Entergy Arkansas, LLC
Union Power Station

NPDES Permit No. AR0049140
Renewal Application

June 1, 2021

WE POWER LIFE℠

NPDES Permit Renewal Application
Permit No. AR0049140

Prepared for:

Entergy Arkansas, LLC – Union Power Station
6497 Calion Highway
El Dorado, AR 71730

June 1, 2021

CONTENTS

Application Summary
Requested Permit Revisions
Cooling Tower Chemical Usage Certification
ADEQ Form 1
Water Supply Sources
Area Maps
FEMA Map
Process Flow Diagram
Watershed Map
Site Drainage Map
EPA Form 2C
PPS Form
DMR Summary Tables
Analytical Results
316(b) Cooling Water Intake Structure Information
Certificate of Good Standing
Disclosure Statement: 10K and 10Q Reports

Application Summary

June 1, 2021

APPLICATION SUMMARY

Entergy Arkansas, LLC – Union Power Station (Union Power) is an electric generating facility located in El Dorado, Arkansas. The facility is currently permitted through the Arkansas Department of Energy and Environment, Division of Environmental Quality (ADEQ), National Pollutant Discharge Elimination System (NPDES) Permit No. AR0049140. Union Power's current NPDES Permit expires on November 30, 2021; therefore, this application package is being submitted to request a renewal of the existing NPDES permit. Included with this application package are Forms 1, 2C, PPS, Area Maps, Site Diagrams, Water Supply Source, and other pertinent information necessary to complete the permit renewal process.

Facility Description

Union Power is a natural gas-fired, combined cycle, 2200-megawatt electric generating facility. It is located on approximately 330 acres approximately eight miles north of El Dorado, Arkansas in Union County.

Union Power maintains four (4) primary electric generating blocks (Power Blocks #1 – #4). Each Power Block is comprised of a Combustion Turbine (CT), a Heat Recovery Steam Generator (HRSG), and a steam (reheat) turbine. The major components of the facility are:

- Eight (8) General Electric (GE) Combustion Turbines (CTs)
- Eight (8) Heat Recovery Steam Generator (HRSG) units with Selective Catalytic Reduction (SCR) configured for enhanced thermal efficiency.
- Four (4) Steam (reheat) turbines.
- Four (4) Mechanical draft cooling towers.
- Two (2) 2,000 kw diesel fuel-fired emergency generators.
- Two (2) 1,750 kw diesel fuel-fired emergency generators.
- One (1) 240 horsepower diesel fuel-fired emergency fire water pump.
- Ancillary equipment, including raw and demineralized water storage tanks.
- Water treatment and storage facilities.
- Wastewater discharge pipe from the plant to the discharge into the Ouachita River.

Water Supply

Water is supplied to the plant from the Union County Water Conservation Board (UCWCB) as treated industrial water and used for production of steam for the HRSGs, cooling tower makeup, CT washes, fire protection through the use of an electric fire pump, and general plant service. Cooling tower makeup water and fire protection water are not treated before their use. Boiler feed water and turbine wash water are treated in a multimedia filtration and a demineralization system prior to their use. The cooling water system consists of four cooling towers. An average of 5 million gallons per day (MGD) is used as cooling tower makeup.

Potable drinking water, water for sinks and toilets, ice makers, showers, and eyewash/safety shower water, is provided by Quinn Water System.

Wastewater Discharges

Wastewater discharges primarily consist of the following wastewater streams:

- Low volume wastes, including demineralizer waste and plant drains (Internal Outfall 01B).
- Cooling tower blowdown (Internal Outfall 01C).

Cooling tower blowdown averages 1.5 MGD (i.e., average of maximum daily flows over the last 3 years) and combines with the plant's low volume wastes prior to discharge to the Ouachita River via final Outfall 001. Low volume wastes are collected and treated in an oil/water separator prior to their commingling with the cooling tower blowdown and average 0.1 MGD (i.e., average of maximum daily flows over the last 3 years).

Stormwater Discharges

Stormwater associated with industrial activity generated at Union Power is permitted under the Industrial Stormwater General Permit with Permit Tracking Number ARR001499. Stormwater generated in the power block area is collected in the stormwater collection system and routed to stormwater detention ponds denominated as the North and South Stormwater Ponds, which discharge to an unnamed tributary to Amason Creek via Outfalls 002 and 003. Stormwater generated on the west side of the plant property is collected into the West Stormwater Pond, which discharges via Outfall 004 to an unnamed tributary to Salt Creek.

Requested Permit Revisions

June 1, 2021

REQUESTED PERMIT REVISIONS

Entergy Arkansas, LLC – Union Power Station (Union Power) is an electric generating facility located in El Dorado, Arkansas. With this NPDES permit renewal application, Union Power requests ADEQ consider the following revisions to the existing permit requirements.

Sampling Frequency Reduction

Throughout the current permit term, Union Power has been required to monitor most parameters on a Weekly basis. As shown in the DMR Summary Tables included in this permit application, the long-term average DMR values over the last 3 years are less than 50% of the current permit limits. With this permit renewal, Union Power is requesting that the current Weekly monitoring be reduced to Monthly as shown in the following table.

Outfall #	Outfall Type	Outfall Description	Parameter	Existing Monitoring Frequency	Proposed Monitoring Frequency
01B	Internal	Low Volume Waste	Flow	Once/Day	Once/Day
			pH	Once/Week	Once/Month
			TSS	Once/Week	Once/Month
			O&G	Once/Week	Once/Month
01C	Internal	Cooling Tower Blowdown	Flow	Once/Day	Once/Day
			pH	Once/Week	Once/Month
			FAC	Once/Week	Once/Month
			Chromium	No Testing	No Testing
			Zinc	No Testing	No Testing
001	External	Combined Discharge	Flow	Once/Day	Once/Day
			pH	Once/Week	Once/Month
			O&G	Once/Week	Once/Month
			Acute WET	Once/Quarter	Once/Quarter

316(b) Requirements Removal

Union Power's current NPDES permit contains requirements associated with section 316(b) of the Clean Water Act (CWA) pertaining to cooling water intake structures. While Union Power does use water withdrawn from the Ouachita River as cooling water in the electricity generation process, Entergy does not own or operate the river intake structure. The Union County Water Conservation Board (UCWCB) is a public entity formed in 1999 to regulate the ground water use in Union County. It consists of 11 elected members which represent separate political subdivisions within Union County. UCWCB owns and operates the intake structure on the Ouachita River along with a water treatment facility. UCWCB provides clarified water from their treatment facility to several large industrial customers including Union Power. A metered pipeline delivers clarified water to Union Power who is then invoiced for all the water obtained.

Since Union Power obtains treated water from a public entity and does not own or operate the intake structure on the Ouachita River, it is Entergy's position that Union Power is not subject to the 316(b) requirements in the CWA. Therefore, all associated requirements should be removed from the renewed NPDES permit.

Cooling Tower Chemical Usage Certification

June 1, 2021

COOLING TOWER CHEMICAL USAGE CERTIFICATION

Entergy Arkansas, LLC – Union Power Station (Union Power) is a steam electric generating facility subject to the Effluent Limitation Guideline (ELG) at 40 CFR 423.15. Union Power operates four (4) mechanical draft cooling towers (#1 through #4) to cool the superheated steam produced in electricity generation. To maintain the operation of the cooling towers, maintenance chemicals must be used.

As required in the federal standard, Union Power is prohibited from using a cooling tower maintenance chemical containing any of the 126 priority pollutants except for Chromium and Zinc. As allowed in the existing NPDES permit, the required monitoring for Chromium and Zinc was waived if the cooling tower maintenance chemicals used did not contain these pollutants.

Union Power does not use any cooling tower maintenance chemical which contains Chromium or Zinc. Entergy water treatment personnel are aware of this permit condition and diligently check every chemical to make sure these pollutants are not present. Before a chemical can be used, it must be approved through Entergy's corporate chemical approval process. Any potential new cooling tower maintenance chemical is reviewed through this process to ensure there is no Chromium or Zinc in the proposed maintenance chemical.

With the renewed NPDES permit, Union Power requests the current monitoring waiver be continued. The following serves as Union Power's certification that the existing and future cooling tower maintenance chemicals used will not contain Chromium or Zinc.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations."

robert heath
robert heath (May 26, 2021 10:52 CDT)

Robert Heath
General Manager

May 26, 2021
Date

June 1, 2021

ADEQ Form 1

June 1, 2021

NPDES PERMIT APPLICATION

FORM 1

ARKANSAS DEPARTMENT OF ENERGY AND ENVIRONMENT
DIVISION OF ENVIRONMENTAL QUALITY - OFFICE OF WATER QUALITY
5301 Northshore Drive
North Little Rock, AR 72118-5317
www.adeq.state.ar.us/water

PURPOSE OF THIS APPLICATION

- ☐ INITIAL PERMIT APPLICATION FOR NEW FACILITY
- ☐ INITIAL PERMIT APPLICATION FOR EXISTING FACILITY
- ☐ MODIFICATION OF EXISTING PERMIT
- ☒ REISSUANCE (RENEWAL) OF EXISTING PERMIT
- ☐ MODIFICATION AND CONSTRUCTION OF EXISTING PERMIT
- ☐ CONSTRUCTION PERMIT

SECTION A- GENERAL INFORMATION

1. Legal Applicant Name (The permit will be issued under this name. This is the entity that controls and is responsible for operations and compliance.):

   Entergy Arkansas, LLC

   Note: The legal name of the applicant must be identical to the name listed with the Arkansas Secretary of State.

2. Operator Type: Private ☐ Municipality ☐ State ☐ Federal ☐ Partnership ☐ Corporation ☐ Other ☒

   State of Incorporation: Limited Liability Company, State of LLC: TX

3. Facility Name: Entergy Arkansas, LLC – Union Power Station

4. Is the legal applicant identified in number 1 above the owner of the facility? ☒ Yes ☐ No

5. NPDES Permit Number (If Applicable): AR0049140

6. NPDES General Permit Number (If Applicable): ARG

7. NPDES General Storm Water Permit Number (If Applicable): ARR001499

8. Permit Numbers and/or names of any permits issued by ADEQ or EPA for an activity located in Arkansas that is presently held by the applicant or its parent or subsidiary corporation which are not listed above:

Permit Name	Permit Number	Held by
Title V Air Permit	1861-AOP-R12	Applicant
Very Small Quantity Hazardous Waste Generator ID	ARR000010348	Applicant
No-Discharge Permit, Commercial Septic System	5377-W	Applicant

9. Give driving directions to the wastewater treatment plant with respect to known landmarks:

   The facility is located approximately six (6) miles northeast of El Dorado, Arkansas on US Highway 167 (Calion Highway).

10. Facility Physical Location: (Attach a map with location marked; street, route no. or other specific identifier)

Street: 6497 Calion Highway

City: El Dorado County: Union State: AR Zip: 71730

11. Facility Mailing Address for permit, DMR, and invoice (Street or Post Office Box):

Name: Brent Parker Title: Senior Environmental Analyst

Street: 6497 Calion Highway P.O. Box

City: El Dorado State: AR Zip: 71730

E-mail address*: cparke3@entergy.com Fax:

* Is emailing all documents (permit, letters, DMRs, invoices, etc.) acceptable to the applicant? ☒ Yes ☐ No

12. Neighboring States Within 20 Miles of the permitted facility (Check all that apply):

Oklahoma ☐ Missouri ☐ Tennessee ☐ Louisiana ☒ Texas ☐ Mississippi ☐

13. Indicate applicable Standard Industrial Classification (SIC) Codes and NAICS codes for primary processes (See Item #3 of the instructions for assistance in determining the correct SIC and NAICS Codes):

4911 SIC Facility Activity under this SIC or NAICS:

221112 NAICS Natural gas fired, combine cycle, 2200 Megawatt (MW) electric generating facility.

14. Design Flow: N/A MGD Highest Monthly Average of the last two years Flow: 2.83 MGD

15. Is the outfall equipped with a diffuser? ☐ Yes ☒ No

16. Responsible Official (as described on the last page of this application):

Name: Ms. Beverley Gale Title: VP, Power Plant Operations - EAL

Address: 10055 Grogan's Mill Road Phone Number: (281) 297-5538

E-mail Address: bgale@entergy.com

City: The Woodlands State: TX Zip: 77380

17. Cognizant Official (Duly Authorized Representative of responsible official as described on the last page of this application):

Name: Robert Heath Title: General Manager

Address: 6497 Calion Highway Phone Number: (870) 748-2001

E-mail Address: rheath1@entergy.com

City: El Dorado State: AR Zip: 71730

18. Name, address and telephone number of active consulting engineer firm (If none, so state): **N/A**

Contact Name:

Company Name:

Address: Phone Number:

E-mail Address:

City: State: Zip:

19. Wastewater Operator Information

Wastewater Operator Name: Brent Parker License number: 004818

Class of municipal wastewater operator: I ☐ II ☒ III ☐ IV ☐

Class of industrial wastewater operator: Basic ☒ Advanced ☐

SECTION B: FACILITY AND OUTFALL INFORMATION

1. Facility Location (All information must be based on the **front door (gate)** location of the facility). A topographic map must be submitted. See Item #5 of the instructions for additional details.:

   Lat: 33 ° 18 ‘ 10.9 ” Long: 92 ° 35 ‘ 17.2 ”

2. Outfall Information (If more than two outfalls, add additional pages)

   Outfall 001
   End-of-Pipe Location: Latitude: 33 ° 20 ’ 35.8 ” Longitude: 92 ° 31 ’ 45.2 ”
   Monitoring Location: Latitude: 33 ° 18 ’ 6.7 ” Longitude: 92 ° 35 ’ 17.2 ”

   Description of outfall location: Underground discharge pipeline from the facility to the Ouachita River.

   Name of Receiving Stream (i.e. an unnamed tributary of Mill Creek, thence into Mill Creek; thence into Arkansas River):

   Ouachita River in Segment 2D of the Ouachita River Basin

   Type of Treatment system (Include all components of the treatment system and attach the process flow diagram):

   Outfall 001 – None; Internal Outfall 01B – Oil/Water Separator; Internal Outfall 01C – Dechlorination

   How are effluent samples collected?

   There is an ISCO 6712 FR Refrigerated Autosampler at Outfall 001.

   How is flow measured, i.e., v-notch weir, totalizing meter, Parshall flume, etc.?

   There are Emerson Rosemount Magnetic Flow Meters at Outfall 001, Internal Outfall 01B, and Internal Outfall 01C.

3. Is the proposed or existing facility located above the 100-year flood level? ☒ Yes ☐ No

   NOTE: FEMA Map must be included with this application. Maps can be ordered at www.fema.gov .

   If "No", what measures are (or will be) used to protect the facility? _____

4. Population for Municipal and Domestic Sewer Systems: N/A

5. Backup Power Generation for Treatment Plants

Are there any permanent backup generators? Yes ☒ No ☐

If Yes, how many? 4 Total Horsepower (hp)? 18,088

If no, check one of the following.

☐ Portable generator is available.

☐ The WWTP does not require power to operate.

☐ Operations at the facility will cease if power is not available.

☐ The WWTP has sufficient capacity to hold influent until power is restored.

☐ Other, please explain _____

SECTION C – WASTE STORAGE AND DISPOSAL INFORMATION

1. Solids/Sludge Disposal Method (Check as many as are applicable):

☐ **Solids are not produced at this facility.**

☒ **Landfill:**

Landfill Site Name Waste Corporation of Arkansas, LLC ADEQ Solid Waste Permit No. 0248-S1-R5

☐ **Land Application:** ADEQ State Permit No. _____

☒ **Septic Tank**: Arkansas Department of Health Permit No.: 041398, 047669, 060983 (Sanitary Wastewater Only)
ADEQ State Permit No. 5377-W New Permit Awaiting Issuance, Application Submitted 4/28/2021

☐ **Distribution and Marketing**: Facility receiving sludge:

Name: _____ Address: _____

City: _____ State: _____ Zip: _____ Phone: _____

Rail: ☐ Pipe: ☐ Other: _____

☐ **Subsurface Disposal** (Lagoon for which the sole purpose is storing sludge):

Location of lagoon _____ How old is the lagoon? _____

Surface area of lagoon: _____ Acre Depth: _____ ft Does lagoon have a liner? ☐ Yes ☐ No

☐ **Incineration:** Location of incinerator _____

☐ **Remains in Treatment Lagoon(s):**

How old is the lagoon(s)? _____ Has sludge depth been measured? ☐ Yes ☐ No

If Yes, Date measured? _____ Sludge Depth? _____ ft If No, When will it be measured? _____

Has sludge ever been removed? Yes ☐ No ☐ If Yes, When was it removed? _____

☒ **Other** (Provide complete description): _____

Entergy – Union Power Plant uses the following companies for handling various waste streams generated onsite:

- Code 3 Services, LLC (oily debris)
- Safety Kleen (used oil filters and parts washers)
- Heritage Crystal Clean (used oil, used oil filters, and parts washers)
- LEI, Inc. (hazardous waste and used batteries)
- Waste Management Lamp Tracker (used bulbs)
- Clean Harbors (hazardous waste)

SECTION D - WATER SUPPLY

Water Sources which are downstream of the outfall location, i.e., those which could be affected by the discharge from this facility (check as many as are applicable):

SEE ATTACHMENT – WATER SUPPLY SOURCES

☐ **None**

☐ **Private Well** - Distance from Discharge point: ☐ Within 5 miles ☐ Within 50 miles

☐ **Municipal Water Utility** (Specify City): _____

Distance from Discharge point: ☐ Within 5 miles ☐ Within 50 miles

☐ **Surface Water**- Name of Surface Water Source: _____

Distance from Discharge point: ☐ Within 5 miles ☐ Within 50 miles

Lat: _____ ° _____ ‘ _____ “ Long: _____ ° _____ ‘ _____ “

☐ **Other** (Specify): _____

Distance from Discharge point: ☐ Within 5 miles ☐ Within 50 miles

NOT APPLICABLE (N/A): ☒

SECTION E: TRUST FUND REQUIREMENTS AND DISCLOSURE STATEMENT

1. Ark. Code Ann. § 8-4-203(b)(1)(A) forbids the Arkansas Department of Energy and Environment – Division of Environmental Quality (DEQ) from issuing, modifying, renewing, or transferring a permit for a nonmunicipal domestic sewage treatment works without the applicant first fulfilling the trust fund requirements set forth in that section. Ark. Code Ann. § 8-4-203(b)(1)(B) defines "nonmunicipal domestic sewage treatment works" as a device or system operated by an entity other than a city, town, or county that treats, in whole or in part, waste or wastewater from humans or household operations and must continually operate to protect human health and the environment despite a permittee's failure to maintain or operate the device or system. NDSTW's can include, but are not limited to:

    - Sewer Improvement Districts;
    - Subdivisions,
    - Mobile Home Parks,
    - Property Owner' Associates,
    - RV parks, and
    - Apartments

    Exclusions Excluded from this application's Section E.1. requirements for trust fund contribution fees are:
    - State or federal facilities,
    - Schools,
    - Universities and colleges,
    - Public facilities boards and public water authorities,
    - Entities that continuously operate due to a connection with a city, town, or county, and
    - Commercial or industrial entity that treats domestic sewage from its operations and does not accept domestic sewage from other entities or residences.

    The trust fund form may be obtained from the DEQ web site at:

    http://www.adeq.state.ar.us/water/permits/npdes/individual/pdfs/ndstw-trust-fund-certification-form.pdf

2. Disclosure Statement:

    Ark. Code Ann. 8-1-106 requires that applicants for any type of permit or transfer of any permit, license, certification or operational authority issued by the DEQ file a Disclosure Statement with their application unless exempt for doing so under Ark. Code Ann. §8-1-106(b)(2). The filing of a Disclosure Statement is mandatory. No application can be considered administratively complete without a completed Disclosure Statement unless that facility is exempt. Publicly traded companies may submit the most recent 10k and 10Q filings to the Securities and Exchange Commission in lieu of the Disclosure Statement. The form may be obtained from the ADEQ web site at:

    https://www.adeq.state.ar.us/ADEQ_Disclosure_Statement.pdf

NOT APPLICABLE (N/A): ☐

SECTION F – INDUSTRIAL ACTIVITY

1. Does an effluent guideline limitation promulgated by EPA (Link to a Listing of the 40 CFR Effluent Limit Guidelines) under Section 304 of the Clean Water Act (CWA) apply to your facility?

   YES ☒ (Answer questions 2 and 3) NO ☐

2. What Part of 40 CFR? 423

3. What Subpart(s)? N

4. Give a brief description of all operations at this facility including primary products or services (attach additional sheets if necessary):

   Natural gas fired, combined cycle, 2200-megawatt electric generating station.

5. Production: (projected for new facilities)

Product(s) Manufactured	Last 12 Months lbs/day*		Highest Production Year of Last 5 Years lbs/day*	
(Brand name)	Highest Month	Days of Operation	Monthly Average	Days of Operation
N/A				

* These units could be off-lbs, lbs quenched, lbs cleaned/etched/rinsed, lbs poured, lbs extruded, etc.

NOT APPLICABLE (N/A): ☐

SECTION G - WASTEWATER DISCHARGE INFORMATION

Facilities that checked "Yes" in question 1 of Section F are considered Categorical Industrial Users and should skip to question 2.

1. **For Non-Categorical Users Only**: List average wastewater discharge, maximum discharge, and type of discharge (batch, continuous, or both), for each plant process. Include the reference number from the process flow schematic (reference Figure 1) that corresponds to each process. [New facilities should provide estimates for each discharge.]

No.	Process Description	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
N/A				

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

Number of batch discharges: _____ per day Average discharge per batch: (GPD)

Time of batch discharges _____ at _____
(days of week) (hours of day)

Flow rate: _____ gallons/minute Percent of total discharge: _____

Answer questions 2, 3, 4, and 5 only if you are subject to Categorical Standards.

2. For Categorical Users: Provide the wastewater discharge flows for each of your processes or proposed processes. Include the reference number from the process flow schematic (reference Figure 1) that corresponds to each process. [Note: 1) New facilities should provide estimates for each discharge and 2) Facilities should denote whether the flow was measured or estimated.]

No.	Regulated Process	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
001	Combined Discharge	Variable	Variable	Variable
01B	Low Volume Wastes	Variable	Variable	Variable
01C	Cooling Tower Blowdown	Variable	Variable	Variable

No.	Unregulated Process	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
N/A				

No.	Dilution (e.g., Cooling Water)	Average Flow (GPD)	Maximum Flow (GPD)	Type of Discharge (batch, continuous, none)
N/A				

If batch discharge occurs or will occur, indicate: [New facilities may estimate.]

Number of batch discharges: _____ per day Average discharge per batch: (GPD)

Time of batch discharges _____ at _____
(days of week) (hours of day)

Flow rate: _____ gallons/minute Percent of total discharge: _____

3. Do you have, or plan to have, automatic sampling equipment or continuous wastewater flow metering equipment at this facility?

Current:	Flow Metering	☒	Yes	Type: _Magnetic Flow Meters_	☐	No	N/A	☐
	Sampling Equipment	☒	Yes	Type: _ISCO 6712__	☐	No	N/A	☐
Planned:	Flow Metering	☐	Yes	Type: _____	☐	No	N/A	☐
	Sampling Equipment	☐	Yes	Type: _____	☐	No	N/A	☐

If yes, please indicate the present or future location of this equipment on the sewer schematic and describe the equipment below:

There is an ISCO 6712 FR refrigerated autosampler stationed at the monitoring station for Outfall 001.

There are Emerson Rosemount Magnetic Flow Meters at Outfall 001, Internal Outfall 01B, and Internal Outfall 01C.

4. Are any process changes or expansions planned during the next three years that could alter wastewater volumes or characteristics?

☐ Yes ☒ No (If no, skip Question 5)

5. Briefly describe these changes and their effects on the wastewater volume and characteristics:

N/A

NOT APPLICABLE (N/A): ☒

SECTION H -TECHNICAL INFORMATION

Technical information to support this application shall be furnished in appropriate detail to understand the project. Information in this Part is required for obtaining a **construction permit** or for **modification** of the treatment system.

1. Describe the proposed construction activity. Include the types of control equipment to be installed along with their methods of operation and control efficiency.

   _____

   _____

   _____

2. One set of construction plans and specifications, approved (signed and stamped) by a **Professional Engineer** (PE) registered in **Arkansas**, must be submitted as follows:

   a. The plans must show flow rates in addition to pertinent dimensions so that detention times, overflow rates, and loadings per acre, etc. can be calculated.
   b. Specifications and complete design calculations.
   c. All treated wastewater discharges should have a flow measuring device such as a weir or Parshall flume installed after the final treatment unit. Where there is a significant difference between the flow rates of the raw and treated wastewater, a flow measuring device should be provided both before and after treatment.

3. If this application includes a construction permit disturbing five or more acres, a storm water construction permit must be obtained by submitting a notice of intent (NOI) to DEQ.

SECTION I: SIGNATORY REQUIREMENTS

Cognizant Official (Duly Authorized Representative)

40 CFR 122.22(b) states that all reports required by the permit, or other information requested by the Director, shall be signed by the applicant (or person authorized by the applicant) or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) the authorization is made in writing by the applicant (or person authorized by the applicant);
(2) the authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity responsibility, or an individual or position having overall responsibility for environmental matters for the company.

The applicant hereby designates the following person as a Cognizant Official, or duly authorized representative, for signing reports, etc., including Discharge Monitoring Reports (DMR) required by the permit, and other information requested by the Director:

Signature of Cognizant Official: robert heath (May 24, 2021 08:58 CDT) Date: May 24, 2021

Printed name of Cognizant Official: Robert Heath

Official title of Cognizant Official: General Manager Telephone Number: (870) 748-2001

Responsible Official

The information contained in this form must be certified by a ***responsible official*** as defined in the "signatory requirements for permit applications" (40 CFR 122.22).

Responsible official is defined as follows:

Corporation, a principal officer of at least the level of vice president
Partnership, a general partner
Sole proprietorship: the proprietor
Municipal, state, federal, or other public facility: principal executive officer, or ranking elected official.

"By my signature below, I certify that the cognizant official designated above is qualified to act as a duly authorized representative under the provisions of 40 CFR 122.22(b)." NOTE: If no duly authorized representative is designated in this section, the Division considers the applicant to be the responsible official for the facility and only reports, etc., signed by the applicant will be accepted by the Division.

"By my signature below, I certify that, if this facility is a corporation, it is registered with the Secretary of State in Arkansas. Please provide the full name of the corporation if different than that listed in Section A above."

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment for knowing violations. I further certify under penalty of law that all analyses reported as less than detectable in this application or attachments thereto were performed using the EPA approved test method having the lowest detection limit for the substance tested."

Signature of Responsible Official: Beverley Gale (May 24, 2021 13:45 CDT) Date: May 24, 2021

Printed name of Responsible Official: Beverley Gale

Official title of Responsible Official: VP, Power Plant Operations – EAL Telephone Number: (281) 297-5538

Water Supply Sources

June 1, 2021

WATER SUPPLY SOURCES

The following entities have water supply sources within 5 miles of the Entergy – Union Power Station:

- Calion Waterworks
- Crabapple Point Water System
- El Dorado Chemical Company
- El Dorado Waterworks
- Norphlet Water Works
- Old Union Water Association
- Quinn Water Association

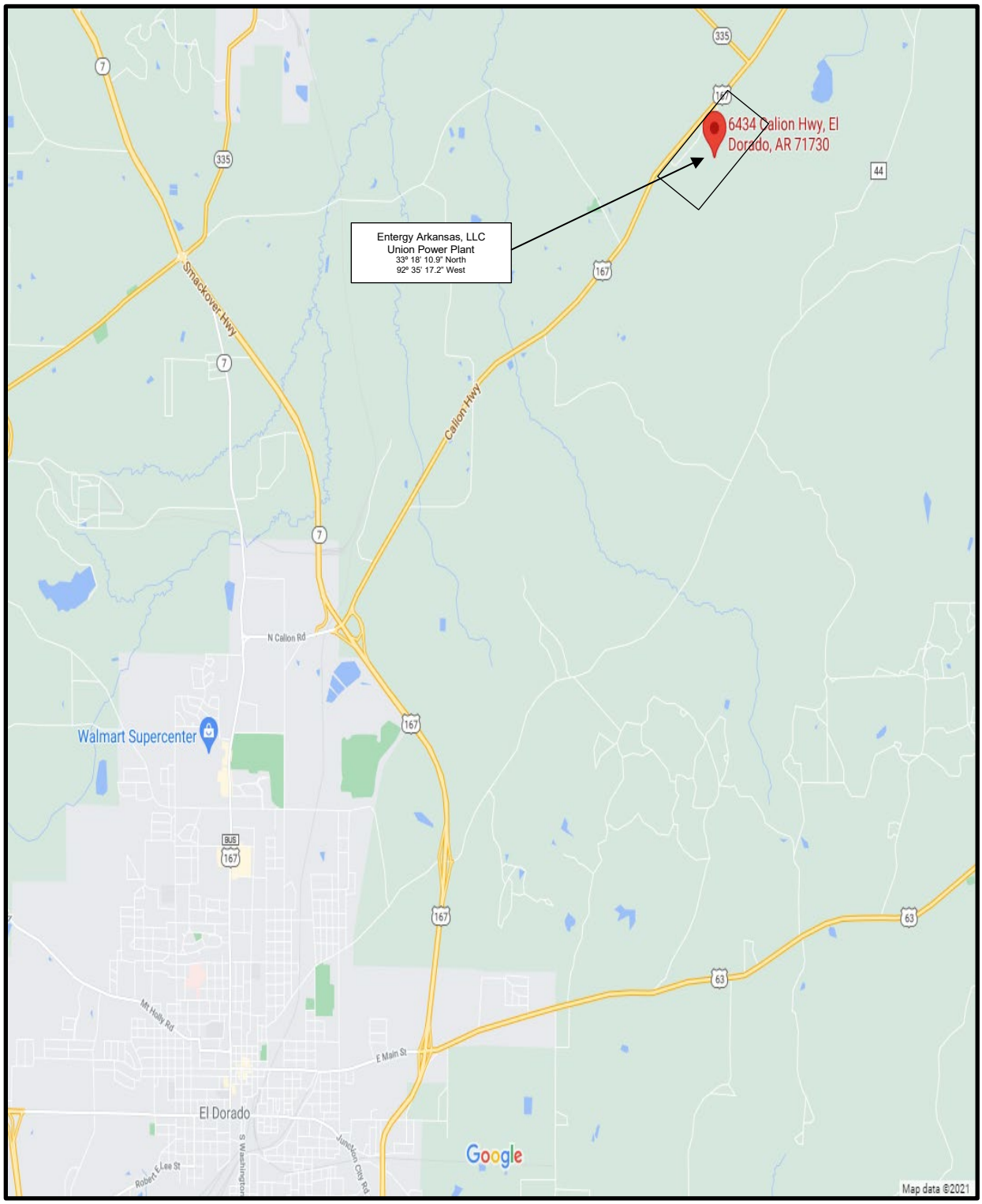
The following entities have water supply surface sources within 50 miles of the Entergy – Union Power Station:

- Ashley Mineral Spring
- Camden Waterworks
- Country Store
- El Dorado Chemical Company
- Magnolia Waterworks

Area Maps

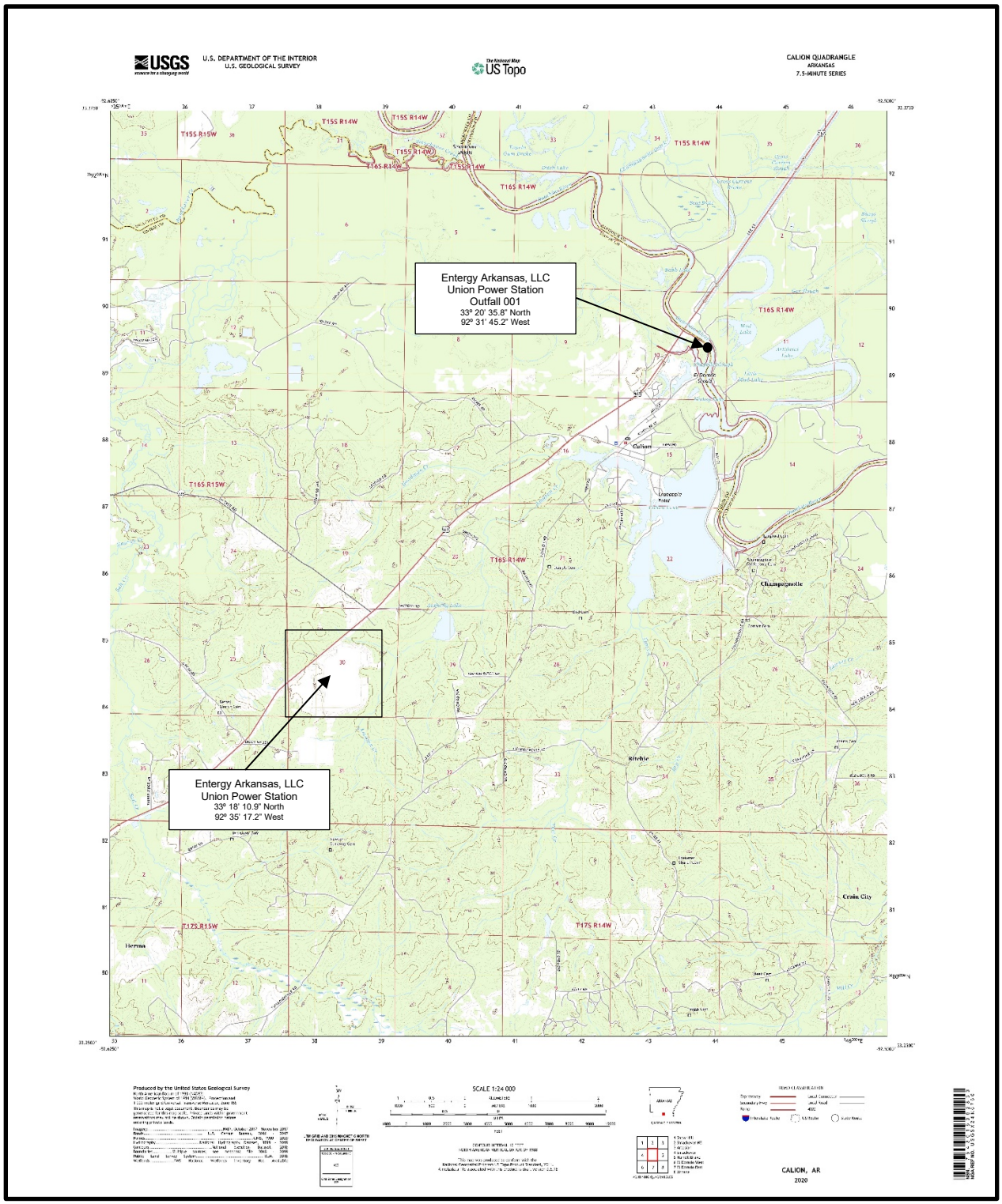
June 1, 2021

GENERAL LOCATION MAP
ENTERGY – UNION POWER STATION



June 1, 2021

USGS TOPOGRAPHIC MAP
ENTERGY – UNION POWER STATION

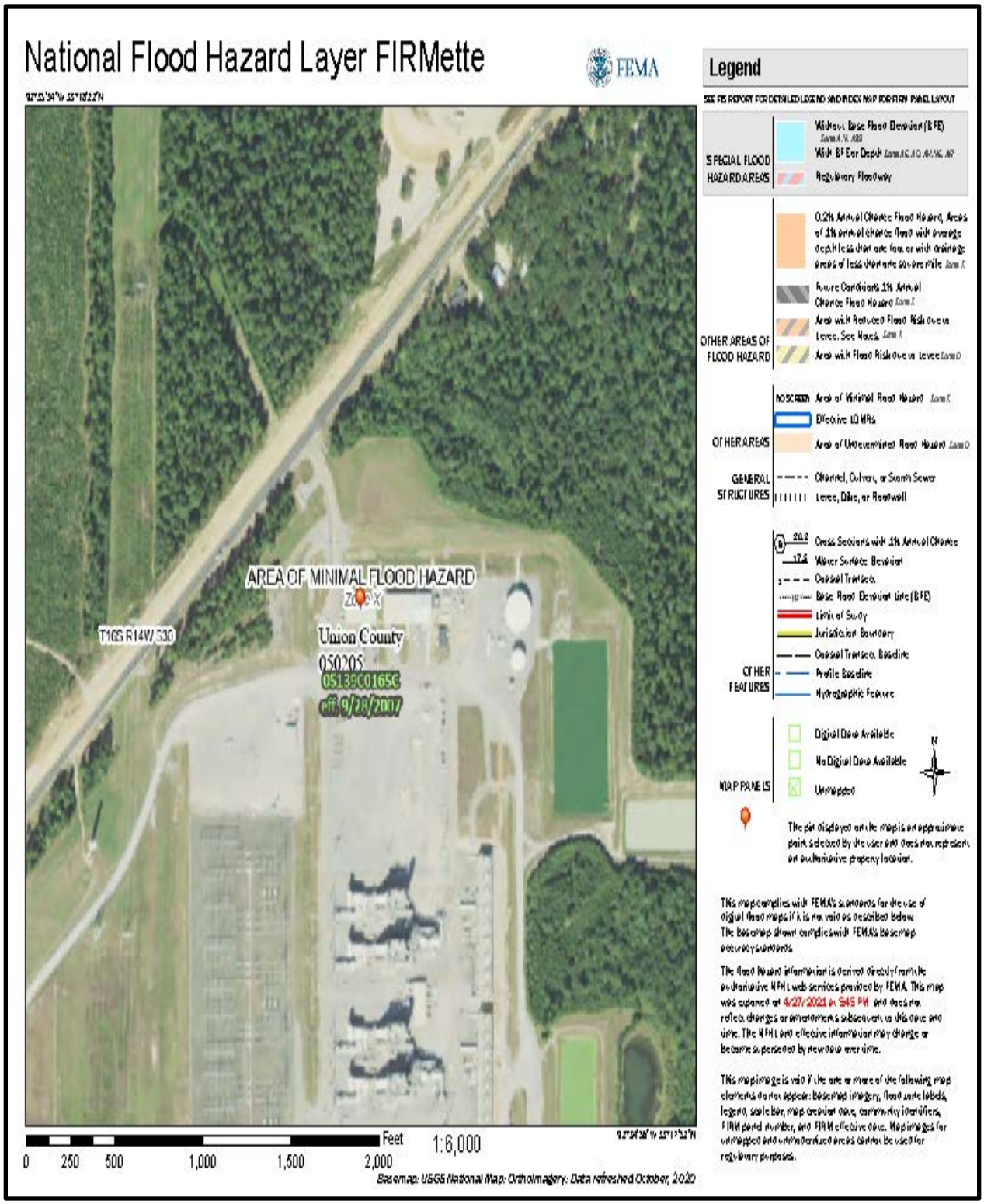


June 1, 2021

FEMA Map

June 1, 2021

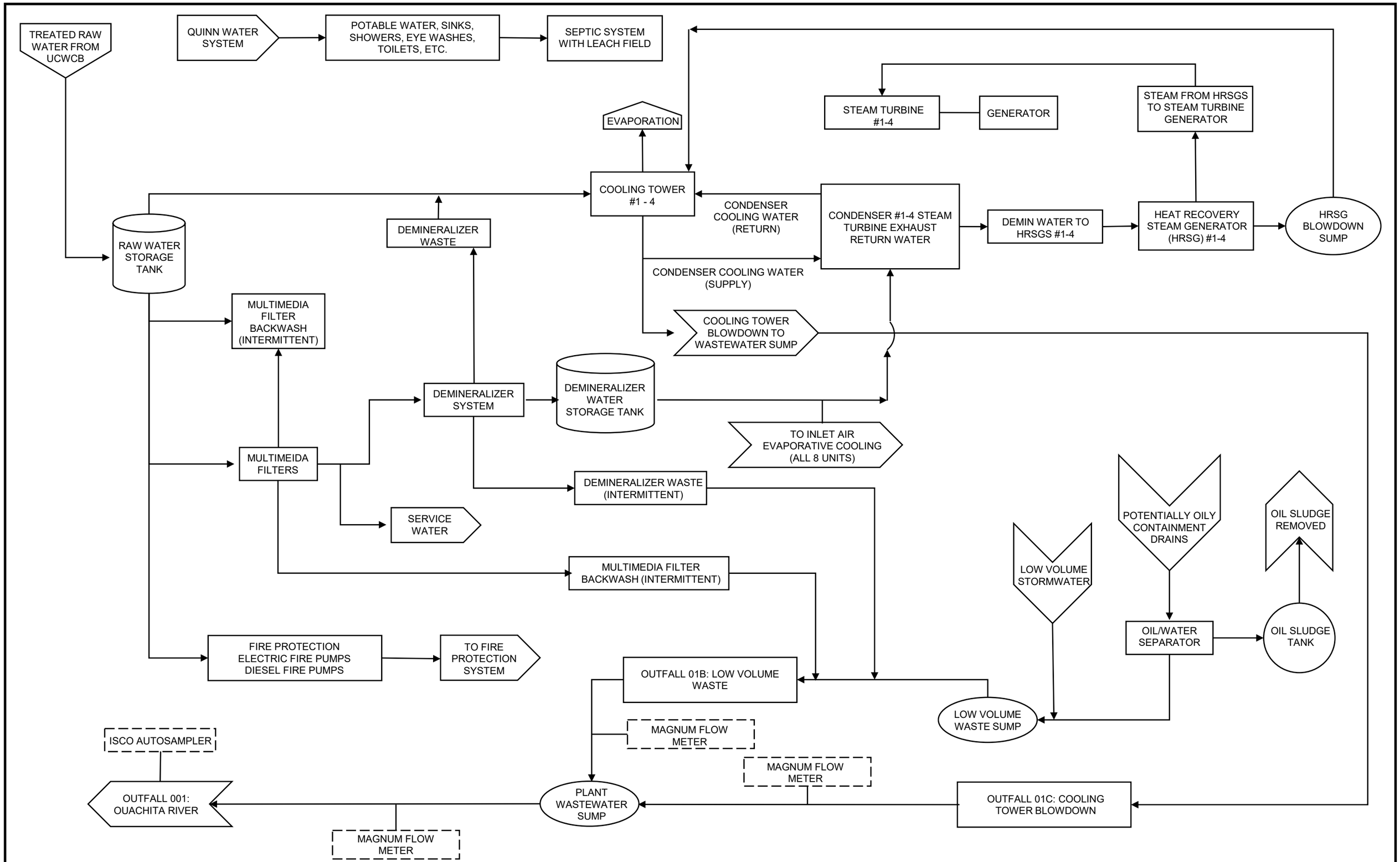
FEMA FLOOD PLAIN MAP
ENTERGY – UNION POWER STATION



June 1, 2021

Process Flow Diagram

June 1, 2021



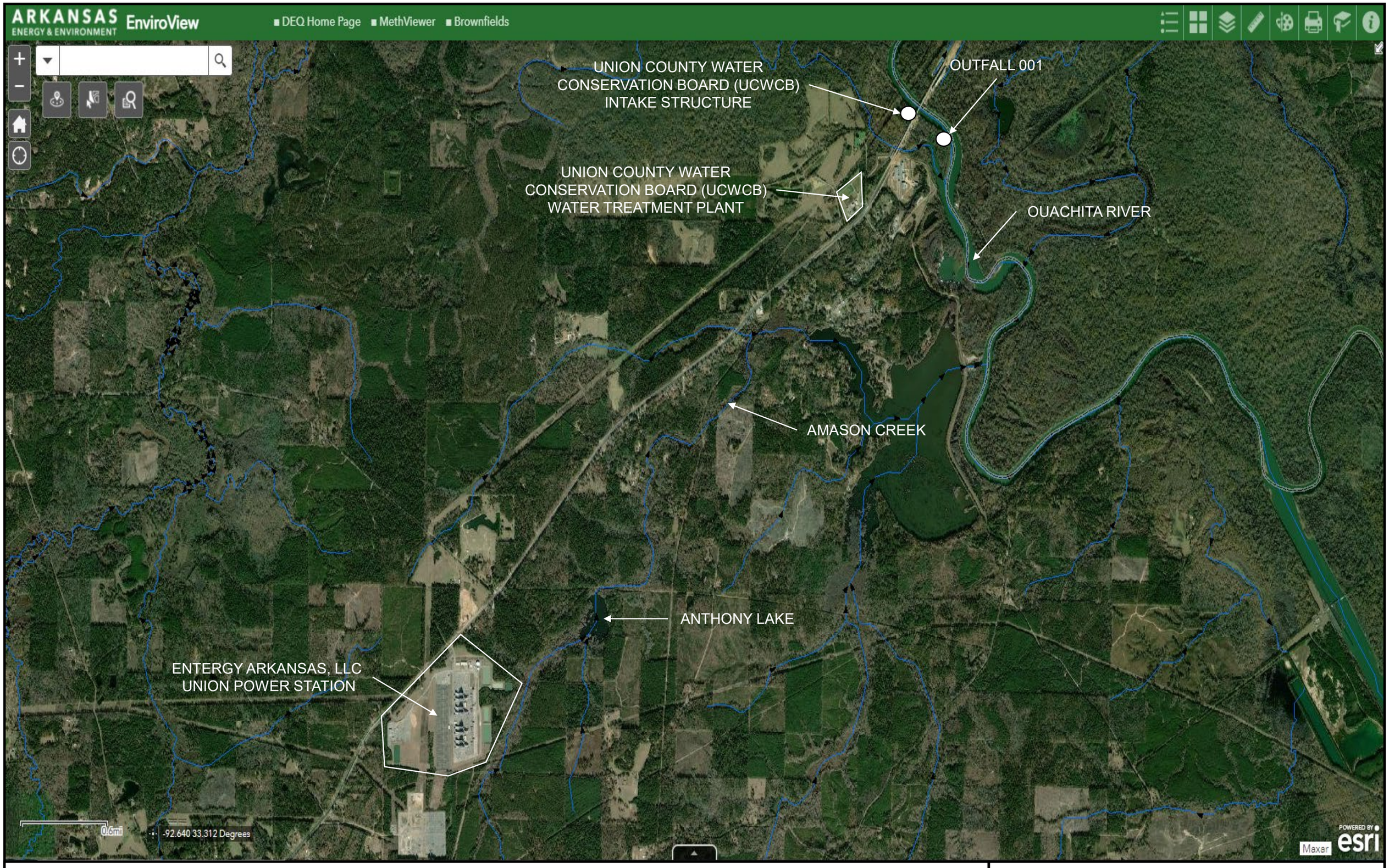
PROCESS FLOW DIAGRAM

UNION POWER STATION

ENTERGY ARKANSAS, LLC
EL DORADO, ARKANSAS

Watershed Map

June 1, 2021



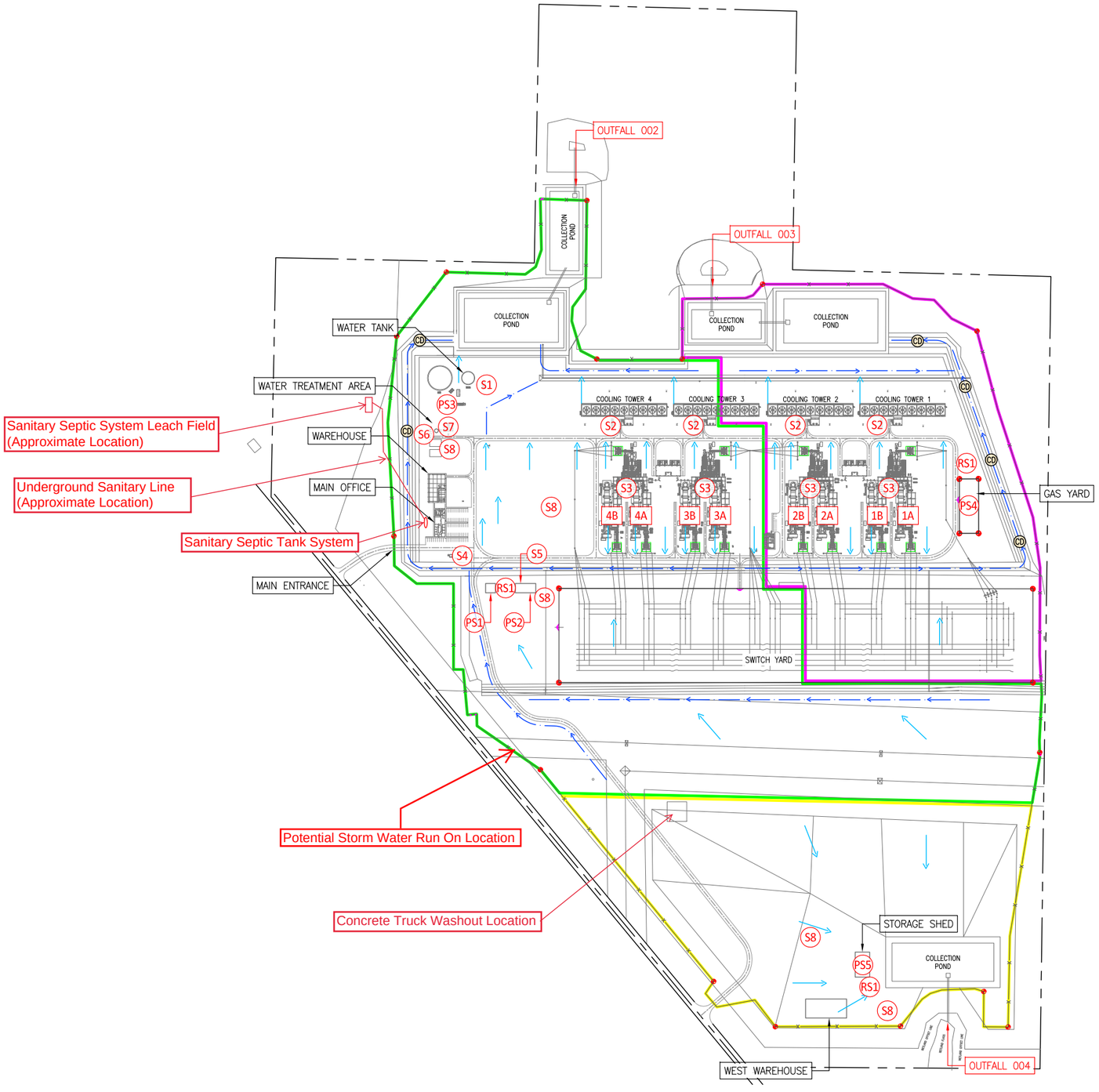
WATERSHED MAP

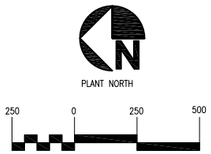
UNION POWER STATION

ENTERGY ARKANSAS, LLC
EL DORADO, ARKANSAS

Site Drainage Map

June 1, 2021





NOTES:

ACREAGE: ~330

OUTFALLS SAMPLED: 002 & 004

SIMILAR OUTFALLS: 003

RECEIVING STREAM:
- 002 & 003 – UNNAMED TRIBUTARY, THENCE TO AMASON CREEK, THENCE TO CATIAN LAKE.
- 004 – UNNAMED TRIBUTARY, THENCE TO SALT CREEK, THENCE TO HAYNES CREEK.

NON–STORMWATER DISCHARGES ARE PRESENT ON–SITE. SPECIFIC LOCATIONS ARE NOT SHOWN DUE TO THE SCALE OF THE MAP.

OUTFALL 001 IS PERMITTED UNDER NPDES PERMIT NO. AR0049140. SMALL AMOUNTS OF STORM WATER THAT COLLECT IN SUMPS LOCATED WITHIN EACH POWER BLOCK ARE DISCHARGED THROUGH OUTFALL 001. DUE TO THE SCALE OF THE MAP, THE LOCATION OF EACH SUMP IS NOT SHOWN ON THE MAP.

1A – POWER BLOCK
CD – CHECK DAM
→ – STORMWATER DITCH
→ – FLOW
— – DRAINAGE BASIN

RS1 – DUMPSTERS
S1 – AQUEOUS AMMONIA TANK
S2 – COOLING TOWER TREATMENT CHEMICALS
S3 – AMMONIA & BOILER CHEMICALS
S4 – SODIUM BISULFATE TANK
S5 – COOLING TOWER & BOILER WATER TREATMENT CHEMICALS
S6 – BRINE STORAGE TANK
S7 – CONTRACTOR AREA (INCLUDES EQUIPMENT STORAGE)
S8 – EQUIPMENT/MATERIAL STORAGE AREA

PS1 – DIESEL & GASOLINE TANK
PS2 – USED OIL & LUBE OIL STORAGE
PS3 – DIESEL TANK
PS4 – LIGHT OIL
PS5 – LUBE OIL

NO	DATE	REVISION	BY	CK.	APPR.
3	5/18/2021	Added Sanitary System and Leach Field Locations	KAF		
2	1/30/2020	Added Concrete Washout Location	CBP		
1	9/4/2018	Added Potential Stormwater Run On Location	CBP		

DESIGNED BY JJF
CHECKED BY JJF
APPR. BY AAG
DRAWN BY IT

GBMc
Strategic Environmental Services
219 Brown Lane
Bryant, Arkansas 72022

SHEET TITLE
SITE DRAINAGE MAP

JOB NAME
STORM WATER POLLUTION PREVENTION PLAN
ENTERGY ARKANSAS, INC.
EL DORADO, ARKANSAS

PROJECT NO. 2444–14–010
REV. NO.
DATE 04/13/2017
SCALE SHOWN
DWG. NO.

EPA Form 2C

June 1, 2021

EPA Identification Number	NPDES Permit Number	Facility Name	Form Approved 03/05/19 OMB No. 2040-0004
AR0049140	AR0049140	Entergy - Union Power Station	

Form 2C NPDES

U.S. Environmental Protection Agency
Application for NPDES Permit to Discharge Wastewater

EXISTING MANUFACTURING, COMMERCIAL, MINING, AND SILVICULTURE OPERATIONS

SECTION 1. OUTFALL LOCATION (40 CFR 122.21(g)(1))

Outfall Location

1.1 Provide information on each of the facility's outfalls in the table below.

Outfall Number	Receiving Water Name	Latitude	Longitude
001	Ouachita River	33° 20′ 35.8″	92° 31′ 45.2″
		° ′ ″	° ′ ″
		° ′ ″	° ′ ″

SECTION 2. LINE DRAWING (40 CFR 122.21(g)(2))

Line Drawing

2.1 Have you attached a line drawing to this application that shows the water flow through your facility with a water balance? (See instructions for drawing requirements. See Exhibit 2C–1 at end of instructions for example.)

☑ Yes ☐ No

SECTION 3. AVERAGE FLOWS AND TREATMENT (40 CFR 122.21(g)(3))

Average Flows and Treatment

3.1 For each outfall identified under Item 1.1, provide average flow and treatment information. Add additional sheets if necessary.

****Outfall Number**** 001

Operations Contributing to Flow

Operation	Average Flow
Combined Internal Outfalls 01B & 01C	Variable mgd
Internal Outfall 01B - Low Volume Wastes	Variable mgd
Internal Outfall 01C - Cooling Tower Blowdown	Variable mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge
Internal Outfall 01B - Oil/Water Seperator	1-H	Class I Landfill
Internal Outfall 01C - Dechlorination	2-E	N/A

Average Flows and Treatment Continued

3.1 cont.

****Outfall Number**** N/A

Operations Contributing to Flow

Operation	Average Flow
	mgd
	mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge

****Outfall Number**** N/A

Operations Contributing to Flow

Operation	Average Flow
	mgd
	mgd
	mgd
	mgd

Treatment Units

Description (include size, flow rate through each treatment unit, retention time, etc.)	Code from Table 2C-1	Final Disposal of Solid or Liquid Wastes Other Than by Discharge

System Users

3.2 Are you applying for an NPDES permit to operate a privately owned treatment works?

☐ Yes ☑ No ➔ SKIP to Section 4.

3.3 Have you attached a list that identifies each user of the treatment works?

☐ Yes ☐ No

SECTION 4. INTERMITTENT FLOWS (40 CFR 122.21(g)(4))

Intermittent Flows

4.1 Except for storm runoff, leaks, or spills, are any discharges described in Sections 1 and 3 intermittent or seasonal?

☐ Yes ☑ No ➔ SKIP to Section 5.

4.2 Provide information on intermittent or seasonal flows for each applicable outfall. Attach additional pages, if necessary.

Outfall Number	Operation (list)	Frequency		Flow Rate		Duration
		Average Days/Week	Average Months/Year	Long-Term Average	Maximum Daily	
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days
		days/week	months/year	mgd	mgd	days

SECTION 5. PRODUCTION (40 CFR 122.21(g)(5))

Applicable ELGs

5.1 Do any effluent limitation guidelines (ELGs) promulgated by EPA under Section 304 of the CWA apply to your facility?

☑ Yes ☐ No ➔ SKIP to Section 6.

5.2 Provide the following information on applicable ELGs.

ELG Category	ELG Subcategory	Regulatory Citation
Steam Electric Power Generating I	N/A	40 CFR 423, Subpart N

Production-Based Limitations

5.3 Are any of the applicable ELGs expressed in terms of production (or other measure of operation)?

☐ Yes ☑ No ➔ SKIP to Section 6.

5.4 Provide an actual measure of daily production expressed in terms and units of applicable ELGs.

Outfall Number	Operation, Product, or Material	Quantity per Day	Unit of Measure

SECTION 6. IMPROVEMENTS (40 CFR 122.21(g)(6))

Upgrades and Improvements

6.1 Are you presently required by any federal, state, or local authority to meet an implementation schedule for constructing, upgrading, or operating wastewater treatment equipment or practices or any other environmental programs that could affect the discharges described in this application?

☐ Yes ☑ No ➔ SKIP to Item 6.3.

6.2 Briefly identify each applicable project in the table below.

Brief Identification and Description of Project	Affected Outfalls (list outfall number)	Source(s) of Discharge	Final Compliance Dates	
			Required	Projected

6.3 Have you attached sheets describing any additional water pollution control programs (or other environmental projects that may affect your discharges) that you now have underway or planned? *(optional item)*

☐ Yes ☐ No ☑ Not applicable

SECTION 7. EFFLUENT AND INTAKE CHARACTERISTICS (40 CFR 122.21(g)(7))

Effluent and Intake Characteristics

See the instructions to determine the pollutants and parameters you are required to monitor and, in turn, the tables you must complete. Not all applicants need to complete each table.

Table A. Conventional and Non-Conventional Pollutants

7.1 Are you requesting a waiver from your NPDES permitting authority for one or more of the Table A pollutants for any of your outfalls?

☐ Yes ☑ No ➔ SKIP to Item 7.3.

7.2 If yes, indicate the applicable outfalls below. Attach waiver request and other required information to the application.

Outfall Number _____ Outfall Number _____ Outfall Number _____

7.3 Have you completed monitoring for all Table A pollutants at each of your outfalls for which a waiver has not been requested and attached the results to this application package?

☑ Yes ☐ No; a waiver has been requested from my NPDES permitting authority for all pollutants at all outfalls.

Table B. Toxic Metals, Cyanide, Total Phenols, and Organic Toxic Pollutants

7.4 Do any of the facility's processes that contribute wastewater fall into one or more of the primary industry categories listed in Exhibit 2C-3? (See end of instructions for exhibit.)

☑ Yes ☐ No ➔ SKIP to Item 7.8.

7.5 Have you checked "Testing Required" for all toxic metals, cyanide, and total phenols in Section 1 of Table B?

☑ Yes ☐ No

7.6 List the applicable primary industry categories and check the boxes indicating the required GC/MS fraction(s) identified in Exhibit 2C-3.

Primary Industry Category	Required GC/MS Fraction(s) (Check applicable boxes.)			
Steam Electric Power Plants	☑ Volatile	☑ Acid	☐ Base/Neutral	☐ Pesticide
	☐ Volatile	☐ Acid	☐ Base/Neutral	☐ Pesticide
	☐ Volatile	☐ Acid	☐ Base/Neutral	☐ Pesticide

Effluent and Intake Characteristics Continued

7.7	Have you checked "Testing Required" for all required pollutants in Sections 2 through 5 of Table B for each of the GC/MS fractions checked in Item 7.6? ☑ Yes ☐ No
7.8	Have you checked "Believed Present" or "Believed Absent" for all pollutants listed in Sections 1 through 5 of Table B where testing is not required? ☑ Yes ☐ No
7.9	Have you provided (1) quantitative data for those Section 1, Table B, pollutants for which you have indicated testing is required or (2) quantitative data or other required information for those Section 1, Table B, pollutants that you have indicated are "Believed Present" in your discharge? ☑ Yes ☐ No
7.10	Does the applicant qualify for a small business exemption under the criteria specified in the instructions? ☐ Yes ➔ Note that you qualify at the top of Table B, then SKIP to Item 7.12. ☑ No
7.11	Have you provided (1) quantitative data for those Sections 2 through 5, Table B, pollutants for which you have determined testing is required or (2) quantitative data or an explanation for those Sections 2 through 5, Table B, pollutants you have indicated are "Believed Present" in your discharge? ☑ Yes ☐ No
Table C. Certain Conventional and Non-Conventional Pollutants	
7.12	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed on Table C for all outfalls? ☑ Yes ☐ No
7.13	Have you completed Table C by providing (1) quantitative data for those pollutants that are limited either directly or indirectly in an ELG and/or (2) quantitative data or an explanation for those pollutants for which you have indicated "Believed Present"? ☑ Yes ☐ No
Table D. Certain Hazardous Substances and Asbestos	
7.14	Have you indicated whether pollutants are "Believed Present" or "Believed Absent" for all pollutants listed in Table D for all outfalls? ☑ Yes ☐ No
7.15	Have you completed Table D by (1) describing the reasons the applicable pollutants are expected to be discharged and (2) by providing quantitative data, if available? ☑ Yes ☐ No
Table E. 2,3,7,8-Tetrachlorodibenzo-p-Dioxin (2,3,7,8-TCDD)	
7.16	Does the facility use or manufacture one or more of the 2,3,7,8-TCDD congeners listed in the instructions, or do you know or have reason to believe that TCDD is or may be present in the effluent? ☐ Yes ➔ Complete Table E. ☑ No ➔ SKIP to Section 8.
7.17	Have you completed Table E by reporting *qualitative* data for TCDD? ☐ Yes ☐ No

SECTION 8. USED OR MANUFACTURED TOXICS (40 CFR 122.21(g)(9))

Used or Manufactured Toxics

8.1	Is any pollutant listed in Table B a substance or a component of a substance used or manufactured at your facility as an intermediate or final product or byproduct? ☐ Yes ☑ No ➔ SKIP to Section 9.
8.2	List the pollutants below.

1.	4.	7.
2.	5.	8.
3.	6.	9.

SECTION 9. BIOLOGICAL TOXICITY TESTS (40 CFR 122.21(g)(11))

Biological Toxicity Tests

9.1 Do you have any knowledge or reason to believe that any biological test for acute or chronic toxicity has been made within the last three years on (1) any of your discharges or (2) on a receiving water in relation to your discharge?

☑ Yes ☐ No ➔ SKIP to Section 10.

9.2 Identify the tests and their purposes below.

Test(s)	Purpose of Test(s)	Submitted to NPDES Permitting Authority?	Date Submitted
Acute Toxicity (Pimephales Promelas)	NPDES Permit Requirement	☑ Yes ☐ No	01/06/2021
Acute Toxicity (Daphnia Pulex)	NPDES Permit Requirement	☑ Yes ☐ No	01/06/2021
		☐ Yes ☐ No	

SECTION 10. CONTRACT ANALYSES (40 CFR 122.21(g)(12))

Contract Analyses

10.1 Were any of the analyses reported in Section 7 performed by a contract laboratory or consulting firm?

☑ Yes ☐ No ➔ SKIP to Section 11.

10.2 Provide information for each contract laboratory or consulting firm below.

	Laboratory Number 1	Laboratory Number 2	Laboratory Number 3
Name of laboratory/firm	Arkansas Analytical, Inc.		
Laboratory address	8001 National Drive Little Rock, AR 72209		
Phone number	(501) 455-3233		
Pollutant(s) analyzed	All reported pollutants.		

SECTION 11. ADDITIONAL INFORMATION (40 CFR 122.21(g)(13))

Additional Information

11.1 Has the NPDES permitting authority requested additional information?

☑ Yes ☐ No ➔ SKIP to Section 12.

11.2 List the information requested and attach it to this application.

1. 316b Cooling Water Intake Structure Information	4.
2.	5.
3.	6.

SECTION 12. CHECKLIST AND CERTIFICATION STATEMENT (40 CFR 122.22(a) and (d))

Checklist and Certification Statement

12.1 In Column 1 below, mark the sections of Form 2C that you have completed and are submitting with your application. For each section, specify in Column 2 any attachments that you are enclosing to alert the permitting authority. Note that not all applicants are required to complete all sections or provide attachments.

Column 1	Column 2	
☑ Section 1: Outfall Location	☐ w/ attachments	
☑ Section 2: Line Drawing	☑ w/ line drawing	☐ w/ additional attachments
☑ Section 3: Average Flows and Treatment	☐ w/ attachments	☐ w/ list of each user of privately owned treatment works
☐ Section 4: Intermittent Flows	☐ w/ attachments	
☑ Section 5: Production	☐ w/ attachments	
☐ Section 6: Improvements	☐ w/ attachments	☐ w/ optional additional sheets describing any additional pollution control plans
☑ Section 7: Effluent and Intake Characteristics	☐ w/ request for a waiver and supporting information ☐ w/ small business exemption request ☑ w/ Table A ☑ w/ Table C ☑ w/ Table E	☐ w/ explanation for identical outfalls ☐ w/ other attachments ☑ w/ Table B ☑ w/ Table D ☑ w/ analytical results as an attachment
☐ Section 8: Used or Manufactured Toxics	☐ w/ attachments	
☑ Section 9: Biological Toxicity Tests	☑ w/ attachments	
☑ Section 10: Contract Analyses	☑ w/ attachments	
☒ Section 11: Additional Information	☒ w/ attachments	
☑ Section 12: Checklist and Certification Statement	☐ w/ attachments	

12.2 **Certification Statement**

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name (print or type first and last name)	Official title
Beverley Gale	VP, Power Plant Operations - EAL
Signature BAGale Beverley Gale (May 24, 2021 13:45 CDT)	**Date signed** May 24, 2021

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AR0049140	AR0049140	Entergy - Union Power Station	001

Form Approved 03/05/19
OMB No. 2040-0004

TABLE A. CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(iii)) [1]

	Pollutant	Waiver Requested (if applicable)	Units (specify)		Effluent: Maximum Daily Discharge (required)	Effluent: Maximum Monthly Discharge (if available)	Effluent: Long-Term Average Daily Discharge (if available)	Effluent: Number of Analyses	Intake (Optional): Long-Term Average Value	Intake (Optional): Number of Analyses
☐	Check here if you have applied to your NPDES permitting authority for a waiver for *all* of the pollutants listed on this table for the noted outfall.									
1.	Biochemical oxygen demand (BOD_5)	☐	Concentration	mg/l	4.58			1		
			Mass	lb/day	35.4			1		
2.	Chemical oxygen demand (COD)	☐	Concentration	mg/l	76.3			1		
			Mass	lb/day	717.8			1		
3.	Total organic carbon (TOC)	☐	Concentration	mg/l	31.1			1		
			Mass	lb/day	240.2			1		
4.	Total suspended solids (TSS)	☐	Concentration	mg/l	13.5			1		
			Mass	lb/day	104.3			1		
5.	Ammonia (as N)	☐	Concentration	mg/l	0.5			1		
			Mass	lb/day	4.7			1		
6.	Flow	☐	Rate	MGD	1.35	1.35	0.75	37		
7.	Temperature (winter)	☐	°C	°C	32.1	25.4	23.7	22		
	Temperature (summer)	☐	°C	°C	34.6	33.1	32.5	15		
8.	pH (minimum)	☐	Standard units	s.u.	6.59	6.59	7.25	37		
	pH (maximum)	☐	Standard units	s.u.	8.33	8.33	7.9	37		

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AR0049140	AR0049140	Entergy - Union Power Station	001

Form Approved 03/05/19
OMB No. 2040-0004

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you qualify as a small business per the instructions to Form 2C and, therefore, do not need to submit quantitative data for any of the organic toxic pollutants in Sections 2 through 5 of this table. Note, however, that you must still indicate in the appropriate column of this table if you believe any of the pollutants listed are present in your discharge.											
Section 1. Toxic Metals, Cyanide, and Total Phenols												
1.1	Antimony, total (7440-36-0)	☑	☐	☐	Concentration	ug/l	< 60			1		
					Mass	lb/day	<0 .46			1		
1.2	Arsenic, total (7440-38-2)	☑	☐	☐	Concentration	ug/l	22.4			1		
					Mass	lb/day	0.17			1		
1.3	Beryllium, total (7440-41-7)	☑	☐	☐	Concentration	ug/l	< 0.5			1		
					Mass	lb/day	< 0.004			1		
1.4	Cadmium, total (7440-43-9)	☑	☐	☐	Concentration	ug/l	< 0.5			1		
					Mass	lb/day	< 0.004			1		
1.5	Chromium, total (7440-47-3)	☑	☐	☐	Concentration	ug/l	12.4			1		
					Mass	lb/day	0.1			1		
1.6	Copper, total (7440-50-8)	☑	☐	☐	Concentration	ug/l	21.6			1		
					Mass	lb/day	0.17			1		
1.7	Lead, total (7439-92-1)	☑	☐	☐	Concentration	ug/l	< 0.5			1		
					Mass	lb/day	< 0.004			1		
1.8	Mercury, total (7439-97-6)	☑	☐	☐	Concentration	ug/l	< 0.005			1		
					Mass	lb/day	< 0.00004			1		
1.9	Nickel, total (7440-02-0)	☑	☐	☐	Concentration	ug/l	4.93			1		
					Mass	lb/day	0.04			1		
1.10	Selenium, total (7782-49-2)	☑	☐	☐	Concentration	ug/l	5.2			1		
					Mass	lb/day	0.04			1		
1.11	Silver, total (7440-22-4)	☑	☐	☐	Concentration	ug/l	< 0.5			1		
					Mass	lb/day	< 0.004			1		

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
1.12	Thallium, total (7440-28-0)	☑	☐	☐	Concentration	ug/l	< 0.26			1		
					Mass	lb/day	< 0.002			1		
1.13	Zinc, total (7440-66-6)	☑	☐	☐	Concentration	ug/l	29.0			1		
					Mass	lb/day	0.22			1		
1.14	Cyanide, total (57-12-5)	☑	☐	☐	Concentration	mg/l	< 0.01			1		
					Mass	lb/day	< 0.09			1		
1.15	Phenols, total	☑	☐	☐	Concentration	mg/l	< 0.005			1		
					Mass	lb/day	< 0.04			1		
Section 2. Organic Toxic Pollutants (GC/MS Fraction—Volatile Compounds)												
2.1	Acrolein (107-02-8)	☑	☐	☐	Concentration	ug/l	< 50			1		
					Mass	lb/day	< 0.4			1		
2.2	Acrylonitrile (107-13-1)	☑	☐	☐	Concentration	ug/l	< 20			1		
					Mass	lb/day	< 0.15			1		
2.3	Benzene (71-43-2)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.4	Bromoform (75-25-2)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.5	Carbon tetrachloride (56-23-5)	☑	☐	☐	Concentration	ug/l	< 2			1		
					Mass	lb/day	< 0.016			1		
2.6	Chlorobenzene (108-90-7)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.7	Chlorodibromomethane (124-48-1)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.8	Chloroethane (75-00-3)	☑	☐	☐	Concentration	ug/l	< 50			1		
					Mass	lb/day	< 0.4			1		

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
2.9	2-chloroethylvinyl ether (110-75-8)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.10	Chloroform (67-66-3)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.11	Dichlorobromomethane (75-27-4)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.12	1,1-dichloroethane (75-34-3)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.13	1,2-dichloroethane (107-06-2)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.14	1,1-dichloroethylene (75-35-4)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.15	1,2-dichloropropane (78-87-5)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.16	1,3-dichloropropylene (542-75-6)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.17	Ethylbenzene (100-41-4)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.18	Methyl bromide (74-83-9)	☑	☐	☐	Concentration	ug/l	< 50			1		
					Mass	lb/day	< 0.4			1		
2.19	Methyl chloride (74-87-3)	☑	☐	☐	Concentration	ug/l	< 50			1		
					Mass	lb/day	< 0.4			1		
2.20	Methylene chloride (75-09-2)	☑	☐	☐	Concentration	ug/l	< 20			1		
					Mass	lb/day	< 0.15			1		
2.21	1,1,2,2- tetrachloroethane (79-34-5)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
2.22	Tetrachloroethylene (127-18-4)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.23	Toluene (108-88-3)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.24	1,2-trans-dichloroethylene (156-60-5)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.25	1,1,1-trichloroethane (71-55-6)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.26	1,1,2-trichloroethane (79-00-5)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.27	Trichloroethylene (79-01-6)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
2.28	Vinyl chloride (75-01-4)	☑	☐	☐	Concentration	ug/l	< 10			1		
					Mass	lb/day	< 0.08			1		
Section 3. Organic Toxic Pollutants (GC/MS Fraction—Acid Compounds)												
3.1	2-chlorophenol (95-57-8)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
3.2	2,4-dichlorophenol (120-83-2)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
3.3	2,4-dimethylphenol (105-67-9)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
3.4	4,6-dinitro-o-cresol (534-52-1)	☑	☐	☐	Concentration	ug/l	< 49.5			1		
					Mass	lb/day	< 0.4			1		
3.5	2,4-dinitrophenol (51-28-5)	☑	☐	☐	Concentration	ug/l	< 49.5			1		
					Mass	lb/day	< 0.4			1		

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
3.6	2-nitrophenol (88-75-5)	☑	☐	☐	Concentration	ug/l	< 19.8			1		
					Mass	lb/day	< 0.15			1		
3.7	4-nitrophenol (100-02-7)	☑	☐	☐	Concentration	ug/l	< 49.5			1		
					Mass	lb/day	< 0.4			1		
3.8	p-chloro-m-cresol (59-50-7)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
3.9	Pentachlorophenol (87-86-5)	☑	☐	☐	Concentration	ug/l	< 4.95			1		
					Mass	lb/day	< 0.04	< 0.04		1		
3.10	Phenol (108-95-2)	☑	☐	☐	Concentration	ug/l	107			1		
					Mass	lb/day	0.83			1		
3.11	2,4,6-trichlorophenol (88-05-2)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
Section 4. Organic Toxic Pollutants (GC/MS Fraction—Base /Neutral Compounds)												
4.1	Acenaphthene (83-32-9)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.2	Acenaphthylene (208-96-8)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.3	Anthracene (120-12-7)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.4	Benzidine (92-87-5)	☑	☐	☐	Concentration	ug/l	< 49.5			1		
					Mass	lb/day	< 0.4			1		
4.5	Benzo (a) anthracene (56-55-3)	☑	☐	☐	Concentration	ug/l	< 4.95			1		
					Mass	lb/day	< 0.04			1		
4.6	Benzo (a) pyrene (50-32-8)	☑	☐	☐	Concentration	ug/l	< 4.95			1		
					Mass	lb/day	< 0.04			1		

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.7	3,4-benzofluoranthene (205-99-2)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.8	Benzo (ghi) perylene (191-24-2)	☑	☐	☐	Concentration	ug/l	< 19.8			1		
					Mass	lb/day	< 0.15			1		
4.9	Benzo (k) fluoranthene (207-08-9)	☑	☐	☐	Concentration	ug/l	< 4.95			1		
					Mass	lb/day	< 0.04			1		
4.10	Bis (2-chloroethoxy) methane (111-91-1)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.11	Bis (2-chloroethyl) ether (111-44-4)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.12	Bis (2-chloroisopropyl) ether (102-80-1)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.13	Bis (2-ethylhexyl) phthalate (117-81-7)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.14	4-bromophenyl phenyl ether (101-55-3)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.15	Butyl benzyl phthalate (85-68-7)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.16	2-chloronaphthalene (91-58-7)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.17	4-chlorophenyl phenyl ether (7005-72-3)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.18	Chrysene (218-01-9)	☑	☐	☐	Concentration	ug/l	< 4.95			1		
					Mass	lb/day	< 0.04			1		
4.19	Dibenzo (a,h) anthracene (53-70-3)	☑	☐	☐	Concentration	ug/l	< 4.95			1		
					Mass	lb/day	< 0.04			1		

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.20	1,2-dichlorobenzene (95-50-1)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.21	1,3-dichlorobenzene (541-73-1)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.22	1,4-dichlorobenzene (106-46-7)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.23	3,3-dichlorobenzidine (91-94-1)	☑	☐	☐	Concentration	ug/l	< 4.95			1		
					Mass	lb/day	< 0.04			1		
4.24	Diethyl phthalate (84-66-2)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.25	Dimethyl phthalate (131-11-3)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.26	Di-n-butyl phthalate (84-74-2)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.27	2,4-dinitrotoluene (121-14-2)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.28	2,6-dinitrotoluene (606-20-2)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.29	Di-n-octyl phthalate (117-84-0)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.30	1,2-Diphenylhydrazine (as azobenzene) (122-66-7)	☑	☐	☐	Concentration	ug/l	< 19.8			1		
					Mass	lb/day	< 0.15			1		
4.31	Fluoranthene (206-44-0)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.32	Fluorene (86-73-7)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.33	Hexachlorobenzene (118-74-1)	☑	☐	☐	Concentration	ug/l	< 4.95			1		
					Mass	lb/day	< 0.04			1		
4.34	Hexachlorobutadiene (87-68-3)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.35	Hexachlorocyclopentadiene (77-47-4)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.36	Hexachloroethane (67-72-1)	☑	☐	☐	Concentration	ug/l	< 19.8			1		
					Mass	lb/day	< 0.15			1		
4.37	Indeno (1,2,3-cd) pyrene (193-39-5)	☑	☐	☐	Concentration	ug/l	< 4.95			1		
					Mass	lb/day	< 0.04			1		
4.38	Isophorone (78-59-1)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.39	Naphthalene (91-20-3)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.40	Nitrobenzene (98-95-3)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.41	N-nitrosodimethylamine (62-75-9)	☑	☐	☐	Concentration	ug/l	< 49.5			1		
					Mass	lb/day	< 0.4			1		
4.42	N-nitrosodi-n-propylamine (621-64-7)	☑	☐	☐	Concentration	ug/l	< 19.8			1		
					Mass	lb/day	< 0.15			1		
4.43	N-nitrosodiphenylamine (86-30-6)	☑	☐	☐	Concentration	ug/l	< 19.8			1		
					Mass	lb/day	< 0.15			1		
4.44	Phenanthrene (85-01-8)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
4.45	Pyrene (129-00-0)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AR0049140	AR0049140	Entergy - Union Power Station	001

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TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
4.46	1,2,4-trichlorobenzene (120-82-1)	☑	☐	☐	Concentration	ug/l	< 9.9			1		
					Mass	lb/day	< 0.08			1		
Section 5. Organic Toxic Pollutants (GC/MS Fraction—Pesticides)												
5.1	Aldrin (309-00-2)	☑	☐	☐	Concentration	ug/l	< 0.01			1		
					Mass	lb/day	< 0.0001			1		
5.2	α-BHC (319-84-6)	☑	☐	☐	Concentration	ug/l	< 0.05			1		
					Mass	lb/day	< 0.0004			1		
5.3	β-BHC (319-85-7)	☑	☐	☐	Concentration	ug/l	< 0.05			1		
					Mass	lb/day	< 0.0004			1		
5.4	γ-BHC (58-89-9)	☑	☐	☐	Concentration	ug/l	< 0.05			1		
					Mass	lb/day	< 0.0004			1		
5.5	δ-BHC (319-86-8)	☑	☐	☐	Concentration	ug/l	< 0.05			1		
					Mass	lb/day	< 0.0004			1		
5.6	Chlordane (57-74-9)	☑	☐	☐	Concentration	ug/l	< 0.2			1		
					Mass	lb/day	< 0.002			1		
5.7	4,4'-DDT (50-29-3)	☑	☐	☐	Concentration	ug/l	< 0.02			1		
					Mass	lb/day	< 0.0002			1		
5.8	4,4'-DDE (72-55-9)	☑	☐	☐	Concentration	ug/l	< 0.1			1		
					Mass	lb/day	< 0.0008			1		
5.9	4,4'-DDD (72-54-8)	☑	☐	☐	Concentration	ug/l	< 0.1			1		
					Mass	lb/day	< 0.0008			1		
5.10	Dieldrin (60-57-1)	☑	☐	☐	Concentration	ug/l	< 0.02			1		
					Mass	lb/day	< 0.0002			1		
5.11	α-endosulfan (115-29-7)	☑	☐	☐	Concentration	ug/l	< 0.01			1		
					Mass	lb/day	< 0.00008			1		

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.12	β-endosulfan (115-29-7)	☑	☐	☐	Concentration	ug/l	< 0.02			1		
					Mass	lb/day	< 0.0002			1		
5.13	Endosulfan sulfate (1031-07-8)	☑	☐	☐	Concentration	ug/l	< 0.1			1		
					Mass	lb/day	< 0.0008			1		
5.14	Endrin (72-20-8)	☑	☐	☐	Concentration	ug/l	< 0.02			1		
					Mass	lb/day	< 0.0002			1		
5.15	Endrin aldehyde (7421-93-4)	☑	☐	☐	Concentration	ug/l	< 0.1			1		
					Mass	lb/day	< 0.0008			1		
5.16	Heptachlor (76-44-8)	☑	☐	☐	Concentration	ug/l	< 0.01			1		
					Mass	lb/day	< 0.00008			1		
5.17	Heptachlor epoxide (1024-57-3)	☑	☐	☐	Concentration	ug/l	< 0.01			1		
					Mass	lb/day	< 0.00008			1		
5.18	PCB-1242 (53469-21-9)	☑	☐	☐	Concentration	ug/l	< 0.2			1		
					Mass	lb/day	< 0.002			1		
5.19	PCB-1254 (11097-69-1)	☑	☐	☐	Concentration	ug/l	< 0.2			1		
					Mass	lb/day	< 0.002			1		
5.20	PCB-1221 (11104-28-2)	☑	☐	☐	Concentration	ug/l	< 0.2			1		
					Mass	lb/day	< 0.002			1		
5.21	PCB-1232 (11141-16-5)	☑	☐	☐	Concentration	ug/l	< 0.2			1		
					Mass	lb/day	< 0.002			1		
5.22	PCB-1248 (12672-29-6)	☑	☐	☐	Concentration	ug/l	< 0.2			1		
					Mass	lb/day	< 0.002			1		
5.23	PCB-1260 (11096-82-5)	☑	☐	☐	Concentration	ug/l	< 0.2			1		
					Mass	lb/day	< 0.002			1		
5.24	PCB-1016 (12674-11-2)	☑	☐	☐	Concentration	ug/l	< 0.2			1		
					Mass	lb/day	< 0.002			1		

TABLE B. TOXIC METALS, CYANIDE, TOTAL PHENOLS, AND ORGANIC TOXIC POLLUTANTS (40 CFR 122.21(g)(7)(v))[1]

	Pollutant/Parameter (and CAS Number, if available)	Testing Required	Presence or Absence (check one)		Units (specify)		Effluent				Intake (optional)	
			Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
5.25	Toxaphene (8001-35-2)	☑	☐	☐	Concentration	ug/l	< 0.245			1		
					Mass	lb/day	< 0.002			1		

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

EPA Identification Number	NPDES Permit Number	Facility Name	Outfall Number
AR0049140	AR0049140	Entergy - Union Power Station	001

Form Approved 03/05/19
OMB No. 2040-0004

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
☐	Check here if you believe all pollutants on Table C to be ***present*** in your discharge from the noted outfall. You need *not* complete the "Presence or Absence" column of Table C for *each* pollutant.										
☐	Check here if you believe all pollutants on Table C to be ***absent*** in your discharge from the noted outfall. You need *not* complete the "Presence or Absence" column of Table C for *each* pollutant.										
1.	Bromide (24959-67-9)	☐	☑	Concentration							
				Mass							
2.	Chlorine, total residual	☑	☐	Concentration	mg/l	0.33			1		
				Mass	lb/day	2.55			1		
3.	Color	☐	☑	Concentration							
				Mass							
4.	Fecal coliform	☐	☑	Concentration							
				Mass							
5.	Fluoride (16984-48-8)	☐	☑	Concentration							
				Mass							
6	Nitrate-nitrite	☐	☑	Concentration							
				Mass							
7.	Nitrogen, total organic (as N)	☐	☑	Concentration							
				Mass							
8.	Oil and grease	☑	☐	Concentration	mg/l	8.0	8.0	4.66	37		
				Mass	lb/day	97.07	97.07	30.4	37		
9.	Phosphorus (as P), total (7723-14-0)	☑	☐	Concentration	mg/l	3.06			1		
				Mass	lb/day	23.6			1		
10.	Sulfate (as SO_4) (14808-79-8)	☐	☑	Concentration							
				Mass							
11.	Sulfide (as S)	☐	☑	Concentration							
				Mass							

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
12.	Sulfite (as SO_3) (14265-45-3)	☐	☑	Concentration							
				Mass							
13.	Surfactants	☐	☑	Concentration							
				Mass							
14.	Aluminum, total (7429-90-5)	☐	☑	Concentration							
				Mass							
15.	Barium, total (7440-39-3)	☐	☑	Concentration							
				Mass							
16.	Boron, total (7440-42-8)	☐	☑	Concentration							
				Mass							
17.	Cobalt, total (7440-48-4)	☐	☑	Concentration							
				Mass							
18.	Iron, total (7439-89-6)	☐	☑	Concentration							
				Mass							
19.	Magnesium, total (7439-95-4)	☐	☑	Concentration							
				Mass							
20.	Molybdenum, total (7439-98-7)	☐	☑	Concentration							
				Mass							
21.	Manganese, total (7439-96-5)	☐	☑	Concentration							
				Mass							
22.	Tin, total (7440-31-5)	☐	☑	Concentration							
				Mass							
23.	Titanium, total (7440-32-6)	☐	☑	Concentration							
				Mass							

TABLE C. CERTAIN CONVENTIONAL AND NON CONVENTIONAL POLLUTANTS (40 CFR 122.21(g)(7)(vi))[1]

	Pollutant	Presence or Absence (check one)		Units (specify)		Effluent				Intake (Optional)	
		Believed Present	Believed Absent			Maximum Daily Discharge (required)	Maximum Monthly Discharge (if available)	Long-Term Average Daily Discharge (if available)	Number of Analyses	Long-Term Average Value	Number of Analyses
24.	**Radioactivity**										
	Alpha, total	☐	☑	Concentration							
				Mass							
	Beta, total	☐	☑	Concentration							
				Mass							
	Radium, total	☐	☑	Concentration							
				Mass							
	Radium 226, total	☐	☑	Concentration							
				Mass							

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
1.	Asbestos	☐	☑		
2.	Acetaldehyde	☐	☑		
3.	Allyl alcohol	☐	☑		
4.	Allyl chloride	☐	☑		
5.	Amyl acetate	☐	☑		
6.	Aniline	☐	☑		
7.	Benzonitrile	☐	☑		
8.	Benzyl chloride	☐	☑		
9.	Butyl acetate	☐	☑		
10.	Butylamine	☐	☑		
11.	Captan	☐	☑		
12.	Carbaryl	☐	☑		
13.	Carbofuran	☐	☑		
14.	Carbon disulfide	☐	☑		
15.	Chlorpyrifos	☐	☑		
16.	Coumaphos	☐	☑		
17.	Cresol	☐	☑		
18.	Crotonaldehyde	☐	☑		
19.	Cyclohexane	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
20.	2,4-D (2,4-dichlorophenoxyacetic acid)	☐	☑		
21.	Diazinon	☐	☑		
22.	Dicamba	☐	☑		
23.	Dichlobenil	☐	☑		
24.	Dichlone	☐	☑		
25.	2,2-dichloropropionic acid	☐	☑		
26.	Dichlorvos	☐	☑		
27.	Diethyl amine	☐	☑		
28.	Dimethyl amine	☐	☑		
29.	Dintrobenzene	☐	☑		
30.	Diquat	☐	☑		
31.	Disulfoton	☐	☑		
32.	Diuron	☐	☑		
33.	Epichlorohydrin	☐	☑		
34.	Ethion	☐	☑		
35.	Ethylene diamine	☐	☑		
36.	Ethylene dibromide	☐	☑		
37.	Formaldehyde	☐	☑		
38.	Furfural	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
39.	Guthion	☐	☑		
40.	Isoprene	☐	☑		
41.	Isopropanolamine	☐	☑		
42.	Kelthane	☐	☑		
43.	Kepone	☐	☑		
44.	Malathion	☐	☑		
45.	Mercaptodimethur	☐	☑		
46.	Methoxychlor	☐	☑		
47.	Methyl mercaptan	☐	☑		
48.	Methyl methacrylate	☐	☑		
49.	Methyl parathion	☐	☑		
50.	Mevinphos	☐	☑		
51.	Mexacarbate	☐	☑		
52.	Monoethyl amine	☐	☑		
53.	Monomethyl amine	☐	☑		
54.	Naled	☐	☑		
55.	Naphthenic acid	☐	☑		
56.	Nitrotoluene	☐	☑		
57.	Parathion	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
58.	Phenolsulfonate	☐	☑		
59.	Phosgene	☐	☑		
60.	Propargite	☐	☑		
61.	Propylene oxide	☐	☑		
62.	Pyrethrins	☐	☑		
63.	Quinoline	☐	☑		
64.	Resorcinol	☐	☑		
65.	Strontium	☐	☑		
66.	Strychnine	☐	☑		
67.	Styrene	☐	☑		
68.	2,4,5-T (2,4,5-trichlorophenoxyacetic acid)	☐	☑		
69.	TDE (tetrachlorodiphenyl ethane)	☐	☑		
70.	2,4,5-TP [2-(2,4,5-trichlorophenoxy) propanoic acid]	☐	☑		
71.	Trichlorofon	☐	☑		
72.	Triethanolamine	☐	☑		
73.	Triethylamine	☐	☑		
74.	Trimethylamine	☐	☑		
75.	Uranium	☐	☑		
76.	Vanadium	☐	☑		

TABLE D. CERTAIN HAZARDOUS SUBSTANCES AND ASBESTOS (40 CFR 122.21(g)(7)(vii))[1]

	Pollutant	Presence or Absence (check one)		Reason Pollutant Believed Present in Discharge	Available Quantitative Data (specify units)
		Believed Present	Believed Absent		
77.	Vinyl acetate	☐	☑		
78.	Xylene	☐	☑		
79.	Xylenol	☐	☑		
80.	Zirconium	☐	☑		

[1] Sampling shall be conducted according to sufficiently sensitive test procedures (i.e., methods) approved under 40 CFR 136 for the analysis of pollutants or pollutant parameters or required under 40 CFR chapter I, subchapter N or O. See instructions and 40 CFR 122.21(e)(3).

TABLE E. 2,3,7,8 TETRACHLORODIBENZO P DIOXIN (2,3,7,8 TCDD) (40 CFR 122.21(g)(7)(viii))

Pollutant	TCDD Congeners Used or Manufactured	Presence or Absence (check one)		Results of Screening Procedure
		Believed Present	Believed Absent	
2,3,7,8-TCDD	☐	☐	☑	

Click to go back to the beginning of Form

Entergy - Union Power Station
EPA Form 2C Mass Calculations
Outfall 001

Sample Date	Flow
	MGD
4/13/2021	0.9260
4/21/2021	1.1280

Pollutant	Concentration	Concentration	Mass
	ug/l	mg/l	lb/day
BOD5		4.58000	35.37061
COD		76.30000	717.79378
TOC		31.10000	240.18032
TSS		13.50000	104.25834
Ammonia		0.50000	4.70376
Antimony	60.0000	0.06000	0.46337
Arsenic	22.4000	0.02240	0.17299
Beryllium	0.5000	0.00050	0.00386
Cadmium	0.5000	0.00050	0.00386
Chromium	12.4000	0.01240	0.09576
Copper	21.6000	0.02160	0.16681
Lead	0.5000	0.00050	0.00386
Mercury	0.0050	0.00001	0.00004
Nickel	4.9300	0.00493	0.03807
Selenium	5.2000	0.00520	0.04016
Silver	0.5000	0.00050	0.00386
Thallium	0.2600	0.00026	0.00201
Zinc	29.0000	0.02900	0.22396
Cyanide		0.01000	0.09408
Phenols		0.00500	0.03861
Acrolein	50.0000	0.05000	0.38614
Acrylonitrile	20.0000	0.02000	0.15446
Benzene	10.0000	0.01000	0.07723
Bromoform	10.0000	0.01000	0.07723
Carbon Tetrachloride	2.0000	0.00200	0.01545
Chlorobenzene	10.0000	0.01000	0.07723
Chlorodibromomethane	10.0000	0.01000	0.07723
Chloroethane	50.0000	0.05000	0.38614
2-Chloroethylvinyl Ether	10.0000	0.01000	0.07723
Chloroform	10.0000	0.01000	0.07723
Dichlorobromomethane	10.0000	0.01000	0.07723
1,1-Dichloroethane	10.0000	0.01000	0.07723
1,2-Dichloroethane	10.0000	0.01000	0.07723
1,1-Dichloroethylene	10.0000	0.01000	0.07723
1,2-Dichloropropane	10.0000	0.01000	0.07723
1,3-Dichloropropylene	10.0000	0.01000	0.07723
Ethylbenzene	10.0000	0.01000	0.07723
Methyl Bromide	50.0000	0.05000	0.38614
Methyl Chloride	50.0000	0.05000	0.38614
Methylene Chloride	20.0000	0.02000	0.15446
1,1,2,2-Tetrachloroethane	10.0000	0.01000	0.07723
Tetrachloroethylene	10.0000	0.01000	0.07723

Entergy - Union Power Station
EPA Form 2C Mass Calculations
Outfall 001

Sample Date	Flow
	MGD
4/13/2021	0.9260
4/21/2021	1.1280

Pollutant	Concentration	Concentration	Mass
	ug/l	mg/l	lb/day
Toluene	10.0000	0.01000	0.07723
1,2-Trans-Dichloroethylene	10.0000	0.01000	0.07723
1,1,1-Trichloroethane	10.0000	0.01000	0.07723
1,1,2-Trichloroethane	10.0000	0.01000	0.07723
Trichloroethylene	10.0000	0.01000	0.07723
Vinyl Chloride	10.0000	0.01000	0.07723
2-Chlorophenol	9.9000	0.00990	0.07646
2,4-Dichlorophenol	9.9000	0.00990	0.07646
2,4-Dimethylphenol	9.9000	0.00990	0.07646
4,6-Dinitro-o-Cresol	49.5000	0.04950	0.38228
2,4-Dinitrophenol	49.5000	0.04950	0.38228
2-Nitrophenol	19.8000	0.01980	0.15291
4-Nitrophenol	49.5000	0.04950	0.38228
P-Chloro-m-Cresol	9.9000	0.00990	0.07646
Pentachlorophenol	4.9500	0.00495	0.03823
Phenol	107.0000	0.10700	0.82634
2,4,6-Trichlorophenol	9.9000	0.00990	0.07646
Acenaphthene	9.9000	0.00990	0.07646
Acenaphthylene	9.9000	0.00990	0.07646
Anthracene	9.9000	0.00990	0.07646
Benzidine	49.5000	0.04950	0.38228
Benzo(a)anthracene	4.9500	0.00495	0.03823
Benzo(a)pyrene	4.9500	0.00495	0.03823
3,4-Benzofluoranthene	9.9000	0.00990	0.07646
Benzo(ghi)perylene	19.8000	0.01980	0.15291
Benzo(k)fluoranthene	4.9500	0.00495	0.03823
Bis (2-Chloroethoxy) Methane	9.9000	0.00990	0.07646
Bis (2-Chloroethyl) Ether	9.9000	0.00990	0.07646
Bis (2-Chloroisopropyl) Ether	9.9000	0.00990	0.07646
Bis (2-Ethylhexyl) Phthalate	9.9000	0.00990	0.07646
4-Bromophenyl Phenyl Ether	9.9000	0.00990	0.07646
Butyl Benzyl Phthalate	9.9000	0.00990	0.07646
2-Chloronaphthalene	9.9000	0.00990	0.07646
4-Chlorophenyl Phenyl Ether	9.9000	0.00990	0.07646
Chrysene	4.9500	0.00495	0.03823
Dibenzo(a,h)anthracene	4.9500	0.00495	0.03823
1,2-Dichlorobenzene	9.9000	0.00990	0.07646
1,3-Dichlorobenzene	9.9000	0.00990	0.07646
1,4-Dichlorobenzene	9.9000	0.00990	0.07646
3,3-Dichlorobenzidine	4.9500	0.00495	0.03823
Diethyl Phthalate	9.9000	0.00990	0.07646
Dimethyl Phthalate	9.9000	0.00990	0.07646

Entergy - Union Power Station
EPA Form 2C Mass Calculations
Outfall 001

Sample Date	Flow
	MGD
4/13/2021	0.9260
4/21/2021	1.1280

Pollutant	Concentration	Concentration	Mass
	ug/l	mg/l	lb/day
Di-n-Butyl Phthalate	9.9000	0.00990	0.07646
2,4-Dinitrotoluene	9.9000	0.00990	0.07646
2,6-Dinitrotoluene	9.9000	0.00990	0.07646
Di-n-Octyl Phthalate	9.9000	0.00990	0.07646
1,2-Diphenylhydrazine	19.8000	0.01980	0.15291
Fluoranthene	9.9000	0.00990	0.07646
Fluorene	9.9000	0.00990	0.07646
Hexachlorobenzene	4.9500	0.00495	0.03823
Hexachlorobutadiene	9.9000	0.00990	0.07646
Hexachlorocyclopentadiene	9.9000	0.00990	0.07646
Hexachloroethane	19.8000	0.01980	0.15291
Indeno (1,2,3-cd) Pyrene	4.9500	0.00495	0.03823
Isophorone	9.9000	0.00990	0.07646
Naphthalene	9.9000	0.00990	0.07646
Nitrobenzene	9.9000	0.00990	0.07646
N-Nitrosodimethylamine	49.5000	0.04950	0.38228
N-Nitrosodi-n-Propylamine	19.8000	0.01980	0.15291
N-Nitrosodiphenylamine	19.8000	0.01980	0.15291
Phenanthrene	9.9000	0.00990	0.07646
Pyrene	9.9000	0.00990	0.07646
1,2,4-Trichlorobenzene	9.9000	0.00990	0.07646
Aldrin	0.0100	0.00001	0.00008
Alpha-BHC	0.0500	0.00005	0.00039
Beta-BHC	0.0500	0.00005	0.00039
Gamma-BHC	0.0500	0.00005	0.00039
Delta-BHC	0.0500	0.00005	0.00039
Chlorodane	0.2000	0.00020	0.00154
4,4'-DDT	0.0200	0.00002	0.00015
4,4'-DDE	0.1000	0.00010	0.00077
4,4'-DDD	0.1000	0.00010	0.00077
Dieldrin	0.0200	0.00002	0.00015
Alpha-Endosulfan	0.0100	0.00001	0.00008
Beta-Endosulfan	0.0200	0.00002	0.00015
Endosulfan Sulfate	0.1000	0.00010	0.00077
Endrin	0.0200	0.00002	0.00015
Endrin Aldehyde	0.1000	0.00010	0.00077
Heptachlor	0.0100	0.00001	0.00008
Heptachlor Epoxide	0.0100	0.00001	0.00008
PCB-1242	0.2000	0.00020	0.00154
PCB-1254	0.2000	0.00020	0.00154
PCB-1221	0.2000	0.00020	0.00154
PCB-1232	0.2000	0.00020	0.00154

Entergy - Union Power Station
EPA Form 2C Mass Calculations
Outfall 001

Sample Date	Flow
	MGD
4/13/2021	0.9260
4/21/2021	1.1280

Pollutant	Concentration	Concentration	Mass
	ug/l	mg/l	lb/day
PCB-1248	0.2000	0.00020	0.00154
PCB-1260	0.2000	0.00020	0.00154
PCB-1016	0.2000	0.00020	0.00154
Toxaphene	0.2450	0.00025	0.00189
Total Residual Chlorine		0.33000	2.54854
Phosphorus		3.06000	23.63189

PPS Form

June 1, 2021

ARKANSAS Department of Environmental Quality
PPS REQUIREMENTS

1. Name of facility:
   Entergy Arkansas, LLC - Union Power Station

2. Name, address and telephone number of laboratory:
   Arkansas Analytical, Inc.; 8100 National Drive, Little Rock, AR 72209

   Telephone: (501) 455-3233; Fax: (501) 455-6118

3. Is the lab certified by the State of Arkansas? Yes X No ___

4. What are the certification dates?
   Issued data 10/30/2020 Expire date 10/30/2021

5. Is the laboratory certified for all the parameters?
   YES X No ____ (Explain)

6. Date and time of samples collected:
   Collected: 4/13/2021, 7:41 and 4/21/2021, 12:27

7. Date and time samples were received in the laboratory:
   Received: 4/13/2021, 14:06 and 4/21/2021 15:04

8. Sample location (Outfall No.):
   Outfall 001

9. Samples collected by:
   Name Clint James
   Title Arkansas Analytical
   Telephone (501) 455-3233

10. I certify under penalty of law that this document and all attachments were prepared under my direction of supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information submitted is, to the best of my knowledge and belief, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Beverley Gale	VP, Power Plant Operations - EAL
Printed Name of person signing	Title
BGale Beverley Gale (Jun 1, 2021 12:51 CDT)	Jun 1, 2021
Signature	Date signed

List all attachments to this form:

Arkansas Analytical, Lab Reports dated 4/21/2021 , 4/29/2021, and 5/26/2021

METALS AND CYANIDE	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
1. Antimony (Total), Recoverable	< 60.0	EPA 200.8, Rev. 5.4 (1994)	60.0	60
2. Arsenic (Total), Recoverable	22.4	EPA 200.8, Rev. 5.4 (1994)	0.5	0.5
3. Beryllium (Total), Recoverable	< 0.5	EPA 200.8, Rev. 5.4 (1994)	0.5	0.5
4. Cadmium (Total), Recoverable	< 0.5	EPA 200.8, Rev. 5.4 (1994)	0.5	0.5
5. Chromium (Total), Recoverable	12.4	EPA 200.8, Rev. 5.4 (1994)	10.0	10
7. Chromium (6+), Dissolved	< 10.0	SM3500-Cr B, 2009	10.0	10
8. Copper (Total), Recoverable	21.6	EPA 200.8, Rev. 5.4 (1994)	0.5	0.5
9. Lead (Total), Recoverable	< 0.5	EPA 200.8, Rev. 5.4 (1994)	0.5	0.5
10. Mercury (Total), Recoverable	< 0.005	EPA 1631 E	0.005	0.005
12. Nickel (Total), Recoverable	4.93	EPA 200.8, Rev. 5.4 (1994)	0.5	0.5
13. Selenium (Total), Recoverable	< 5.2	EPA 200.8, Rev. 5.4 (1994)	5.0	5
14. Silver (Total), Recoverable	< 0.5	EPA 200.8, Rev. 5.4 (1994)	0.5	0.5
15. Thallium (Total), Recoverable	< 0.26	EPA 200.8, Rev. 5.4 (1994)	0.5	0.5
16. Zinc (Total), Recoverable	29.0	EPA 200.8, Rev. 5.4 (1994)	20.0	20
129. Phenols, Total Recoverable	< 5.0	EPA 420.1-1978	5.0	5
17. Cyanide (Total), Recoverable	< 10.0	SM4500-CN B,E-2011	10.0	10

DIOXIN	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
18. 2,3,7,8-Tetrachloro-debenzo-p-dioxin (TCDD)	< 9.9	EPA 625.1-2016	10.0	0.00001

VOLATILE COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
19. Acrolein	< 50.0	EPA 624.1-2016	50.0	50
20. Acrylonitrile	< 20.0	EPA 624.1-2016	20.0	20
21. Benzene	< 10.0	EPA 624.1-2016	10.0	10
22. Bromoform	< 10.0	EPA 624.1-2016	10.0	10
23. Carbon Tetrachloride	< 2.0	EPA 624.1-2016	2.0	2
24. Chlorobenzene	< 10.0	EPA 624.1-2016	10.0	10
25. Chlorodibromomethane	< 10.0	EPA 624.1-2016	10.0	10
26. Chloroethane	< 50.0	EPA 624.1-2016	50.0	50
27. 2-Chloroethyl vinyl ether	< 10.0	EPA 624.1-2016	10.0	10
28. Chloroform	< 10.0	EPA 624.1-2016	10.0	10
29. Dichlorobromomethane	< 10.0	EPA 624.1-2016	10.0	10
30. 1,1-Dichloroethane	< 10.0	EPA 624.1-2016	10.0	10
31. 1,2-Dichloroethane	< 10.0	EPA 624.1-2016	10.0	10
32. 1,1-Dichloroethylene	< 10.0	EPA 624.1-2016	10.0	10
33. 1,2-Dichloropropane	< 10.0	EPA 624.1-2016	10.0	10
34. 1,3-Dichloropropylene	< 10.0	EPA 624.1-2016	10.0	10
35. Ethylbenzene	< 10.0	EPA 624.1-2016	10.0	10
36. Methyl Bromide [Bromomethane]	< 50.0	EPA 624.1-2016	50.0	50
37. Methyl Chloride [Chloromethane]	< 50.0	EPA 624.1-2016	50.0	50
38. Methylene Chloride	< 20.0	EPA 624.1-2016	20.0	20
39. 1,1,2,2-Tetrachloroethane	< 10.0	EPA 624.1-2016	10.0	10
40. Tetrachloroethylene	< 10.0	EPA 624.1-2016	10.0	10
41. Toluene	< 10.0	EPA 624.1-2016	10.0	10
42. 1,2-trans-Dichloroethylene	< 10.0	EPA 624.1-2016	10.0	10
43. 1,1,1-Trichloroethane	< 10.0	EPA 624.1-2016	10.0	10
44. 1,1,2-Trichloroethane	< 10.0	EPA 624.1-2016	10.0	10
45. Trichloroethylene	< 10.0	EPA 624.1-2016	10.0	10
46. Vinyl Chloride	< 10.0	EPA 624.1-2016	10.0	10

ACID COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
47. 2-Chlorophenol	< 9.9	EPA 625.1-2016	10.0	10
48. 2,4-Dichlorophenol	< 9.9	EPA 625.1-2016	10.0	10
49. 2,4-Dimethylphenol	< 9.9	EPA 625.1-2016	10.0	10
50. 4,6-Dinitro-o-Cresol [2 methyl 4,6-dinitrophenol	< 49.5	EPA 625.1-2016	50.0	50
51. 2,4-Dinitrophenol	< 49.5	EPA 625.1-2016	50.0	50
52. 2-Nitrophenol	< 19.8	EPA 625.1-2016	20.0	20
53. 4-Nitrophenol	< 49.5	EPA 625.1-2016	50.0	50
54. P-Chloro-m-Cresol [4 chloro-3-methylphenol]	< 9.9	EPA 625.1-2016	10.0	10
55. Pentachlorophenol	< 4.95	EPA 625.1-2016	5.0	5
56. Phenol	107.0	EPA 625.1-2016	10.0	10
57. 2,4,6-Trichlorophenol	< 9.9	EPA 625.1-2016	10.0	10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
58. Acenaphthene	< 9.9	EPA 625.1-2016	10.0	10
59. Acenaphthylene	< 9.9	EPA 625.1-2016	10.0	10
60. Anthracene	< 9.9	EPA 625.1-2016	10.0	10
61. Benzidine	< 49.5	EPA 625.1-2016	50.0	50
62. Benzo(a)anthracene	< 4.95	EPA 625.1-2016	5.0	5
63. Benzo(a)pyrene	< 4.95	EPA 625.1-2016	5.0	5
64. 3,4-Benzofluoranthene	< 9.9	EPA 625.1-2016	10.0	10
65. Benzo(ghi)perylene	< 19.8	EPA 625.1-2016	20.0	20
66. Benzo(k)fluoranthene	< 4.95	EPA 625.1-2016	5.0	5
67. Bis(2-chloroethoxy) methane	< 9.9	EPA 625.1-2016	10.0	10
68. Bis(2-chloroethyl) ether	< 9.9	EPA 625.1-2016	10.0	10
69. Bis(2-chloroisopropyl) ether	< 9.9	EPA 625.1-2016	10.0	10
70. Bis(2-ethylhexyl) phthalate	< 9.9	EPA 625.1-2016	10.0	10
71. 4-Bromophenyl phenyl ether	< 9.9	EPA 625.1-2016	10.0	10
72. Butyl benzyl phthalate	< 9.9	EPA 625.1-2016	10.0	10
73. 2-Chloronapthalene	< 9.9	EPA 625.1-2016	10.0	10
74. 4-Chlorophenyl phenyl ether	< 9.9	EPA 625.1-2016	10.0	10
75. Chrysene	< 4.95	EPA 625.1-2016	5.0	5
76. Dibenzo (a,h) anthracene	< 4.95	EPA 625.1-2016	5.0	5
77. 1,2-Dichlorobenzene	< 9.9	EPA 625.1-2016	10.0	10
78. 1,3-Dichlorobenzene	< 9.9	EPA 625.1-2016	10.0	10
79. 1,4-Dichlorobenzene	< 9.9	EPA 625.1-2016	10.0	10
80. 3,3'-Dichlorobenzidine	< 4.95	EPA 625.1-2016	5.0	5
81. Diethyl Phthalate	< 9.9	EPA 625.1-2016	10.0	10
82. Dimethyl Phthalate	< 9.9	EPA 625.1-2016	10.0	10
83. Di-n-Butyl Phthalate	< 9.9	EPA 625.1-2016	10.0	10
84. 2,4-Dinitrotoluene	< 9.9	EPA 625.1-2016	10.0	10
85. 2,6-Dinitrotoluene	< 9.9	EPA 625.1-2016	10.0	10
86. Di-n-octyl Phthalate	< 9.9	EPA 625.1-2016	10.0	10

BASE/NEUTRAL COMPOUNDS	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
87. 1,2-Diphenylhydrazine	< 19.8	EPA 625.1-2016	20.0	20
89. Fluorene	< 9.9	EPA 625.1-2016	10.0	10
90. Hexachlorobenzene	< 4.95	EPA 625.1-2016	5.0	5
91. Hexachlorobutadiene	< 9.9	EPA 625.1-2016	10.0	10
92. Hexachlorocyclopentadiene	< 9.9	EPA 625.1-2016	10.0	10
93. Hexachloroethane	< 19.8	EPA 625.1-2016	20.0	20
94. Indeno (1,2,3-cd) pyrene (2,3-o-phenylene pyrene)	< 4.95	EPA 625.1-2016	5.0	5
95. Isophorone	< 9.9	EPA 625.1-2016	10.0	10
96. Naphthalene	< 9.9	EPA 625.1-2016	10.0	10
97. Nitrobenzene	< 9.9	EPA 625.1-2016	10.0	10
98. N-nitrosodimethylamine	< 49.5	EPA 625.1-2016	50.0	50
99. N-nitrosodi-n-propylamine	< 19.8	EPA 625.1-2016	20.0	20
100. N-nitrosodiphenylamine	< 19.8	EPA 625.1-2016	20.0	20
101. Phenanthrene	< 9.9	EPA 625.1-2016	10.0	10
102. Pyrene	< 9.9	EPA 625.1-2016	10.0	10
103. 1,2,4-Trichlorobenzene	< 9.9	EPA 625.1-2016	10.0	10

PESTICIDES	LABORATORY ANALYSIS			REQUIRED MQL (µg/l)
	RESULTS (µg/l)	APPROVED EPA METHOD USED	DETECTION LEVEL ACHIEVED (µg/l)	
104. Aldrin	< 0.01	EPA 608.3-2016	0.01	0.01
105. Alpha-BHC	< 0.05	EPA 608.3-2016	0.05	0.05
106. Beta-BHC	< 0.05	EPA 608.3-2016	0.05	0.05
107. Gamma-BHC	< 0.05	EPA 608.3-2016	0.05	0.05
108. Delta-BHC	< 0.05	EPA 608.3-2016	0.05	0.05
109. Chlordane	< 0.2	EPA 608.3-2016	0.2	0.2
110. 4,4'-DDT	< 0.02	EPA 608.3-2016	0.02	0.02
111. 4,4'-DDE (p,p-DDX)	< 0.1	EPA 608.3-2016	0.1	0.1
112. 4,4'-DDD 9(p,p-TDE)	< 0.1	EPA 608.3-2016	0.1	0.1
113. Dieldrin	< 0.02	EPA 608.3-2016	0.02	0.02
114. Alpha-endosulfan	< 0.01	EPA 608.3-2016	0.01	0.01
115. Beta-endosulfan	< 0.02	EPA 608.3-2016	0.02	0.02
116. Endosulfan sulfate	< 0.1	EPA 608.3-2016	0.1	0.1
117. Endrin	< 0.02	EPA 608.3-2016	0.02	0.02
118. Endrin aldehyde	< 0.1	EPA 608.3-2016	0.1	0.1
119. Heptachlor	< 0.01	EPA 608.3-2016	0.01	0.01
120. Heptachlor epoxide (BHC-hexachlorocyclohexane)	< 0.01	EPA 608.3-2016	0.01	0.01
130. Chlorpyrifos	< 0.07	EPA 608.3-2016	0.07	0.07
121. PCB-1242	< 0.2	EPA 608.3-2016	0.2	0.2
122. PCB-1254	< 0.2	EPA 608.3-2016	0.2	0.2
123. PCB-1221	< 0.2	EPA 608.3-2016	0.2	0.2
124. PCB-1232	< 0.2	EPA 608.3-2016	0.2	0.2
125. PCB-1248	< 0.2	EPA 608.3-2016	0.2	0.2
126. PCB-1260	< 0.2	EPA 608.3-2016	0.2	0.2
127. PCB-1016	< 0.2	EPA 608.3-2016	0.2	0.2
128. Toxaphene	< 0.245	EPA 608.3-2016	0.3	0.3

DMR Summary Tables

June 1, 2021

Entergy - Union Power Station
DMR Summary Table
Outfall 001

Monitoring Period		Flow		pH		Temperature*		Oil & Grease			
		MGD		S.U.		°C		lbs/day		mg/l	
Year	Month	Average	Maximum	Minimum	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
2018	April	0.68	1.25	7.78	8.33	76.80	85.50	22.60	36.42	3.50	3.50
2018	May	0.91	1.70	7.60	8.29	24.89	29.72	23.82	45.90	3.55	3.63
2018	June	0.96	1.59	7.53	7.82	29.01	31.00	26.64	46.96	3.56	3.61
2018	July	0.92	1.59	6.97	8.10	30.31	32.61	30.69	40.51	3.54	3.57
2018	August	0.99	1.95	7.51	7.84	31.10	32.22	35.91	55.48	3.55	3.61
2018	September	0.71	1.36	7.16	7.78	31.44	32.78	22.76	35.56	3.50	3.50
2018	October	1.17	1.92	7.54	7.88	30.14	31.72	31.78	50.65	3.50	3.50
2018	November	0.39	1.19	7.20	8.02	26.80	30.89	11.06	21.89	3.50	3.50
2018	December	0.16	0.93	7.09	8.05	18.57	24.50	7.85	14.45	3.60	3.76
2019	January	0.42	1.15	6.93	8.00	19.19	22.50	18.34	45.98	4.70	5.00
2019	February	0.77	1.27	7.77	8.09	18.28	21.39	30.33	51.72	5.00	5.00
2019	March	0.51	1.11	7.66	7.84	20.03	26.00	20.08	37.27	5.07	5.26
2019	April	0.53	1.13	7.79	8.20	20.32	20.61	26.84	41.45	5.03	5.15
2019	May	0.73	1.63	7.42	8.13	26.51	30.28	41.38	68.10	5.08	5.32
2019	June	0.79	1.52	7.22	8.08	29.29	33.28	30.63	38.42	5.05	5.21
2019	July	0.96	1.89	7.29	8.00	29.88	31.89	40.26	55.89	5.03	5.15
2019	August	1.02	1.94	7.74	7.93	30.89	33.28	51.51	74.60	5.07	5.15
2019	September	0.81	1.42	7.50	7.90	32.68	34.61	39.87	57.91	5.04	5.15
2019	October	1.35	2.83	7.73	8.07	31.33	32.61	70.43	86.92	5.00	5.00
2019	November	1.30	2.65	7.76	8.05	27.04	32.11	78.82	96.81	5.79	8.00
2019	December	1.05	2.33	7.13	7.88	24.06	26.78	55.46	97.07	5.12	5.18
2020	January	0.87	2.10	7.17	7.89	19.42	21.89	24.70	36.71	5.14	5.29
2020	February	0.45	1.39	6.59	7.50	18.18	21.28	12.83	23.04	5.11	5.18
2020	March	0.66	1.50	7.54	7.99	20.43	24.28	26.32	38.82	5.04	5.21
2020	April	0.25	0.74	6.67	7.21	25.00	26.89	5.92	10.69	5.02	5.08
2020	May	0.46	1.73	6.63	8.06	21.39	24.78	18.82	30.79	5.03	5.10
2020	June	0.87	1.71	7.12	7.72	26.01	29.00	34.02	45.13	5.06	5.15
2020	July	1.12	2.15	7.11	7.70	30.09	33.39	43.39	67.10	5.05	5.18
2020	August	1.10	1.76	6.88	7.63	31.49	31.89	50.39	59.02	4.79	4.88
2020	September	0.63	1.33	6.75	7.48	31.92	33.50	27.56	35.87	4.86	4.95
2020	October	0.81	1.45	7.46	7.80	28.91	33.78	31.79	45.75	4.90	5.15
2020	November	0.64	1.13	6.93	7.78	26.57	30.39	15.17	22.29	4.88	5.00
2020	December	0.72	1.66	6.64	7.81	17.97	20.50	28.38	42.23	4.86	5.05
2021	January	0.45	2.01	7.41	7.67	13.84	15.50	13.36	14.39	4.96	5.10
2021	February	0.45	1.12	7.34	8.01	14.25	15.39	21.01	34.82	4.93	5.05
2021	March	0.55	0.95	6.73	7.65	12.33	16.11	22.37	41.48	5.26	6.99
2021	April	0.77	1.79	6.95	8.06	18.00	24.00	31.57	38.94	4.83	5.00
						20.03	21.72				
Count		**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**
Long Term Average		**0.75**	**1.59**	**7.25**	**7.90**	**26.06**	**29.16**	**30.40**	**45.60**	**4.66**	**4.87**
Permit Limit		**N/A**	**N/A**	**6.00**	**9.00**	**N/A**	**N/A**	**96.70**	**145.10**	**10.00**	**15.00**
% of Permit Limit		**N/A**	**N/A**	**82.76%**	**87.76%**	**N/A**	**N/A**	**31.43%**	**31.42%**	**46.62%**	**32.45%**

* Temperature monitored but not reported on the monthly DMRs.

Entergy - Union Power Station
DMR Summary Table
Outfall 01B

Monitoring Period		Flow		pH		Oil & Grease				Total Suspended Solids (TSS)			
		MGD		S.U.		lbs/day		mg/l		lbs/day		mg/l	
Year	Month	Average	Maximum	Minimum	Maximum	Average	Maximum	Average	Maximum	Average	Maximum	Average	Maximum
2018	April	0.05	0.07	7.03	7.29	1.41	2.11	3.50	3.50	2.78	4.41	8.00	13.50
2018	May	0.06	0.09	6.97	7.52	1.63	1.93	3.51	3.52	3.27	6.93	7.10	14.50
2018	June	0.06	0.09	6.93	7.26	1.75	1.94	3.63	3.96	2.08	3.24	4.38	7.50
2018	July	0.06	0.07	6.57	7.29	1.74	2.39	3.79	4.80	2.12	4.98	4.50	10.00
2018	August	0.05	0.07	6.89	7.35	1.53	1.70	3.50	3.50	1.16	1.73	2.75	4.50
2018	September	0.05	0.12	6.76	7.13	1.51	2.16	3.50	3.50	3.04	5.88	6.75	9.50
2018	October	0.05	0.08	7.11	7.40	1.57	2.23	3.50	3.50	3.72	11.17	7.20	17.50
2018	November	0.05	0.08	6.74	7.53	1.48	1.77	3.50	3.50	2.05	3.87	5.12	10.50
2018	December	0.06	0.11	7.06	7.34	1.89	2.79	3.68	4.20	2.55	4.02	5.12	8.00
2019	January	0.07	0.11	6.92	7.61	2.55	2.96	4.70	5.00	2.83	5.93	5.10	10.00
2019	February	0.08	0.11	7.44	7.73	3.17	3.89	5.00	5.00	7.95	13.58	12.88	24.50
2019	March	0.06	0.11	7.07	7.63	2.22	2.65	5.08	5.32	2.49	5.53	5.50	11.50
2019	April	0.05	0.11	6.89	7.51	2.28	3.70	5.05	5.26	2.21	6.04	4.60	12.50
2019	May	0.06	0.10	6.89	7.54	2.47	3.53	5.00	5.00	2.98	4.51	6.38	9.00
2019	June	0.07	0.12	6.50	6.92	4.05	9.08	7.53	15.10	2.83	4.73	5.88	11.00
2019	July	0.07	0.11	6.94	7.29	3.14	4.26	5.00	5.15	4.37	7.67	6.70	9.00
2019	August	0.06	0.07	6.84	7.36	2.47	2.71	5.00	5.00	2.95	3.53	6.00	6.50
2019	September	0.06	0.08	7.03	7.37	2.35	2.57	5.03	5.13	3.62	8.48	7.50	16.50
2019	October	0.05	0.10	6.90	7.41	2.45	4.20	5.00	5.00	3.25	7.15	6.20	11.50
2019	November	0.05	0.06	6.89	7.43	2.00	2.26	5.00	5.00	1.33	1.69	3.38	4.50
2019	December	0.04	0.06	6.92	7.11	1.81	2.32	5.04	5.15	1.88	3.40	5.50	11.50
2020	January	0.05	0.08	6.98	7.18	1.89	2.34	5.04	5.13	1.86	2.80	5.00	8.50
2020	February	0.03	0.08	6.83	7.12	1.68	3.31	5.03	5.10	2.06	4.86	6.75	10.00
2020	March	0.04	0.05	6.29	6.91	1.58	1.97	5.00	5.00	1.32	2.04	4.40	6.50
2020	April	0.04	0.08	6.48	6.66	1.54	1.72	5.00	5.00	1.03	1.17	3.38	4.00
2020	May	0.04	0.06	6.65	6.90	1.86	2.67	5.00	5.00	1.52	2.40	4.13	6.50
2020	June	0.05	0.09	6.72	7.00	2.08	2.82	5.03	5.13	2.77	4.76	6.90	14.00
2020	July	0.06	0.08	6.34	6.69	2.73	3.30	5.05	5.21	5.45	8.66	10.70	20.50
2020	August	0.06	0.14	6.31	6.58	2.01	2.17	4.80	4.90	5.67	8.42	14.13	22.00
2020	September	0.05	0.08	6.48	7.08	2.17	3.04	4.78	4.81	2.67	5.26	6.10	14.00
2020	October	0.06	0.07	6.76	6.96	2.38	2.49	4.89	5.10	4.20	4.65	8.62	9.50
2020	November	0.06	0.11	6.46	7.15	2.20	2.78	4.80	4.81	4.26	5.85	9.25	11.00
2020	December	0.06	0.10	6.44	7.54	2.47	2.81	4.76	4.81	3.91	7.45	7.30	12.50
2021	January	0.06	0.10	6.46	6.81	2.46	2.77	5.05	5.62	1.74	2.86	3.50	5.50
2021	February	0.06	0.13	6.82	7.13	2.43	2.87	4.87	5.00	3.58	10.03	6.63	17.50
2021	March	0.05	0.14	6.29	6.74	2.16	2.62	4.90	5.05	1.58	4.33	3.30	8.00
2021	April	0.04	0.08	6.52	6.82	1.50	1.80	4.79	4.81	1.02	1.87	3.25	5.00
Count		**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**
Long Term Average		**0.05**	**0.09**	**6.76**	**7.20**	**2.12**	**2.83**	**4.68**	**5.02**	**2.87**	**5.29**	**6.21**	**11.04**
Permit Limit		**N/A**	**N/A**	**6.00**	**9.00**	**9.26**	**12.30**	**15.00**	**20.00**	**18.5**	**61.7**	**30**	**100**
% of Permit Limit		**N/A**	**N/A**	**88.76%**	**79.97%**	**22.94%**	**22.99%**	**31.23%**	**25.08%**	**15.50%**	**8.58%**	**20.71%**	**11.04%**

Entergy - Union Power Station
DMR Summary Table
Outfall 01C

Monitoring Period		Flow		pH		Free Available Chlorine (FAC)			
		MGD		S.U.		lbs/day		mg/l	
Year	Month	Average	Maximum	Minimum	Maximum	Average	Maximum	Average	Maximum
2018	April	0.62	1.19	7.30	8.15	0.05	0.08	0.10	0.10
2018	May	0.83	1.64	7.33	8.18	0.05	0.10	0.10	0.10
2018	June	0.89	1.50	7.38	7.74	0.06	0.10	0.10	0.10
2018	July	0.85	1.51	7.33	7.81	0.07	0.09	0.10	0.10
2018	August	0.85	1.51	7.32	7.96	0.05	0.08	0.10	0.10
2018	September	0.65	1.31	7.40	7.79	0.05	0.08	0.10	0.10
2018	October	1.11	1.86	7.87	8.05	0.07	0.12	0.10	0.10
2018	November	0.33	1.15	7.35	8.20	0.02	0.05	0.10	0.10
2018	December	0.10	0.88	7.25	8.12	0.01	0.03	0.10	0.10
2019	January	0.34	1.08	7.71	8.07	0.03	0.07	0.10	0.10
2019	February	0.68	1.20	7.87	8.49	0.04	0.08	0.10	0.10
2019	March	0.44	1.03	7.60	7.95	0.03	0.06	0.10	0.10
2019	April	0.47	1.07	7.98	8.20	0.04	0.06	0.10	0.10
2019	May	0.66	1.54	7.42	8.12	0.06	0.11	0.10	0.10
2019	June	0.72	1.38	7.45	8.06	0.05	0.06	0.10	0.10
2019	July	0.88	1.79	7.09	7.89	0.07	0.12	0.10	0.10
2019	August	0.95	1.86	7.38	7.96	0.08	0.12	0.10	0.10
2019	September	0.74	1.36	7.52	7.94	0.06	0.09	0.10	0.10
2019	October	1.29	2.78	7.71	8.06	0.11	0.14	0.10	0.10
2019	November	1.25	2.61	7.68	8.01	0.11	0.15	0.10	0.10
2019	December	1.00	2.29	7.25	7.96	0.09	0.16	0.10	0.10
2020	January	0.82	2.04	7.38	7.97	0.04	0.06	0.10	0.10
2020	February	0.42	1.35	7.04	7.72	0.02	0.03	0.10	0.10
2020	March	0.62	1.46	7.65	8.04	0.04	0.06	0.10	0.10
2020	April	0.19	0.53	6.54	7.74	0.01	0.01	0.10	0.10
2020	May	0.41	1.67	6.50	8.23	0.03	0.05	0.10	0.10
2020	June	0.81	1.64	7.29	8.07	0.05	0.07	0.10	0.10
2020	July	1.06	2.08	7.16	7.89	0.07	0.10	0.10	0.10
2020	August	1.03	1.62	6.77	7.60	0.08	0.10	0.10	0.10
2020	September	0.57	1.27	6.80	7.61	0.04	0.06	0.10	0.10
2020	October	0.71	1.38	7.49	7.92	0.05	0.07	0.10	0.10
2020	November	0.57	1.10	7.13	7.46	0.02	0.03	0.10	0.10
2020	December	0.65	1.59	7.59	8.03	0.04	0.07	0.10	0.10
2021	January	0.37	1.96	7.54	7.99	0.02	0.02	0.10	0.10
2021	February	0.34	1.04	7.50	8.28	0.03	0.05	0.10	0.10
2021	March	0.50	0.89	6.93	7.73	0.03	0.05	0.10	0.10
2021	April	0.72	1.74	7.02	8.12	0.05	0.07	0.10	0.10
Count		**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**	**37.00**
Long Time Average		**0.69**	**1.51**	**7.34**	**7.98**	**0.05**	**0.08**	**0.10**	**0.10**
Permit Limit		**N/A**	**N/A**	**6.00**	**9.00**	**1.40**	**3.40**	**0.20**	**0.50**
% of Permit Limit		**N/A**	**N/A**	**81.76%**	**88.62%**	**3.51%**	**2.27%**	**50.00%**	**20.00%**

Analytical Results

June 1, 2021

Arkansas Analytical Inc.

8100 National Dr. - Little Rock, AR 72209
501-455-3233 Fax 501-455-6118

21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730

Project: Permit Renewal Sample

Project Number: April 2021 -- Outfall 001

SDG Number: 2104186

Enclosed are the results of analyses for samples received by the laboratory on 13-Apr-21 14:06. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

Custody Seals	✔
Containers Correct	✔
COC/Labels Agree	✔
Received On Ice	✔
Temperature on Receipt	3.0°C

Sincerely,

Norma James
Technical Director

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

CASE NARRATIVE

Sample Delivery Group – 2104186

One *OR* more of the qualifiers described below may appear in this report. Qualifiers in RED apply to this SDG (Sample Delivery Group).

QUALITY CONTROL QUALIFIERS:

Qualifier	Description
E20	Sample used as "parent" for the associated analytical batch.
%D3/S-01	Surrogate failed to recover within acceptance criteria (%D3/S-01).
E1	Results associated with this surrogate were qualified as "estimated" (E1).
B	Present in the Associated Blank
B1	Present in Blank, but Not In the Sample.
%D2 / E5	Laboratory Control Spike (LCS) and/or Laboratory Control Spike Duplicate (LCSD) failed to recover with acceptance criteria (%D2). Associated results were qualified as "estimated" (E5).
%D1	Matrix Spike (MS) and/or Matrix Spike Duplicate (MSD) failed acceptance criteria.
MBA	Failed criteria due to the high concentration of analyte in the parent sample.
MBI	Failed criteria due to an interference in the parent sample.
%D3	Quality Control Surrogate failed acceptance criteria.
NREC	Quality Control Surrogate failed.

CALIBRATION QUALIFIERS:

Qualifier	Description
CR	Result above highest calibration standard, but within linear calibration range.
Est3	Result at the instrument was above the concentration of the highest standard in the calibration curve.
E2-F	Second Source Verification Failure
E7	Internal Standard Response Failure
E11	Initial Calibration Minimum Response Factor Failure
E21	CCV Low
E-01	CCV High
E35	Low Level CCV Failure

ANALYTICAL QUALIFIERS:

Qualifier	Description
EDL	Result was non-detect at an elevated detection limit due to one or more of the following: Sample Matrix, Sample Dilution, or Limited Sample Volume.
EX	Result exceeds DAILY MAXIMUM and/or MONTHLY AVERAGE.
EX2	The result exceeds the TCLP limit.
J	At client request, J-Values are reported. J-Values are considered "estimated" results as they are below the limit of quantitation yet above the method detection limit (MDL).
N	Insufficient Sample Weight as Required by Method.
T40	The ambient temperature exceeded 23 +/- 2oC during the TCLP rotation process
TCLP-1	TCLP extraction done in alternate ZHE due to sample matrix.

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample

Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

ANALYTICAL RESULTS

Lab Number:	**2104186-01**
Sample Name:	**Outfall 001 Grab**
Date/Time Collected:	**4/13/21 7:41**
Sample Matrix:	**Water**

Field Analyses	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Chlorine Residual	mg/L	**0.33**		4/13/21 7:51	B104345	SM 4500-Cl G 2000

Wet Chemistry	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Phenolics	mg/L	< 0.00500		4/16/21 8:15	B104278	EPA 420.1-1978

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

ANALYTICAL RESULTS

Lab Number: 2104186-02
Sample Name: Outfall 001 Composite
Date/Time Collected: 4/13/21 8:01
Sample Matrix: Water

Acid Compounds	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
2,4,6-Trichlorophenol	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
2,4-Dichlorophenol	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
2,4-Dimethylphenol	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
2,4-Dinitrophenol	ug/L	< 49.5		4/13/21 16:37	B104206	EPA 625.1-2016
2-Chlorophenol	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
2-Nitrophenol	ug/L	< 19.8		4/13/21 16:37	B104206	EPA 625.1-2016
4,6-Dinitro-o-cresol	ug/L	< 49.5		4/13/21 16:37	B104206	EPA 625.1-2016
4-Chloro-3-methylphenol	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
4-Nitrophenol	ug/L	< 49.5		4/13/21 16:37	B104206	EPA 625.1-2016
Pentachlorophenol	ug/L	< 4.95		4/13/21 16:37	B104206	EPA 625.1-2016
Phenol	ug/L	**107**		4/13/21 17:05	B104206	EPA 625.1-2016
2,4,6-Tribromophenol [surr]	%	86.3		4/13/21 16:37	B104206	EPA 625.1-2016
2-Fluorophenol [surr]	%	51.4		4/13/21 16:37	B104206	EPA 625.1-2016
Phenol-d5 [surr]	%	35.7		4/13/21 16:37	B104206	EPA 625.1-2016

Base/Neutral Compounds	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
1,2,4-Trichlorobenzene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
1,2-Dichlorobenzene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
1,2-Diphenyl Hydrazine	ug/L	< 19.8		4/13/21 16:37	B104206	EPA 625.1-2016
1,3-Dichlorobenzene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
1,4-Dichlorobenzene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
2,3,7,8-TCDD (SIM)	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
2,2'-Oxybis(1-Chloropropane)	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
2,4-Dinitrotoluene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
2,6-Dinitrotoluene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
2-Chloronaphthalene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
3,3'-Dichlorobenzidine	ug/L	< 4.95		4/13/21 16:37	B104206	EPA 625.1-2016
4-Bromophenyl-phenylether	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
4-Chlorophenyl-phenylether	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Acenaphthene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Acenaphthylene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Anthracene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Benzidine	ug/L	< 49.5		4/13/21 16:37	B104206	EPA 625.1-2016
Benzo[a]pyrene	ug/L	< 4.95		4/13/21 16:37	B104206	EPA 625.1-2016
Benzo[b]fluoranthene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Benzo[g,h,i]perylene	ug/L	< 19.8		4/13/21 16:37	B104206	EPA 625.1-2016
Benzo[k]fluoranthene	ug/L	< 4.95		4/13/21 16:37	B104206	EPA 625.1-2016
Benzo (a) anthracene	ug/L	< 4.95		4/13/21 16:37	B104206	EPA 625.1-2016
Bis(2-chloroethoxy)methane	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Bis(2-chloroethyl)ether	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Bis(2-ethylhexyl)phthalate	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Butylbenzylphthalate	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Chrysene	ug/L	< 4.95		4/13/21 16:37	B104206	EPA 625.1-2016

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

ANALYTICAL RESULTS

Lab Number: 2104186-02
Sample Name: Outfall 001 Composite
Date/Time Collected: 4/13/21 8:01
Sample Matrix: Water

Base/Neutral Compounds	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Dibenz[a,h]anthracene	ug/L	< 4.95		4/13/21 16:37	B104206	EPA 625.1-2016
Diethylphthalate	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Dimethylphthalate	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Di-n-butylphthalate	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Di-n-octylphthalate	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Fluoranthene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Fluorene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Hexachlorobenzene	ug/L	< 4.95		4/13/21 16:37	B104206	EPA 625.1-2016
Hexachlorobutadiene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Hexachlorocyclopentadiene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Hexachloroethane	ug/L	< 19.8		4/13/21 16:37	B104206	EPA 625.1-2016
Indeno[1,2,3-cd]pyrene	ug/L	< 4.95		4/13/21 16:37	B104206	EPA 625.1-2016
Isophorone	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Naphthalene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Nitrobenzene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
N-Nitrosodimethylamine	ug/L	< 49.5		4/13/21 16:37	B104206	EPA 625.1-2016
n-Nitrosodiphenylamine	ug/L	< 19.8	E21, E2-F	4/13/21 16:37	B104206	EPA 625.1-2016
N-Nitroso-di-n-propylamine	ug/L	< 19.8		4/13/21 16:37	B104206	EPA 625.1-2016
Phenanthrene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
Pyrene	ug/L	< 9.90		4/13/21 16:37	B104206	EPA 625.1-2016
2-Fluorobiphenyl [surr]	%	70.6		4/13/21 16:37	B104206	EPA 625.1-2016
Nitrobenzene-d5 [surr]	%	71.5		4/13/21 16:37	B104206	EPA 625.1-2016
Terphenyl-d14 [surr]	%	86.0		4/13/21 16:37	B104206	EPA 625.1-2016

Pesticides/PCBs	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Aldrin	ug/L	< 0.020	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
alpha-BHC	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
beta-BHC	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
gamma-BHC (Lindane)	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
delta-BHC	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
Chlordane	ug/L	< 0.500	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
alpha-Chlordane	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
gamma-Chlordane	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
4,4´-DDT	ug/L	< 0.040	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
4,4´-DDE	ug/L	< 0.100		4/13/21 16:43	B104209	EPA 608.3-2016
4,4´-DDD	ug/L	< 0.100		4/13/21 16:43	B104209	EPA 608.3-2016
Dieldrin	ug/L	< 0.040	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
Endosulfan I	ug/L	< 0.010		4/13/21 16:43	B104209	EPA 608.3-2016
Endosulfan II	ug/L	< 0.040	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
Endosulfan sulfate	ug/L	< 0.100		4/13/21 16:43	B104209	EPA 608.3-2016
Endrin	ug/L	< 0.040	E-01, EDL	4/13/21 16:43	B104209	EPA 608.3-2016
Endrin aldehyde	ug/L	< 0.100		4/13/21 16:43	B104209	EPA 608.3-2016
Heptachlor	ug/L	< 0.020	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
Heptachlor epoxide	ug/L	< 0.020	EDL	4/13/21 16:43	B104209	EPA 608.3-2016

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

ANALYTICAL RESULTS

Lab Number: **2104186-02**
Sample Name: **Outfall 001 Composite**
Date/Time Collected: **4/13/21 8:01**
Sample Matrix: **Water**

Pesticides/PCBs	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Chlorpyrifos	ug/L	< 0.070	E21, E2-F	4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1242	ug/L	< 0.500	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1254	ug/L	< 0.500	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1221	ug/L	< 0.500	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1232	ug/L	< 0.500	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1248	ug/L	< 0.500	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1260	ug/L	< 0.500	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1016	ug/L	< 0.500	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
Toxaphene	ug/L	< 0.500	EDL	4/13/21 16:43	B104209	EPA 608.3-2016
TCMX [surr]	%	12.8		4/13/21 16:43	B104209	EPA 608.3-2016
DCBP [surr]	%	16.0		4/13/21 16:43	B104209	EPA 608.3-2016

Wet Chemistry	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
BOD-5	mg/L	**4.58**		4/14/21 8:00	B104222	SM 5210 B-2011, Hach 10360
TOC	mg/L	**31.1**		4/15/21 9:34	B104253	SM 5310 B-2011
TSS	mg/L	**13.5**		4/16/21 9:20	B104267	I-3765-85/SM2540 D-2011

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

ANALYTICAL RESULTS

Lab Number: 2104186-03
Sample Name: Outfall 001 Composite (4-Part Grab)
Date/Time Collected: 4/13/21 7:41
Sample Matrix: Water

PPS Metals	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Antimony	ug/L	< 60.0		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)
Arsenic	ug/L	**22.4**		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)
Beryllium	ug/L	< 0.500		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)
Cadmium	ug/L	< 0.500		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)
Chromium	ug/L	**12.4**		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)
Copper	ug/L	**21.6**		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)
Hexavalent Chromium	ug/L	< 10.0		4/14/21 7:25	B104234	SM3500-Cr B, 2009
Lead	ug/L	< 0.500		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)
Mercury	ng/L	< 5.00		4/16/21 11:01	B104289	EPA 1631 E
Nickel	ug/L	**4.93**		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)
Selenium	ug/L	< 5.20		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)
Silver	ug/L	< 0.500		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)
Thallium	ug/L	< 0.260		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)
Zinc	ug/L	**29.0**		4/16/21 13:07	B104265	EPA 200.8, Rev. 5.4(1994)

Total Metals	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Phosphorus	mg/L	**3.06**		4/16/21 12:56	B104271	EPA 200.7, Rev 4.4 (1994)

Volatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
1,1-Dichloroethane	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
1,1-Dichloroethene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
1,1,1-Trichloroethane	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
1,1,2-Trichloroethane	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
1,1,2,2-Tetrachloroethane	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
1,2-Dichlorobenzene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
1,2-Dichloropropane	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
1,2-Dichloroethane	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
1,3-Dichlorobenzene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
1,4-Dichlorobenzene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
2-Chloroethyl vinyl ether	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Acrylonitrile	ug/L	< 20.0		4/15/21 18:50	B104254	EPA 624.1-2016
Benzene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Bromodichloromethane	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Bromoform	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Acrolein	ug/L	< 50.0		4/15/21 18:50	B104254	EPA 624.1-2016
Bromomethane	ug/L	< 50.0		4/15/21 18:50	B104254	EPA 624.1-2016
Carbon tetrachloride	ug/L	< 2.00		4/15/21 18:50	B104254	EPA 624.1-2016
Chlorobenzene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Dibromochloromethane	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Chloroethane	ug/L	< 50.0		4/15/21 18:50	B104254	EPA 624.1-2016
Chloroform	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Chloromethane	ug/L	< 50.0		4/15/21 18:50	B104254	EPA 624.1-2016
cis-1,3-Dichloropropene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

ANALYTICAL RESULTS

Lab Number: 2104186-03
Sample Name: Outfall 001 Composite (4-Part Grab)
Date/Time Collected: 4/13/21 7:41
Sample Matrix: Water

Volatiles	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Ethylbenzene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Methylene chloride	ug/L	< 20.0		4/15/21 18:50	B104254	EPA 624.1-2016
Tetrachloroethene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Toluene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
trans-1,2-Dichloroethene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Trichloroethene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
trans-1,3-Dichloropropene	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Vinyl chloride	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
Trichlorofluoromethane	ug/L	< 10.0		4/15/21 18:50	B104254	EPA 624.1-2016
4-Bromofluorobenzene [surr]	%	101		4/15/21 18:50	B104254	EPA 624.1-2016
1,2-Dichloroethane-d4 [surr]	%	106		4/15/21 18:50	B104254	EPA 624.1-2016
Toluene-d8 [surr]	%	102		4/15/21 18:50	B104254	EPA 624.1-2016

ANALYTICAL RESULTS

Lab Number: 2104186-04
Sample Name: Outfall 001 Composite Duplicate (4-Part Grab)
Date/Time Collected: 4/13/21 7:41
Sample Matrix: Water

PPS Metals	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Antimony	ug/L	< 60.0		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)
Arsenic	ug/L	**22.2**		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)
Beryllium	ug/L	< 0.500		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)
Cadmium	ug/L	< 0.500		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)
Chromium	ug/L	**12.3**		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)
Copper	ug/L	**21.6**		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)
Hexavalent Chromium	ug/L	< 10.0		4/14/21 7:25	B104234	SM3500-Cr B, 2009
Lead	ug/L	< 0.500		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)
Mercury	ng/L	< 5.00		4/16/21 11:01	B104289	EPA 1631 E
Nickel	ug/L	**5.08**		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)
Selenium	ug/L	< 5.20		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)
Silver	ug/L	< 0.500		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)
Thallium	ug/L	< 0.260		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)
Zinc	ug/L	**30.6**		4/16/21 13:10	B104265	EPA 200.8, Rev. 5.4(1994)

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

ANALYTICAL RESULTS

Lab Number: 2104186-05
Sample Name: Outfall 001 Composite Field Blank (4-Part Grab)
Date/Time Collected: 4/13/21 7:41
Sample Matrix: Water

PPS Metals	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Antimony	ug/L	< 60.0		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)
Arsenic	ug/L	< 0.500		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)
Beryllium	ug/L	< 0.500		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)
Cadmium	ug/L	< 0.500		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)
Chromium	ug/L	< 10.0		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)
Copper	ug/L	< 0.500		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)
Hexavalent Chromium	ug/L	< 10.0		4/14/21 7:25	B104234	SM3500-Cr B, 2009
Lead	ug/L	< 0.500		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)
Mercury	ng/L	< 5.00		4/16/21 11:01	B104289	EPA 1631 E
Nickel	ug/L	< 0.500		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)
Selenium	ug/L	< 5.20		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)
Silver	ug/L	< 0.500		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)
Thallium	ug/L	< 0.260		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)
Zinc	ug/L	< 20.0		4/16/21 13:59	B104265	EPA 200.8, Rev. 5.4(1994)

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

QUALITY CONTROL RESULTS

Base/Neutral Compounds -- Batch: B104206 (Water)
Prepared: 12-Apr-21 15:47 By: JM -- Analyzed: 12-Apr-21 17:30 By: TB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
1,2,4-Trichlorobenzene	<0.561 ug/L	73.6% / NA	62.0% / 57.9%		6.76%	
1,2-Dichlorobenzene	<0.514 ug/L	81.2% / NA	64.3% / 61.8%		3.91%	
1,2-Diphenyl Hydrazine	<1.81 ug/L	99.4% / NA	93.6% / 88.1%		6.04%	
1,3-Dichlorobenzene	<0.470 ug/L	79.4% / NA	63.4% / 60.4%		4.82%	
1,4-Dichlorobenzene	<0.527 ug/L	79.3% / NA	63.1% / 60.2%		4.79%	
2,2'-Oxybis(1-Chloropropane)	<0.394 ug/L	80.7% / NA	63.4% / 62.3%		1.77%	
2,3,7,8-TCDD (SIM)	<1.00 ug/L	NA / NA	NA / NA		NA	
2,4,6-Trichlorophenol	<0.507 ug/L	95.5% / NA	84.7% / 83.8%		1.08%	
2,4-Dichlorophenol	<0.449 ug/L	83.8% / NA	70.8% / 71.1%		0.382%	
2,4-Dimethylphenol	<1.12 ug/L	79.3% / NA	69.9% / 68.8%		1.60%	
2,4-Dinitrophenol	<0.642 ug/L	77.8% / NA	80.4% / 81.9%		1.87%	
2,4-Dinitrotoluene	<0.656 ug/L	91.0% / NA	88.9% / 87.2%		1.96%	
2,6-Dinitrotoluene	<0.656 ug/L	90.5% / NA	87.7% / 83.3%		5.13%	
2-Chloronaphthalene	<0.515 ug/L	91.3% / NA	76.8% / 76.9%		0.138%	
2-Chlorophenol	<0.433 ug/L	87.1% / NA	68.2% / 68.3%		0.164%	
2-Nitrophenol	<0.554 ug/L	92.8% / NA	76.2% / 75.7%		0.612%	
3,3'-Dichlorobenzidine	<0.233 ug/L	99.7% / NA	90.0% / 88.3%		1.91%	
4,6-Dinitro-o-cresol	<0.643 ug/L	93.0% / NA	89.8% / 90.4%		0.668%	
4-Bromophenyl-phenylether	<0.580 ug/L	100% / NA	93.8% / 88.8%		5.48%	
4-Chloro-3-methylphenol	<0.567 ug/L	83.8% / NA	79.2% / 76.6%		3.29%	
4-Chlorophenyl-phenylether	<0.563 ug/L	95.6% / NA	86.5% / 85.5%		1.22%	
4-Nitrophenol	<0.607 ug/L	57.1% / NA	57.6% / 55.5%		3.63%	
Acenaphthene	<0.523 ug/L	93.9% / NA	82.4% / 80.1%		2.75%	
Acenaphthylene	<0.487 ug/L	93.1% / NA	83.7% / 80.5%		3.92%	
Anthracene	<0.566 ug/L	96.1% / NA	92.0% / 86.1%		6.61%	
Benzidine	<0.522 ug/L	38.1% / NA	38.8% / 38.7%		0.194%	
Benzo (a) anthracene	<0.475 ug/L	93.4% / NA	91.8% / 89.4%		2.65%	
Benzo[a]pyrene	<0.566 ug/L	102% / NA	99.7% / 96.9%		2.78%	
Benzo[b]fluoranthene	<0.482 ug/L	101% / NA	101% / 98.0%		2.54%	
Benzo[g,h,i]perylene	<0.529 ug/L	102% / NA	98.2% / 96.7%		1.51%	
Benzo[k]fluoranthene	<0.516 ug/L	98.0% / NA	98.2% / 94.9%		3.37%	
Bis(2-chloroethoxy)methane	<0.461 ug/L	81.3% / NA	68.7% / 68.0%		1.05%	
Bis(2-chloroethyl)ether	<0.458 ug/L	85.6% / NA	66.8% / 68.1%		1.90%	
Bis(2-ethylhexyl)phthalate	<0.598 ug/L	96.4% / NA	94.7% / 92.8%		2.01%	
Butylbenzylphthalate	<0.637 ug/L	97.6% / NA	97.3% / 95.5%		1.82%	
Chrysene	<0.489 ug/L	89.3% / NA	89.0% / 85.9%		3.50%	
Dibenz[a,h]anthracene	<0.389 ug/L	62.5% / NA	60.2% / 58.7%		2.50%	
Diethylphthalate	<0.456 ug/L	90.6% / NA	88.5% / 85.3%		3.61%	
Dimethylphthalate	<0.516 ug/L	94.1% / NA	89.9% / 85.7%		4.79%	
Di-n-butylphthalate	<0.607 ug/L	105% / NA	102% / 101%		1.42%	
Di-n-octylphthalate	<0.407 ug/L	95.2% / NA	94.4% / 92.9%		1.60%	
Fluoranthene	<0.575 ug/L	103% / NA	102% / 99.5%		2.53%	
Fluorene	<0.498 ug/L	93.0% / NA	86.6% / 83.4%		3.80%	
Hexachlorobenzene	<0.560 ug/L	99.9% / NA	96.2% / 90.4%		6.30%	
Hexachlorobutadiene	<0.461 ug/L	74.1% / NA	61.3% / 57.0%		7.11%	
Hexachlorocyclopentadiene	<0.303 ug/L	82.1% / NA	64.7% / 63.8%		1.43%	
Hexachloroethane	<0.958 ug/L	76.8% / NA	59.2% / 57.7%		2.64%	
Indeno[1,2,3-cd]pyrene	<0.502 ug/L	105% / NA	102% / 100%		1.90%	

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

QUALITY CONTROL RESULTS

Base/Neutral Compounds -- Batch: B104206 (Water)
Prepared: 12-Apr-21 15:47 By: JM -- Analyzed: 12-Apr-21 17:30 By: TB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Isophorone	<0.535 ug/L	77.0% / NA	65.3% / 64.9%		0.657%	
Naphthalene	<0.480 ug/L	78.0% / NA	66.9% / 62.3%		7.05%	
Nitrobenzene	<0.456 ug/L	84.6% / NA	68.9% / 68.3%		0.824%	
N-Nitrosodimethylamine	<0.372 ug/L	58.7% / NA	45.5% / 44.6%		1.93%	
N-Nitroso-di-n-propylamine	<0.414 ug/L	88.2% / NA	71.7% / 72.0%		0.439%	
n-Nitrosodiphenylamine	<0.425 ug/L	96.6% / NA	92.9% / 88.2%		5.21%	E21, E2-F
Pentachlorophenol	<0.311 ug/L	87.7% / NA	109% / 105%		3.86%	
Phenanthrene	<0.572 ug/L	96.9% / NA	92.3% / 88.2%		4.54%	
Phenol	<0.348 ug/L	50.8% / NA	41.5% / 40.2%		3.21%	
Pyrene	<0.489 ug/L	106% / NA	103% / 100%		2.90%	
2,4,6-Tribromophenol [surr]	76.8 %	93.9% / NA	92.4% / 87.7%		NA	
2-Fluorobiphenyl [surr]	83.8 %	83.1% / NA	72.0% / 74.1%		NA	
2-Fluorophenol [surr]	66.6 %	70.3% / NA	53.9% / 52.9%		NA	
Nitrobenzene-d5 [surr]	91.1 %	87.7% / NA	70.1% / 72.0%		NA	
Phenol-d5 [surr]	48.0 %	49.0% / NA	38.8% / 38.0%		NA	
Terphenyl-d14 [surr]	103 %	98.4% / NA	95.7% / 96.0%		NA	

Pesticides/PCBs -- Batch: B104209 (Water)
Prepared: 12-Apr-21 15:47 By: JM -- Analyzed: 13-Apr-21 14:06 By: TB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
4,4´-DDD	<0.002 ug/L	91.0% / NA	98.4% / 98.4%		0.0668%	
4,4´-DDE	<0.001 ug/L	79.1% / NA	88.6% / 87.7%		1.11%	
4,4´-DDT	<0.001 ug/L	82.4% / NA	94.4% / 94.0%		0.450%	
Aldrin	<0.0005 ug/L	53.7% / NA	65.0% / 65.5%		0.801%	
alpha-BHC	<0.0006 ug/L	74.3% / NA	81.9% / 80.3%		2.04%	
beta-BHC	<0.002 ug/L	88.6% / NA	104% / 103%		1.35%	
delta-BHC	<0.002 ug/L	76.4% / NA	84.0% / 81.1%		3.22%	
Dieldrin	<0.001 ug/L	80.4% / NA	90.3% / 89.0%		1.44%	
Endosulfan I	<0.0003 ug/L	72.2% / NA	78.2% / 78.1%		0.179%	
Endosulfan II	<0.0009 ug/L	82.6% / NA	90.0% / 90.0%		0.0187%	
Endosulfan sulfate	<0.001 ug/L	81.7% / NA	94.0% / 93.7%		0.273%	
Endrin	<0.001 ug/L	90.3% / NA	101% / 101%		0.205%	E-01
Endrin aldehyde	<0.001 ug/L	75.0% / NA	99.9% / 93.0%		6.53%	
gamma-BHC (Lindane)	<0.001 ug/L	76.6% / NA	96.9% / 93.6%		3.34%	
Heptachlor	<0.001 ug/L	65.0% / NA	75.0% / 75.6%		0.837%	
Heptachlor epoxide	<0.0005 ug/L	71.8% / NA	77.4% / 77.2%		0.166%	
DCBP [surr]	93.3 %	81.3% / NA	102% / 96.4%		NA	
TCMX [surr]	68.7 %	70.8% / NA	81.7% / 83.5%		NA	

Wet Chemistry -- Batch: B104222 (Water)
Prepared: 14-Apr-21 08:00 By: ALA -- Analyzed: 14-Apr-21 08:00 By: ALA

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
BOD-5	<2.00 mg/L	99.5% / 98.0%	NA / NA		1.53%	

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

QUALITY CONTROL RESULTS

PPS Metals -- Batch: B104234 (Water)
Prepared: 14-Apr-21 07:25 By: SPS -- Analyzed: 14-Apr-21 07:25 By: SPS

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Hexavalent Chromium	<10.0 ug/L	104% / 100%	88.0% / NA		3.54%	

Wet Chemistry -- Batch: B104253 (Water)
Prepared: 15-Apr-21 09:34 By: SPS -- Analyzed: 15-Apr-21 09:34 By: SPS

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TOC	<1.00 mg/L	96.3% / NA	92.8% / 93.5%		0.668%	

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6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
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Date Received: 13-Apr-21 14:06

QUALITY CONTROL RESULTS

Volatiles -- Batch: B104254 (Water)
Prepared: 15-Apr-21 10:18 By: CT -- Analyzed: 15-Apr-21 20:06 By: ct

Analyte	BLK	LCS / LCSD			MS / MSD			Dup	RPD	Qualifiers
1,1,1-Trichloroethane	<0.319 ug/L	102%	/	NA	111%	/	112%		0.450%	
1,1,2,2-Tetrachloroethane	<0.290 ug/L	103%	/	NA	108%	/	109%		0.240%	
1,1,2-Trichloroethane	<0.238 ug/L	107%	/	NA	116%	/	122%		5.01%	
1,1-Dichloroethane	<0.200 ug/L	105%	/	NA	111%	/	111%		0.0322%	
1,1-Dichloroethene	<0.355 ug/L	99.2%	/	NA	110%	/	115%		4.43%	
1,2-Dichlorobenzene	<0.206 ug/L	96.7%	/	NA	103%	/	101%		1.68%	
1,2-Dichloroethane	<0.248 ug/L	97.6%	/	NA	103%	/	102%		1.33%	
1,2-Dichloropropane	<0.220 ug/L	98.4%	/	NA	109%	/	109%		0.0811%	
1,3-Dichlorobenzene	<0.249 ug/L	92.9%	/	NA	100%	/	98.9%		1.43%	
1,4-Dichlorobenzene	<0.187 ug/L	94.2%	/	NA	99.8%	/	97.3%		2.58%	
2-Chloroethyl vinyl ether	<0.328 ug/L	83.5%	/	NA	MBI	/	MBI		%	MBI
Acrolein	<1.10 ug/L	94.2%	/	NA	88.4%	/	92.9%		5.00%	
Acrylonitrile	<0.539 ug/L	116%	/	NA	113%	/	120%		6.24%	
Benzene	<0.174 ug/L	101%	/	NA	108%	/	106%		1.35%	
Bromodichloromethane	<0.278 ug/L	97.5%	/	NA	109%	/	108%		1.46%	
Bromoform	<0.160 ug/L	98.9%	/	NA	111%	/	110%		1.25%	
Bromomethane	<0.579 ug/L	100%	/	NA	94.8%	/	96.3%		1.63%	
Carbon tetrachloride	<0.170 ug/L	94.8%	/	NA	108%	/	106%		1.53%	
Chlorobenzene	<0.100 ug/L	91.9%	/	NA	104%	/	102%		1.42%	
Chloroethane	<0.993 ug/L	93.0%	/	NA	93.3%	/	95.0%		1.75%	
Chloroform	<0.591 ug/L	101%	/	NA	105%	/	110%		3.69%	
Chloromethane	<0.660 ug/L	120%	/	NA	118%	/	117%		1.01%	
cis-1,3-Dichloropropene	<0.258 ug/L	97.2%	/	NA	99.9%	/	102%		1.93%	
Dibromochloromethane	<0.130 ug/L	97.1%	/	NA	109%	/	109%		0.264%	
Ethylbenzene	<0.216 ug/L	94.3%	/	NA	109%	/	106%		2.23%	
Methylene chloride	0.843 ug/L	107%	/	NA	118%	/	116%		1.68%	B
Tetrachloroethene	<0.280 ug/L	93.4%	/	NA	113%	/	115%		1.24%	
Toluene	<0.245 ug/L	96.2%	/	NA	113%	/	112%		0.716%	
trans-1,2-Dichloroethene	<0.258 ug/L	101%	/	NA	115%	/	114%		0.510%	
trans-1,3-Dichloropropene	<0.287 ug/L	101%	/	NA	105%	/	105%		0.289%	
Trichloroethene	<0.280 ug/L	91.7%	/	NA	105%	/	108%		2.18%	
Trichlorofluoromethane	<0.465 ug/L	91.1%	/	NA	103%	/	106%		2.56%	
Vinyl chloride	<0.373 ug/L	118%	/	NA	111%	/	110%		0.591%	
1,2-Dichloroethane-d4 [surr]	107 %	103%	/	NA	97.0%	/	97.6%		NA	
4-Bromofluorobenzene [surr]	106 %	103%	/	NA	97.9%	/	98.1%		NA	
Toluene-d8 [surr]	100 %	101%	/	NA	101%	/	103%		NA	

This report must be reproduced in its entirety.

21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

QUALITY CONTROL RESULTS

PPS Metals -- Batch: B104265 (Water)
Prepared: 15-Apr-21 14:40 By: ST -- Analyzed: 16-Apr-21 12:46 By: ST

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Antimony	<60.0 ug/L	102% / NA	91.9% / 93.7%		1.93%	
Arsenic	<0.500 ug/L	103% / NA	104% / 106%		1.50%	
Beryllium	<0.500 ug/L	102% / NA	98.0% / 101%		2.83%	
Cadmium	<0.500 ug/L	101% / NA	95.5% / 97.9%		2.48%	
Chromium	<10.0 ug/L	104% / NA	96.3% / 98.7%		2.45%	
Copper	<0.500 ug/L	106% / NA	101% / 101%		0.0315%	
Lead	<0.500 ug/L	105% / NA	99.9% / 102%		1.59%	
Nickel	<0.500 ug/L	103% / NA	98.3% / 100%		1.85%	
Selenium	<5.20 ug/L	101% / NA	111% / 107%		3.57%	
Silver	<0.500 ug/L	102% / NA	97.4% / 98.5%		1.17%	
Thallium	<0.260 ug/L	106% / NA	101% / 103%		2.05%	
Zinc	<20.0 ug/L	104% / NA	103% / 103%		0.440%	

Wet Chemistry -- Batch: B104267 (Water)
Prepared: 16-Apr-21 09:20 By: MH -- Analyzed: 16-Apr-21 09:20 By: MH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
TSS	<1.00 mg/L	86.0% / 90.0%	NA / NA		4.55%	

Total Metals -- Batch: B104271 (Water)
Prepared: 16-Apr-21 08:07 By: SPS -- Analyzed: 16-Apr-21 12:41 By: SPS

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Phosphorus	<0.035 mg/L	95.1% / NA	101% / 98.6%		1.68%	

Wet Chemistry -- Batch: B104278 (Water)
Prepared: 16-Apr-21 08:15 By: CNW -- Analyzed: 16-Apr-21 08:15 By: CNW

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Phenolics	<0.00500 mg/L	126% / NA	104% / 81.8%		19.0%	

PPS Metals -- Batch: B104289 (Water)
Prepared: 16-Apr-21 11:01 By: AA -- Analyzed: 16-Apr-21 11:01 By: AA

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Mercury	<5.00 ng/L	102% / NA	83.5% / 82.8%		0.598%	

Field Analyses -- Batch: B104345 (Water)
Prepared: 13-Apr-21 07:18 By: CJ -- Analyzed: 13-Apr-21 07:18 By: CJ

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Chlorine Residual (Field)	NA	105% / 105%	NA / NA		0.00%	

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21 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

QUALIFIER(S)

*B:	Analyte Is Found In The Associated Blank
*E-01:	Estimated Result; This Analyte Failed "High" in the CCV; If the sample is non-detect for this analyte, the CCV demonstrated the analyte would have been detected were it present.
*E21:	Estimated Result; This Analyte failed (low) in the CCV.
*E2-F:	Second Source Verification Failure
*EDL:	Elevated Detection Limit Due to one or more of the following: Sample Matrix, Sample Dilution, or Limited Sample Volume
*MBI:	Masked By Interference

All Analysis performed according to EPA approved methodology when available:
SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods.
Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

Reviewed by: Norma James

Norma James
Technical Director

This report must be reproduced in its entirety.

Arkansas Analytical Inc.
8100 National Dr.
Little Rock, AR 72209
PHONE: 501-455-3233
FAX: 501-455-6118

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION	Project Description	Turnaround Time	Preservation Codes:
Entergy - Union Power	Outfall 001 Permit Renewal	1 Day (100%)	1. Cool, 6 Degrees Centigrade; 4. Thiosulfate for Dechlorination
6434 Calion Hwy.		2 Day (50%)	2. Sulfuric Acid (H_2SO_4), pH < 2; 5. Hydrochloric Acid(HCl)
El Dorado, AR 71730	Reporting Information	3 Day (25%)	3. Nitric Acid (HNO_3), pH < 2; 6. Sodium Hydroxide (NaOH), pH > 12
	Telephone: 870-748-2007	5 Day (Routine)	
Attn: Brent Parker	Email: cparke3@entergy.com; rmclare@entergy.com; kfulle1@entergy.com		

Sampler(s) Signature: [signature] Sampler(s) Printed: Shon Randles Clint James

Field Number	SAMPLE COLLECTION Date/s	Time/s	Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION	Field Residual Chlorine	Cyanide	Total Phenolics	BOD, TSS	Ammonia, COD	TOC	PPS Base Neutral/Acid Compounds (Including TCDD Screen)	PPS Pesticides/PCBs		Arkansas Analytical Work Order Number: 210486
Preservative Code:									1,6	1,2	1	1,2	1,5	1	1		
Bottle Type:									P	GA	P	P	GV	GA	GA		G = Glass; P = Plastic; V = Septum; A = Amber
	4/13/2021	0741	X		2	Water	Outfall 001 Grab Sample	X	X	X							01
	4/12-13/21	0901 - 0801		X	10	Water	Outfall 001 Composite Sample				X	X	X	X	X		02

Field Calibration Record -- DATE: 4-13-21

pH / Time		D.O.	Chlorine
4		Time	QC Time
7			1 0.23/0718
10		Slope	2 0.23/0718

ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 4-13-21

	Sample	Duplicate	QC	QC Duplicate
Residual Chlorine	0.33	0.34	0.23	0.23
Time	0751	0751	0718	0718

1. Relinquished by: (Signature)	Date/Time	2. Received by: (Signature)
3. Relinquished by: (Signature)	Date/Time	4. Received by lab: (Signature)
[signature]	4-13-21 1406	Sydney James

SAMPLE CONDITION UPON RECEIPT IN LAB

1. CUSTODY SEALS:	✓ Yes	___ No
2. CONTAINERS CORRECT:	___ Yes	___ No
3. COC/LABELS AGREE:	___ Yes	___ No
4. RECEIVED ON ICE:	___ Yes	___ No
5. TEMPERATURE ON RECEIPT:	3 °C	
6. TEMPERATURE GUN ID:	HHT# 4	

FOR COMPLETION BY LAB ONLY

REMARKS / SAMPLE COMMENTS

* Due to refrigeration issues CN, NH_3, & COD were temp compromised in lab - analysis canceled per Kim Fuller - lab/client will resample - 4/19/21 - ⑧

Revision 3
1/4/16

Arkansas Analytical Inc.

8100 National Dr.
Little Rock, AR 72209
PHONE: 501-455-3233
FAX: 501-455-6118

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION	Project Description	Turnaround Time
Entergy - Union Power	Outfall 001 Permit Renewal	1 Day (100%)
6434 Calion Hwy.		2 Day (50%)
El Dorado, AR 71730	Reporting Information	3 Day (25%)
	Telephone: 870-748-2007	5 Day (Routine)
Attn: Brent Parker	Email: cparke3@entergy.com; rmclare@entergy.com; kfulle1@entergy.com	Preservative Code: 1,5 / 1 / 1 / 1
		Bottle Type: GV / P / P / G

Preservation Codes:
1. Cool, 6 Degrees Centigrade
2. Sulfuric Acid (H_2SO_4), pH < 2
3. Nitric Acid (HNO_3), pH < 2
4. Thiosulfate for Dechlorination
5. Hydrochloric Acid(HCl)
6. Sodium Hydroxide (NaOH), pH > 12

Sampler(s) Signature: [signature] Sampler(s) Printed: Shon Randall-S / Clint James

Field Number	SAMPLE COLLECTION Date/s	Time/s	Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION	PPS Volatiles	Metals (ICP/OES-200.7 - Phosphorus)	PPS Metals (ICP/MS-200.8 - Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn)	PPS Hexavalent Chromium	PPS Hg (Low Level-1631E)	Arkansas Analytical Work Order Number:
	4/12/2021	0910	X		11	Water	Outfall 001 Composite (Grab #1)	X	X		X	X	24186 03
	4/12/2021	1210	X				Outfall 001 Composite (Grab #2)						
	4/12/2021	1510	X				Outfall 001 Composite (Grab #3)						
	4/13/2021	0741	X				Outfall 001 Composite (Grab #4)						
	4/12/2021	0910	X		3	Water	Outfall 001 Duplicate Composite (Grab #1)			X	X	X	04
	4/12/2021	1210	X				Outfall 001 Duplicate Composite (Grab #2)						
	4/12/2021	1510	X				Outfall 001 Duplicate Composite (Grab #3)						
	4/13/2021	0741	X				Outfall 001 Duplicate Composite (Grab #4)						
	4/12/2021	0910	X		3	Water	Outfall 001 Field Blank Composite (Grab #1)			X	X	X	05
	4/12/2021	1210	X				Outfall 001 Field Blank Composite (Grab #2)						
	4/12/2021	1510	X				Outfall 001 Field Blank Composite (Grab #3)						
	4/13/2021	0741	X				Outfall 001 Field Blank Composite (Grab #4)						

1. Relinquished by: (Signature)	Date/Time	2. Received by: (Signature)
3. Relinquished by: (Signature)	Date/Time	4. Received by lab: (Signature)
[signature]	4-13-21 1406	Sydney James

SAMPLE CONDITION UPON RECEIPT IN LAB

1. CUSTODY SEALS:	√ Yes	No
2. CONTAINERS CORRECT:	Yes	No
3. COC/LABELS AGREE:	Yes	No
4. RECEIVED ON ICE:	Yes	No
5. TEMPERATURE ON RECEIPT:	3 °C	
6. TEMPERATURE GUN ID:	HHT# 4	

FOR COMPLETION BY LAB ONLY

REMARKS / SAMPLE COMMENTS

Revision 3
1/4/16

Arkansas Analytical Inc.

8100 National Dr. - Little Rock, AR 72209
501-455-3233 Fax 501-455-6118

26 May 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730

Project: Permit Renewal Sample

Project Number: April 2021 -- Outfall 001

SDG Number: 2104186

Enclosed are the results of analyses for samples received by the laboratory on 13-Apr-21 14:06. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

Custody Seals	✔
Containers Correct	✔
COC/Labels Agree	✔
Received On Ice	✔
Temperature on Receipt	3.0°C

Sincerely,

Norma James
Technical Director

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26 May 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

CASE NARRATIVE

Sample Delivery Group – 2104186

One *OR* more of the qualifiers described below may appear in this report. Qualifiers in RED apply to this SDG (Sample Delivery Group).

ANALYTICAL QUALIFIERS:

Qualifier	Description
EDL	Result was non-detect at an elevated detection limit due to one or more of the following: Sample Matrix, Sample Dilution, or Limited Sample Volume.
EX	Result exceeds DAILY MAXIMUM and/or MONTHLY AVERAGE.
EX2	The result exceeds the TCLP limit.
J	At client request, J-Values are reported. J-Values are considered "estimated" results as they are below the limit of quantitation yet above the method detection limit (MDL).
N	Insufficient Sample Weight as Required by Method.
T40	The ambient temperature exceeded 23 +/- 2oC during the TCLP rotation process
TCLP-1	TCLP extraction done in alternate ZHE due to sample matrix.

CALIBRATION QUALIFIERS:

Qualifier	Description
CR	Result above highest calibration standard, but within linear calibration range.
Est3	Result at the instrument was above the concentration of the highest standard in the calibration curve.
E2-F	Second Source Verification Failure
E7	Internal Standard Response Failure
E11	Initial Calibration Minimum Response Factor Failure
E21	CCV Low
E-01	CCV High
E35	Low Level CCV Failure

This report must be reproduced in its entirety.

26 May 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

ANALYTICAL RESULTS

Lab Number: 2104186-02
Sample Name: Outfall 001 Composite
Date/Time Collected: 4/13/21 8:01
Sample Matrix: Water

Pesticides/PCBs	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Aldrin	ug/L	< 0.010		4/13/21 16:43	B104209	EPA 608.3-2016
alpha-BHC	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
beta-BHC	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
gamma-BHC (Lindane)	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
delta-BHC	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
Chlordane	ug/L	< 0.200		4/13/21 16:43	B104209	EPA 608.3-2016
alpha-Chlordane	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
gamma-Chlordane	ug/L	< 0.050		4/13/21 16:43	B104209	EPA 608.3-2016
4,4´-DDT	ug/L	< 0.020		4/13/21 16:43	B104209	EPA 608.3-2016
4,4´-DDE	ug/L	< 0.100		4/13/21 16:43	B104209	EPA 608.3-2016
4,4´-DDD	ug/L	< 0.100		4/13/21 16:43	B104209	EPA 608.3-2016
Dieldrin	ug/L	< 0.020		4/13/21 16:43	B104209	EPA 608.3-2016
Endosulfan I	ug/L	< 0.010		4/13/21 16:43	B104209	EPA 608.3-2016
Endosulfan II	ug/L	< 0.020		4/13/21 16:43	B104209	EPA 608.3-2016
Endosulfan sulfate	ug/L	< 0.100		4/13/21 16:43	B104209	EPA 608.3-2016
Endrin	ug/L	< 0.020	E-01	4/13/21 16:43	B104209	EPA 608.3-2016
Endrin aldehyde	ug/L	< 0.100		4/13/21 16:43	B104209	EPA 608.3-2016
Heptachlor	ug/L	< 0.010		4/13/21 16:43	B104209	EPA 608.3-2016
Heptachlor epoxide	ug/L	< 0.010		4/13/21 16:43	B104209	EPA 608.3-2016
Chlorpyrifos	ug/L	< 0.070	E21, E2-F	4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1242	ug/L	< 0.200		4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1254	ug/L	< 0.200		4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1221	ug/L	< 0.200		4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1232	ug/L	< 0.200		4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1248	ug/L	< 0.200		4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1260	ug/L	< 0.200		4/13/21 16:43	B104209	EPA 608.3-2016
Aroclor-1016	ug/L	< 0.200		4/13/21 16:43	B104209	EPA 608.3-2016
Toxaphene	ug/L	< 0.245	J	4/13/21 16:43	B104209	EPA 608.3-2016
TCMX [surr]	%	12.8		4/13/21 16:43	B104209	EPA 608.3-2016
DCBP [surr]	%	16.0		4/13/21 16:43	B104209	EPA 608.3-2016

This report must be reproduced in its entirety.

26 May 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001
Date Received: 13-Apr-21 14:06

QUALITY CONTROL RESULTS

Pesticides/PCBs -- Batch: B104209 (Water)
Prepared: 12-Apr-21 15:47 By: JM -- Analyzed: 13-Apr-21 14:06 By: TB

Analyte	BLK	LCS / LCSD			MS / MSD			Dup	RPD	Qualifiers
4,4´-DDD	<0.002 ug/L	91.0%	/	NA	98.4%	/	98.4%		0.0668%	
4,4´-DDE	<0.001 ug/L	79.1%	/	NA	88.6%	/	87.7%		1.11%	
4,4´-DDT	<0.001 ug/L	82.4%	/	NA	94.4%	/	94.0%		0.450%	
Aldrin	<0.0005 ug/L	53.7%	/	NA	65.0%	/	65.5%		0.801%	
alpha-BHC	<0.0006 ug/L	74.3%	/	NA	81.9%	/	80.3%		2.04%	
beta-BHC	<0.002 ug/L	88.6%	/	NA	104%	/	103%		1.35%	
delta-BHC	<0.002 ug/L	76.4%	/	NA	84.0%	/	81.1%		3.22%	
Dieldrin	<0.001 ug/L	80.4%	/	NA	90.3%	/	89.0%		1.44%	
Endosulfan I	<0.0003 ug/L	72.2%	/	NA	78.2%	/	78.1%		0.179%	
Endosulfan II	<0.0009 ug/L	82.6%	/	NA	90.0%	/	90.0%		0.0187%	
Endosulfan sulfate	<0.001 ug/L	81.7%	/	NA	94.0%	/	93.7%		0.273%	
Endrin	<0.001 ug/L	90.3%	/	NA	101%	/	101%		0.205%	E-01
Endrin aldehyde	<0.001 ug/L	75.0%	/	NA	99.9%	/	93.0%		6.53%	
gamma-BHC (Lindane)	<0.001 ug/L	76.6%	/	NA	96.9%	/	93.6%		3.34%	
Heptachlor	<0.001 ug/L	65.0%	/	NA	75.0%	/	75.6%		0.837%	
Heptachlor epoxide	<0.0005 ug/L	71.8%	/	NA	77.4%	/	77.2%		0.166%	
DCBP [surr]	93.3 %	81.3%	/	NA	102%	/	96.4%		NA	
TCMX [surr]	68.7 %	70.8%	/	NA	81.7%	/	83.5%		NA	

QUALIFIER(S)

*E-01: Estimated Result; This Analyte Failed "High" in the CCV; If the sample is non-detect for this analyte, the CCV demonstrated the analyte would have been detected were it present.
*E21: Estimated Result; This Analyte failed (low) in the CCV.
*E2-F: Second Source Verification Failure
*J: Detected but below the Reporting Limit; therefore, result is an estimated concentration (CLP J-Flag).

All Analysis performed according to EPA approved methodology when available:
SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods.
Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

Reviewed by:

Norma James
Technical Director

This report must be reproduced in its entirety.

Arkansas Analytical Inc.
8100 National Dr.
Little Rock, AR 72209
PHONE: 501-455-3233
FAX: 501-455-6118

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION	Project Description	Turnaround Time	Preservation Codes:
Entergy - Union Power	Outfall 001 Permit Renewal	1 Day (100%)	1. Cool, 6 Degrees Centigrade; 4. Thiosulfate for Dechlorination
6434 Calion Hwy.		2 Day (50%)	2. Sulfuric Acid (H_2SO_4), pH < 2; 5. Hydrochloric Acid(HCl)
El Dorado, AR 71730	Reporting Information	3 Day (25%)	3. Nitric Acid (HNO_3), pH < 2; 6. Sodium Hydroxide (NaOH), pH > 12
	Telephone: 870-748-2007	5 Day (Routine)	
Attn: Brent Parker	Email: cparke3@entergy.com; rmclare@entergy.com; kfulle1@entergy.com		

Sampler(s) Signature: [signature] Sampler(s) Printed: Shon Randles Clint James

Field Number	SAMPLE COLLECTION Date/s	Time/s	Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION	Field Residual Chlorine	Cyanide	Total Phenolics	BOD, TSS	Ammonia, COD	TOC	PPS Base Neutral/Acid Compounds (Including TCDD Screen)	PPS Pesticides/PCBs		Arkansas Analytical Work Order Number: 210486
Preservative Code:									1,6	1,2	1	1,2	1,5	1	1		
Bottle Type:									P	GA	P	P	GV	GA	GA		G = Glass; P = Plastic; V = Septum; A = Amber
	4/13/2021	0741	X		2	Water	Outfall 001 Grab Sample	X	X	X							01
	4/12-13/21	0901 - 0801		X	10	Water	Outfall 001 Composite Sample				X	X	X	X	X		02

Field Calibration Record -- DATE: 4-13-21

pH / Time		D.O.	Chlorine
4		Time	QC Time
7			1 0.23/0718
10		Slope	2 0.23/0718

ONSITE MEASUREMENTS by Arkansas Analytical -- DATE: 4-13-21

	Sample	Duplicate	QC	QC Duplicate
Residual Chlorine	0.33	0.34	0.23	0.23
Time	0751	0751	0718	0718

1. Relinquished by: (Signature)	Date/Time	2. Received by: (Signature)
3. Relinquished by: (Signature)	Date/Time	4. Received by lab: (Signature)
[signature]	4-13-21 1406	Sydney James

SAMPLE CONDITION UPON RECEIPT IN LAB

1. CUSTODY SEALS:	✓ Yes	___ No
2. CONTAINERS CORRECT:	___ Yes	___ No
3. COC/LABELS AGREE:	___ Yes	___ No
4. RECEIVED ON ICE:	___ Yes	___ No
5. TEMPERATURE ON RECEIPT:	3 °C	
6. TEMPERATURE GUN ID:	HHT# 4	

FOR COMPLETION BY LAB ONLY

REMARKS / SAMPLE COMMENTS

* Due to refrigeration issues CN, NH_3, & COD were temp compromised in lab - analysis canceled per Kim Fuller - lab/client will resample - 4/19/21 - ⑧

Revision 3
1/4/16

Arkansas Analytical Inc.

8100 National Dr.
Little Rock, AR 72209
PHONE: 501-455-3233
FAX: 501-455-6118

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION	Project Description	Turnaround Time
Entergy - Union Power	Outfall 001 Permit Renewal	1 Day (100%)
6434 Calion Hwy.		2 Day (50%)
El Dorado, AR 71730	Reporting Information	3 Day (25%)
	Telephone: 870-748-2007	5 Day (Routine)
Attn: Brent Parker	Email: cparke3@entergy.com; rmclare@entergy.com; kfulle1@entergy.com	Preservative Code: 1,5 / 1 / 1 / 1
		Bottle Type: GV / P / P / G

Preservation Codes:
1. Cool, 6 Degrees Centigrade
2. Sulfuric Acid (H_2SO_4), pH < 2
3. Nitric Acid (HNO_3), pH < 2
4. Thiosulfate for Dechlorination
5. Hydrochloric Acid(HCl)
6. Sodium Hydroxide (NaOH), pH > 12

Sampler(s) Signature: [signature] Sampler(s) Printed: Shon Randall-S / Clint James

Field Number	SAMPLE COLLECTION Date/s	Time/s	Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION	PPS Volatiles	Metals (ICP/OES-200.7 - Phosphorus)	PPS Metals (ICP/MS-200.8 - Sb, As, Be, Cd, Cr, Cu, Pb, Ni, Se, Ag, Tl, Zn)	PPS Hexavalent Chromium	PPS Hg (Low Level-1631E)	Arkansas Analytical Work Order Number:
	4/12/2021	0910	X		11	Water	Outfall 001 Composite (Grab #1)	X	X		X	X	24186 03
	4/12/2021	1210	X				Outfall 001 Composite (Grab #2)						
	4/12/2021	1510	X				Outfall 001 Composite (Grab #3)						
	4/13/2021	0741	X				Outfall 001 Composite (Grab #4)						
	4/12/2021	0910	X		3	Water	Outfall 001 Duplicate Composite (Grab #1)			X	X	X	04
	4/12/2021	1210	X				Outfall 001 Duplicate Composite (Grab #2)						
	4/12/2021	1510	X				Outfall 001 Duplicate Composite (Grab #3)						
	4/13/2021	0741	X				Outfall 001 Duplicate Composite (Grab #4)						
	4/12/2021	0910	X		3	Water	Outfall 001 Field Blank Composite (Grab #1)			X	X	X	05
	4/12/2021	1210	X				Outfall 001 Field Blank Composite (Grab #2)						
	4/12/2021	1510	X				Outfall 001 Field Blank Composite (Grab #3)						
	4/13/2021	0741	X				Outfall 001 Field Blank Composite (Grab #4)						

1. Relinquished by: (Signature)	Date/Time	2. Received by: (Signature)
3. Relinquished by: (Signature)	Date/Time	4. Received by lab: (Signature)
[signature]	4-13-21 1406	Sydney James

SAMPLE CONDITION UPON RECEIPT IN LAB

1. CUSTODY SEALS:	√ Yes	No
2. CONTAINERS CORRECT:	Yes	No
3. COC/LABELS AGREE:	Yes	No
4. RECEIVED ON ICE:	Yes	No
5. TEMPERATURE ON RECEIPT:	3 °C	
6. TEMPERATURE GUN ID:	HHT# 4	

FOR COMPLETION BY LAB ONLY

REMARKS / SAMPLE COMMENTS

Revision 3
1/4/16

Arkansas Analytical Inc.

8100 National Dr. - Little Rock, AR 72209
501-455-3233 Fax 501-455-6118

29 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730

Project: Permit Renewal Sample

Project Number: April 2021 -- Outfall 001-Resample

SDG Number: 2104342

Enclosed are the results of analyses for samples received by the laboratory on 21-Apr-21 15:04. If you have any questions concerning this report, please feel free to contact me.

Sample Receipt Information:

Custody Seals	✔
Containers Correct	✔
COC/Labels Agree	✔
Received On Ice	✔
Temperature on Receipt	6.0°C

Sincerely,

Norma James
Technical Director

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29 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample
Project Number: April 2021 -- Outfall 001-Resample
Date Received: 21-Apr-21 15:04

ANALYTICAL RESULTS

Lab Number: 2104342-01
Sample Name: Outfall 001 Grab
Date/Time Collected: 4/21/21 12:27
Sample Matrix: Water

Wet Chemistry	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Cyanide (total)	mg/L	< 0.010		4/28/21 10:55	B104489	SM 4500-CN B,E-2011

ANALYTICAL RESULTS

Lab Number: 2104342-02
Sample Name: Outfall 001 Composite
Date/Time Collected: 4/21/21 12:00
Sample Matrix: Water

Wet Chemistry	Units	Result	Qualifier(s)	Date/Time Analyzed	Batch	Method
Ammonia as N	mg/L	< 0.500		4/23/21 8:00	B104420	SM 4500-NH3 B,D,C-2011
COD	mg/L	**76.3**		4/23/21 10:46	B104425	EPA 410.4, Rev.2.0(1993)

QUALITY CONTROL RESULTS

Wet Chemistry -- Batch: B104420 (Water)
Prepared: 23-Apr-21 08:00 By: AA -- Analyzed: 23-Apr-21 08:00 By: AA

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Ammonia as N	<0.500 mg/L	81.5% / NA	85.1% / 84.9%		0.229%	

Wet Chemistry -- Batch: B104425 (Water)
Prepared: 23-Apr-21 10:46 By: MB -- Analyzed: 23-Apr-21 10:46 By: MB

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
COD	<10.0 mg/L	107% / NA	85.5% / 94.0%		5.90%	

Wet Chemistry -- Batch: B104489 (Water)
Prepared: 28-Apr-21 10:55 By: JH -- Analyzed: 28-Apr-21 10:55 By: JH

Analyte	BLK	LCS / LCSD	MS / MSD	Dup	RPD	Qualifiers
Cyanide (total)	<0.010 mg/L	103% / NA	97.0% / 102%		5.03%	

This report must be reproduced in its entirety.

29 April 2021

Brent Parker
Entergy Arkansas, Inc. - Union Power Plant
6434 Calion Hwy.
El Dorado, AR 71730
Project: Permit Renewal Sample

Project Number: April 2021 -- Outfall 001-Resample
Date Received: 21-Apr-21 15:04

All Analysis performed according to EPA approved methodology when available :
SW 846, Revised December, 1996; EPA 600/4-79-020, Revised March, 1983; Standard Methods.
Instrument calibration and quality control samples performed at or above frequency specified in analytical method.

Reviewed by: Norma James

Norma James
Technical Director

This report must be reproduced in its entirety.

Arkansas Analytical Inc.

8100 National Dr.
Little Rock, AR 72209
PHONE: 501-455-3233
FAX: 501-455-6118

CHAIN OF CUSTODY RECORD

CLIENT INFORMATION	Project Description	Turnaround Time
Entergy - Union Power	Outfall 001 Permit Renewal	1 Day (100%)
6434 Calion Hwy.		2 Day (50%)
El Dorado, AR 71730	**Reporting Information**	3 Day (25%)
	Telephone: 870-748-2007	5 Day (Routine)
Attn: Brent Parker	Email: cparke3@entergy.com; rmclare@entergy.com; kfulle1@entergy.com	Preservative Code:
		Bottle Type:

Preservation Codes:

1. Cool, 6 Degrees Centigrade
2. Sulfuric Acid (H_2SO_4), pH < 2
3. Nitric Acid (HNO_3), pH < 2
4. Thiosulfate for Dechlorination
5. Hydrochloric Acid(HCl)
6. Sodium Hydroxide (NaOH), pH > 12

Sampler(s) Signature: Clint Wood

Sampler(s) Printed: Clint Wood

Field Number	SAMPLE COLLECTION Date/s	Time/s	Grab	Comp	Number of Bottles	Sample Matrix	SAMPLE IDENTIFICATION/ DESCRIPTION	TEST PARAMETERS: Cyanide (1,6 / P)	Ammonia, COD (1,2 / P)	Bottle Type Code	Arkansas Analytical Work Order Number: 2104342
	4/21/21	1227	X		1	Water	Outfall 001 Grab Sample	X		01	
	1	~~1224~~ *		X	1	Water	Outfall 001 Composite Sample		X	02	

1. Relinquished by: (Signature)	Date/Time	2. Received by: (Signature)
Clint Wood	4/21/21 1504	
3. Relinquished by: (Signature)	Date/Time	4. Received by lab: (Signature)
		Jaranny Riddle

SAMPLE CONDITION UPON RECEIPT IN LAB		
1. CUSTODY SEALS:	✓ Yes	No
2. CONTAINERS CORRECT:	Yes	No
3. COC/LABELS AGREE:	Yes	No
4. RECEIVED ON ICE:	Yes	No
5. TEMPERATURE ON RECEIPT:	6 °C	
6. TEMPERATURE GUN ID:	HHT# 4	
FOR COMPLETION BY LAB ONLY		

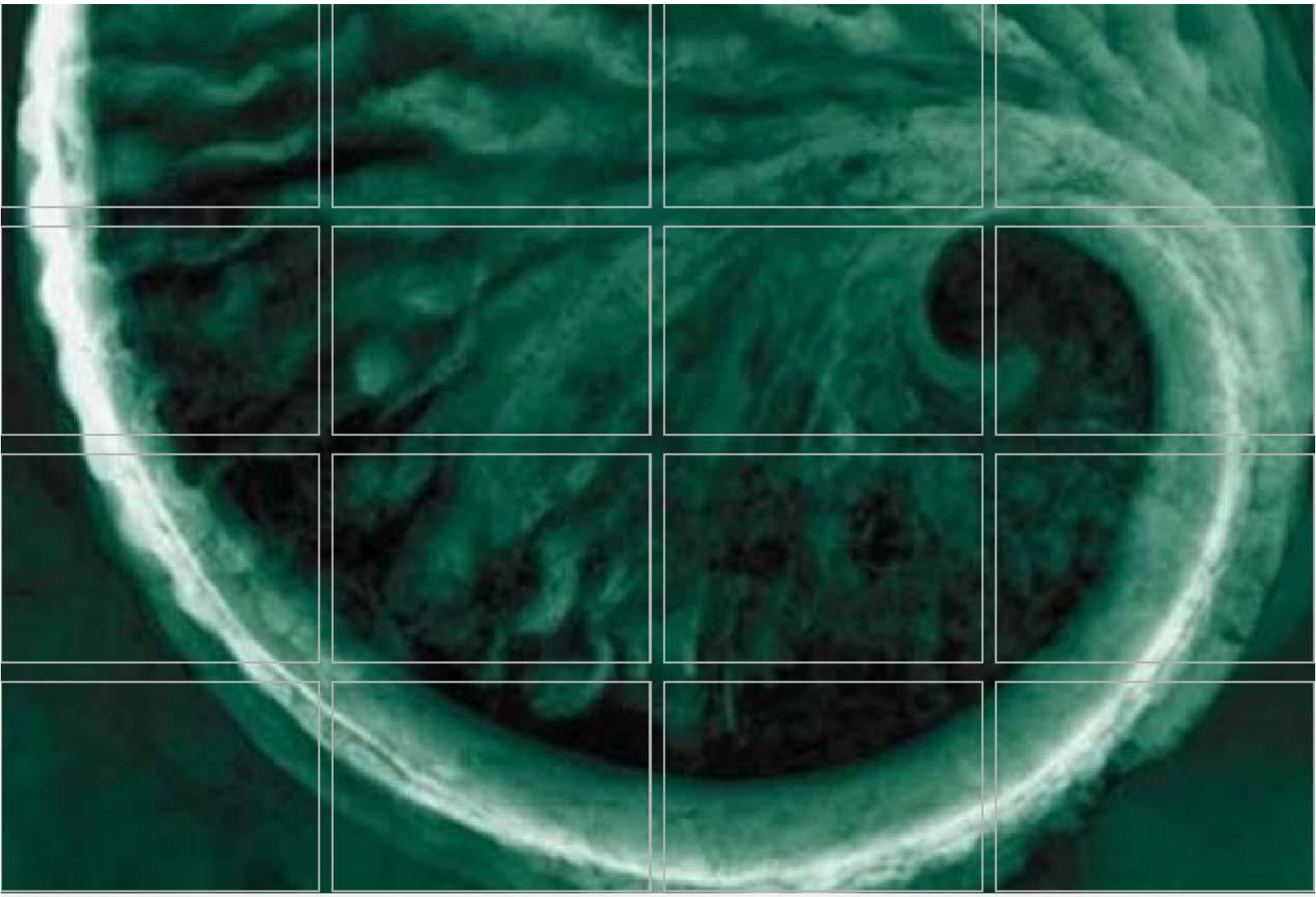
REMARKS / SAMPLE COMMENTS

* comp start
4/20/21 at 1300
comp complete
4/21/21 at 1300
comp collected
4/21/21 at 1224 CW
4/22/21

Revision 3
1/4/16

316(b) Cooling Water Intake Structure Information

June 1, 2021



316(b) Supporting Documentation for NPDES Permit Renewal

Union Power Station
Permit No. AR0049140
Union County, Arkansas

Entergy Arkansas, LLC

20 May 2021

Project No.: 0455220

The business of sustainability

ERM

Signature Page

20 May 2021

316(b) Supporting Documentation for NPDES Permit Renewal

Union Power Station
Permit No. AR0049140
Union County, Arkansas

Barry Gillespie
Partner

Kurtis Schlicht
Project Manager

Amanda Ragatz
Senior Consultant, Scientist

Environmental Resources Management
CityCentre Four
840 West Sam Houston Parkway North, Suite 600
Houston, Texas 77024
281-600-1000 (T)
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CONTENTS

1. INTRODUCTION 1
2. §122.21(R)(2) SOURCE WATER PHYSICAL DATA 3
3. §122.21(R)(3) COOLING WATER INTAKE STRUCTURE DATA 10
4. §122.21(R)(4) SOURCE WATER BASELINE BIOLOGICAL CHARACTERIZATION DATA 12
5. §122.21(R)(5) COOLING WATER SYSTEM DATA 38
6. §122.21(R)(6) CHOSEN METHOD OF COMPLIANCE WITH IMPINGEMENT MORTALITY STANDARD 40
7. §122.21(R)(7) ENTRAINMENT PERFORMANCE STUDIES 41
8. §122.21(R)(8) OPERATIONAL STATUS 42
9. REFERENCES 44

ATTACHMENT 1 FLOW DIAGRAM AND WATER BALANCE
ATTACHMENT 2 ENGINEERING DRAWINGS
ATTACHMENT 3 SPECIES LIFE HISTORIES

List of Tables

Table 3-1: Operational Time of UCWCB's CWIS and Water Volumes to Union
Table 4-1: Relative Abundance and Fish Species Collected in Ouachita River
Table 4-2: Larval Fish Species Collected in the Upper Ouachita National Wildlife Refuge
Table 4-3: Mussels Identified in the Ouachita River from the Confluence with the Little Missouri River to the Arkansas-Louisiana State Line
Table 4-4: Summary of Fish and Shellfish Common to the Union CWIS by Significance – Commercial, Recreational and Forage
Table 4-5: Mean Length of Fish Impinged during the Entergy Sterlington IM Study
Table 4-6: Species Susceptible to Impingement and Entrainment at the Union CWIS
Table 4-7: Typical Spawning and Recruitment Periods of Species at the Union CWIS (Gray shaded cells indicate peak spawning months)
Table 4-8: USFWS Threatened and Endangered Species
Table 8-1: Capacity Utilization by Year as determined from EIA data

List of Figures

Figure 2-1: General Location of the Union CWIS within the Ouachita River
Figure 2-2: Cross Sectional Bathymetry at the Union CWIS
Figure 2-3: Average Annual Water Temperature by Month from 2000-2018 at OUA0006A
Figure 2-4: Water Temperature at River Station OUA0006A from 2000-2018
Figure 2-5: Salinity at River Station OUA0006A from 2015-2021
Figure 2-6: Discharge (cfs) Rates of the Ouachita River at USGS 07362000 at Camden, Arkansas from 2000-2020
Figure 2-7: Average Discharge (cfs) by Month of the Ouachita River at USGS 07362000 at Camden, Arkansas from 2000-2020
Figure 2-8: Expected Zone of Influence at the Union CWIS

Figure 2-9: Location of Union CWIS
Figure 4-1: Relative Abundance of Organisms collected along the Ouachita River between 1972 and 1975
Figure 4-2: Relative Abundance of Organisms collected along the Ouachita River in 1983
Figure 4-3: Relative Abundance of Organisms Impinged at Sterlington (2006-2007)
Figure 4-4: Relative Abundance of Organisms impinged at McClellan Generating Station between January 2006 and December 2006

Acronyms and Abbreviations

Name	Description
ADEQ	Arkansas Department of Environmental Quality
AGFC	Arkansas Game and Fish Commission
AIF	actual intake flow
ASWCC	Arkansas Soil and Water Conservation Commission
BTA	best technology available
CCGT	combined-cycle gas turbine
CCRS	closed-cycle recirculating system
CFR	Code of Federal Regulations
cfs	cubic feet per second
CWA	Clean Water Act
CWIS	cooling water intake structure
DIF	design intake flow
E	entrainment
EPRI	Electric Power Research Institute
ERM	Environmental Resources Management
gpm	gallons per minute
HRSG	heat recovery steam generator
IM	impingement mortality
L&D	lock and dam
LDWF	Louisiana Department of Wildlife and Fisheries
LORWG	Lower Ouachita River Work Group
MGD	million gallons per day
MISO	Midcontinent Independent System Operator, Inc.
MW	megawatt
NPDES	National Pollutant Discharge Elimination System
NWIS	National Water Information System
PC&E	Pollution Control and Ecology
psi	pound per square inch
UCWCB	Union County Water Conservation Board
USACE	U.S. Army Corps of Engineers
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
YOY	young of the year
ZOI	zone of influence

1. INTRODUCTION

Environmental Resources Management (ERM), on behalf of Entergy Arkansas, LLC (Entergy), completed a detailed compilation and review of available data and other resources related to Entergy's Union Power Station (Union) located in El Dorado, Arkansas and developed the following information as it relates to meeting the requirements of the Clean Water Act (CWA) 316(b) rule issued on October 14, 2014. Union operates under National Pollutant Discharge Elimination System (NPDES) permit AR0049140.

Union is located in Union County and consists of four combine-cycle gas turbines (CCGT) with an approximate generating capacity of 2200 megawatts (MW). Each of the four CCGT unit consists of two gas turbines with an individual evaporative cooler system, each with a heat recovery steam generator (HRSG) equipped with duct burners and steam turbine in a 2 by 1 configuration. Union entered commercial service in 2003 under Union Power Partners, L.P. On March 29, 2016, after purchase by Entergy, the permit was changed to reflect its new ownership by Entergy.

Union receives its cooling water from a purchase agreement with a public water provider supplying clarified water to multiple industrial users. The provider, Union County Water Conservation Board (UCWCB) operates a cooling water intake structure (CWIS) on the shoreline of the Ouachita River at US Highway 167 near Calion, Arkansas. Union has a design intake flow (DIF) of 86.4 million gallons per day (MGD), withdraws water from the waters of the U.S., and uses at least 25 percent of the water they withdraw exclusively for cooling purposes and is, therefore, subject to requirements under section 316(b) of the CWA for existing power generating facilities.

This report was developed pursuant to the CWA 316(b) Rule and covers those requirements defined and outlined in 40 CFR Section 125.92, 125.94(d), 125.95(a), and 122.21 (r). Focus in this report will be on the application requirements found in 122.21 (r)(ii) which covers existing facilities and includes the information listed under (r)(2), (3), (4), (5), (6), (7), and (8). Entergy believes the information submitted in this document supports the requirements under 122.21 (r) (2) through (8) and demonstrates that Union operates a best technology available (BTA), closed-cycle recirculating system (CCRS), that meets the standards for impingement mortality (IM) under 40 CFR § 125.94(c)(1).

Based on Union's actual intake flow (AIF) of less than 125 MGD, Entergy believes (r)(9)-(13) (application requirements pertaining to entrainment BTA) are not applicable to Union. However, the rule does allow, at the director's discretion, evaluation of entrainment BTA on a case-by-case/site specific basis for those facilities with AIF less than 125 MGD. Entergy believes the BTA technologies identified in this document not only support the IM BTA evaluation, but also support the evaluation of BTA for entrainment (E). Furthermore, it is Entergy's position that Union's CCRS serves as BTA for entrainment under §125.94(d), should the Arkansas Department of Environmental Quality (ADEQ) decide to evaluate Union's CWIS under the rules for entrainment standards.

The point of compliance for 316(b) at Union is the CWIS and the associated onshore and offshore components located on the Ouachita River. As such, the focus of information for (r)(2) and (4) in this report will be on the Ouachita River which is considered the source water for the CWIS.

Entergy understands the permit application requirements pursuant to the CWA 316 (b) Rule. This document contains the required (r) information pieces as outlined below:

- (r)(2)- Source Water Physical Data;
- (r)(3)- Cooling Water Intake Structure Data;
- (r)(4)- Source Water Baseline Biological Characterization Data;
- (r)(5)- Cooling Water System Data;

- (r)(6)- Chosen Method of Compliance with the Impingement Mortality Standard;
- (r)(7)- Entrainment Performance Studies;
- (r)(8)- Operational Status;

The following sections provide the details for each of the application requirements.

2. §122.21(r)(2) SOURCE WATER PHYSICAL DATA

The source water physical data is required to characterize the facility and evaluate the type of water body potentially affected by the CWIS. The following provides the Source Water Physical Data for Union:

i. A narrative description and scaled drawings showing the physical configuration of all source water bodies used by your facility, including areal dimensions, depths, salinity and temperature regimes, and other documentation that supports your determination of the water body type where each cooling water intake structure is located;

Union obtains water from the Ouachita River, a freshwater system, through a CWIS owned by UCWCB. The CWIS is located approximately 1 mile northwest of the City of Calion (33°20'42.76"N, 92°31'59.63"W, see Figure 2-1). At the CWIS, the river is approximately 375 feet wide with a water depth ranging from approximately 18 feet to 42 feet (Figure 2-2). The shoreline intake is located on the right descending bank on the west side of where Highway 167 crosses the Ouachita River and consists of two intake bays submerged to the river channel bottom at an elevation of 57 feet (Figure 2-1).

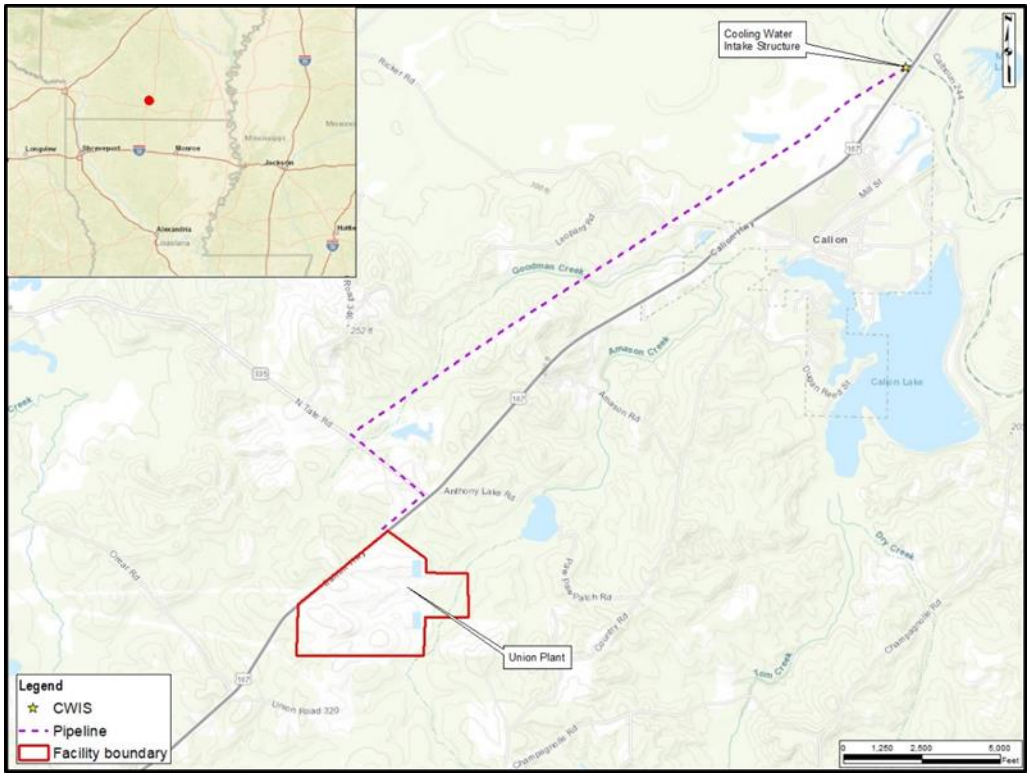

Figure 2-1: General Location of the Union CWIS within the Ouachita River

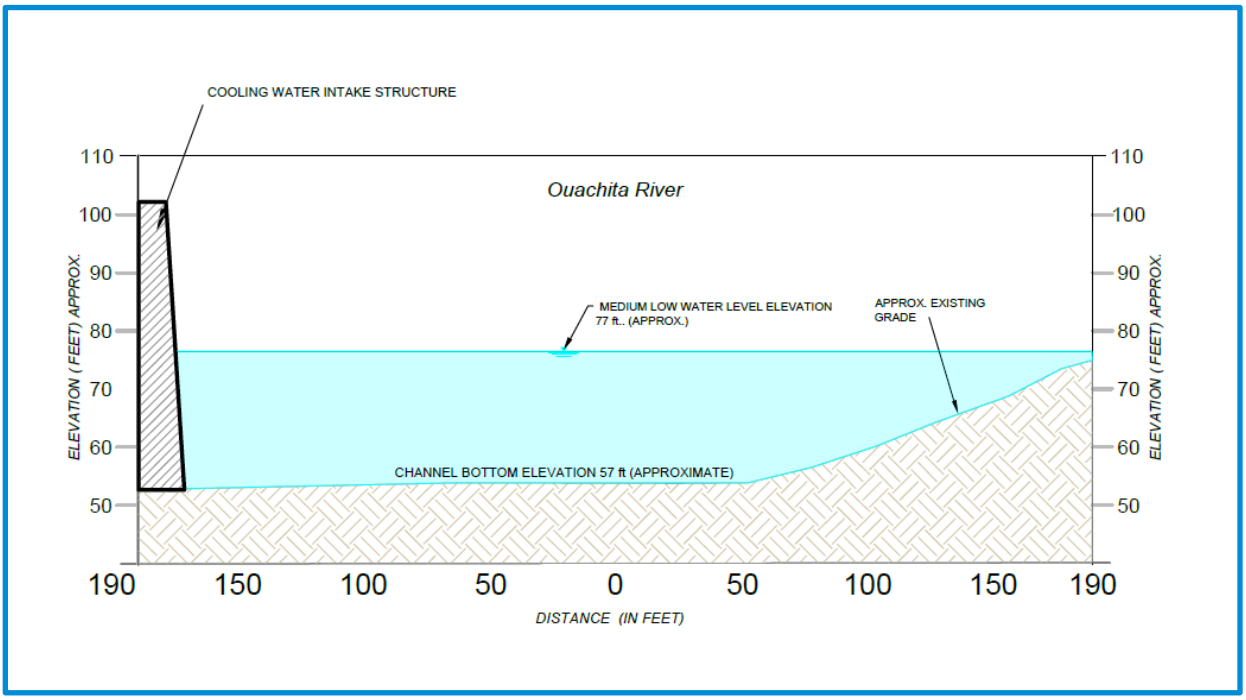

Figure 2-2: Cross Sectional Bathymetry at the Union CWIS

The nearest ADEQ water temperature data on the Ouachita River is collected from river station OUA0006A, located near Malvern and approximately 132 miles upstream from the Union CWIS. Water temperature data collected from 2000 to 2018 shows the temperature ranges from 3°C to 31°C, with highest temperatures between the months of June and September and lowest temperatures between January and February (Figures 2-3 and 2-4).

Specific conductance from OUA0006 near Malvern on SR84/Tanner St. (located approximately 136 miles upstream from the Union CWIS) was used to assess conditions at the Union CWIS. This data indicates specific conductance ranges from 50 to 112 uS/cm (Figure 2-5).

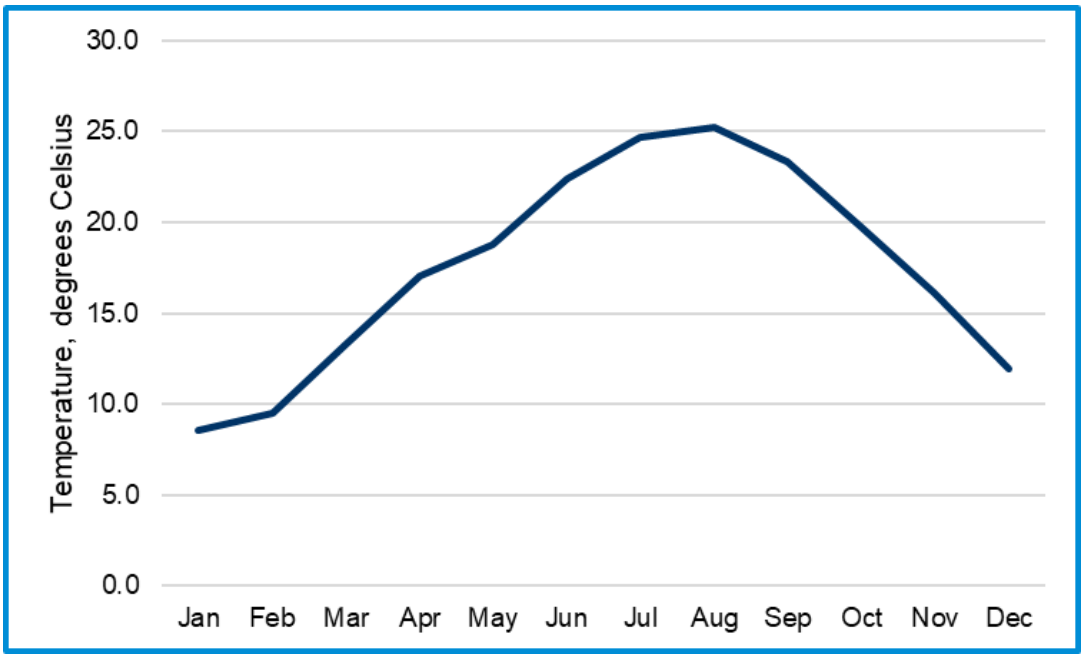

Figure 2-3: Average Annual Water Temperature by Month from 2000-2018 at OUA0006A

Source: https://www.adeq.state.ar.us/techsvs/env_multi_lab/water_quality_station.aspx

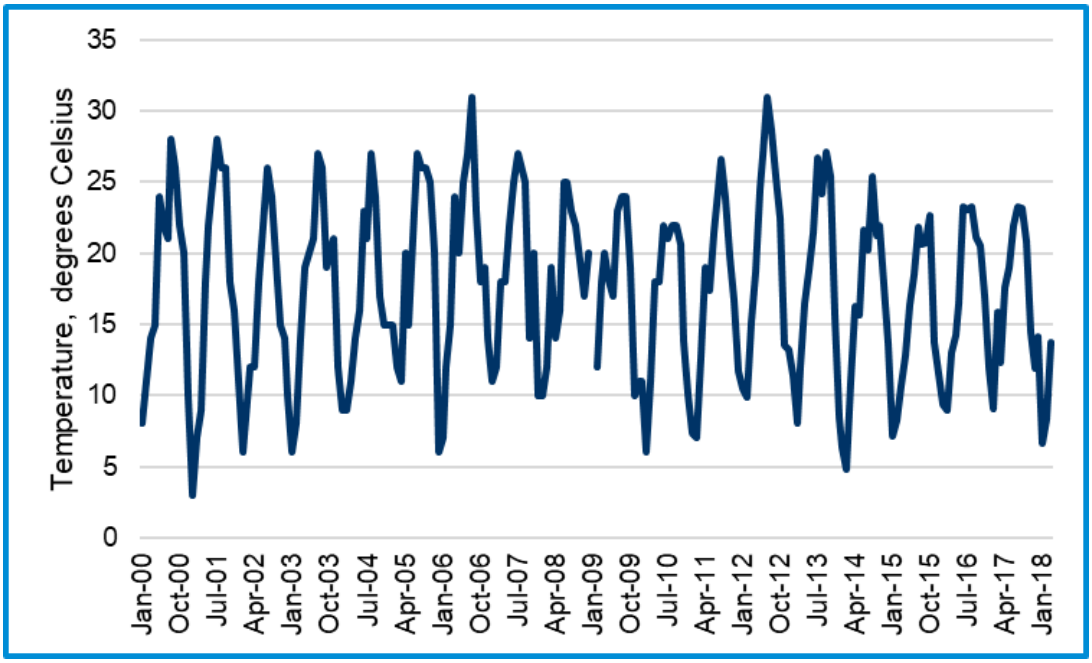

Figure 2-4: Water Temperature at River Station OUA0006A from 2000-2018

Source: https://www.adeq.state.ar.us/techsvs/env_multi_lab/water_quality_station.aspx

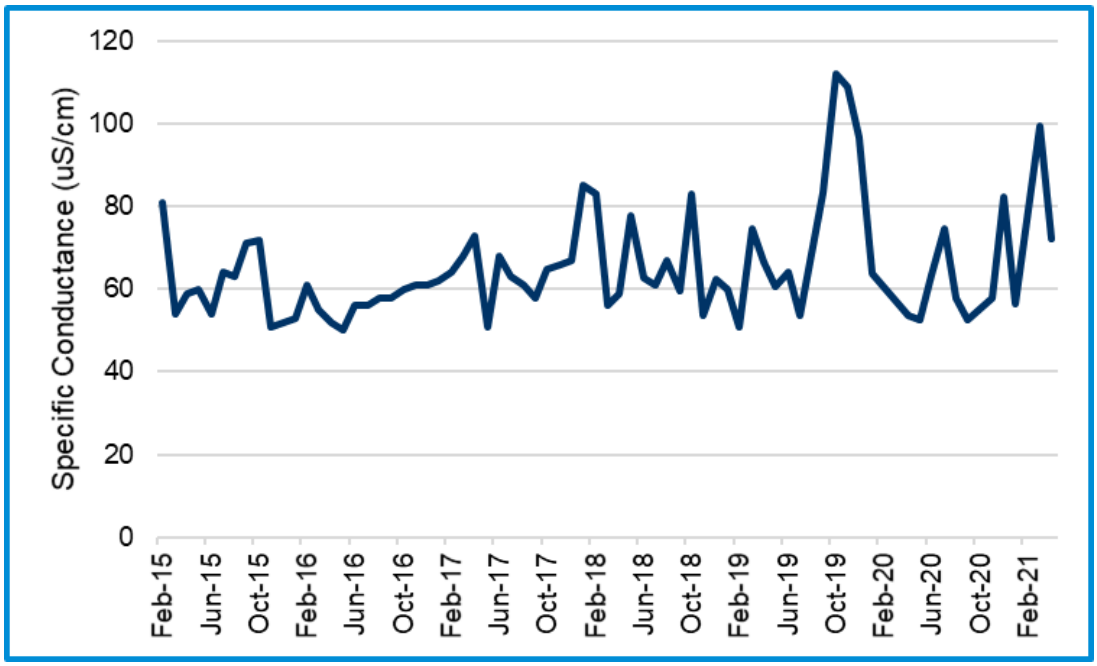

Figure 2-5: Salinity at River Station OUA0006A from 2015-2021

Source: https://www.adeq.state.ar.us/techsvs/env_multi_lab/water_quality_station.aspx

ii. Identification and characterization of the source waterbody's hydrological and geomorphological features, as well as the methods you used to conduct any physical studies to determine your intake's area of influence within the waterbody and the results of such studies;

The Ouachita River starts in the Ouachita Mountains in Polk County, Arkansas and runs for 510 miles before joining the Tensas and Little Rivers to form the Black River, which drains into the Red River in Louisiana (USACE 2019). The Ouachita flows through 11 counties in Arkansas and six parishes in Louisiana with a drainage area of approximately 24,790 square miles. Major tributaries include the Boeuf River, Tensas River, Bayou Bartholomew, and the Saline River. There are three major impoundments located on the Ouachita River that affect the river flow downstream. Lake Ouachita is located ten miles northwest of the city of Hot Springs, Arkansas and is impounded by the Blakely Mountain Dam. Lake Ouachita is operated for flood control, hydroelectric power, headwater benefits, fish and wildlife conservation, and recreational purposes, and has a storage capacity of nearly 2.77 million acre-feet of water. Lake Hamilton is impounded by Carpenter Dam, which is located approximately 19 miles downstream from Blakely Mountain Dam and has a storage capacity of approximately 191,000 acre-feet. Lake Catherine is impounded by the Remmel Dam, which is located approximately 12 miles downstream from Carpenter Dam and has a storage capacity of approximately 37,000 acre-feet (ASWCC 1987).

The Ouachita River is navigable from Camden, Arkansas to the convergence with the Tensas and Little Rivers, approximately 337 miles. The navigable portion of the Ouachita River contains four locks and dams (L&Ds), each with lock chambers 84 feet wide and 600 feet in length having from 3 to 5 tainter gates and the ability to lift from 12 feet up to 30 feet, including the H.K. Thatcher L&D in Calion, Arkansas; Felsenthal L&D, Arkansas; Columbia L&D in Louisiana; and Jonesville L&D Louisiana (Lake Ouachita 2020). Union is located approximately 6.5 miles upstream of the H.K. Thatcher L&D. The navigation channel is a minimum 9 feet deep and 100 feet wide to accommodate barge traffic from the Red River in Louisiana north to Camden, Arkansas.

The United States Geological Survey (USGS) collects flow data at USGS 07362000 at Camden, Arkansas, approximately 44 miles upstream from the Union CWIS. The Ouachita River has a mean annual flow of approximately 9,214 cubic feet per second (cfs) (4,959 MGD) near Camden, Arkansas (Figures 2-6 and 2-7). Therefore, it is estimated the facility withdraws 1.74% of the mean river flow when pumping at maximum capacity.

The zone of influence (ZOI) associated with the CWIS was calculated based upon a desktop analysis and engineering calculations. Four total pumps are used, two for each of the intake bays. Both intake bays have a width of 6 feet and height of 50 feet. The intake bays withdraw water from the Ouachita River. Each bay intakes water at a total rate of 30,000 gallons per minute (gpm) or 66.84 cfs. Intake bay 1 consists of IP-1 Pump (20,000 gpm) and IP-3 Pump (10,000 gpm). Intake bay 2 consists of IP-2 Pump (20,000 gpm) and IP-4 Pump (10,000 gpm). An analysis was conducted to determine the 50% (1.61 foot/s) river flow exceedance velocity. A ZOI was calculated for the 50% river flow exceedance scenario at its corresponding depth of 20 feet. Fish have the ability to swim out of intake velocities smaller than 0.5 foot/s. Shown on the image is the semicircular ZOI of each bay with a radius of 3 feet. The edge of each ZOI has a CWIS intake velocity of 0.5 foot/s. Through limitations of the equations used, the ZOI was found to be less than the width of the intake bays. Limitations occurred because the Ouachita River velocity was far greater than the CWIS intake rate. When a ZOI is calculated to be less than the diameter of the intake, the corrected ZOI is assumed to be the diameter of the intake.

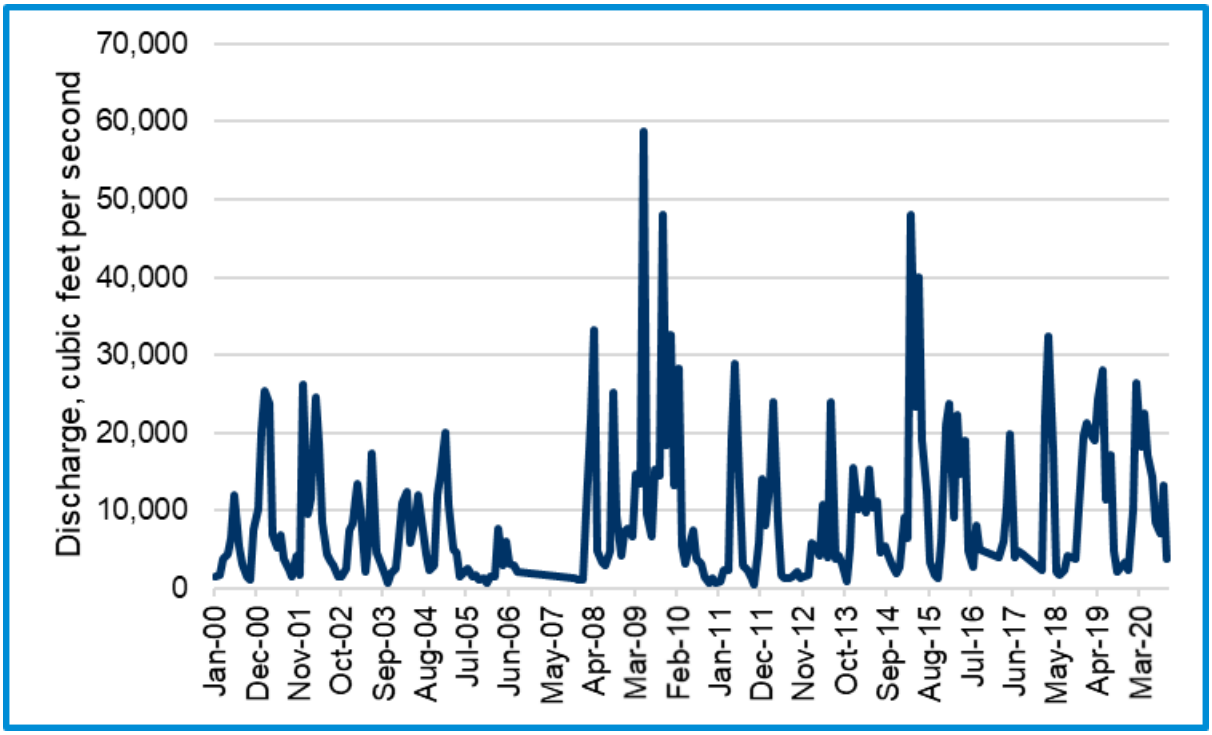

Figure 2-6: Discharge (cfs) Rates of the Ouachita River at USGS 07362000 at Camden, Arkansas from 2000-2020

Source: https://waterdata.usgs.gov/nwis/monthly?referred_module=sw&search_site_no=07362000&format=sites_selection_links

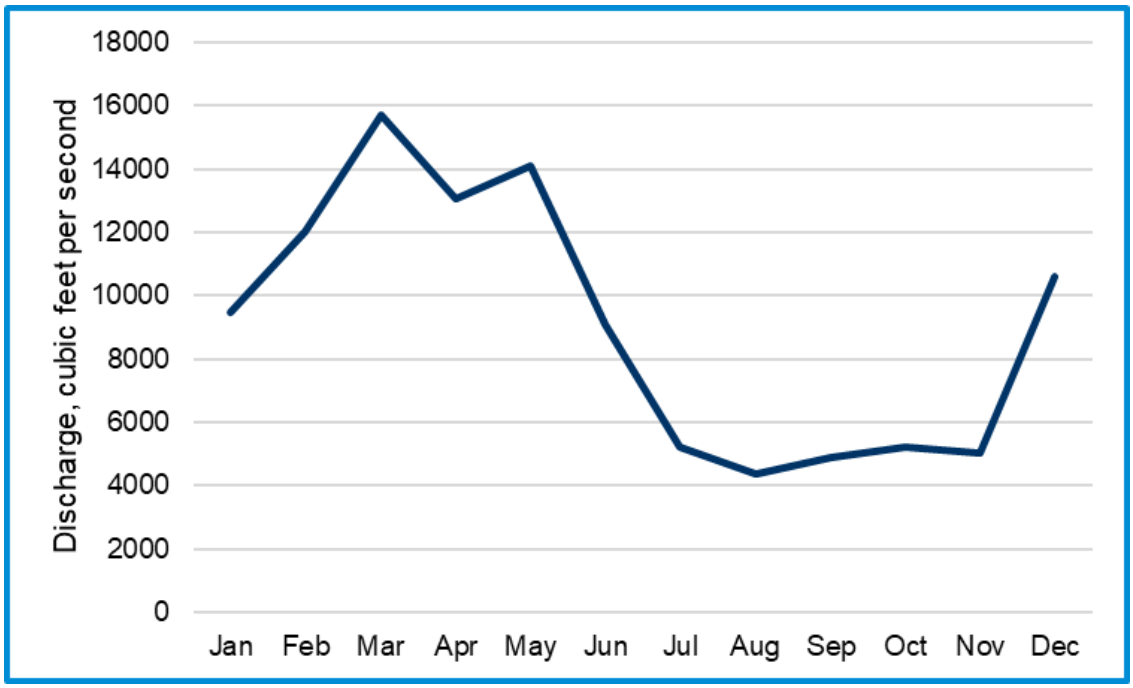

Figure 2-7: Average Discharge (cfs) by Month of the Ouachita River at USGS 07362000 at Camden, Arkansas from 2000-2020

Source: https://waterdata.usgs.gov/nwis/monthly?referred_module=sw&search_site_no=07362000&format=sites_selection_links

Figure 2-8: Expected Zone of Influence at the Union CWIS

iii. *Locational maps; and*

Figure 2-9 shows the location of the Union CWIS.

Figure 2-9: Location of Union CWIS

iv. For new offshore oil and gas facilities that are not fixed facilities, a narrative description and/or locational maps providing information on predicted locations within the waterbody during the permit term in sufficient detail for the Director to determine the appropriateness of additional impingement requirements under §125.134(b)(4).

Not applicable.

3. §122.21(r)(3) COOLING WATER INTAKE STRUCTURE DATA

The cooling water intake structure data is required to characterize the configuration and operation of the CWIS. The following provides the CWIS Data for Union:

i. A narrative description of the configuration of each of your cooling water intake structures and where it is located in the water body and in the water column;

The UCWCB's CWIS supplies clarified water to Union and is located on the right descending bank of the Ouachita River at river mile 276.9 at the US Hwy 167 bridge at Calion, AR. The CWIS consists of a shoreline intake structure and an onshore facility. Onshore facility is a single concrete structure and water storage facility for water clarification and distribution to end-users. It is located approximately 0.6 miles from the shoreline intake where river water is delivered via a 48-inch raw water line.

The CWIS supports a DIF of 86.4 MGD based on the combined total of these four pumps. One bay and screen combination with two pumps are sufficient to supply the necessary water to UCWCB for clarification and distribution to all end-users at 43.2 MGD. Two of the pumps are larger volume capacity, each rated at 20,000 gpm (28.8 MGD) and two are smaller volume capacity, each rated at 10,000 gpm (14.4 MGD). The pumps are labeled sequentially as IP-1, IP-3, IP-2 and IP-4 from west to east with one larger capacity pump paired with one smaller capacity pump per intake bay. The two intake bays serve as conduits for the raw water pumped from the Ouachita River through the rotating screens, labeled TS-1 West and TS-2 East, and thence to the onshore water clarifying system. At a low water elevation of 77-foot and the bottom of the bar rack structure submerged to the river channel bottom at a 57-foot elevation, a 20-foot depth exist to provide raw river water to the UCWCB CWIS. Likewise, based on a 99-foot, 6-inch high water level elevation and channel bottom at a 57-foot elevation, a 42-foot, 6-inch depth exist. Treated raw water is received from UCWCB and stored for use in a 500,000 gallon tank at the Union facility.

The shoreline intake structure is constructed with two intake bays. The bottom of the intake bays are submerged to the river channel bottom at an elevation of 57 feet with the system protected from large debris by a 7-foot, 6-inch wide X 50-foot tall bar rack constructed of ⅜-inch X 3-inch flat bar on 3-inch centers. Each of the two intake bays are fitted with a 6-foot traveling screen behind which are four vertical turbine Fairbanks Morse circulating pumps (two pumps/bay).

Each of the two UCWCB traveling water screens (TS-1 West and TS-2 East) are a Rex style thru-flow fish handling and backwash system design with 58, 6-foot wide screen baskets on 52-foot centers (top to bottom measure) constructed of 14 gauge (# 0.080 inch) ⅜ inch square, 304 stainless steel smooth-top square opening mesh. The screen/spray wash system includes two traveling screen pumps (TSP-1 West and TSP-2 East), each with a U-shaped, back-facing 2-inch, schedule 40 carbon steel spray header with five brass nozzles rated to deliver 392 gpm at 80 pounds per square inch (psi). Only one bay (two pumps and one rotating screen) is in operation at any time and is sufficient to supply the volume of water required by the UCWCB plant for its customers. Traveling screens are rotated once per 24 hours for a recommended 1 - 1/3 revolutions. This timing is sufficient to maintain a clean screen surface due to the low debris conditions inherent at the CWIS location on the Ouachita River. The second screen and its associated pump pair alternate use with the first. A relatively short sluiceway common to both traveling screens provides a conduit to a debris basket for removal of predominantly leaf litter every six weeks.

A 48-inch header pipe collects water from the circulating pumps and delivers it through a 48-inch raw water line into the intake building at the shoreline for initial pretreatment with a coagulant and sodium hypochlorite. From there, the water is delivered (0.6 miles) to the onshore component for pH adjustment, residual bleach, flocculants, and micro-sand treatment to produce a finished clarified water for storage

into the UCWCB's clear well for deliver to multiple downstream customers that includes purchase by Union.

ii. Latitude and longitude in degrees, minutes, and seconds for each of your cooling water intake structures;

Shoreline CWIS: 33°20'42.76"N, 92°31'59.63"W

Onshore CWIS: 33°20'16.16"N, 92°32'23.03"W

iii. A narrative description of the operation of each of your cooling water intake structures, including design intake flows, daily hours of operation, number of days of the year in operation and seasonal changes, if applicable;

As described above, Union consist of a CCRS supporting its CCGT generating facility and receives its makeup water from the UCWCB raw water intake on the Ouachita River. The CWIS supports a DIF of 86.4 MGD based on the combined total of four circulating water pumps. Two of the pumps are larger volume capacity, each rated at 20,000 gpm (28.8 MGD) and two are smaller volume capacity, each rated at 10,000 gpm (14.4 MGD). One bay and screen combination with two pumps are sufficient to supply the necessary water to UCWCB for clarification and distribution to all end-users at 43.2 MGD with Union having a 5-year AIF of 6.74 MGD (see Table 3.1). Entergy operates Union as an "Intermediate" facility under Midcontinent Independent System Operator (MISO) who controls facility usage and operational status. Please see sections (r)(5) and (r)(8) below for operational use and status.

Table 3-1: Operational Time of UCWCB's CWIS and Water Volumes to Union

	CWIS			
Year	Days	Gallons Purchased	Daily Mean (gallons)	MGD AIF
2016	365	2,391,214,995	6,551,274	6.55
2017	365	2,140,161,671	5,863,457	5.86
2018	365	2,681,397,877	7,346,296	7.35
2019	273	1,990,354.578	7,290,676	7.29
2020	365	2,424,263,691	6,641,818	6.64
Total	5-year AIF			6.74

iv. A flow distribution and water balance diagram that includes all sources of water to the facility, recirculating flows, and discharges; and

Flow distribution and water balance diagrams are provided as Attachment 1.

v. Engineering drawings of the cooling water intake structure.

Engineering drawings of the CWIS are provided as Attachment 2.

4. §122.21(r)(4) SOURCE WATER BASELINE BIOLOGICAL CHARACTERIZATION DATA

The source water baseline biological characterization data is required to characterize the biological community and evaluate how that community may potentially be affected by the CWIS. The following provides the Source Water Baseline Biological Characterization Data for Union:

i. *A list of the data in paragraphs (r)(4)(ii) through (vi) of this section that are not available and efforts made to identify sources of the data;*

The Ouachita River is the source water for the Union CWIS. Source water baseline biological data for the Ouachita River near the Union CWIS was evaluated based on the key studies listed below. These studies were identified for characterizing the fish community and relative abundance in the Ouachita River representative of fish communities at the Union CWIS. Furthermore, a number of studies were identified elsewhere on the Ouachita River in Arkansas and on tributaries of the Ouachita River in Louisiana (downstream of Union CWIS) that provide data sufficient for characterizing the biological community at the Union CWIS. Collectively, these studies provide a list of species common to the Ouachita River and provide an overview for the types of habitats fish that may occur, and in some cases provide a basis for evaluating relative abundances, all of which support the baseline characterization. The studies are listed below in chronological order. No publically available formal studies characterizing the larval fish communities in the Ouachita River in the vicinity of Union were identified.

Raymond (1975) conducted 62 collections from 25 locations from the summer of 1972 to the summer of 1975 using gear types including electrofishing unit (used once), gill net, hoop net (used twice), and mesh seines. Seventy-four species were collected from the vicinity of Union.

Baker (1984) collected fishes from 17 sites along the Ouachita River in the summer of 1983. Forty species were collected from 8 sites within the vicinity of Union using gear types that included boat shocker, backpack shocker, gill nets, hoop nets, and mesh seines. Approximately one hour of boat shocking was performed and up to six hauls were made with the seine at each location.

The Lower Ouachita River Work Group (LORWG), the Arkansas Game and Fish Commission (AGFC), and the Arkansas Department of Pollution Control and Ecology (PC&E) conducted a fish community survey of the lower Ouachita River from Remmel Dam to the Arkansas/ Louisiana state line during the summer and fall of 1991 and 1992 (Wise et al. 1993). The report identified 41 species occurring in the Ouachita River in the vicinity of Union during the 1991 sampling and 50 species during the 1992 sampling and provides relative abundance data from two sample events using gear including boat and backpack shockers.

Posey et al. (1996) conducted mussel surveys in the Ouachita River between 1992 and 1996 to determine distribution of freshwater mussels from the confluence of the Ouachita River with the Little Missouri River (approximately 45 miles north of Union) to the Arkansas-Louisiana state line (approximately 36 miles south of Union) (Reaches four through eight as described in Wise et al. 1993). The dominant species in the lower Ouachita River were *Amblema plicata* (18.1%), *Pleurobema pyramidatum* (16.0%), *Fusconaia ebena* (14.1%), *Quadrula pustulosa* (14.1%), and *Fusconaia flava* (10.8%).

AECC (2006) completed an impingement characterization study at the John L. McClellan Generating Station at Ouachita RM 327.5. They conducted 25 sampling events between January 2006 and December 2006. The total number of fish impinged during the sampling was 46 individuals (5 alive, 41 deceased) comprising 6 identified species. The total number of shellfish impinged during sampling was 410 individuals, dominantly comprised of zebra mussels (49%) and Asiatic clams (48%).

ENSR Corporation (2008a) conducted an impingement characterization study at the Entergy Lake Catherine Plant for Unit 4, approximately xx miles upstream from Union CWIS. The Lake Catherine Plant is situated on a man-made lake of the Ouachita River behind the Remmel Dam. Data from the 2006 to 2007 Impingement Study (ENSR 2008) at Lake Catherine indicated that 17 species totaling 3,408 fish were impinged. Threadfin shad and gizzard shad represented 81% and 16% of the total fish impinged. Other species impinged included: channel catfish, flathead catfish, white bass, log perch, walleye, brook silverside, bluegill, largemouth bass, freshwater drum, golden redhorse and spotted sucker.

ENSR Corporation (2008b) conducted an impingement characterization study at the Entergy Sterlington Plant for Unit 6, approximately 50 miles straight-line distance southeast of the Union CWIS. The study was conducted from November 2006 through October 2007. The total number of organisms impinged during the course of the sampling was 340 individuals comprising 37 species belonging to 13 families. During the Sterlington impingement study, a total of 340 fish/shellfish representing 37 species and 13 families were collected. The dominant impinged species were threadfin shad (24%), bluegill sunfish (17%), and common carp (12%). Other species comprising >1% included freshwater drum (8.5%), crawfish (5.6%), black bullhead (3.8%), river shrimp (3.2%), white crappie (2.6%), blue catfish (2.4%), grass shrimp (1.8%), shiner spp. (1.8%), sunfish (1.8%), orangespotted sunfish (1.5%), redear sunfish (1.5%), channel catfish (1.2%), black crappie (1.2%), and largemouth bass (1.2%). In terms of intake flow, this represents approximately 0.81 fish/shellfish per 10,000 m3 of cooling water. Impingement mortality data from the study indicated 24% of the fish impinged were fragile species (threadfin shad). Fragile species anticipated to be found at the Sterlington CWIS would be limited to the shad species in the Clupeidae family including gizzard shad and threadfin shad.

The Electric Power Research Institute (EPRI) (2011) summarized trends in impingement and entrainment data based on waterbody type and location due to similarities between these features, with small and large freshwater rivers having their own categories. Based on this, impingement and entrainment data for facilities within the small freshwater rivers category are assumed to have similar potentials for impingement and entrainment. The most common impinged species on small rivers was gizzard shad, bluegill, channel catfish, threadfin shad, and emerald shiner. The most common entrained were shad, minnows, and suckers.

The Louisiana Department of Wildlife and Fisheries (LDWF) (2018) has also been conducting standardized surveys on Bayou DeSiard since 1989, with additional rotenone sampling, creel surveys, a gill net sample, and an electrofishing sample prior to 1989. LDWF sampling locations on Bayou DeSiard are located approximately 55-65 miles south of the Union plant. In the 2001 study included in the 2018 report, the LDWF report identified the presence of 59 species from 17 families in Bayou DeSiard.

Kaller (personal communication, January 14, 2020) conducted sampling of larval fish in the Upper Ouachita National Wildlife Refuge using quatrefoil light traps in sets of four for 24 hours from July 2009 through November 2011. Of the 1,565 larval fish caught, 1,380 were identified. 10 families and 13 species

ii. A list of species (or relevant taxa) for all life stages and their relative abundance in the vicinity of the cooling water intake structure;

Raymond (1975) identified dominant species to be cypress minnow (13%), mosquitofish (11%), brook silverside (9%), blacktail shiner (7%), and bluegill sunfish (5%) (Figure 4-1). Baker (1984) identified dominant species to be blacktail shiner (33%), brook silverside (14%), threadfin shad (9%), silvery minnow (7%), Steelcolor shiner (5%), gizzard shad (5%), ribbon shiner (5%), weed shiner (4%), and ghost shiner (4%) (Figure 4-2). Wise et al. (1993) identified common species to be gizzard shad, blackspotted topminnow, blacktail shiner, carp, emerald shiner, silvery minnow, brook silverside, longear sunfish bluegill sunfish, freshwater drum, and spotted gar.

Wise et al. (1993) conducted a survey of the fish community in the Lower Ouachita River in the summers of 1991 and 1992. The authors divided their area of study, from the base of the Remmel Dam to the Arkansas/Louisiana state line, into eight reaches based on similar habitat and hydrology. Only reaches #5, #6, and #8 are referenced for the baseline biological characterization. Reaches #5, #6, and #8 encompass the river from Camden, Arkansas to the Louisiana/Arkansas border and includes the Felsenthal Lock & Dam. The Union CWIS is located within reach #6. Wise et al. (1993) identified which locations in previous studies (Baker 1984 and Raymond 1975) were located in the same river reaches in order to compare their results with earlier studies (Table 4-1).

The LDWF (2018) has also been conducting standardized surveys on Bayou DeSiard since 1989, with some additional sampling prior to 1989. Bayou DeSiard was separated from the Ouachita River in 1935 with construction of the Ouachita River Levee System. Bayou DeSiard originally formed the lower end of a historical channel of the Arkansas River, which flowed through what is now Bayou Bartholomew. It is now impounded at its confluence with the Ouachita River by a levee and where it diverted from Bayou Bartholomew (now Bartholomew Lake) by an earthen dam. Bayou DeSiard receives inflows from Bartholomew Lake and Black Bayou Lake through control structures and naturally from Mill Bayou, an intermittent tributary near Fairbanks. In the 2001 study included in the 2018 report, the LDWF report identified the presence of 59 species from 17 families in Bayou DeSiard (Table 4-1) collected from sampling locations located 55 to 65 miles south of the Union plant.

Table 4-1: Relative Abundance and Fish Species Collected in Ouachita River

	Raymond (1975)		*Baker (1984)*		*Wise et al. (1993)*		*LDWF Bayou DeSiard (2001)*	*AECC (2006)*		*ENSR Sterlington IM (2006-2007)*
Family and Species	***# of Specimens***	***Relative Abundance (%)***	***# of Specimens***	***Relative Abundance (%)***	***Species Present (1991)***	***Species Present (1992)***	***Species Present***	***# of Specimens***	***Relative Abundance (%)***	***Species Present***
Lepisosteidae										
Alligator gar, *Atractosteus spatula*			1	0.07			X			
Spotted gar, *Lepisosteus oculatus*	2	0.01	12	0.89	X	X	X			
Shortnose gar, *Lepisosteus platostomus*			3	0.22		X	X			
Longnose gar, *Lepisosteus osseus*	1	0.00	6	0.45	X	X	X			
Amiidae										
Bowfin							X			
Anguillidae										
American eel, *Anguilla rostrata*					X					
Clupeidae										
Gizzard shad, *Dorosoma cepedianum*	103	0.51	66	4.90	X	X	X	40	86.96	X
Skipjack herring, *Alosa chrysochloris*			5	0.37		X				
Threadfin shad, *Dorosoma petenense*	369	1.84	118	8.76	X	X	X			X
Esocidae										

	Raymond (1975)		Baker (1984)		Wise et al. (1993)		LDWF Bayou DeSiard (2001)	AECC (2006)		ENSR Sterlington IM (2006-2007)
Family and Species	**# of Specimens**	**Relative Abundance (%)**	**# of Specimens**	**Relative Abundance (%)**	**Species Present (1991)**	**Species Present (1992)**	**Species Present**	**# of Specimens**	**Relative Abundance (%)**	**Species Present**
Chain pickerel, *Esox niger*	327	1.63			X	X	X			
Grass pickerel, *Esox americanus*	317	1.58					X			
Cyprinodontidae										
Blackstripe minnow, *Fundulus notatus*	146	0.73			X	X	X			
Blackspotted topminnow, *Fundulus olivaceus*	398	1.99	6	0.45	X	X	X			
Golden topminnow, *Fundulus chrysotus*	16	0.08					X			
Starhead topminnow, *Fundulus dispar*	26	0.13					X			
Cyprinidae								1	2.17	
Bigeye shiner, *Notropis boops*	17	0.08	11	0.82						
Blacktail shiner, *Cyprinella venusta*	1440	7.19	440	32.67	X	X	X			
Bluntnose minnow, *Pimephales notatus*	4	0.02				X				X
Bullhead minnow, *Pimephales vigilax*	975	4.87	5	0.37		X	X			
Carp, *Cyprinus spp.*	2	0.01	3	0.22	X	X	X			
Common carp, *Cyprinus carpio*										X

	Raymond (1975)		Baker (1984)		Wise et al. (1993)		LDWF Bayou DeSiard (2001)	AECC (2006)		ENSR Sterlington IM (2006-2007)
Family and Species	# of Specimens	Relative Abundance (%)	# of Specimens	Relative Abundance (%)	Species Present (1991)	Species Present (1992)	Species Present	# of Specimens	Relative Abundance (%)	Species Present
Cypress minnow, *Hybognathus hayi*	2608	13.02			X					
Emerald shiner, *Notropis atherinoides*	524	2.62	58	4.31		X	X			
Ghost shiner, *Notropis buchanani*	13	0.06								
Golden Shiner, *Notemigonus crysoleucas*	834	4.17	1	0.07	X	X	X			X
Grass carp (triploid), *Ctenopharyngodon idella*							X			
Gravel chub, *Erimystax x-punctatus*			1	0.07						
Ironcolored shiner, *Notropis chalybaeus*	2	0.01								
Mimic shiner, *Notropis volucellus*	267	1.33				X				
Pallid shiner, *Hybopsis amnis*	275	1.37				X				
Pugnose minnow, *Opsopoeodus emiliae*	469	2.34	3	0.22			X			
Redfin shiner, *Lythrurus umbratilis*	71	0.35					X			
Ribbon Shiner, *Lythrurus fumeus*	581	2.90	64	4.75	X	X				

	Raymond (1975)		Baker (1984)		Wise et al. (1993)		LDWF Bayou DeSiard (2001)	AECC (2006)		ENSR Sterlington IM (2006-2007)
Family and Species	**# of Specimens**	**Relative Abundance (%)**	**# of Specimens**	**Relative Abundance (%)**	**Species Present (1991)**	**Species Present (1992)**	**Species Present**	**# of Specimens**	**Relative Abundance (%)**	**Species Present**
Silvery minnow, *Hybognathus nuchalis*	720	3.60	86	6.38	X	X				
Spottail shiner, *Notropis hudsonius*										X
Stoneroller, *Campostoma anomalum*	11	0.05			X	X				
Steelcolor shiner, *Cyprinella whipplei*	94	0.47	71	5.27	X	X				
Striped shiner, *Luxilus chrysocephalus*			4	0.30						
Taillight shiner, *Notropis maculatus*	789	3.94					X			X
Weed shiner, *Notropis texanus*	618	3.09	58	4.31		X				X
Catostomidae										
Bigmouth buffalo, *Ictiobus cyprinellus*					X	X	X			
Black buffalo, *Ictiobus niger*							X			
Blacktail redhorse, *Moxostoma poecilurum*	1	0.00			X	X				
Creek chubsucker, *Erimyzon oblongus*	5	0.02								
Golden redhorse, *Moxostoma erythrurum*	9	0.04			X	X				

	Raymond (1975)		Baker (1984)		Wise et al. (1993)		LDWF Bayou DeSiard (2001)	AECC (2006)		ENSR Sterlington IM (2006-2007)
Family and Species	# of Specimens	Relative Abundance (%)	# of Specimens	Relative Abundance (%)	Species Present (1991)	Species Present (1992)	Species Present	# of Specimens	Relative Abundance (%)	Species Present
Lake chubsucker, *Erimyzon sucetta*							X			
Northern hogsucker, *Hypentelium nigricans*						X				
Smallmouth buffalo, *Ictiobus bubalus*			2	0.15	X	X	X			
Spotted sucker, *Minytrema melanops*	42	0.21	1	0.07	X	X	X			
Ictaluridae										
Black bullhead, *Ameiurus melas*	46	0.23					X			
Blue catfish, *Ictalurus furcatus*	4	0.02			X	X				X
Brown bullhead, *Ameiurus melas*							X			
Channel catfish, *Ictalurus punctatus*	64	0.32	2	0.15	X	X	X	1	2.17	X
Flathead catfish, *Pylodictis olivaris*	2	0.01	3	0.22	X	X		1	2.17	X
Tadpole madtom, *Noturus gyrinus*	2	0.01					X			
Yellow bullhead, *Ameiurus natalis*	16	0.08	1	0.07			X			X
Poeciliidae										
Mosquitofish, *Gambusia affinis*	2209	11.03	9	0.67	X	X	X			

	Raymond (1975)		Baker (1984)		Wise et al. (1993)		LDWF Bayou DeSiard (2001)	AECC (2006)		ENSR Sterlington IM (2006-2007)
Family and Species	**# of Specimens**	**Relative Abundance (%)**	**# of Specimens**	**Relative Abundance (%)**	**Species Present (1991)**	**Species Present (1992)**	**Species Present**	**# of Specimens**	**Relative Abundance (%)**	**Species Present**
Aphredoderidae										
Pirate perch, *Aphredoderus sayanus*	71	0.35					X			
Atherinidae										
Brook silverside, *Labidesthes sicculus*	1810	9.04	193	14.33	X	X	X			
Mississippi silverside, *Menidia audens*										X
Inland silverside, *Menidia beryllina*			2	0.15						
Moronidae										
White bass, *Morone chrysops*	20	0.10			X		X			
Yellow bass, *Morone mississippiensis*	1	0.00					X			
Striped bass, *Morone saxatilis*							X			
Hybrid striped bass, *Morone saxatilis x chrysops*							X			
Elassomatidae										
Banded pygmy sunfish, *Elassoma zonatum*	17	0.08					X			
Centrarchidae										
Bantam sunfish, *Lepomis symmetricus*	40	0.20					X			

	Raymond (1975)		Baker (1984)		Wise et al. (1993)		LDWF Bayou DeSiard (2001)	AECC (2006)		ENSR Sterlington IM (2006-2007)
Family and Species	# of Specimens	Relative Abundance (%)	# of Specimens	Relative Abundance (%)	Species Present (1991)	Species Present (1992)	Species Present	# of Specimens	Relative Abundance (%)	Species Present
Black crappie, *Pomoxis nigromaculatus*	144	0.72	12	0.89	X	X	X	1	2.17	X
Bluegill, *Lepomis macrochirus*	1124	5.61	36	2.67	X	X	X			X
Dollar sunfish, *Lepomis marginatus*	176	0.88					X			
Flier, *Centrarchus macropterus*	64	0.32					X			
Florida largemouth bass, *Micropterus floridanus*							X			
Green sunfish, *Lepomis cyanellus*	18	0.09				X	X			
Largemouth bass, *Micropterus salmoides*	129	0.64	10	0.74	X	X				X
Lepomis species, *Lepmois sp.*								1	2.17	
Longear sunfish, *Lepomis megalotis*	124	0.62	6	0.45	X	X	X			X
Northern largemouth bass, *Micropterus salmoides*							X			
Orangespotted sunfish, *Lepmis humilis*	33	0.16			X		X			X
Redear sunfish, *Lepomis microlophus*	77	0.38	4	0.30	X	X	X			X

	Raymond (1975)		Baker (1984)		Wise et al. (1993)		LDWF Bayou DeSiard (2001)	AECC (2006)		ENSR Sterlington IM (2006-2007)
Family and Species	**# of Specimens**	**Relative Abundance (%)**	**# of Specimens**	**Relative Abundance (%)**	**Species Present (1991)**	**Species Present (1992)**	**Species Present**	**# of Specimens**	**Relative Abundance (%)**	**Species Present**
Spotted bass, *Micropterus punctulatus*	77	0.38	15	1.11	X		X			
Spotted sunfish, *Lepomis punctatus*	14	0.07			X	X				
Warmouth, *Lepomis gulosus*	184	0.92	1	0.07	X	X	X			X
White crappie, *Pomoxis annularis*	8	0.04	12	0.89	X	X	X			
Percidae										
Blackside darter, *Percina maculata*	11	0.05				X				
Bluntnose darter, *Etheostoma chlorosoma*	656	3.28				X	X			
Channel darter, *Percina copelandi*	21	0.10				X				
Creole darter, *Etheostoma collettei*	5	0.02				X				
Crystal darter, *Crystallaria asprella*					X					
Cypress darter, *Etheostoma proeliare*	45	0.22					X			
Dusky darter, *Percina sciera*	2	0.01								
Logperch, *Percina caprodes*	506	2.53	1	0.07	X	X				

	Raymond (1975)		*Baker (1984)*		*Wise et al. (1993)*		*LDWF Bayou DeSiard (2001)*	*AECC (2006)*		*ENSR Sterlington IM (2006-2007)*
Family and Species	***# of Specimens***	***Relative Abundance (%)***	***# of Specimens***	***Relative Abundance (%)***	***Species Present (1991)***	***Species Present (1992)***	***Species Present***	***# of Specimens***	***Relative Abundance (%)***	***Species Present***
Mud darter, *Etheostoma asprigene*	164	0.82								
River darter, *Percina shumardi*	14	0.07								
Saddleback darter, *Percina vigil*	16	0.08								
Scaly sand darter, *Ammocrypta vivax*	10	0.05	10	0.74	X	X				
Slough darter, *Etheostoma gracile*	15	0.07					X			
Swamp darter, *Etheostoma fusiforme*							X			
Walleye, *Sander vitreus*	3	0.01								
Western sand darter, *Ammocrypta clara*						X				
Sciaenidae										
Freshwater drum, *Aplodinotus grunniens*	6	0.03	5	0.37	X	X	X			
Unidentified species								1	2.17	
Total Species	**74**		**40**		**41**	**50**	**59**	**7**		**20**
Total Relative Abundance Value		**100**		**100**					**100**	

Source: Raymond 1975, Baker 1984, Wise et al. 1993, LDWF 2018, AECC 2006, ENSR 2008

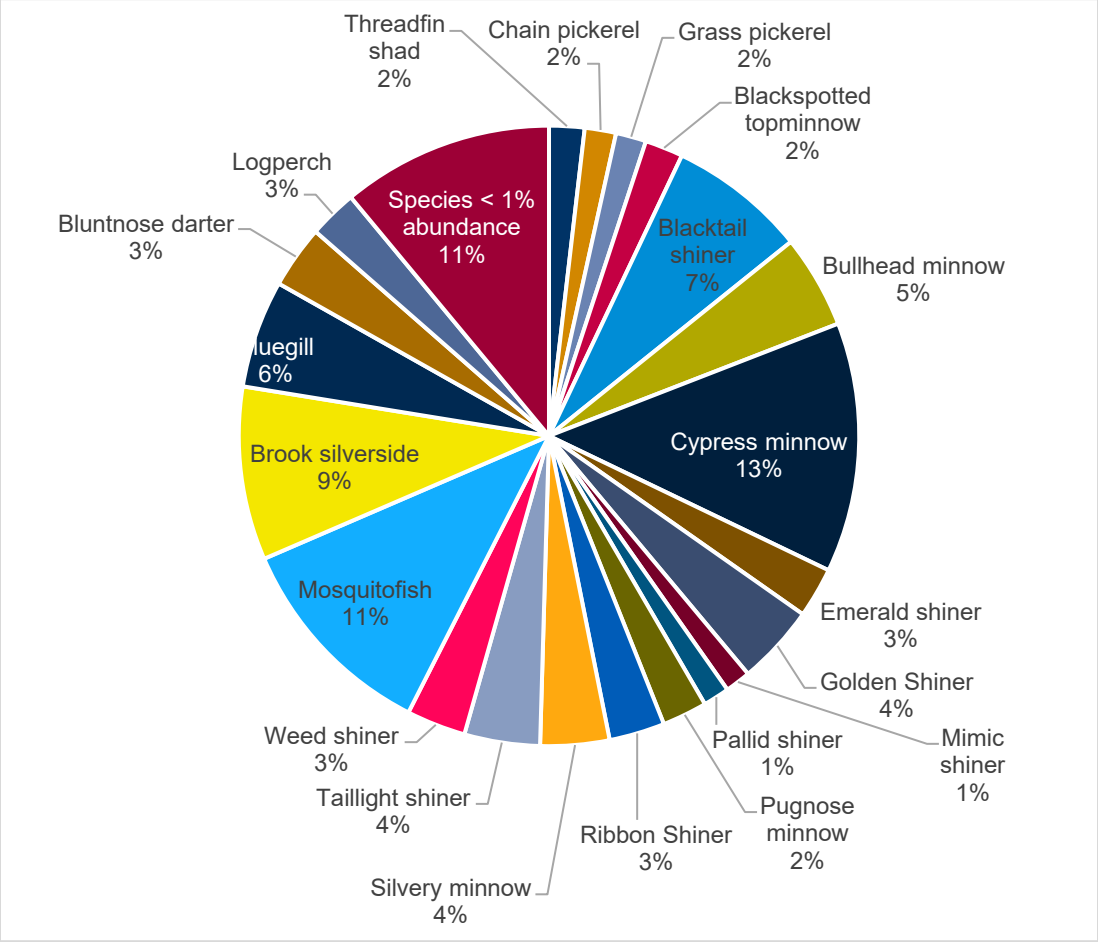

Figure 4-1: Relative Abundance of Organisms collected along the Ouachita River between 1972 and 1975

Source: Raymond 1975

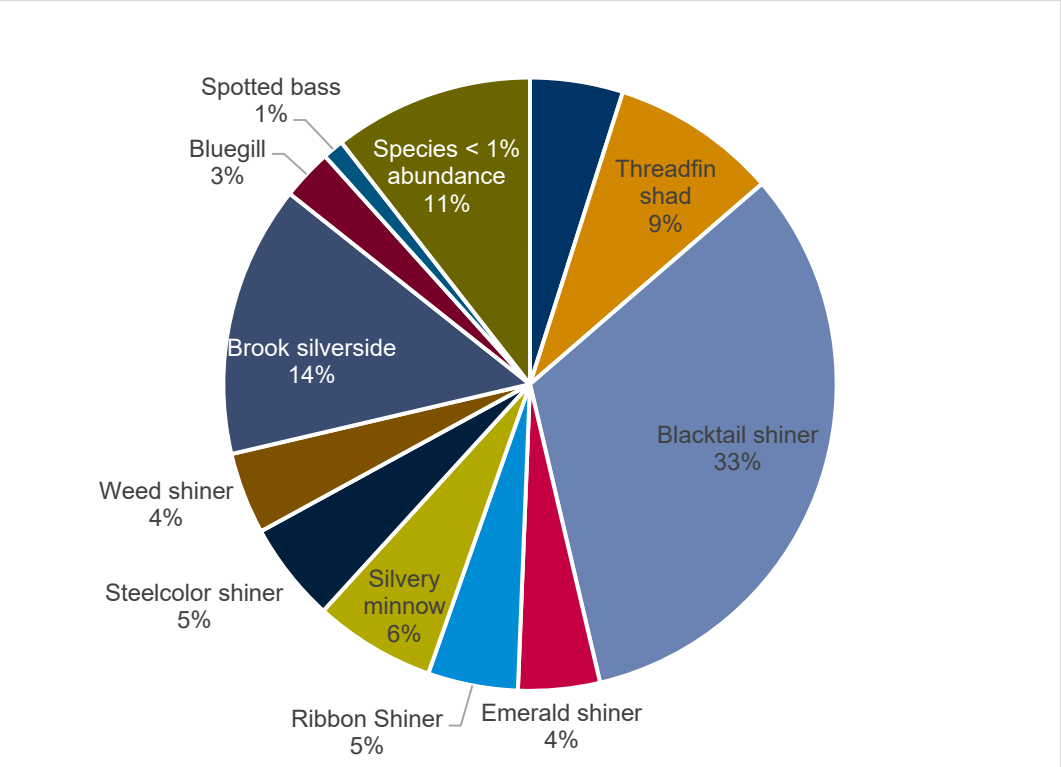

Figure 4-2: Relative Abundance of Organisms collected along the Ouachita River in 1983

Source: Baker 1984

Kaller (personal communication, January 14, 2020) conducted larval fish sampling and identified 1,380 larval fish out of the 1,565 larval fish caught. 10 families and 13 species were identified (Table 4-2).

Table 4-2: Larval Fish Species Collected in the Upper Ouachita National Wildlife Refuge

Family	Species
Clupeidae	Gizzard shad, *Dorosoma cepedianum*
Cyprinidae	Emerald shiner, *Notropis atherinoides*
Fundulidae	Fundulus sp.
Poeciliidae	Mosquitofish, *Gambusia affinis*
Cyprinodontidae	
Atherinidae	Brook silverside, *Labidesthes sicculus*
Moronidae	
Centrarchidae	Green sunfish, *Lepomis cyanellus* Bluegill, *Lepomis macrochirus* Bantam sunfish, *Lepomis symmetricus* *Lepomis sp.* Spotted bass, *Micropterus punctulatus*
Elassomatidae	Banded pygmy sunfish, *Elassoma zonatum*
Percidae	Swamp darter, *Etheostoma fusiforme* Slough darter, *Etheostoma gracile*
Total: 10 Families; 13 species	

Source: Kaller 2020

Posey et al. (1996) conducted mussel surveys in the Ouachita River between 1992 and 1996 to determine distribution of freshwater mussels. The dominant species in the lower Ouachita River were Amblema plicata (18.1%), Pleurobema pyramidatum (16.0%), Fusconaia ebena (14.1%), Quadrula pustulosa (14.1%), and Fusconaia flava (10.8%) (Table 4-3).

Table 4-3: Mussels Identified in the Ouachita River from the Confluence with the Little Missouri River to the Arkansas-Louisiana State Line

Scientific Name	
Actinonaias ligamentina	*Plectomerus dombeyanus*
Amblema plicata	*Pleurobema pyramidatum*
Arcidens confragosus	*Potamilus ohiensis*
Arkansia wheeleri	*Potamilus purpuratus*
Cumberlandia monodonta	*Ptychobranchus occidentalis*
Cyprogenia aberti	*Pyganodon grandis*
Ellipsaria lineolata	*Quadrula apiculata*
Elliptio dilatata	*Quadrula cylindrica*
Fusconaia ebena	*Quadrula fragosa*
Fusconaia flava	*Quadrula metanevra*
Lampsilis abrupta	*Quadrula nodulata*
Lampsilis cardium	*Quadrula pustulosa*
Lampsilis hydiana	*Quadrula quadrula*
Lampsilis teres	*Strophitus undulatus*
Lasmigona costata	*Toxolasma texasensis*
Leptodea fragilis	*Tritogonia verrucosa*
Ligumia recta	*Truncilla donaciformis*
Megalonaias nervosa	*Truncilla truncata*
Obliquaria reflexa	*Utterbackia imbecillis*
Obovaria olivaria	

Source: Posey et al. 1996

Utilizing this information as well as the species life histories data, Table 4-4 summarizes the species considered common near the Union CWIS based on significance.

Table 4-4: Summary of Fish and Shellfish Common to the Union CWIS by Significance – Commercial, Recreational and Forage

Species	Commercial	Recreational	Forage
Fishes			
Bigmouth buffalo	X	X	
Black bullhead		X	
Black crappie		X	
Blackspotted topminnow			X
Blacktail shiner			X
Blue catfish	X	X	
Bluegill		X	X
Bluntnose darter			X
Brook silverside			X

Species	Commercial	Recreational	Forage
Bullhead minnow			X
Channel catfish		X	
Chain pickerel		X	
Common carp		X	
Cypress minnow			X
Emerald shiner			X
Freshwater drum		X	
Flathead catfish		X	
Gizzard shad			X
Golden shiner			X
Grass pickerel		X	
Largemouth bass		X	
Logperch			X
Longear sunfish		X	
Mississippi silvery minnow			X
Mosquitofish			X
Orangespotted sunfish		X	
Redear sunfish		X	
Ribbon shiner			X
Silvery minnow			X
Spotted bass		X	
Spotted gar		X	
Steelcolor shiner			X
Taillight shiner			X
Threadfin shad			X
Warmouth		X	
Weed shiner			X
White crappie		X	
Yellow bullhead		X	
Shellfishes			
Crawfish	X	X	
Grass shrimp			X
River shrimp	X		X

Shellfish

The Entergy Sterlington impingement characterization study on the Ouachita River, approximately 50 miles south of Union CWIS, identified three species of shellfish, including grass shrimp, river shrimp, and crawfish (ENSR 2008).

Grass shrimp of the family Palaemonidae are native to freshwater ponds, lakes, and streams. Grass shrimp are most abundant in dense beds of submerged aquatic vegetation and serve as an important

food source for numerous fish species (Sheehy 2019). Additionally, they are known to occur in river systems with fine silt and detritus. Grass shrimp comprised 1.8% of the organisms impinged in the Entergy Sterlington impingement study (ENSR 2008).

River shrimp (*Macrobrachium ohione*) inhabit primarily freshwater rivers and streams and prefer borders of the main channels when they are flooded and filled with plant and animal materials for forage (Wenner 2005). Their known range includes eastern Texas, Louisiana, and most of the Mississippi and Ohio River watersheds. River shrimp comprised 3.2% of the organisms impinged from the Ouachita River in the Entergy Sterlington impingement study (ENSR 2008).

Crawfish of the family Cambaridae are found in a variety of habitats, typically preferring areas with cover, such as rocks or dense vegetation and rarely near-surface habitats, normally occupying only the bottom portions of a lake, pond, or stream. There are two species (*Procambarus clarkia* and *P. zonangulus*) that are common and important to the commercial market in Louisiana. Crawfish comprised 5.6% of the organisms impinged in the Entergy Sterlington impingement study (ENSR 2008).

iii. Identification of the species and life stages that would be most susceptible to impingement and entrainment. Species evaluated should include the forage base as well as those most important in terms of significance to commercial and recreational fisheries;

Susceptibility to impingement and entrainment is dependent upon a variety of interrelated factors including size, life stage, swimming speed, intake flow velocity, rheotaxis, seasonal variation, habitat preference, etc. Studies have shown that smaller, juvenile individuals are more susceptible to impingement than their larger, adult counterpart (Bodensteiner and Lewis 1992, Saalfeld 2006). Young fish often exhibit higher natural mortality or weakened swimming ability due to stresses including extreme water temperature, low dissolved oxygen, strong flow velocity, physical damage, and infectious disease (Saalfeld 2006).

Swimming speed in relation to intake velocity is also very important in determination of susceptibility to impingement. Previous studies have determined that young of the year (YOY) fish, defined as those individuals in the 0-age group that were hatched in the previous year, are the most prone to impingement due to growing too large to pass through 3/8 inch intake screens (Dahlberg 1979, Bodensteiner & Lewis 1992, Saalfeld 2006). One study found that impingement occurs at velocities between 30 and 90 cm per second (1–3 ft. /sec) (Black 2007). For comparison, gizzard shad between 25–50 mm in length, which are considered YOY, have swimming speeds around 23 cm per second (0.75 ft. /sec) (Barnes 1977). Thus, while YOY individuals have developed swimming capabilities, the intake structure velocity can be too strong to swim against and the artificial current produced prevents individuals from avoiding the intake tunnel, leading to exhaustion and subsequent impingement (Turnpenny 1988, Bodensteiner & Lewis 1992). A negative relationship between fish size and impingement mortality has been documented by numerous studies (Hadderingh 1979, Skinner 1974, Black 2007), further supporting the vulnerability of YOY individuals.

Rheotaxis, the response or reaction of an organism to the stimulus of a current, is also very important to that organism's impingement and entrainment potential. For example, rheotaxis of Acipenseriforms (sturgeons and paddlefish) has been studied to evaluate these species entrainment risk by dredge currents (Hoover and Boysen 2009). The authors found that paddlefish had the lowest risk of entrainment by a 50 cm/sec (1.64 ft. /sec) dredge current due to their high propensity for rheotaxis, high sustained swimming speeds, and pelagic existence. Conversely, pallid sturgeon exhibited lower rheotactic response, slower swimming speeds, and a benthic existence, making them more susceptible to currents.

Clupeids such as gizzard shad and threadfin shad have been shown to be impinged in the highest numbers relative to other fishes in many impingement and entrainment studies (Kelso and Milburn 1979, LaJeone and Monzingo 2000, Saalfeld 2006, King et al. 2010). The external factors contributing to the

impingement potential of these species have been well documented. Shad have been shown to lose equilibrium (and thus rheotactic response) and to exhibit “cold shock” mortality in response to dropping water temperatures (Griffith 1978).

A report published by EPRI (2011) identifies the species most susceptible to impingement and entrainment in small rivers. This list of species was developed from studies conducted for compliance with the Phase II §316(b) Rule. The most frequently impinged included gizzard shad (88.4%), freshwater drum (3.5%), threadfin shad (1.7%), channel catfish (1.3%) and emerald shiner (1.1%). All other species accounted for 3.9% of the impinged taxa. The most commonly entrained taxa for small rivers showed that 12 taxa accounted for 93% of the entrained ichthyoplankton: unidentified Centrarchidae (32.4%), Clupeidae (27.2%), Cyprinidae (9.8%), freshwater drum larvae and eggs (7.9%), gizzard shad (5.7%), Catostomidae (5.7%), Percidae (1.9%), common carp (1.3%), and unidentified freshwater drum type eggs (1.2%). Other taxa accounted for 4.0% and unidentified fish eggs accounted for the remaining 3%.

Impingement

The dominant species with the potential to be impinged or entrained for the CWIS at Union were evaluated based on those species common and abundant to the Ouachita River and those impinged during the one-year impingement mortality study conducted at the nearby Sterlington CWIS and the impingement study at nearby McClellan CWIS, see Table 4-1, Figure 4-3, and Figure 4-4.

During the Sterlington impingement study, a total of 340 fish/shellfish representing 37 species and 13 families were collected. The dominant impinged species were threadfin shad (24%), bluegill sunfish (17%), and common carp (12%). Other species comprising >1% included freshwater drum (8.5%), crawfish (5.6%), black bullhead (3.8%), river shrimp (3.2%), white crappie (2.6%), blue catfish (2.4%), grass shrimp (1.8%), shiner spp. (1.8%), sunfish (1.8%), orangespotted sunfish (1.5%), redear sunfish (1.5%), channel catfish (1.2%), black crappie (1.2%), and largemouth bass (1.2%). In terms of intake flow, this represents approximately 0.81 fish/shellfish per 10,000 m^3 of cooling water.

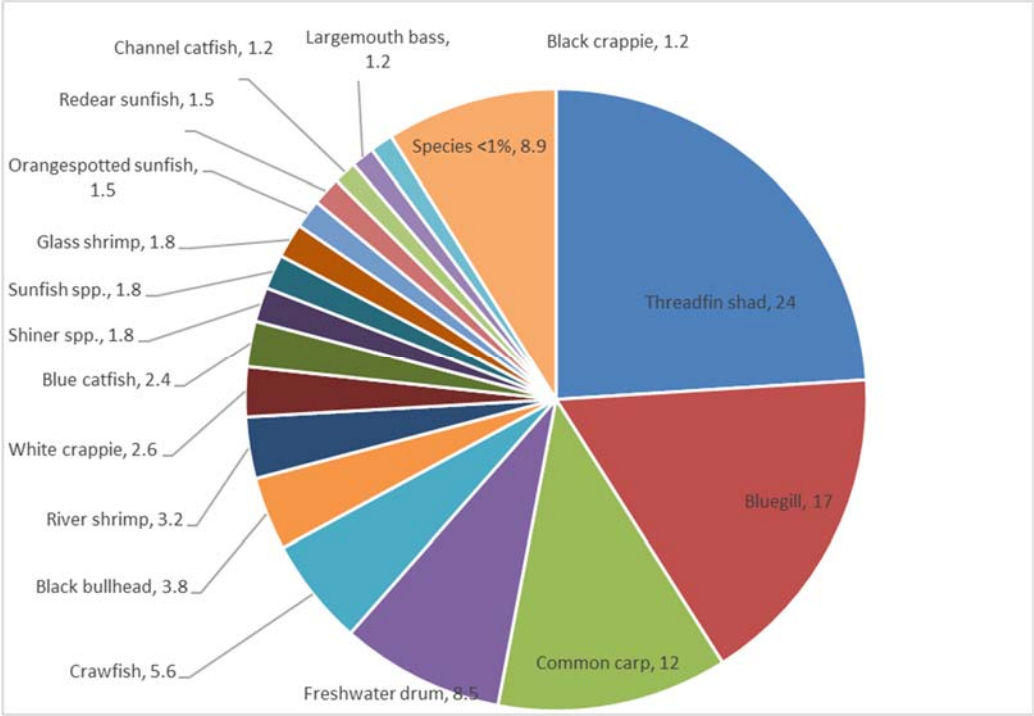

Figure 4-3: Relative Abundance of Organisms Impinged at Sterlington (2006-2007)

Source: Entergy Louisiana, 2008 (316b Sampling Report prepared by ENSR/AECOM)

An assessment of impinged fish and shellfish at the Entergy Sterlington Plant indicated average lengths of impingeable organism's ranges between 40 to 138 millimeters, see Table 4-5. Similarly, other studies from power plants in the southern Gulf States have reported average lengths ranging between 25 to 200 mm (Mississippi Power and Light 1973, Espey, Huston and Associates 1977a, Espey, Huston and Associates 1977b). While larger fish, such as drum, carp, eel, and catfish were impinged, these were often associated with fish that were moribund or already deceased.

Table 4-5: Mean Length of Fish Impinged during the Entergy Sterlington IM Study

Species	Average length (mm)
Threadfin shad	63
Bluegill	51
Common carp	75
Freshwater drum	94
Crawfish	71
Black bullhead	71
River shrimp	66
White crappie	62
Blue catfish	59
Shiner spp.	55
Sunfish spp.	62
Grass shrimp	43
Orangespotted sunfish	55
Redear sunfish	56
Channel catfish	105
Largemouth bass	40
Black crappie	138

Source: Entergy Louisiana, 2008 (316b Sampling Report prepared by ENSR/AECOM)

In 2006 AECC completed a one year impingement study at the McClellan Generating Station located at Ouachita river mile 327.5, approximately 40 river miles upstream from the Union CWIS. During the McClellan impingement study, the total number of fish impinged during the sampling was 46 individuals (5 alive, 41 deceased) comprising 6 identified species. The dominant species impinged was gizzard shad (87%), followed by unidentified Cyprinidae species (3%). Channel catfish, black crappie, flathead catfish, various Lepomis species, and unidentified species each made up 2% of impinged individuals.

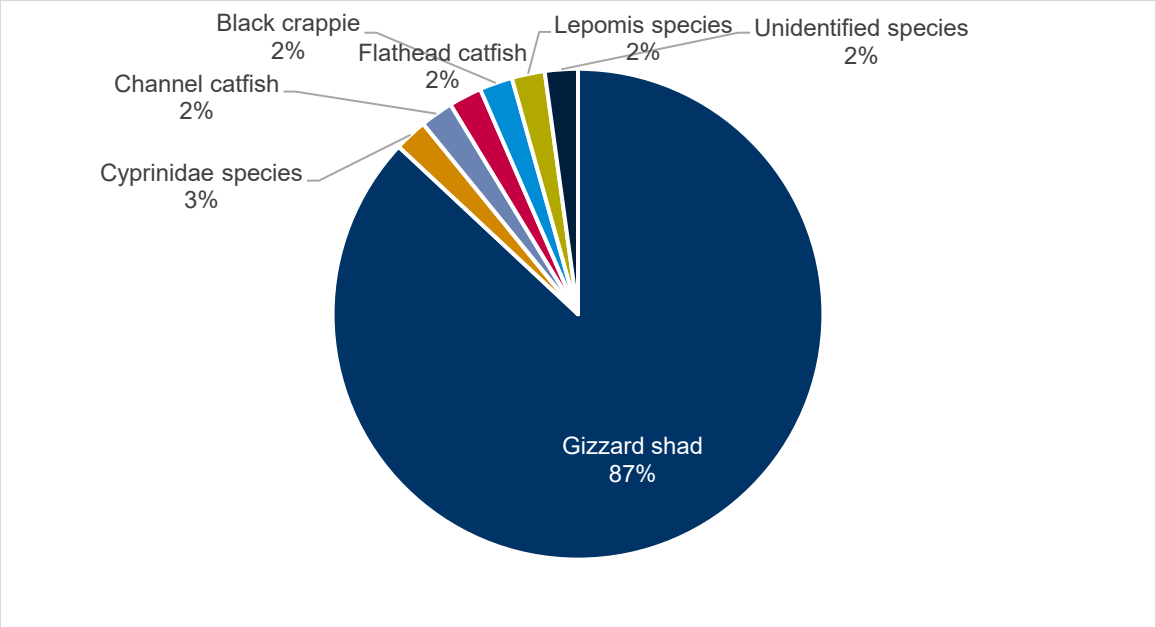

Figure 4-4: Relative Abundance of Organisms impinged at McClellan Generating Station between January 2006 and December 2006

Source: AECC 2006

Table 4-6 below provides a summary of the 25 fish and shellfish species susceptible to impingement and 6 species susceptible to entrainment at the Union CWIS. Please see Attachment 3 - Species Life Histories for illustrations on determining habitat preference and the calculation baseline.[1]

Table 4-6: Species Susceptible to Impingement and Entrainment at the Union CWIS

Family	Genus	Species	Common Name	Impingement	Entrainment
Fishes					
Atherinopsidae					
	Menidia	*audens*	Mississippi silverside	X	
Centrarchidae					
	Lepomis	*spp.*	Sunfish spp.	X	
	Lepomis	*microlophus*	Redear sunfish	X	
	Lepomis	*humilis*	Orangespotted sunfish	X	

[1] Species life histories for fishes were downloaded from http://txstate.fishesoftexas.org/ and additional information specific to Louisiana was added.

Family	Genus	Species	Common Name	Impingement	Entrainment
	Lepomis	*gulosus*	Warmouth sunfish	X	
	Lepomis	*macrochirus*	Bluegill	X	
	Lepomis	*megalotis*	Longear sunfish	X	
	Micropterus	salmoides	Largemouth bass	X	
	Pomoxis	*annularis*	White crappie	X	
	Pomoxis	*nigromaculatus*	Black crappie	X	
Clupeidae					
	Dorosoma	*cepedianum*	Gizzard shad	X	X
	Dorosoma	*petenense*	Threadfin shad	X	X
Cyprinidae					
	Hybognathus	*nuchalis*	Mississippi silvery minnow	X	
	Cyprinus	*carpio*	Common carp	X	X
	Notemigonius	*Chrysoleucas*	Golden shiner	X	
	Notropis	*spp.*	Shiner spp.	X	
Ictaluridae					
	Ictalurus	*furcatus*	Blue catfish	X	
	Ictalurus	*punctatus*	Channel catfish	X	
	Ictalurus	*Natalis*	Yellow bullhead	X	
	Pylodictis	*olivaris*	Flathead catfish	X	
	Ameiurus	*melas*	Black bullhead	X	
Sciaenidae					
	Aplodinotus	*grunniens*	Freshwater drum	X	X
Shellfishes					
Palaemonidae					
	Palaemonetes	*paludoses*	Grass shrimp	X	X
	Macrobrachium	*Ohione*	River shrimp	X	X
Cambaridae					
	Procambarus	*spp.*	Crawfish	X	

Entrainment

Entrained organisms in cooling water intake structures are comprised primarily of immature fish and invertebrate eggs and larvae, as these organisms do not have fully developed swimming capabilities and are thus drawn into the intake structures with the current. For example, gizzard shad hatch at lengths between 3.3–3.5 mm (Shelton & Stephens 1980). Until reaching lengths of 25 mm, larval swimming speed is typically less than 2-4 centimeters per second (0.066-0.098 feet/second), making shad larvae especially vulnerable to entrainment 5-11 days post-hatch (Barnes 1977). As organisms are potentially circulated through the cooling system, entering the intake structures and exiting the discharge, these individuals may be subject to thermal, physical and chemical stressors (Mayhew et al. 2000).

Entrainment studies have not been performed at Union and no information on entrainment in the Ouachita River was identified. A larval fish study was performed by Kaller from July 2009 through November 2011 in the Upper Ouachita National Wildlife Refuge. Larval species collected by Kaller (personal communication, January 14, 2020) included 10 families and 13 species as shown in Table 4-2. Based on this study, the species expected to be present in the Ouachita river include gizzard shad, emerald shiner, topminoows, mosquitofish, Cyprinodontidae (killifish, pupfish), brook silverside,

Moronidae (temperate basses), green sunfish, bluegill, Bantam sunfish, sunfishes, spotted bass, banded pygmy sunfish, swamp darter, and slough darter.

The location of the CWIS along the shoreline of the Ouachita River is maintained, in deep water and away from shoreline habitats where most of the common fish species identified in the calculation baseline spawn and their eggs and larvae develop and grow. Therefore, the influences of the CWIS intake would not likely have a detrimental effect and there would be minimal entrainment of fish and shellfish.

iv. Identification and evaluation of the primary period of reproduction, larval recruitment, and period of peak abundance for relevant taxa;

Fish show an enormous variety of reproductive strategies. Some change sex during their life-span, some are completely hermaphrodite and reproduce by self-fertilization or cross-breeding; others choose their sex according to their potential partner. Spawning strategies range from collective events, involving the release of millions of eggs in open water, to sophisticated nest building followed by parental care. Some species of fish even incubate eggs in their mouth or undertake internal fertilization.

The process of reproduction is dependent on diverse environmental factors, such as temperature, day length and specific spawning substrates; it can also involve complex social interactions. Fish typically adapt a reproductive strategy referred to as iteroparity, in which individuals can reproduce multiple times throughout their life cycle.

Spawning in the Ouachita River may be influenced by multiple variables including available habitat, water temperature (Chilton & Muoneke 1992), stream/river stage (Bayley 1995) and photoperiod (Papoulias et al. 2011). It is highly dependent on the species' environmental preferences, reproductive strategy and the environmental conditions during spawning. General consistency of these variables in the Ouachita River indicate peak spawning typically occurs in spring with smaller spawning events in the fall and winter. It is anticipated spawning patterns and seasons for those species will be similar to freshwater species in the southern U.S. The species-specific spawning and recruitment periods of the species identified as susceptible to impingement and entrainment are detailed below in Table 4 7.

Table 4-7: Typical Spawning and Recruitment Periods of Species at the Union CWIS (Gray shaded cells indicate peak spawning months)

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Bigmouth buffalo				■	■	■						
Black bullhead					■	■	■	■				
Black crappie			■	■	■							
Blackspotted topminnow			■	■	■	■	■	■	■			
Blacktail shiner				■	■	■	■	■	■			
Blue catfish					■	■	■	■				
Bluegill				■	■	■	■	■				
Bullhead minnow					■	■	■	■	■			
Channel catfish				■	■	■						
Common carp			■	■	■	■	■	■				
Crawfish	■	■	■	■	■	■	■	■	■	■	■	■
Dollar sunfish				■	■	■	■	■	■			
Dusky darter				■	■	■						
Emerald shiner					■	■	■	■				

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Flier												
Freshwater drum												
Gizzard shad												
Grass shrimp												
Green sunfish												
Golden shiner												
Largemouth bass												
Longear sunfish												
Mississippi silvery minnow												
Orangespotted sunfish												
Redear sunfish												
Redfin pickerel												
River shrimp												
Spotted bass												
Spotted gar												
Shiner spp.												
Sunfish spp.												
Taillight shiner												
Threadfin shad												
Warmouth												
White crappie												
Yellow bullhead												

The time frame for ontogenetic process (eggs to larvae to juvenile) will vary by species. Current literature indicates that once eggs are released it can take between 10 to 60 days for most species to become larvae and then more than 30 days to move from larvae to post-larvae or actual juvenile stage.

Abundances of mature adults will likely peak from April to August based upon the known spawning periods of species commonly found in the Ouachita River (Table 4-7). Following the abundance of adults during spawning season, a temporal lag of approximately one month associated with egg and larvae development will occur in which there will then be a peak abundance of larvae and juvenile stages. In the fall and early winter, YOY individuals will be seen in greater abundance as individuals attain YOY size and will be seeking overwinter habitats. As such, impingement and entrainment potential may exhibit seasonal variability due to periods of peak abundance.

v. Data representative of the seasonal and daily activities (e.g., feeding and water column migration) of biological organisms in the vicinity of the cooling water intake structure;

Temporal variations in IM are the result of both biological factors (e.g., spawning season, migrations, etc.) and non-biological factors (e.g., river stage, plant operational status, etc.). Due to the multitude of factors that can potentially affect impingement mortality at a given location, temporal variations are difficult to ascertain. Specific knowledge of the waterbody, plant CWIS, and the dominant species in the area can allow temporal variations to be estimated. Diel variations are typically difficult to ascertain since many sampling programs sample the same time each day. Diel variations observed are most likely caused by species-specific daily patterns associated with rest and feeding periods. Organisms are much more active

and mobile when feeding, and therefore have a higher chance of becoming impinged during these periods. In general most aquatic organisms are more active in the morning hours at daybreak.

Downstream movement of individuals in lotic systems, known as drift, is a phenomenon that has been heavily studied (Hay et al. 2008, Reeves & Galat 2010). Individuals drifting are predominantly early life stages of fish, with peak drift occurring after hatching, due to limited swimming abilities and the need to reach nursery habitats (Brown & Armstrong 1985). Diel patterns of drift have been witnessed, with greater drift at night for some cyprinid species (Reichard et al. 2004). Abiotic factors such as temperature have also been found to influence the occurrence and density of larval catostomids and freshwater drum drifting (Hay et al. 2008). A positive correlation between body size and distance from the shore has been witnessed for drifting cyprinids (Reichard et al. 2004). This highlights that bank habitats are prime drift areas for younger larvae and that these individuals are susceptible to entrainment in CWIS that are located alongshore.

Seasonal movements of fish populations are largely due to responses to changes in water temperatures. For example, some species common to the Ouachita River, i.e., largemouth bass and blue catfish, have been documented to move downriver to reach warmer waters in the fall and winter months (Pflieger 1975; Davis & Lock 1997). Conversely, some species move upstream or offshore during the summer to reach cooler waters. Another reason cited for seasonal movements include species seeking habitats that promote overwinter survival. Channel and flathead catfishes and emerald shiner migrate downstream to deeper waters for this purpose (Ross 2001). Seasonal spawning events result in movement of adults inshore and upstream to reach spawning habitats (Pflieger 1975). Seasonal variations in temperature known to affect fish movement and assemblages may subsequently affect impingement and entrainment.

Migration patterns associated with daily fish movements, seasonal changes, and drift (e.g. movement attributed to current) occur for most fish species in the Ouachita River. Individuals of some species have been found to vertically migrate within the water column in response to changes in turbidity (Netsch 1971), water temperature (Miller 1960), and to escape visually oriented predators (Campbell & MacCrimmon 1970). Diel vertical migration can take place both during the day and at night and is both species- and age class-dependent (Dewey and Moen 1985). For example, species such as the emerald shiner have been found to occupy surface waters at night and reside in deeper waters during the day (Zimpfer 1988; Campbell & MacCrimmon 1970). Additionally, the U.S. Army Corps of Engineers (USACE) Report (Zimpfer 1988) found that 95% of fish protolarvae sampled were found in the upper levels of the water column during the day. ENSR (2008) found in the Sterlington impingement characterization study that average daytime impingement rates were lower than the nighttime impingement rates (1.07 at night and 0.45 during daytime collections). Threadfin shad, bluegill sunfish, common carp, redear sunfish, freshwater drum, and crawfish made up the majority of the organisms comprising >1% during both the daytime and nighttime samples. Redear sunfish were more abundant in the daytime sample, while freshwater drum were more abundant in the nighttime sample. It is important to note that while the daytime impingement rate was lower than nighttime impingement rate, species diversity was greater in the daytime samples.

Diel vertical migration may affect impingement and entrainment. Given the location of the CWIS intake pipe in deeper water in the Ouachita River channel, it is anticipated most fish species will be present higher in the water column, above where the opening of the intake pipes, or closer to the riverbank most of the months during the year, thus limiting the amount of IM and E occurring at the Union CWIS.

vi. Identification of all threatened, endangered, and other protected species that might be susceptible to impingement and entrainment at your cooling water intake structures;

Review of United States Fish and Wildlife Service (USFWS) Threatened and Endangered List on March 27, 2021 for the area surrounding the Union CWIS identified four birds and four mussel species as shown

in Table 4-8. Of the eight species listed only the four clam species are aquatic. Rabbitsfoot, Ouachita rock pocketbook and pink mucket are known to require sandy to gravel substrate which are not known to be present at the Union CWIS. Spectaclecase mussels live in sheltered areas in large rivers. Spectaclecase prefer firm mud and sheltered areas beneath rocks or boulders (USFWS 2019). No Spectaclecase were identified in the areas surrounding the Union CWIS (Posey et al.1996). No critical habitat was identified surrounding the Union CWIS.

Table 4-8: USFWS Threatened and Endangered Species

Type	Common name	Scientific name	Status
Bird	Red-cockaded Woodpecker	*Picoides borealis*	Endangered
Bird	Eastern Black Rail	*Laterallus jamaicensis*	Threatened
Bird	Piping Plover	*Charadrius melodus*	Threatened
Bird	Red Knot	*Calidris canutus rufa*	Threatened
Clam	Pink Mucket (pearlymussel)	*Lampsilis abrupta*	Endangered
Clam	Rabbitsfoot	*Quadrula cylindrica cylindrical*	Threatened
Clam	Ouachita Rock Pocketbook	*Arkansia wheeleri*	Endangered
Clam	Spectaclecase	*Cumberlandia monodonta*	Endangered

vii. Documentation of any public participation or consultation with Federal or State agencies undertaken in development of the plan; and

Entergy has not consulted or met with the ADEQ or other agencies to discuss development of a plan for 316(b) at Union.

viii. If you supplement the information requested in paragraph (r)(4)(i) of this section with data collected using field studies, supporting documentation for the Source Water Baseline Biological Characterization must include a description of all methods and quality assurance procedures for sampling, and data analysis including a description of the study area; taxonomic identification of sampled and evaluated biological assemblages (including all life stages of fish and shellfish); and sampling and data analysis methods. The sampling and/or data analysis methods you use must be appropriate for a quantitative survey and based on consideration of methods used in other biological studies performed within the same source water body. The study area should include, at a minimum, the area of influence of the cooling water intake structure.

No field studies were performed to support documentation of the Source Water Baseline Biological Characterization.

ix. In the case of the owner or operator of an existing facility or new unit at an existing facility, the Source Water Baseline Biological Characterization Data is the information in paragraphs (r)(4)(i) through (xii) of this section.

Union is an existing facility owned and operated by Entergy. Therefore, the Source Water Baseline Biological Characterization Data is presented here in sections (r)(4)(i) through (xii).

x. For the owner or operator of an existing facility, identification of protective measures and stabilization activities that have been implemented, and a description of how these measures and activities affected the baseline water condition in the vicinity of the intake.

Entergy does not own the existing CWIS facility, they purchase water from the owner/operator of the CWIS, UCWCB. The CWIS is a concrete structure situated along the shoreline of the river. Entergy is not aware of any studies performed to evaluate how the CWIS affected the baseline water condition in the vicinity of the intake.

xi. *For the owner or operator of an existing facility, a list of fragile species, as defined at 40 CFR 125.92(m), at the facility. The applicant need only identify those species not already identified as fragile at 40 CFR 125.92(m). New units at an existing facility are not required to resubmit this information if the cooling water withdrawals for the operation of the new unit are from an existing intake.*

Fragile species are defined as those with an impingement survival rate of less than 30 percent, including but not limited to alewife, American shad, Atlantic herring, Atlantic long-finned squid, Atlantic menhaden, bay anchovy, blueback herring, bluefish, butterfish, gizzard shad, grey snapper, hickory shad, menhaden, rainbow smelt, round herring, and silver anchovy.

Impingement mortality data from the Entergy Sterlington impingement study from 2006-2007 indicated 24% of the fish impinged were fragile species (threadfin shad). Fragile species anticipated to be found at the Union CWIS would be limited to the shad species in the Clupeidae family including gizzard shad and threadfin shad.

xii. *For the owner or operator of an existing facility that has obtained incidental take exemption or authorization for its cooling water intake structure(s) from the U.S. Fish and Wildlife Service or the National Marine Fisheries Service, any information submitted in order to obtain that exemption or authorization may be used to satisfy the permit application information requirement of paragraph 40 CFR 125.95(f) if included in the application.*

Union is not required to have an incidental take exemption or authorization for its cooling water intake structure from the U.S. Fish and Wildlife Service.

5. §122.21(r)(5) COOLING WATER SYSTEM DATA

The cooling water system data is required to characterize the operation and use of the cooling water system. The following provides the Cooling Water System Data for Union.

i. A narrative description of the operation of the cooling water system and its relationship to cooling water intake structures; the proportion of the design intake flow that is used in the system; the number of days of the year the cooling water system is in operation and seasonal changes in the operation of the system, if applicable; the proportion of design intake flow for contact cooling, non-contact cooling, and process uses; a distribution of water reuse to include cooling water reused as process water, process water reused for cooling, and the use of gray water for cooling; a description of reductions in total water withdrawals including cooling water intake flow reductions already achieved through minimized process water withdrawals; a description of any cooling water that is used in a manufacturing process either before or after it is used for cooling, including other recycled process water flows; the proportion of the source waterbody withdrawn (on a monthly basis);

Union operates as an “Intermediate” facility and is regulated by MISO scheduling with a capacity factor based on a five-year (2016-2020) average utilization of 47.5%. Union consists of four CCGT units with an approximate generating capacity of 2200 MW. Each of the four CCGT units consist of two gas turbines with an individual evaporative cooler system, each with a HRSG equipped with duct burners and steam turbine in a 2 by 1 configuration.

Union receives cooling tower make-up water from the Ouachita River and purchases clarified water from the UCWCB through a single CWIS with four line drive pumps in a shoreline concrete structure with two intake bay openings submerged to the channel depth to support its four block, 9-cell fan cooling towers. Raw water from the Ouachita River is pumped through a single 48-inch pipe header from two circulating pumps and delivered through a 48-inch raw water line into the intake building at the shoreline for initial pretreatment with a coagulant and sodium hypochlorite. From there, the water is delivered (0.6 miles) to the onshore component for pH adjustment, residual bleach, flocculants, and micro-sand treatment to produce a finished clarified water for storage into the UCWCB’s clear well for deliver to multiple downstream customers that includes purchase by Union.

From the UCWCB’s water clarifying system, water is piped into a 500,000 gallon raw water storage tank at the Union facility where it is then used for cooling tower make-up water, the demineralizer system, inlet air evaporative cooling, cooling tower blowdown, condenser cooling water supply, heat recovery steam generator and the steam turbine generator. Union does not use process water, service water or recycled water for cooling purposes.

Over the last five years (2016-2020) Unit 1 has operated on average 44 days, Unit 2 has operated on average 45 days, Unit 3 has operated an average of 40 days and Unit 4 has operated 44 days. The Ouachita facility flow diagram/ water balance is located in Attachment 1.

The 5-year AIF (2016 – 2020) for Union is 6.74 MGD. From the above utilization load, Union could account for 0.084% usage of the mean flow from the Ouachita River based on a 12,400 cfs rate (USGS 07362000) of measured river flow (8,014 MGD) and the 6.74 MGD AIF into the facility.

ii. Description of existing impingement and entrainment technologies or operational measures and a summary of their performance, including but not limited to reductions in impingement mortality and entrainment due to intake location and reductions in total water withdrawals and usage.

Union purchases water from the UCWCB and operates with a CCRS for cooling that by definition reduces cooling water withdrawals (flow reductions), and is therefore, capable of providing entrainment and impingement reductions of 98% and 70 to 96%, respectively. Union utilizes four blocks of 9-cell fan cooling towers for its impingement BTA standard approved technology for compliance. The UCWCB CWIS intake face is situation perpendicular to the river flow, opens into the deeper water of the channel border habitat of the Ouachita River. The UCWCB intake utilized by Union for its raw river water has a DIF of 86.4 MGD from its two intake bays with two rotating screens and four pumps. However, only one intake bay with one screen and two pumps is necessary to provide clarified water to all UCWCB end users. Total water withdrawal by Union is 6.74 MGD AIF (see Table 3.1) for its facility use and constitutes a 7.8% use of the DIF to further reduce IM and E.

6. §122.21(r)(6) CHOSEN METHOD OF COMPLIANCE WITH IMPINGEMENT MORTALITY STANDARD

Union is compliant with the Impingement Mortality standard by utilizing a CCRS.

i. Identify the compliance method for the entire facility or, alternatively, the compliance method for each cooling water intake structure at the facility

The BTA standards for impingement mortality are identified in 125.94(c). Union operates a CCRS in conjunction with its CWIS as the means for meeting compliance with the Impingement Mortality standard. As indicated in (r)(3) and (5) of this document, Union utilizes a cooling tower as part of the cooling water system.

In order to comply with the CCRS in 125.94(c)(1), a facility must operate a CCRS as defined at 125.92(c)(1):

“Closed-cycle recirculating system includes a facility with wet, dry, or hybrid cooling towers, a system of impoundments that are not waters of the United States, or any combination thereof. A properly operated and maintained closed-cycle recirculating system withdraws new source water (make-up water) only to replenish losses that have occurred due to blowdown, drift, and evaporation. If waters of the United States are withdrawn for purposes of replenishing losses to a closed-cycle recirculating system other than those due to blowdown, drift, and evaporation from the cooling system, the Director may determine a cooling system is a closed-cycle recirculating system if the facility demonstrates to the satisfaction of the Director that make-up water withdrawals attributed specifically to the cooling portion of the cooling system have been minimized.”

In addition to meeting the definition of a closed-cycle recirculating system, the facility must monitor the actual intake flows or cycles of concentration at a minimum frequency of daily. The monitoring must be representative of normal operating conditions and must include cooling water withdrawals, make-up water, and blow down volume.

Union utilizes closed-cycle cooling as identified under 125.94(c)(1) and 125.92(c)(1). The cooling tower operates with 10 cycles of concentration (COC).

7. §122.21(r)(7) ENTRAINMENT PERFORMANCE STUDIES

Entrainment studies have not been performed at Union and there is limited information on entrainment on the Ouachita River.

i. Submit any previously conducted studies or studies obtained from other facilities addressing technology efficacy, through-facility entrainment survival, and other entrainment studies. Any such submittals must include a description of each study, together with underlying data, and a summary of any conclusions or results. Any studies conducted at other locations must include an explanation as to why the data from other locations are relevant and representative of conditions at your facility. In the case of studies more than 10 years old, the applicant must explain why the data are still relevant and representative of conditions at the facility and explain how the data should be interpreted using the definition of entrainment at 40 CFR 125.92(h).

a. No site-specific entrainment studies have been conducted at Union since the facility began operations in 2003.

b. A literature search was conducted to determine whether any other power or industrial facilities had conducted 316(b) entrainment studies to address technology efficacy or through-facility entrainment survival. No such studies were identified.

c. A literature search was conducted to determine whether any other biological survival studies were conducted along the Ouachita River. No such studies were identified.

8. §122.21(r)(8) OPERATIONAL STATUS

The operational status information is required to describe the individual units and their operations. The following provides the Operational Status for Union.

i. *For power production or steam generation, descriptions of individual unit operating status including age of each unit, capacity utilization rate (or equivalent) for the previous 5 years, including any extended or unusual outages that significantly affect current data for flow, impingement, entrainment, or other factors, including identification of any operating unit with a capacity utilization rate of less than 8 percent averaged over a 24-month block contiguous period, and any major upgrades completed within the last 15 years, including but not limited to boiler replacement, condenser replacement, turbine replacement, or changes to fuel type;*

Union currently operates four units with an approximate generating capacity of 2,200 MW. All units started operating commercially in 2003. A breakdown for the utilization by year for each of the units for the previous five years is provided in Table 8-1. Union operates as an Intermediate facility under MISO. The average capacity utilization was determined using data from 2016-2020. During this 5-year period, Union had an average capacity utilization of 47.5 %.

Table 8-1: Capacity Utilization by Year as determined from EIA data

Capacity Utilization (Based on MW)					
YEAR	Unit 1	Unit 2	Unit 3	Unit 4	Average
2016	32.8%	54.5%	43.2%	47.4%	44.5%
2017	50.3%	30.3%	51.7%	53.3%	46.4%
2018	51.5%	48.3%	50.0%	44.0%	48.5%
2019	54.9%	63.0%	39.7%	54.2%	53.0%
2020	56.2%	49.2%	36.3%	39.3%	45.2%

Union has not experienced any outages during the previous 5-year period that affected the facility's reporting of flow, impingement, or other data.

ii. *Descriptions of completed, approved, or scheduled uprates and Nuclear Regulatory Commission relicensing status of each unit at nuclear facilities;*

Not applicable. Union is not a nuclear facility.

iii. *For process units at your facility that use cooling water other than for power production or steam generation, if you intend to use reductions in flow or changes in operations to meet the requirements of 40 CFR 125.94(c), descriptions of individual production processes and product lines, operating status including age of each line, seasonal operation, including any extended or unusual outages that significantly affect current data for flow, impingement, entrainment, or other factors, any major upgrades completed within the last 15 years, and plans or schedules for decommissioning or replacement of process units or production processes and product lines;*

Not applicable. Union uses cooling water for power production and steam generation.

iv. *For all manufacturing facilities, descriptions of current and future production schedules; and*

Not applicable. Union is not a manufacturing facility.

v. Descriptions of plans or schedules for any new units planned within the next 5 years.

Entergy does not have any plans or schedules for replacement of units or any new units at Union within the next five years.

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ATTACHMENT 1 FLOW DIAGRAM AND WATER BALANCE

20 May 2021

TREATED RAW WATER FROM UCWCB

QUINN WATER SYSTEM

POTABLE WATER, SINKS, SHOWERS, EYE WASHES, TOILETS, ETC.

SEPTIC SYSTEM WITH LEACH FIELD

EVAPORATION

STEAM TURBINE #1-4

GENERATOR

STEAM FROM HRSGS TO STEAM TURBINE GENERATOR

COOLING TOWER #1 - 4

CONDENSER COOLING WATER (RETURN)

CONDENSER #1-4 STEAM TURBINE EXHAUST RETURN WATER

DEMIN WATER TO HRSGS #1-4

HEAT RECOVERY STEAM GENERATOR (HRSG) #1-4

HRSG BLOWDOWN SUMP

RAW WATER STORAGE TANK

DEMINERALIZER WASTE

CONDENSER COOLING WATER (SUPPLY)

MULTIMEDIA FILTER BACKWASH (INTERMITTENT)

COOLING TOWER BLOWDOWN TO WASTEWATER SUMP

DEMINERALIZER SYSTEM

DEMINERALIZER WATER STORAGE TANK

TO INLET AIR EVAPORATIVE COOLING (ALL 8 UNITS)

MULTIMEIDA FILTERS

DEMINERALIZER WASTE (INTERMITTENT)

SERVICE WATER

POTENTIALLY OILY CONTAINMENT DRAINS

OIL SLUDGE REMOVED

LOW VOLUME STORMWATER

MULTIMEDIA FILTER BACKWASH (INTERMITTENT)

OIL/WATER SEPARATOR

OIL SLUDGE TANK

FIRE PROTECTION ELECTRIC FIRE PUMPS DIESEL FIRE PUMPS

TO FIRE PROTECTION SYSTEM

OUTFALL 01B: LOW VOLUME WASTE

LOW VOLUME WASTE SUMP

MAGNUM FLOW METER

ISCO AUTOSAMPLER

MAGNUM FLOW METER

OUTFALL 001: OUACHITA RIVER

PLANT WASTEWATER SUMP

OUTFALL 01C: COOLING TOWER BLOWDOWN

MAGNUM FLOW METER

PROCESS FLOW DIAGRAM

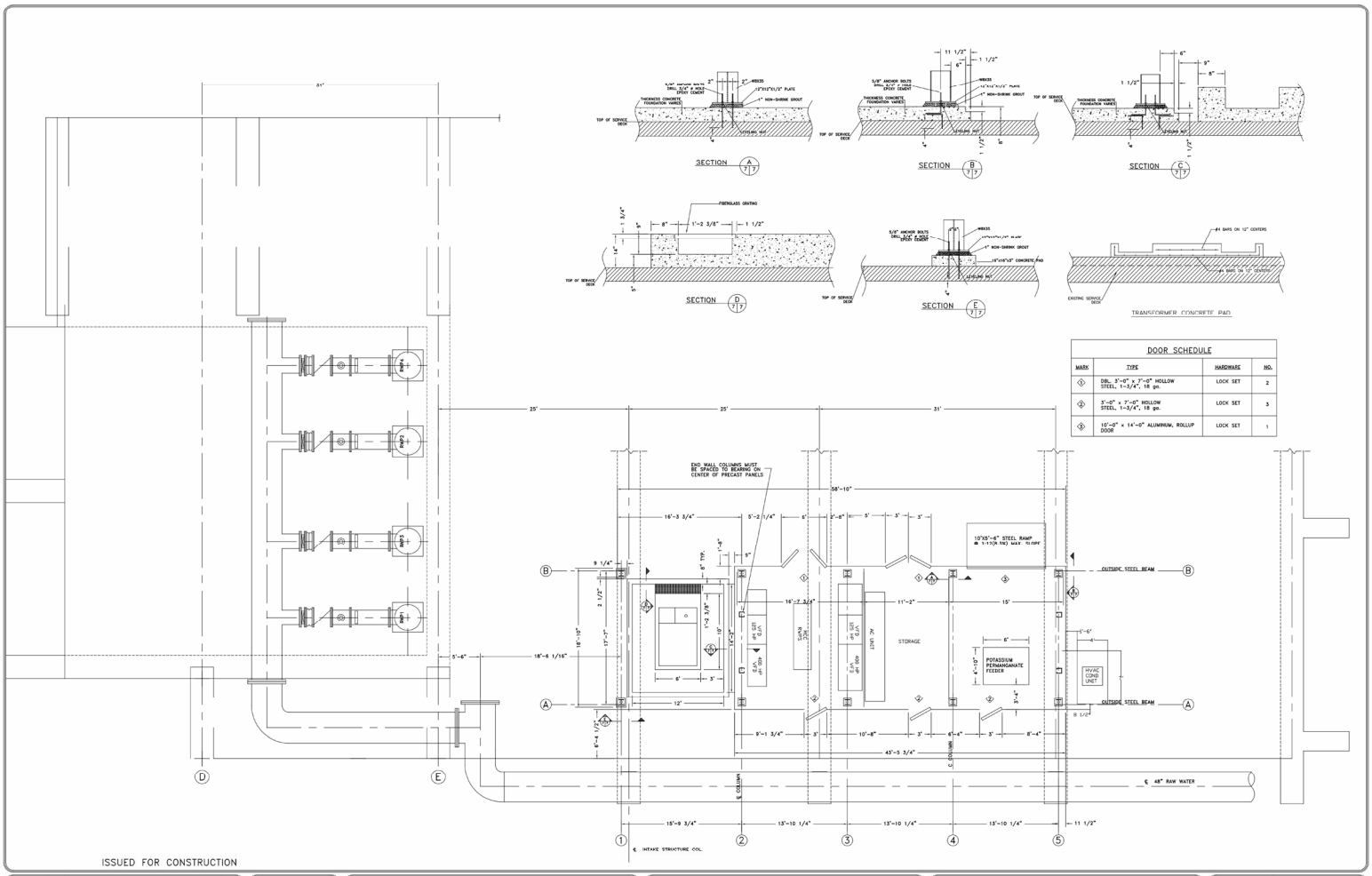
UNION POWER STATION

ENTERGY ARKANSAS, LLC
EL DORADO, ARKANSAS

P:\Projects\0177033\DM\29433H(Att1).pdf

ATTACHMENT 2 ENGINEERING DRAWINGS

20 May 2021



Date	No.	Revision	By
11/09/01	4	ADD 4" TO CONCERT ALL AROUND BUILDING CHANGED ANCHOR BOLTS	ALB
11/26/01	5	CHANGED STORAGE ROOM DOORS	ALB
11/29/01	6	REVISED TRANS. PAD AND FLOOR ELEV.	SMT
5/06/02	7	AS-BUILT	ALB

Designed
Checked
Drawn
Approved

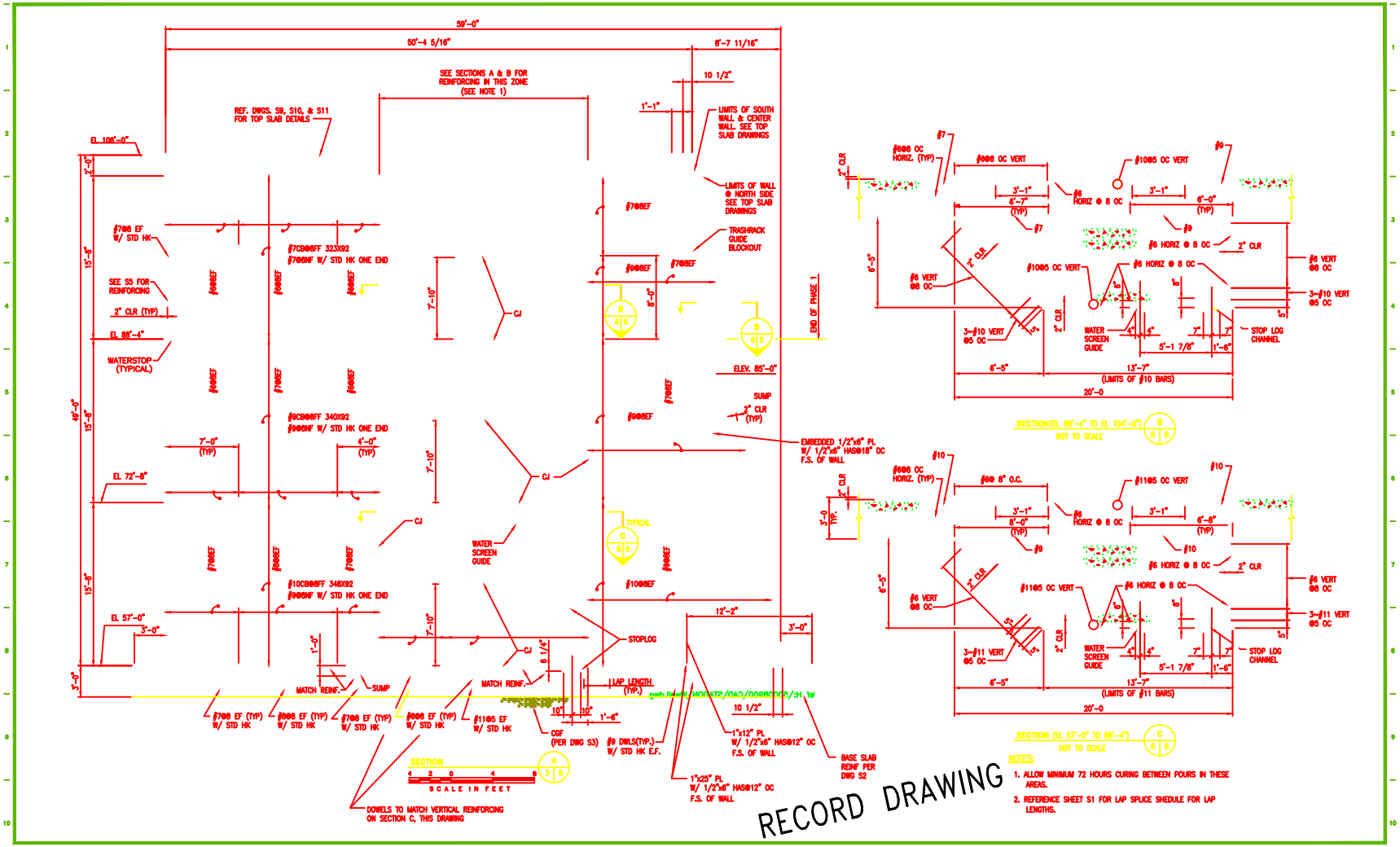
NRS CONSULTING ENGINEERS
4415 JEFFERSON AVE.
TEXARKANA, AR 71854
(870) 773-9967

MILAM CONSTRUCTION CO.
GENERAL CONTRACTORS
EL DORADO, ARKANSAS
(870) 862-4258

UNION POWER PARTNERS, L.P.
RAW WATER INTAKE STRUCTURE

INTAKE BUILDING FACILITY LOCATION

Scale	Job No.	
3/16" = 1'-0"		
Date	Drawing No.	Rev.
10/2001	2161-007	7



NO.	DATE	DESCRIPTION OF REVISION OR ISSUE	BY	APP'D
5	11/26/01	RECORD DRAWING	VDA	BWM
4	4/13/01	WATERSTP. RELOC., TOP SLAB THKNS REV.	JT	JS
3	3/19/01	REVISED TOP SLAB	VA	JS
2	02/16/01	ADDED BLOCKOUT INFORMATION	VA	JS
1	01/22/01	ISSUE FOR CONSTRUCTION	JH	JS
C	12/18/00	ISSUE FOR REVIEW & APPROVAL TO UPP	JH	JS
B	12/13/00	ISSUE FOR REVIEW TO WILLBROS & CAJUN	JH	JS
A	12/12/00	ISSUE FOR REVIEW TO WILLBROS	JH	JS
0	10/26/00	ISSUE FOR STOP LOG BID	JH	JS

The Benham Group
Architects*Engineers
Planners*Consultants
www.benham.com
(918)-492-1600

DATE	10/03/00
SCALE	1/4"=1'-0"
DESIGNED BY	TBG
DRAWN BY	TBG
APPROVED BY	TBG

UPP INTAKE STRUCTURE

INTAKE/PUMP STATION
WALL SECTION

PROJECT NUMBER	
110008900	
SHEET NO.	REV.
S6	5
SEQUENCE	

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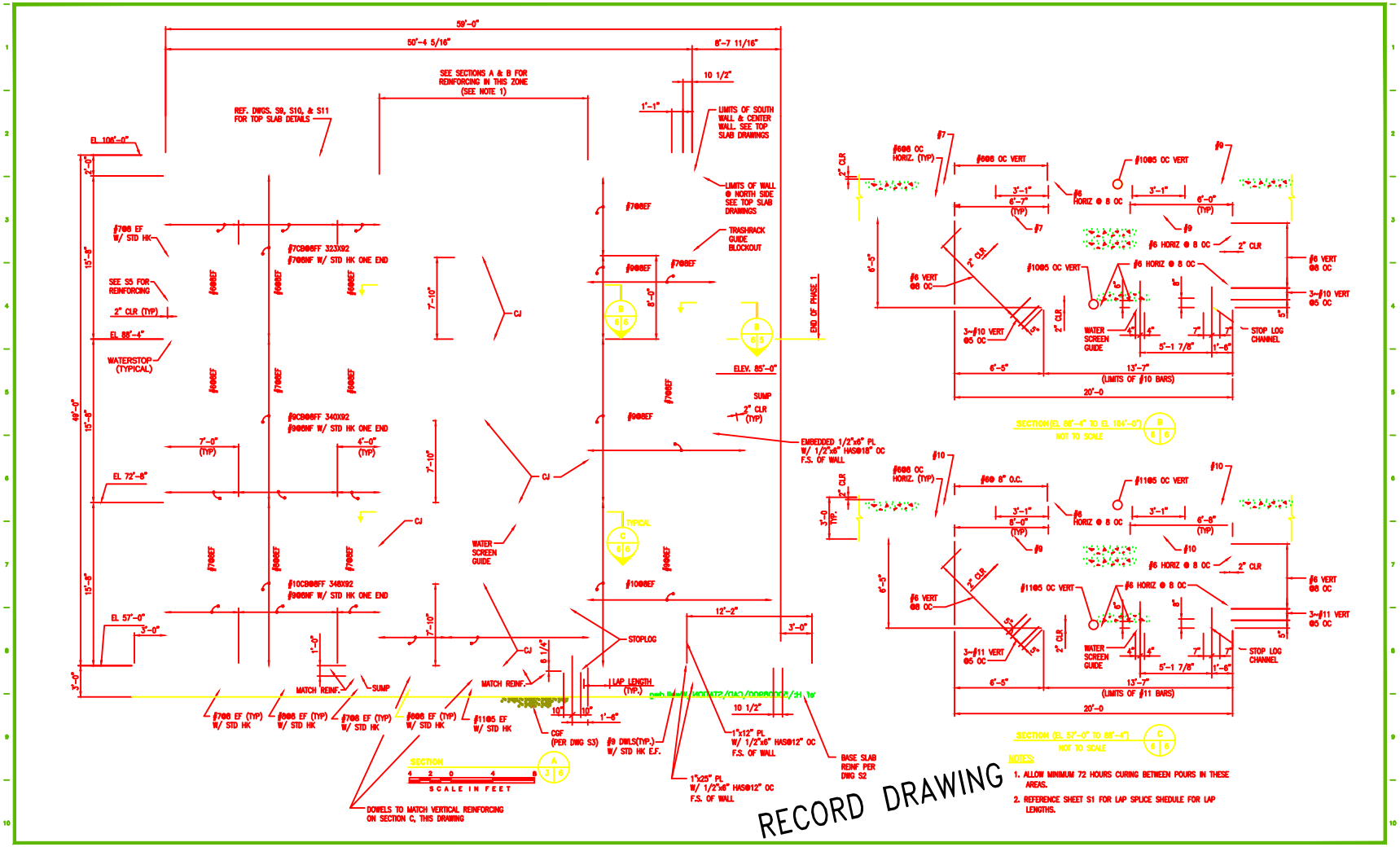

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A	12/12/00	ISSUE FOR REVIEW TO WILLBROS	JH	JS
0	10/26/00	ISSUE FOR STOP LOG BID	JH	JS

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DATE 10/03/00
SCALE 1/4"=1'-0"
DESIGNED BY TBG
DRAWN BY TBG
APPROVED BY TBG

UPP INTAKE STRUCTURE

INTAKE/PUMP STATION
WALL SECTION

PROJECT NUMBER 110008900
SHEET NO. S6
REV. 5
SEQUENCE

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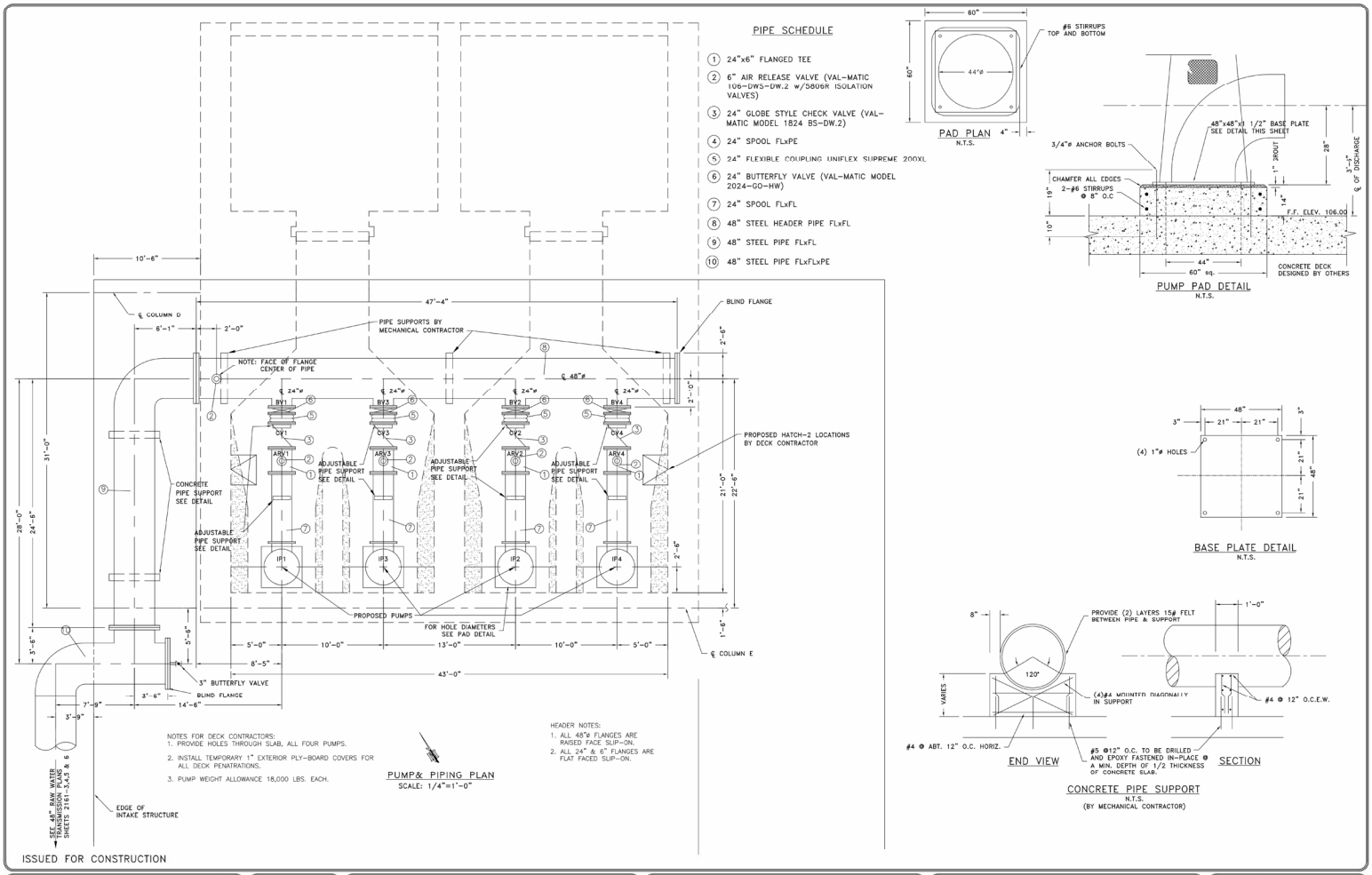
P:\Projects\0177033\DM\29433H(Att2).pdf



Date	No.	Revision	By
09/05/2001	1	ADJUSTED 48" PIPE	DSS
10/04/2001	2	RE-ADJUSTED 48" PIPE	DSS
01/15/2002	3	CHANGED RWP TP IP	DSS
03/19/02	4	AS-BUILT	AJB

Designed L.J.S.
Checked L.J.S.
Drawn D.S.S.
Approved L.J.S.

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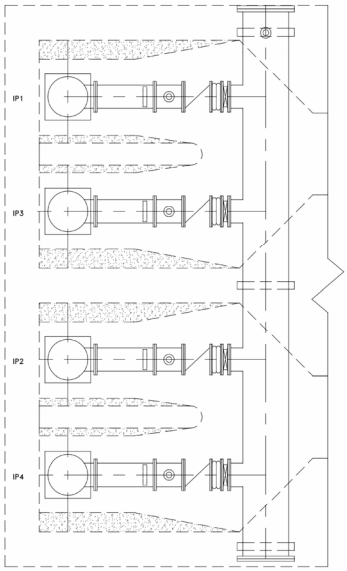
UNION POWER PARTNERS, L.P.
WATER CLARIFICATION FACILITY

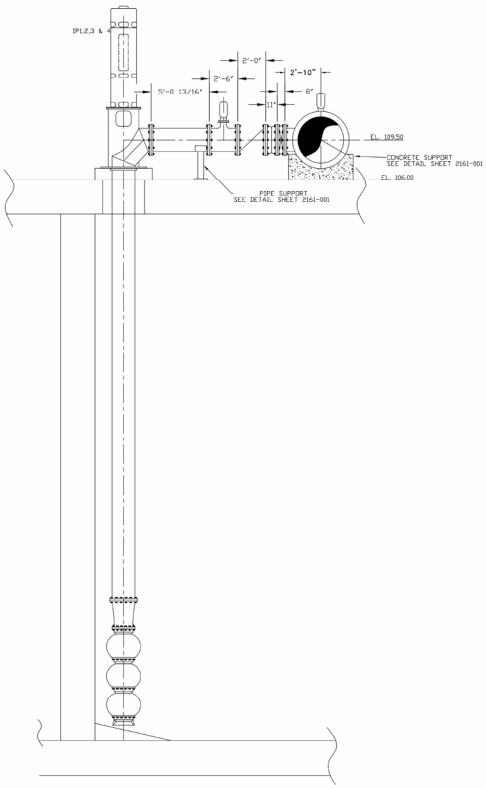
RAW WATER INTAKE
PUMPS & PIPING LAYOUT

Scale	Job No.	
1/4" = 1'		
Date 8/29/01	Drawing No. 2161-001	Rev. 4



INTAKE–RAW WATER PUMPS

NOTE:
FOR PIPING SCHEDULE SEE
SHEET 2161-001



SECTION VIEW

ISSUED FOR CONSTRUCTION

Date	No.	Revision	By
09/05/2001	1	REMOVED COLUMN SCREEN	DSS
01/15/2002	2	CHANGED RWP TO IP	DSS
05/02/2002	3	AS-BUILT	ALB

Designed
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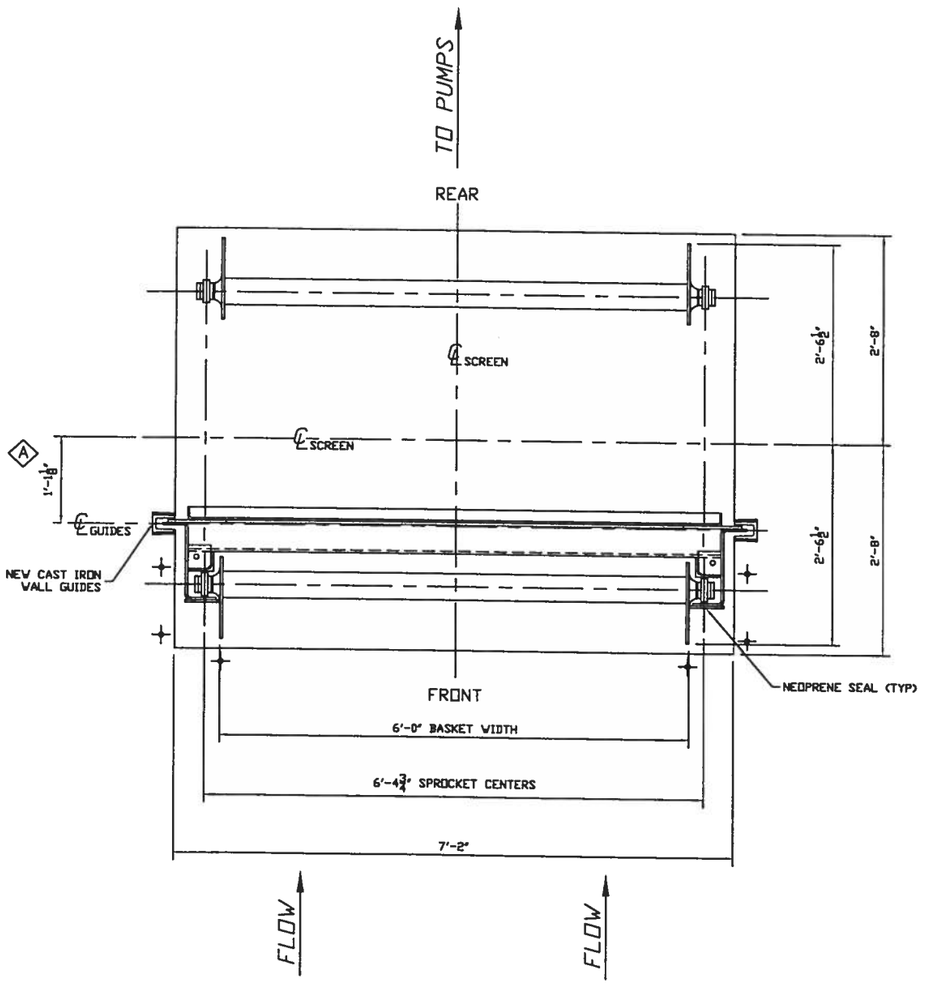
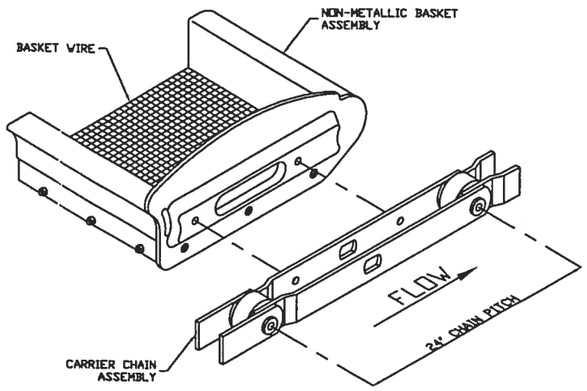
UNION POWER PARTNERS, L.P.
WATER CLARIFICATION FACILITY

RAW WATER PUMP STATION
MECHANICAL VIEW

Scale	Job No.	
1/4" = 1'-0"		
Date	Drawing No.	Rev.
07/2001	2161-002	3

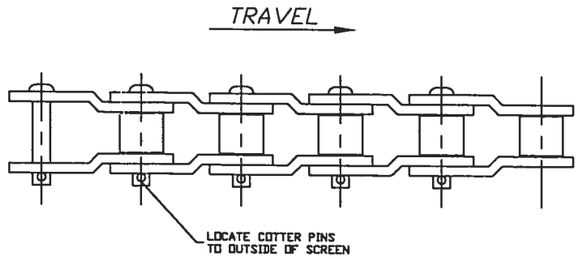


PLAN VIEW



BASKET & CHAIN DETAIL

NOTE DIRECTION OF TRAVEL WHEN ASSEMBLING THE CARRIER CHAIN OVER THE SPROCKETS. WHEN THE BASKETS ARE ERECTED ON THE CHAINS, THEY SHOULD BE BALANCED, OR SOME MEANS SHOULD BE PROVIDED FOR SNUBBING THE HEADSHAFT.



DRIVE CHAIN

DESIGN DATA:

TWO (2) REX STYLE TRAVELING WATER SCREENS, 2-POST DESIGN, 6'-0" WIDE x 52'-0" CENTERS.

THE CAPACITY OF THE SCREENS IS 31,600 GPM AT 1.15 FPS THROUGH A 100% CLEAN SCREEN AT LOW WATER DEPTH 18'-0".

THE SCREEN DRIVE DESIGN IS BASED ON LOADS SPECIFIED AND A STARTING DIFFERENTIAL HEAD OF 2'-6" AT 42'-6" HIGH WATER DEPTH.

STRUCTURAL FRAME MATERIAL:

MATERIAL OF ALL STRUCTURAL FRAME MEMBERS IS 3/8" MINIMUM THICKNESS A-36 STEEL. MATERIAL OF ALL HEAD SECTION STRUCTURAL MEMBERS IS 1/4" MINIMUM THICKNESS A-36 STEEL.

DRIVE MACHINERY:

C SK53C145 NORD HELICAL GEAR REDUCER. 294:1 REDUCTION RATIO, 1725 RPM INPUT, 5.9 RPM OUTPUT. MOTOR TO BE C-FACE MOUNTED. 2-SPEED, 1.0/0.5 HP, 480-VAC/3-PH/60-HZ WITH 143TC FRAME, TEFC ENCLOSURE, 1.15 SERVICE FACTOR AND CLASS 'F' INSULATION. DRIVE SPROCKET A520-8T-6.70" P.D. FAB. STEEL WITH SHEAR PIN DEVICE. DRIVEN SPROCKET A520-56T-45.71" P.D. FAB. STEEL.

BASKETS:

(58) HIGH STRENGTH COMPOSITE BASKETS. WIRE MESH TO BE 14 GA., ø0.080", 304 STAINLESS STEEL WITH 3/8" SQUARE OPENINGS. CLAMPING BARS AND MESH ATTACHMENT BOLTS ARE TO BE 304 STAINLESS STEEL.

D CARRIER CHAIN:

CARRIER CHAIN TO BE OF THE FOLLOWING MATERIALS:

- PINS - 8620 STEEL
- ROLLERS - CAST CHROME
- BUSHINGS - 8620 STEEL
- SIDEBARS - 1045 STEEL
- COTTER PINS - 18-8 SSTL

SPRAY WATER REQUIREMENTS:

B ALL USFilter SUPPLIED PIPING TO BE #2" SCH. 40 CARBON STEEL PIPE. ALL FITTINGS TO BE 150# MALLEABLE IRON. SPRAY NOZZLES TO BE 3/8" NPT, BRASS. WASH WATER VOLUMES AND PRESSURES:

- 278 GPM AT 40 PSI FOR SMALL AMOUNTS OF REFUSE
- 340 GPM AT 60 PSI FOR LEAVES AND GENERAL REFUSE
- 392 GPM AT 80 PSI FOR REFUSE CLINGING TO TRAYS

PAINT INSTRUCTIONS:

ALL NONFERROUS MATERIAL WILL REMAIN UNPAINTED,
ALL GALVANIZED SURFACES WILL REMAIN UNPAINTED,
ALL PURCHASED EQUIPMENT (I.E. MOTORS & REDUCERS) WILL HAVE MANUFACTURER'S STANDARD PAINT,
ALL SHAFTING AND EXPOSED MACHINED SURFACES WILL RECEIVE STANDARD SHOP PRESERVATION,
CARRIER CHAIN AND DRIVE CHAIN WILL RECEIVE ONE COAT OF SLUSH OIL,
DRIVE AND DRIVEN SPROCKETS WILL HAVE MANUFACTURER'S STANDARD PAINT,
FIBERGLASS HOUSINGS AND CHAIN GUARD WILL REMAIN MANUFACTURER'S STANDARD GEL COAT PRIMER GRAY,
D ALL FERROUS STRUCTURAL SHAPES, PLATES AND CASTINGS CURRENTLY COATED WITH COAL TAR EPOXY WILL BE SANDBLASTED TO ACHIEVE AN ANCHOR PROFILE AND OVERCOATED WITH SHOP COATS OF TNEMEC N140 POLY-POX (BLACK) TO 12-14 MILS DFT.

ASSEMBLY NOTE:

THE SCREENS WILL BE FULLY SHOP ASSEMBLED IN OUR MANUFACTURING FACILITY WITH CHAIN AND SCREEN TRAYS ATTACHED. THE DRIVE UNIT, DRIVE SPROCKET, DRIVEN SPROCKET, DRIVE CHAIN GUARD AND SPLASH HOUSINGS WILL BE SHIPPED SEPARATELY FOR FIELD ASSEMBLY TO THE HEAD SECTION.
PRIOR TO SHIPMENT, EACH SCREEN WILL BE ASSEMBLED, RUN IN THE SHOP IN THE HORIZONTAL POSITION AND CHECKED TO ENSURE ALL OPERATING CLEARANCES ARE WITHIN TOLERANCES.

SPARE PARTS:

THE FOLLOWING SPARE PARTS WILL BE INCLUDED WITH THE SHIPMENT:

- (6) SHEAR PINS
- (3) PIECES OF SCREEN CLOTH (MESH)
- (6) SPRAY NOZZLES
- (10) SETS OF TRAY TO CHAIN ATTACHMENT HARDWARE.

NOTES:

1. LUBRICANTS AND SEALERS NOT PROVIDED BY USFilter.
2. ALL FASTENERS FOR EQUIPMENT ASSEMBLY WILL BE 18-8 STAINLESS STEEL UNLESS OTHERWISE NOTED.
3. "SAFETY HAZARD" WARNING LABELS ARE AFFIXED TO USFilter INTAKE SYSTEMS EQUIPMENT WHEN A VISUAL WARNING IS APPROPRIATE. THE EQUIPMENT OWNER IS RESPONSIBLE FOR KEEPING THE LABELS VISIBLE AND IN GOOD CONDITION. REPLACEMENT LABELS ARE AVAILABLE FROM THE USFilter INTAKE SYSTEMS PARTS DEPARTMENT.
4. THE WELD QUALITY PARAMETERS WILL BE IN ACCORDANCE WITH THE AMERICAN WELDING SOCIETY STRUCTURAL WELDING CODE (STEEL) D1.1.
5. TOTAL ESTIMATED WEIGHT = 26,200 LBS. PER SCREEN.
6. NO SPECIAL TOOLS ARE REQUIRED OR PROVIDED FOR THIS SCREEN.

REV	DESCRIPTION	DATE	DWN	CHKD	APVD	ECN
D	REVISED CHAIN & PAINT INSTRUCTIONS.	10/08/01	MCT	MCT	SBT	
C	CHANGED MOTOR TO 480V.	07/12/01	MCT	MCT	SBT	
B	CHANGED SPRAY NOZZLE MATERIAL.	05/12/01	MCT	MCT	SBT	
A	REVISED GUIDE LOCATION	03/12/01	MCT	MCT	SBT	

DIMENSIONS IN INCHES UNLESS SPECIFIED
TOLERANCES UNLESS OTHERWISE SPECIFIED
TWO (2) PLACE DECIMAL ±.06
THREE (3) PLACE DECIMAL ±.005
ANGULAR ±.50°
STRUCTURAL DIMENSIONS ±1/16
MACHINED SURFACES 250

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DESIGNER	MCT	DATE 01/17/01
CHECKER	RBH	DATE 01/24/01
ENGINEER		DATE
MANAGER	SBT	DATE
FILE	30237-103_D	
SCALE	NONE	

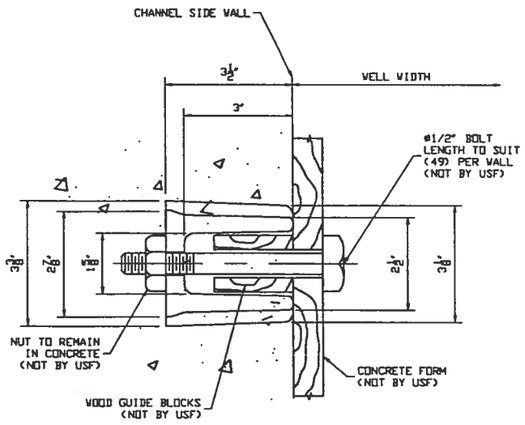
TITLE: DETAILS AND SPECIFICATIONS FOR REX STYLE BACKWASH, THRU-FLOW TRAVELING WATER SCREEN 6'-0" TRAY WIDTH x 52'-0" CENTERS

CLIENT: WILLBROS ENGINEERS, INC. ON BEHALF OF UNION POWER PARTNERS, L.P.

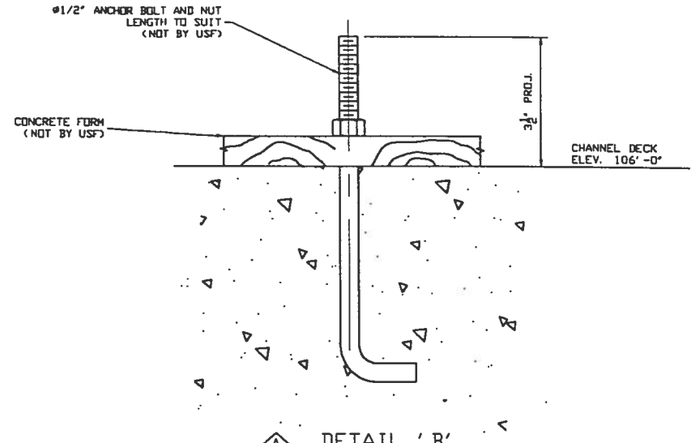
USFilter — Rex & Link-Belt Intake Products, Chalfont, PA, 800-207-9490

PROJECT	CODE	DRAWING	SHEET
30237	3017	30237-103	1 OF 1

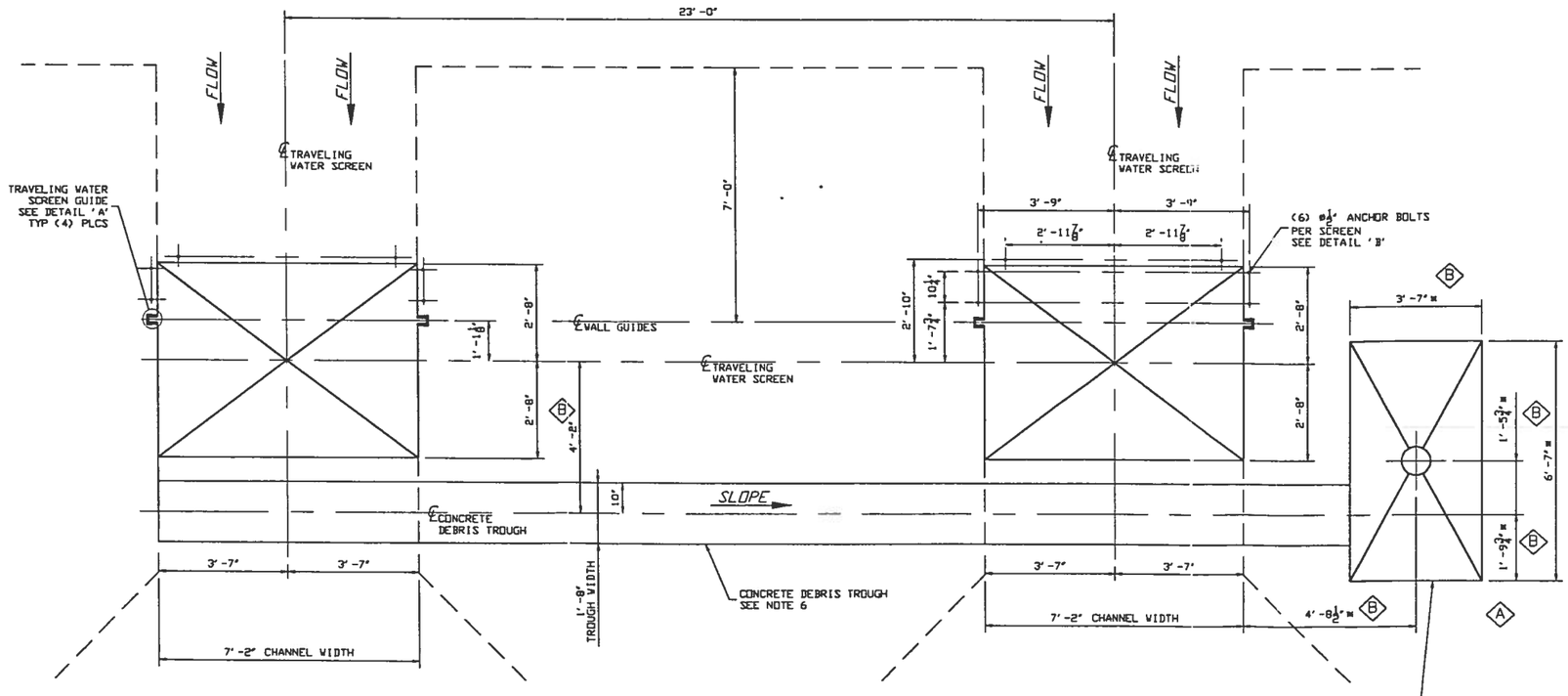
STD: 2-0799-22x34D | MADE FROM: | BAR = 1" AT PLOT SCALE



DETAIL 'A'
METHOD TO SECURE GUIDES
SCALE: 6" = 1'-0"



Ⓐ DETAIL 'B'
ANCHOR DETAIL
SCALE: 6" = 1'-0"



FOUNDATION ARRANGEMENT - PLAN VIEW

NOTES:

1. ANCHOR BOLTS MUST BE ACCURATELY PLACED (±1/8"), WITH RESPECT TO GIVEN DIMENSIONS.
2. GUIDEWAYS MUST BE PLUMB & STRAIGHT (±3/16").
3. THE SIDE WALLS OF THE SCREEN WELL MUST BE PLUMB AND TRUE, AND MUST BE PARALLEL WITH EACH OTHER. THEY CAN NOT BE OUT OF PLUMB MORE THAN 1/2" FOR THE ENTIRE DEPTH.
4. THE WIDTH BETWEEN THE SIDE WALLS MAY NOT BE MORE THAN 1/2" OVER OR UNDER THE GIVEN DIMENSIONS AT ANY GIVEN POINT.
5. THE ANCHOR BOLT AND GUIDE LOCATIONS ARE TYPICAL FOR BOTH SCREENS.
6. CONCRETE DEBRIS TROUGH TO HAVE A MINIMUM SLOPE OF 1/4" PER FOOT. THE MINIMUM DEPTH IS TO BE 6", AND THE RECOMMENDED DEPTH IS 8".
7. Ⓑ DEBRIS PIT DIMENSIONS (MARKED WITH AN ASTERISK) ARE PER INFORMATION PROVIDED BY WILLBROS ENGINEERS, INC.

REV	DESCRIPTION	DATE	DWN	CHKD	APVD	ECN
Ⓑ	REVISED TROUGH, DEBRIS BASKET PIT LOCATIONS.	03/12/01	MCT	MCT	SBT	
Ⓐ	DEBRIS BASKET WAS ON OTHER SIDE. ADDED DIM. REVISED DETAIL 'B'.	02/05/01	MCT	MCT	SBT	

DIMENSIONS IN INCHES UNLESS SPECIFIED
TOLERANCES UNLESS OTHERWISE SPECIFIED
TWO (2) PLACE DECIMAL ±.06
THREE (3) PLACE DECIMAL ±.005
ANGULAR ±.50°
STRUCTURAL DIMENSIONS ±1/16
MACHINED SURFACES 250

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		DATE
DESIGNER	MCT	01/05/01
CHECKER	RBR	01/08/01
ENGINEER		DATE
MANAGER	SBT	DATE
FILE:	30237-101_B	
SCALE:	1/2" = 1'-0"	

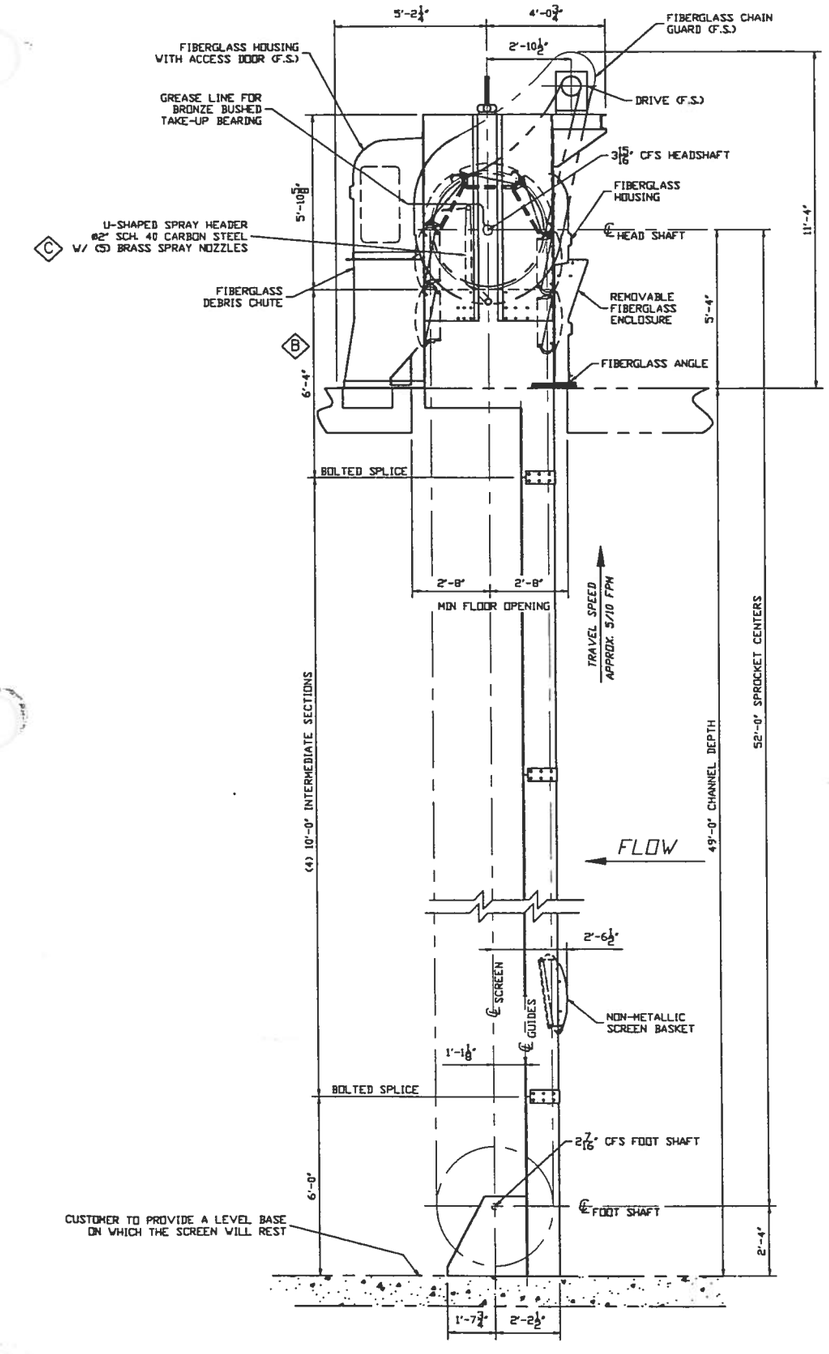
TITLE: FOUNDATION ARRANGEMENT FOR TRAVELING WATER SCREEN & DEBRIS BASKET

CLIENT: WILLBROS ENGINEERS, INC.
ON BEHALF OF UNION POWER PARTNERS, L.P.

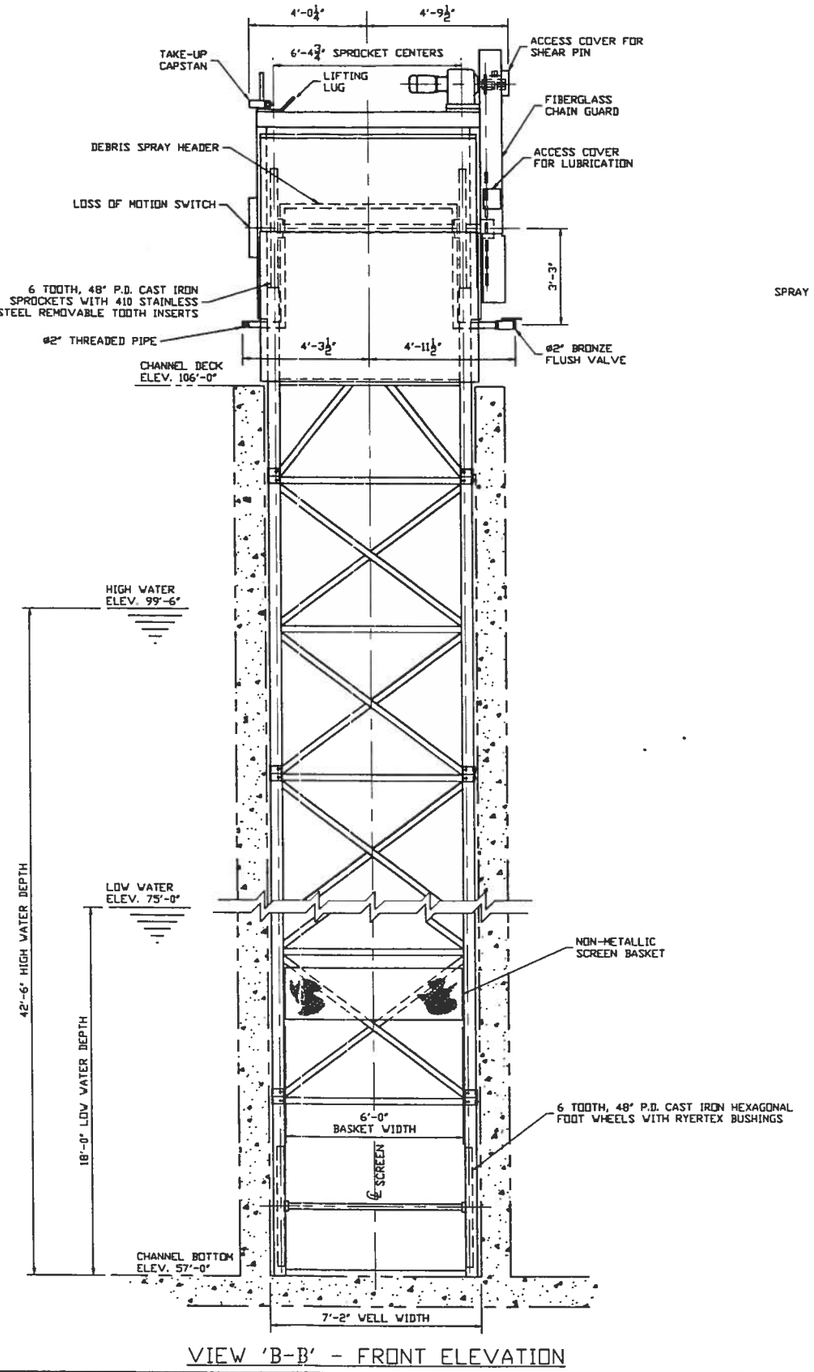
USFilter — Rex & Link-Belt Intake Products, Chalfont, PA, 800-207-9490

PROJECT	CODE	DRAWING	SHEET	REV
30237	4017A	30237-101	1 OF 1	B

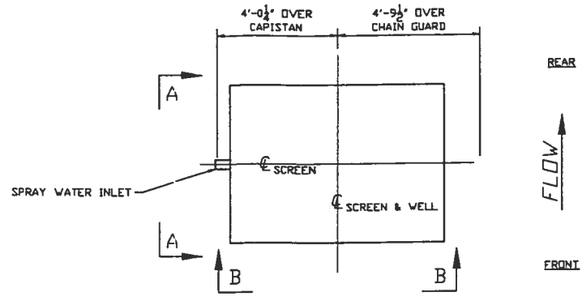
STD: 2-0799-22x340 | MADE FROM: | BAR = 1" AT PLOT SCALE



VIEW 'A-A' - SIDE ELEVATION



VIEW 'B-B' - FRONT ELEVATION



KEY PLAN

REV	DESCRIPTION	DATE	DWN	CHKD	APVD	ECN
C	CHANGED SPRAY NOZZLE MATERIAL.	05/12/01	MCT	MCT	SBT	
B	REVISED TROUGH LOCATION.	03/26/01	MCT	MCT	SBT	
A	GENERAL REVISIONS PER WILLBROS COMMENTS.	03/12/01	MCT	MCT	SBT	

DIMENSIONS IN INCHES UNLESS SPECIFIED
TOLERANCES UNLESS OTHERWISE SPECIFIED
TWO (2) PLACE DECIMAL ±.06
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DESIGNER	MCT	01/15/01
CHECKER	RBH	01/24/01
ENGINEER		
MANAGER	SBT	

FILE: 30237-102_C
SCALE: NONE

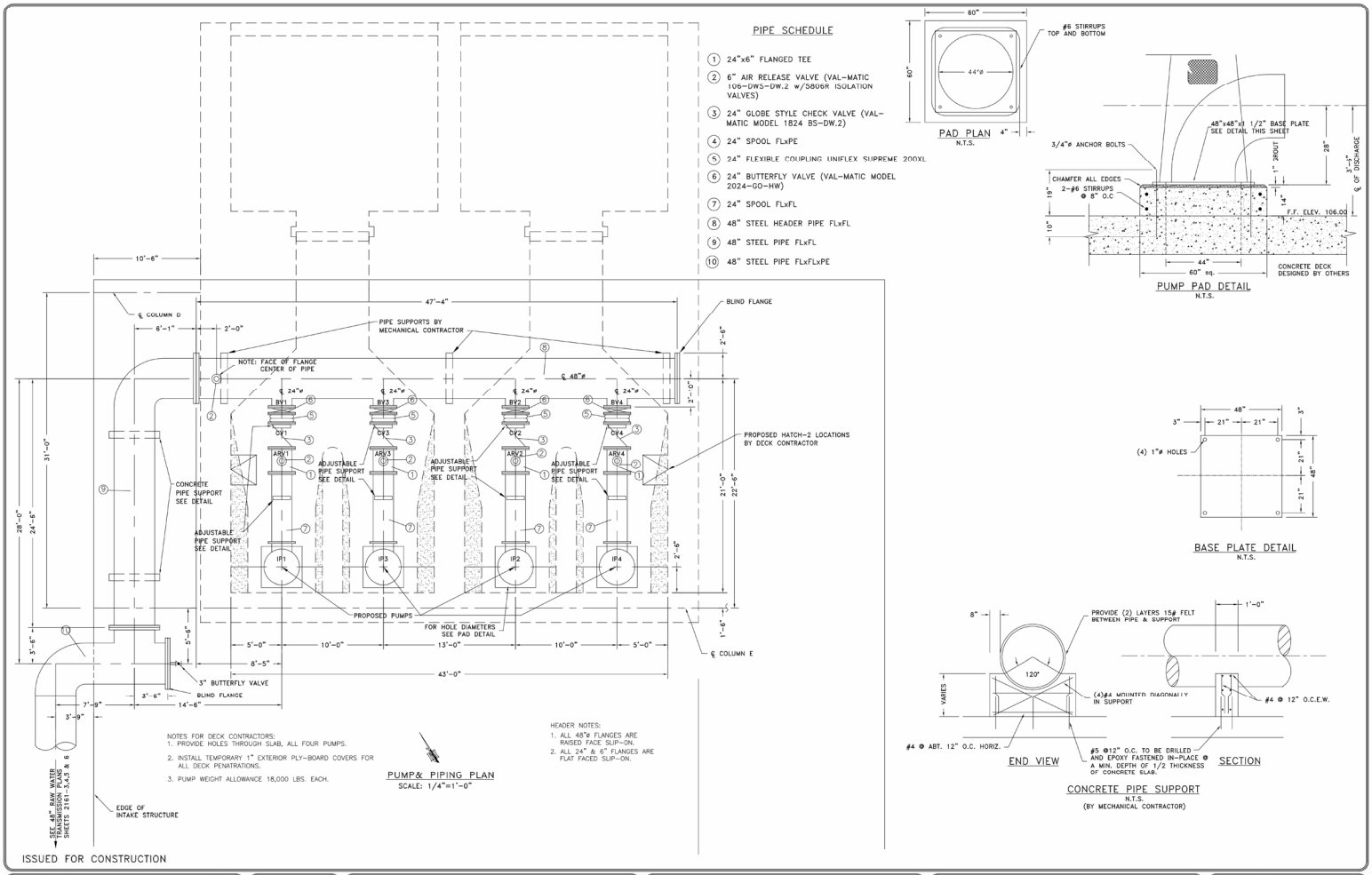
TITLE: GENERAL ARRANGEMENT FOR REX STYLE BACKWASH, THRU-FLOW TRAVELING WATER SCREEN 6'-0" TRAY WIDTH x 52'-0" CENTERS

CLIENT: WILLBROS ENGINEERS, INC. ON BEHALF OF UNION POWER PARTNER, L.P.

USFilter — Rex & Link-Belt Intake Products, Chalfont, PA, 800-207-9490

PROJECT	CODE	DRAWING	SHEET	REV
30237	3017	30237-102	1 OF 1	C

STD: 2-0799-22x340 | MADE FROM: | BAR = 1" AT PLOT SCALE



Date	No.	Revision	By
09/05/2001	1	ADJUSTED 48" PIPE	DSS
10/04/2001	2	RE-ADJUSTED 48" PIPE	DSS
01/15/2002	3	CHANGED RWP TP IP	DSS
03/19/02	4	AS-BUILT	AJB

Designed L.J.S.
Checked L.J.S.
Drawn D.S.S.
Approved L.J.S.

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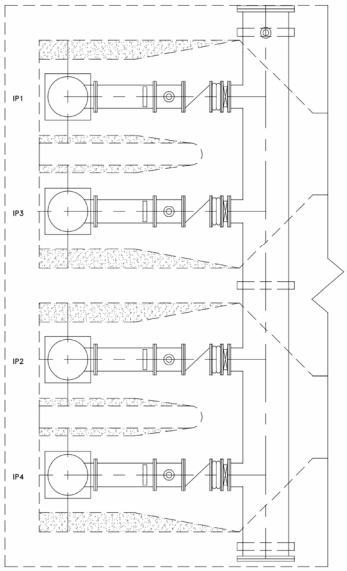
UNION POWER PARTNERS, L.P.
WATER CLARIFICATION FACILITY

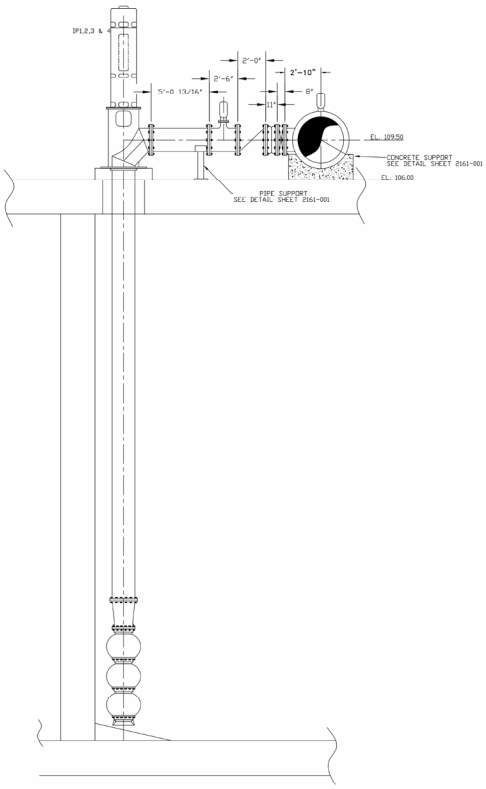
RAW WATER INTAKE
PUMPS & PIPING LAYOUT

Scale	Job No.
1/4" = 1'	
Date 8/29/01	Drawing No. 2161-001
	Rev. 4



INTAKE–RAW WATER PUMPS

NOTE:
FOR PIPING SCHEDULE SEE
SHEET 2161-001



SECTION VIEW

ISSUED FOR CONSTRUCTION

Date	No.	Revision	By
09/05/2001	1	REMOVED COLUMN SCREEN	DSS
01/15/2002	2	CHANGED RWP TO IP	DSS
05/02/2002	3	AS-BUILT	ALB

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Drawn
Approved

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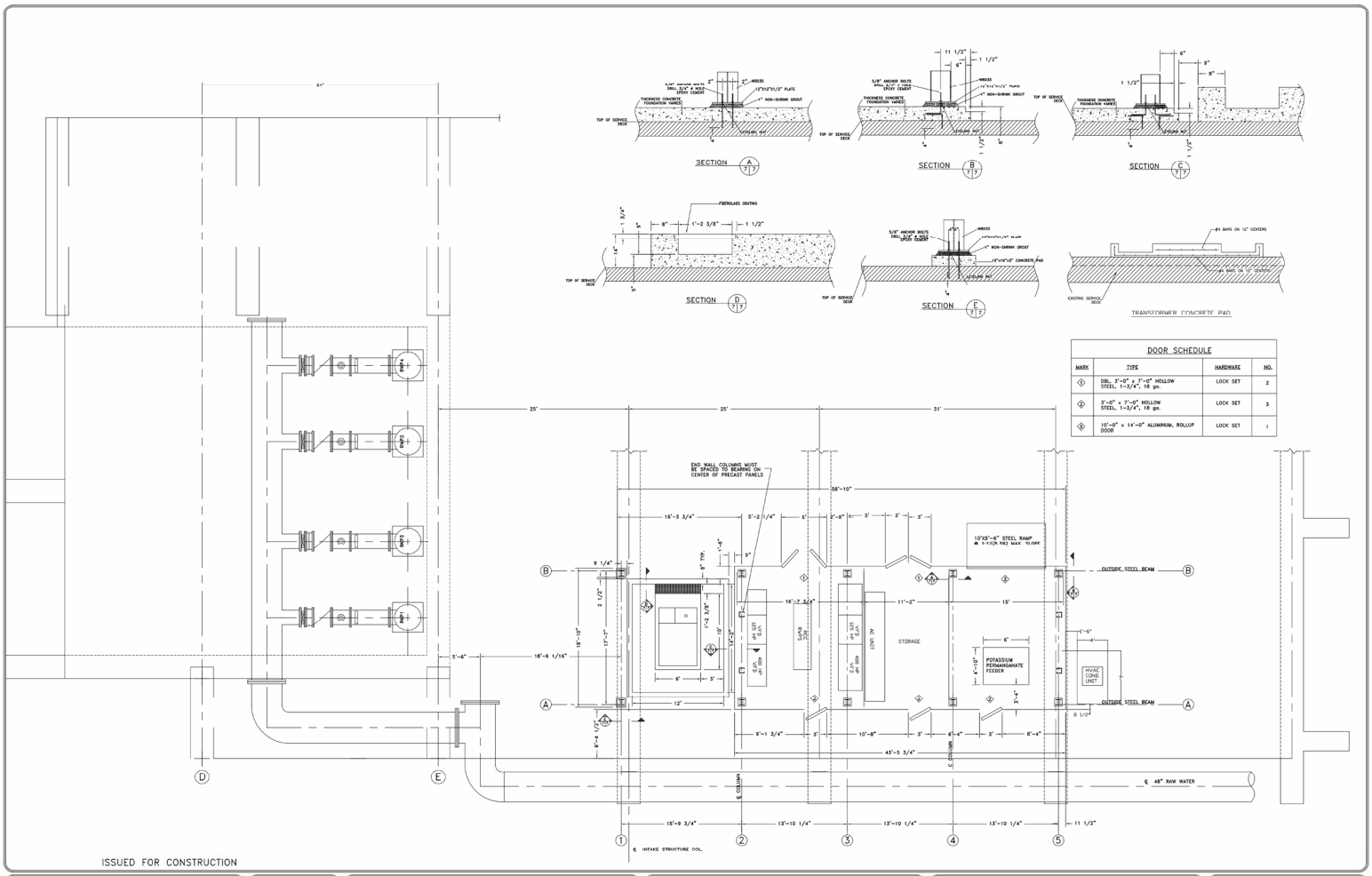
UNION POWER PARTNERS, L.P.
WATER CLARIFICATION FACILITY

RAW WATER PUMP STATION
MECHANICAL VIEW

Scale	Job No.	
1/4" = 1'-0"		
Date	Drawing No.	Rev.
07/2001	2161-002	3



Date	No.	Revision	By
11/09/01	4	ADD 4" TO CONCERT ALL AROUND BUILDING	
		CHANGED ANCHOR BOLTS	ALB
11/26/01	5	CHANGED STORAGE ROOM DOORS	ALB
11/29/01	6	REVISED TRANS. PAD AND FLOOR ELEV.	SMT
5/06/02	7	AS-BUILT	ALB

Designed
Checked
Drawn
Approved

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UNION POWER PARTNERS, L.P.
RAW WATER INTAKE STRUCTURE

INTAKE BUILDING FACILITY LOCATION

Scale	Job No.	
3/16" = 1'-0"		
Date	Drawing No.	Rev.
10/2001	2161-007	7

UNION COUNTY, ARKANSAS
WATER CONSERVATION BOARD

OPTION	1	2	3	4
SEGMENT	PIPE SIZE			
AB	24"	30"	30"	48"
BC	24"	20"	24"	30"
CD	24"	18"	24"	30"
DE	-	14"	-	30"
EF	-	16"	-	30"
FB	-	18"	-	30"
EG	-	12"	-	12"
GH	-	12"	-	12"
DI	12"	16"	12"	16"
IJ	-	16"	-	18"

NORTH

10000 0 10000 20000
SCALE IN FEET

State of Arkansas
Union County

INTAKE AND PUMP STATION
CROSS OIL & REFINERY
SETTLING FACILITIES AND PUMP STATION
STORAGE TANK AND PUMP STATION
UNION POWER PARTNERS
EL DORADO CHEMICAL
LION OIL CO
ENSCO
COLUMBIAN CHEMICALS
GREAT LAKES CENTRAL
DEL-TIN FIBER
CONAGRA
GREAT LAKES-NEWELL
GEORGIA-PACIFIC
GREAT LAKES SOUTH
ALBEMARLE CORP.
GREAT LAKES WEST
LTM CHIPS
WATSON SAWMILL
ANTHONY FOREST PRODUCTS
MOLNAIRD BROTHERS SAWMILL
D&P SAWMILL
PLUM CREEK

A B C D E F G H I J

SMACKOVER
CALION
NORPHLET
MT. HOLLY
STANDARD-UMSTED
WILDWOOD
LISBON
QUINN
OLD UNION
MARYSVILLE
EL DORADO
HWY 82 WEST
OAK MANOR
BEULAH GROVE
PARKERS CHAPEL
HARMONY
WESSON
NEWELL
NEW HOPE
FAIRCREST
JOHNSON TOWNSHIP
JUNCTION CITY
NEW LONDON
LAWSON-URBANIA
STRONG
BATTS LAPILE
FELSENTHAL
HUTTIG
AURELLE
Ouachita River
Lake Jack Lee

LEGEND

- PHASE ONE PIPELINE
- POTENTIAL PIPELINE EXTENSIONS
- INDUSTRIES

PROPOSED ALIGNMENTS FOR NON-POTABLE WATER LINES

Figure VII-2

Burns & McDonnell SINCE 1898

P:\Projects\0177033\DM\29433H(Att2).pdf

ATTACHMENT 3 SPECIES LIFE HISTORIES

20 May 2021

Cambaridae

Procambarus spp.
Crawfish

Type Locality
Mississippi River Drainage

Etymology/Derivation of Scientific Name

Synonymy
Crayfish

Characters
Maximum size: 130 grams

Coloration: white to red, dependent on species

Body shape: body is crawfish-like

Mouth position: located sub-terminal on the carapace

External morphology: As the common names suggest, adults of the white river crawfish are off-white to tan, while the adult red swamp crawfish is red. However, color alone is not a definitive distinguishing characteristic, particularly in immature crawfish. The large primary claws or "chelae" of adult white river crawfish are more elongated and narrow than those of adult red swamp crawfish. The areola, or space on the dorsal surface where the two halves of the carapace meet, is wider on white river crawfish. Also, the white river crawfish lacks the dark stripe on the underside of the tail or abdomen that is a distinguishing characteristic of red swamp crawfish. Sex is easy to distinguish in both species. Males have two sets of hard, calcified swimmerets next to the thorax; females have a seminal receptacle and oviduct openings.

Distribution (Native and Introduced)
Procambarus clarkii (the red swamp crawfish) and *P. zonangulus* (the white river crawfish) are the species of greatest commercial importance in the southern U.S. *Procambarus acutus acutus*, sometimes referred to as the eastern white river crawfish, is cultivated in several states along the east coast of the U.S. and is nearly indistinguishable from *P. zonangulus*.

The red swamp crawfish is native to the states bordering the Gulf of Mexico from Texas to Alabama, northward up the Mississippi River drainage into Tennessee and Illinois, and southward into eastern Mexico. The red swamp crawfish has been introduced in other areas of the U.S. (including Hawaii) and in at least 19 other countries in Central and South America, the Caribbean, Europe, Africa and Asia. The white river crawfish is found in the southern states along the Gulf of Mexico and northward up the Mississippi River drainage, possibly as far as the confluence of the Mississippi and Ohio Rivers. The eastern white river crawfish is found along the Atlantic coastal plain into southern New England.

Louisiana distribution: The species is found in the Mississippi River drainage.

Abundance/Conservation status (Federal, State, NGO)
Crawfish are common in the Mississippi River Basin. Not currently listed as threatened or endangered.

Habitat Associations
Macrohabitat: The red swamp and white river crawfishes are adapted to the annual hydrological cycles of spring flooding and summer dry periods common to large river systems in the southwestern U.S.

Mesohabitat: Commonly found in warm fresh water, such as slowly flowing rivers, marshes, reservoirs, irrigation systems and rice paddies.

Biology
Spawning season: The white river crawfish is a seasonal spawner, reproducing only in the fall and winter. Red swamp crawfish may spawn at any time during the year when environmental conditions are favorable.

Spawning location: Crawfish spawn in open water and the female retreats to the burrow to provide protection while the eggs and offspring are attached to her abdomen.

Reproductive strategy: Mature crawfish mate in open water and the sperm are stored in a seminal receptacle on the underside of the female. The female may mate with more than one male and eventually retreat to the burrow to spawn. While spawning can take place in open water, the burrow provides protections while the eggs and offspring are attached to the abdomen. Crawfish require free-standing water for spawning.

Fecundity: Egg counts typically range from 200 to 300, large females can have more than 500 eggs.

Age/Size at maturation: Juveniles reach maturity at 8 weeks

Migration: Crawfish of all ages and sizes, whether mature or immature, male or female, will construct burrows or retreat to existing burrows to survive periods of dewatering. Burrows are usually occupied for several months before crawfish emerge with the presence of water. Survival during the time they are in the burrow depends on the severity and length of the dry interval (which is associated with burrow moisture), characteristics of the burrow (such as depth and soil type), and the health of the animal.

Longevity: 2 years or less

Food habits: Crawfish have been classified as herbivores (vegetation eaters), detritivores (consumers of decomposing matter), omnivores (consumers of both plant and animal matter), and, more recently, as obligate carnivores, which means that they "require" some animal matter in the diet for optimal growth and health. Crawfish have been known to ingest living and decomposing plant matter, seeds, algae, microorganisms, and an assortment of larger invertebrates. They will also eat some vertebrates such as small fish, but food resources vary considerably among habitats.

Growth: Growth rate is affected by many factors, including water temperature, population density, dissolved oxygen levels, food quality and quantity, and genetic influences; however, environmental factors have the most influence on growth rate. Harvest size is typically reached within 3 to 5 months after hatching in the South, but it can be reached sooner with optimal growing conditions. After growing and attaining sexual maturity, both males and females stop growing.

Phylogeny and morphologically similar fishes: similar to other species of crawfish

Commercial or Environmental Importance: Crawfish have social, economic, and ecological significance in Louisiana. Louisiana dominates the crawfish industry in both aquaculture and wild capture fisheries. The crawfish economy in Louisiana exceeds $150 million annually.

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Centrarchidae

Lepomis gulosus
warmouth

Type Locality

Lake Pontchartrain and lagoons around New Orleans (Cuvier *in* Cuvier and Valenciennes 1829).

Etymology/Derivation of Scientific Name

Lepomis, Greek, meaning "scaled gill cover"; *gulosus*, Latin, meaning "large-mouthed" (Pflieger 1975).

Synonymy

Pomotis gulosus: Cuvier *in* Cuvier and Valenciennes 1829:367.
Chaenobryttus gulosus: Nelson 1876:37; Jordan 1878; Forbes 1884:69; Forbes and Richardson 1908:245-247; O'Donnell 1935:487; Smith 1965:9.
Choenobryttus gulosus: Large 1903:23.

Characters

Maximum size: Up to 284 mm TL (Trautman 1957; Carlander 1977; Edwards 1997).

Life colors: Black spot on opercular flap (Ross 2001); eye reddish with 3-5 reddish to purplish streaks radiating across the eye and operculum; body and upper sides brownish to olivaceous with faint vertical bars; abdomen greenish yellow. Single fins darkly mottled; pelvic fins with melanophores. Breeding male is yellow; eye distinctly red (Sublette et al. 1990).

Tooth patch: Teeth on tongue and pterygoids (Hubbs et al. 1991).

Counts: 3 anal spines (rarely 2 or 4); 6-13 dorsal fin spines; 6 or 7 branchiostegals (Hubbs et al. 1991); 36-44 lateral line scales; 10 dorsal rays; 9-10 anal rays; 13-14 pectoral rays (Ross 2001).

Body shape: Somewhat elongate and robust (Ross 2001). Body depth usually contained two to two and one-half times in standard length (Hubbs et al. 1991).

Mouth position: Terminal (Goldstein and Simon 1999).

External morphology: Supramaxilla longer than breadth of maxilla; maxillary width less than suborbital; lateral line present; scales ctenoid (Hubbs et al. 1991). Gill rakers on first arch long and thin; pectoral fin short and rounded, not reaching past the eye when bent forward; opercle bone (gill cover) stiff to its posterior margin; opercular flap short; lateral line arched anteriorly (Ross 2001).

Distribution (Native and Introduced)

U.S. distribution: Ranges from Kansas and Iowa to southern Wisconsin, lower Michigan, and west Pennsylvania, south to Rio Grande and Florida (Larimore 1957,Lee 1980). Presumed native on Atlantic slope north into Virginia, perhaps to Maryland. Transplanted west of Rockies and to portions of Atlantic slope (Lee 1980).

Louisiana distribution: This fish is found statewide but is more common in small impoundments and bayous with higher levels of vegetation, slower current, and soft bottom (Douglas 1974).

Texas distribution: Found statewide with the exception of the plains streams in the Texas Panhandle area (Hubbs et al. 1991). Warren et al. (2000) list the following drainage units for distribution of *Lepomis gulosus* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, NGO):

Populations in the southern United States are currently secure (Warren et al. 2000).

Habitat Associations

Macrohabitat: Solitary fish inhabiting swamps, bayous, borrow ditches, oxbow lakes (Larimore 1957; Edwards 1997).

Mesohabitat: Prefers heavily vegetated habitats with limited flow (Lee 1980; Glenn 1999). Found in waters with muddy substrates, detritus, dense beds of vegetation; these habitats having sources of cover including brushpiles, stumps, cypress knees, discarded tires and barrels. Sometimes found in impoundments, generally in backwater areas with extensive

brushpiles or stumps (Larimore 1957; Edwards 1997). Occasionally found in somewhat turbid waters; seem to prefer clear water with thick growths of vegetation (Gatz and Adams 1994).Species collected from pool-rootwad, backwater, backwater-bank snag habitat in the Sulphur River, Texas (Gelwick and Morgan 2000; Morgan 2002; Osting et al. 2003).Collected from riffle, run, snag habitats in Cibolo Creek, Texas; run, riffle/bank/snag, run/bank/snag habitats in the San Antonio River; riffle/channel/snag habitat in the Guadalupe River (Edwards 1999). Rose and Echelle (1981) reported collection of species mainly in pools and backwaters.Fish less than about 127 mm TL tend to remain in shallow water, usually in some form of dense cover, but larger fish occur more in deep water (Larimore 1957). Reported in brackish water up to 4.1 ppt (Carlander 1977); abundant where introduced in saline water of lowermost Colorado River, Arizona (Minckley 1973). Critical oxygen level is 3.6 ppm at 20 degrees C (Larimore 1957); however, it survives for short periods at levels as low as 1.0 ppm (Gould and Irwin 1962). Absent from much of the Great Plains, primarily because of lack of suitable backwaters, and other flooded lowland-type habitats (Tomelleri and Eberle 1990; Edwards 1997). Increased flow velocities and decreased vegetative cover will likely lead to the lateral migration of this species from a river channel onto floodplain habitats (Welcomme 1979; Glenn 1999).

Biology

Spawning season: Reproductive development begins when water temperature begins to rise above 4.5 degrees C, and actual spawning occurs at 21.1 degrees C (Ross 2001). Small *Lepomis gulosus* measuring less than 16 mm SL taken from late March through July suggesting spawning season from early March – July, in Texas (Edwards 1997). Larimore (1957) reported spawning from April – October, in Texas, with larger females spawning over a longer period than smaller females.

Spawning location: *Lithophils*; rock and gravel nesters (Larimore 1957; Simon 1999); Male constructs nest near a stump, clump of vegetation, cover that is not on clean sand at depths of 15 cm – 1.5 m; nests may be clumped if sites are limited, otherwise nests are separated (Larimore 1957).

Reproductive strategy: With gill covers flared and mouth open, courting male approaches potential mate. Body color of male changes rapidly to yellow and eyes become blood-red. Receptive female directed to nest by male and both fish swim in circular pattern with female nearer center of nest. Female jerks her body violently while releasing her eggs, actually striking face of the male. This contact apparently stimulates the release of sperm. Male may court and spawn with several females (Larimore 1957). Guarders (Larimore 1957; Simon 1999); nests are guarded by males until fry are free-swimming, 5-6 days after spawning (Carlander 1977; Robison and Buchanan 1988).

Fecundity: Potential fecundity of all ova (not only “ripe” ova) estimated range from 4,500 to 63,200 eggs; water hardened eggs averaged 1.010 ± 0.049 mm.Eggs adhesive, translucent, and light amber in color.Eggs hatch 33-36 hours after fertilization at temperatures between 25.0-26.4 degrees C (Larimore 1957). After hatching, young immediately hide among sand and gravel particles at the bottom of the nest (Carlander 1977). Tomelleri and Eberle (1990) report reasonably low reproductive potential for this species.

Age at maturation: Usually reach adulthood at age 1, at a size of 75 – 100 mm TL. Size presumed to be of more importance than age in attaining maturity (Larimore 1957).

Migration: NA

Longevity: About 3 years in most Texas aquatic environments (Larimore 1957; Edwards 1997).

Growth:Speciesattains relatively large size for sunfishes. Largest specimen found in Texas research museums is 170 mm SL (Edwards 1997).Individuals range from 41-114 mm TL after one year of growth and are 77-122 mm, 108-147 mm, 125-178 mm, 180-196 mm, 203-204 mm, 215-221 mm, and 217 mm TL at ages 2-8, respectively (Carlander 1977). Males slightly larger than females (Larimore 1957).

Food habits: Trophic classifications: Invertivore/carnivore; drift/whole body. Feeding behavior: water column/chasing. Main food items are insects, snails, and fishes (Larimore 1957;Goldstein and Simon 1999). Larval fish feed on small crustaceans (copepods, ostracods, cladocerans; Pflieger 1975; Ross 2001). Individuals often ambush prey by quickly darting out from cover and attacking unsuspecting prey. Diet includes small fishes, crayfish, larval aquatic insects (Ephemeroptera, Odonata, Tricoptera), and isopods (Larimore 1957; Carlander 1977; Layzer and Clady 1991; Edwards 1997).Majority of feeding activity occurs at night, during dusk, or at dawn; relatively little feeding activity occurs during midday (Larimore 1957). During summer, individuals may consume prey amounts equivalent to 4% of their body weight per day; at water temperatures of 24-25 degrees C they are able to completely digest a meal equivalent to 2.2-3.5% of their body weight in 26.2 hours (Hunt 1960).

Phylogeny and morphologically similar fishes

Lepomis gulosus most similar to *Lepomis cyanellus,* the green sunfish, from which it can be separated by the presence of dark bars on the cheek and a tooth patch on the tongue. *L. gulosus* may be confused with *Ambloplites rupestris*, the rock bass, from which it differs in having 3 rather than 5-6 anal spines (Ross 2001). In contrast to its ecological equivalent, *Lepomis cyanellus* (green sunfish), *L. gulosus* inhabit larger streams, bayous, and rivers with suitable habitats while *L. cyanellus* inhabit smaller creeks and tributaries (Layzer and Clady 1991).Species known to hybridize with at least four other *Lepomis spp.*, including *L. cyanellus* and *L. macrochirus*; also hybridizes with *Micropterus salmoides* (largemouth bass), *and Pomoxis nigromaculatus* (black crappie;Merriner 1971; Lee 1980).Considerable ontogenetic and individual variation occurs within species, but little, if any geographic variation (Smith 1979).

Host Records

Gyrodactylus macrochiri (Harris et al. 2004); host for *Posthodiplostomum minimum*, the strigeid fluke; *Proteocephelus ambloplites*, the bass tapeworm; *Camallanus oxycephalus*, a nematode; *Illinobdella moorei*, a leech (Larimore 1957). Trematoda (*Allacanthocasmus varius, Homalometron pearsei, Crepidostomum cormutum, Pisciamphistoma stunkardi*,

Posthodiplostomum minimum); Cestoda (*Proteocephalus sp*.); Nematoda (*Cammalanus oxycephalus, Capillaria catenata, Contracaecum spiculigerum, Contracaecum sp., Spinitectus carolini, Spinitectus gracilis, Agamonema sp.*); Acanthocephala (*Leptorhynchoides thecatus, Neoechinorhynchus cylindritus, Pallisentis sp*.; Arnold 1967).

Commercial or Environmental Importance

Lepomis gulosus transport well, survive low dissolved oxygen levels, good bioassay animals, popular sportfish, and are excellent to eat. Unlike other sunfishes, species does not tend to overpopulate ponds and develop stunted populations (Carlander 1977).

[*Additional literature noting collection of this species from Texas locations includes, but is not limited to the following*: Colle (1976); Eagle Mountain Lake (Gruninger et al. 1977); Lake Nasworthy (Colorado River Basin; Yeh 1977); Edwards (1978); Devils River (Harrell 1978); Mosier (1984); Upper San Marcos River (Hays Co.; Underwood and Dronen 1984); Hillebrandt Bayou (Linam and Kleinsasser 1987); Oyster Creek (Linam and Kleinsasser 1987); Pine Island Bayou (Linam and Kleinsasser 1987); Lower Rio Grande River (Edwards and Contreras-Balderas 1991); Linam et al. (1994); Village Creek (Hardin Co.; Moriarty and Winemiller 1997); Pinto Creek (Garrett et al. 2004).]

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Lepomis microlophus
redear sunfish

Type Locality:
St. Johns River, Florida (Günther 1859 *in*: Eschmeyer 1990).

Etymology/Derivation of Scientific Name:
Lepomis, Greek, meaning "scaled gill cover", *microlophus*, Greek, meaning "small nape" (Pflieger 1975).

Synonymy:
Pomotis microlophus: Gunther 1859:264 *in*: Eschmeyer 1990.
Eupomotis notatus: Forbes 1884:67.
Eupomotis heros: Large 1903:25; Forbes and Richardson 1908:259-260; O'Donnell 1935:487).
Lepomotis microlophus: Smith 1965:9.

Characters
Maximum size: 355 mm TL (Carlander 1977).

Life colors: Opercle margined with scarlet (normally faded in preserved material; Hubbs et al 1991). Back is iridescent olive green to brown, and sides below lateral line silvery to greenish brown with pale brown spots. Breast is white to yellow. Opercular spot black with a bright red-orange margin. Pectoral and pelvic fins are light; median fins are dusky. Young fish have irregular vertical bars along sides. Coloration of breeding males is very intense with an overall darker body color, so that ventral parts of head, breast, and pelvic fin appear black (Ross 2001).

Counts: Fewer than 55 lateral line scales; 3 anal spines (rarely 2 or 4); 6-13 dorsal fin spines; 6 or 7 branchiostegals (Hubbs et al 1991); 10-12 dorsal rays; 10-11 anal rays; 13-14 pectoral rays (Ross 2001).

Body shape: Relatively robust, somewhat elongate with pointed snout and small mouth (Ross 2001). Body depth usually contained two to two and one-half times in standard length (Hubbs et al 1991).

Mouth position: Terminal oblique (Goldstein and Simon 1999). No teeth on tongue or pterygoids (Hubbs et al 1991).

External morphology: Opercle stiff to its margin; gill rakers short, not reaching below base of second raker below when depressed; pectoral fins long and pointed, upper pectoral fin rays much longer than lower; pectoral fin contained 3.5 or fewer times in standard length; supramaxilla absent or shorter than breadth of maxilla; maxillary width less than suborbital; lateral line present (curved upward anteriorly; Ross 2002); scales ctenoid (Hubbs et al 1991).

Distribution (Native and Introduced)
U.S. distribution: Ranges throughout most of the southeastern United States (Hubbs et al. 1991). Native to peninsular Florida, lower Atlantic slope and Gulf slope drainages west to Texas, and north to southern Indiana (Lee 1980).

Texas distribution: Native to the eastern two-thirds of Texas from the Red River to the Rio Grande River; has been widely transplanted throughout the state (Hubbs et al. 1991). Warren et al. (2000) list the following drainage units for distribution of *Lepomis microlophus* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River. Sparsely, but widely distributed throughout Little River drainage, Central Texas, with the exception of species absence in collections from the Blackland Prarie (Rose and Echelle 1981).

Abundance/Conservation status (Federal, State, NGO)

Populations in the southern United States are apparently secure (Warren 2000).

Habitat Associations

Macrohabitat: Found in large rivers, bayous, lakes (Carlander 1977).

Mesohabitat: Common in warm, clear, quiet water where vegetation, stumps, logs, and other cover abound; occasionally brackish water (12.3 ppt.) (Lee 1980). Species seems to be better adapted to brackish water than basses or other sunfishes, but at salinities above 4 ppt, individuals appear to be in poorer condition, perhaps due to the metabolic expense of maintaining proper water balance (Peterson 1991). In Louisiana study, turbidity not considered important factor to species habitat (Carlander 1977).

Biology

Spawning season: In Texas, season lasts from early May - early July (Schloemer 1947). Spawning occurs at water temperatures of 21-32 degrees C during the spring and early summer (Clugston 1966; Lee 1980). In Florida, spawning season may extend from March into August (Clugston 1966). Some evidence exists that peaks in spawning activity may correspond to times of full or new moons (Wilbur 1969).

Spawning location: *Polyphils*; miscellaneous substrate and material nesters that have adhesive eggs either attached or occur in clusters on any available substrate (Childers 1967; Hardy 1978; Simon 1999). Usually nesting in areas of water less than 3 feet deep, in colonies, on firm substrates, often in locations exposed to the sun (Childers 1967). Clugston (1966) reported community spawning, with nests located very close together at depths of 457-914 mm. Wilbur (1969) reported nests constructed over bottom types ranging from sand to soft mud, and nests constructed in areas containing aquatic plants.

Reproductive strategy: Guarders; nest spawners (Childers 1967; Simon 1999). Males produce grunt-like or popping sounds near the sides and around head of female during courtship (Gerald 1971). Males usually do not feed during the period that they are courting and defending the nest area (Wilbur 1969). Fry remain in nest about a week with male guarding (Carlander 1977).

Fecundity: Females reported to produce about 2,000 – 10,000 eggs; fertilized eggs range 1.3 – 1.6 mm in diameter; eggs hatch in 6 – 10 days (Carlander 1977).

Age at maturation: In Texas, individuals may spawn late in 1st year of life (Carlander 1977). Normally matures by 2nd year, although some studies indicate regional variation (Wilbur 1969; Lee 1980); Wilbur (1969) noted some individuals spawning within 1st year of life.

Migration:

Longevity: Usually 5-6 years; fish may occasionally reach 9th year (Carlander 1977).

Food habits: Trophic classifications and mode for this species: Invertivore, benthic and drift; crusher. Main food items are snails and small mussels, with aquatic insects taken also. Because of feeding mode, this species is known as the shell cracker in some parts of range (Goldstein and Simon 1999). Seldom feeds at surface; aquatic snails are major food item throughout range; diet also includes insect larvae and cladocerans (Carlander 1977, Lee 1980). Huish (1958) and Wilbur (1969) note this species feeding primarily on bottom-inhabiting organisms; common foods including mollusks (primarily small snails), midge larvae (chironomids), amphipods, and mayfly and dragonfly larvae. Individuals may swim head-down into the bottom, raising a cloud of sand or mud, when feeding on bottom-inhabiting prey such as mayflies or snails (Wilbur 1969). The feeding pattern of this species, crushing and consuming large numbers of snails, is unique among sunfishes found in Texas. To accommodate feeding, both the bones of the pharyngeal jaws are enlarged, as are muscles responsible for the crushing movement. Species also shows a specialized pattern of muscle contraction that is not found in other, nonmolluskan-feeding sunfishes (Wainwright and Lauder 1992). Feeding involves acquiring a snail using the jaws, followed by the transfer of the snail to the pharyngeal area for crushing. After crushing shell, the soft tissues are held between upper chewing pad and pharyngeal teeth, remnants of the shell (about 85% of shell material) is then expelled (Stein et al. 1984). Major

food items in Lake Ponchartrain, Louisiana, included mud crabs (*Rhithropanopeus)*, other small crustaceans (especially gammarid amphipods) and midges. Midges more important in diet of small individuals; large large fish fed primarily on mud crabs (Desselle et al. 1978).

Growth: In Tennessee, *L. microlophus* average 109 mm TL in second summer, and 152, 175, 190, and 206 mm TL in succeeding summers; no significant difference in rate of growth between sexes (Schoffman 1939). Carlander (1977) noted average growth rates in the southeastern U.S.: 144 mm TL after one year, and 197 mm, 224 mm, and 226 mm at years 2-4, respectively.

Phylogeny and morphologically similar fishes

L. microlophus most similar to *L. macrochirus* (bluegill) and *L. megalotis* (longear sunfish); differs from *L. macrochirus* in lacking a distinct spot at the base of the soft dorsal fin and in having short and stubby versus long and slender gill rakers; species can be distinguished from *L. megalotis* by its long, pointed pectoral fin and by its very short ear flap. Although *L. gulosus* (warmouth) also have a red opercular spot, the combination of the red opercular spot and long pectoral fins differentiates *L. microlophus* from *L. gulosus* and other *Lepomis* (Ross 2001). Childers (1967) found the intergeneric centrarchid hybrid, *L. microlophus* X *C. gulosus* to be fertile.

Host Records

Trematoda, Cestoda, Nematoda, Acanthocephala (Arnold 1967).

Commercial or Environmental Importance

Lepomis microlophus reported to be good test animals, as individuals are easy to handle and not nervous (Carlander 1977). Ross (2001) noted that *L. microlophus* populations tend to decline in abundance in some lakes and ponds over time, perhaps due to competition for food and space with other sunfishes. Also, species may spawn only once during the summer, which puts them at a disadvantage, especially in bass-crowded situations.

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Lepomis humilis
orangespotted sunfish

Type Locality
"Arkansas" (Girard 1858).

Etymology/Derivation of Scientific Name
Lepomis, Greek, meaning "scaled gill cover"; *humilis*, Latin, meaning "humble" (Pflieger 1975)**.**

Synonymy
Bryttus himilis Girard 1858:201.
Lepomis humilis Hay 1883:62; Hildebrand and Towers 1928:134; Cook 1959:181.

Characters
Maximum size: 177 mm TL (Carlander 1977).

Life colors: Ground color olivaceous to silvery blue on back and side; bright reddish orange spots on head and side of body of adult males, spots rusty red on females; opercular flap black with white or pale green margin extending completely around it; no blue green wavy lines on cheek or operculum, but indistinct reddish orange lines usually present. Breeding males brilliantly colored; belly, anal, and pelvic fins bright orange; entire margin of dorsal fin orange. Young have dusky vertical bars and no spots on side (Boshung and Mayden 2004). When ready to spawn, eyes of female become almost black (Miller 1964). No dark spot on posterior part of dorsal fin; opercle not margined with scarlet (Hubbs et al. 1991).

Tooth patch: Palantine teeth present; no teeth on tongue or pterygoids (Hubbs et al 1991; Goldstein and Simon 1999).

Scale counts: 3 anal fin spines; 7-9 anal fin rays; 6-13 dorsal fin spines; 6 or 7 branchiostegals(Hubbs et al 1991); 32-42 lateral line scales; 9-11 dorsal rays; 13-14 pectoral rays (Ross 2001).

Body shape: Compressed, slab-sided (Boschung and Mayden 2004). Body depth usually contained two to two and one-half times in standard length (Hubbs et al 1991).

Mouth position: Terminal (Goldstein and Simon 1999).

External morphology: Opercle flexible; gill rakers reaching at least to base of second below when depressed; pectoral fins long and pointed, upper pectoral fin rays much longer than lower; pectoral fin contained 3.5 or fewer times in standard length; supramaxilla absent or shorter than breadth of maxilla; maxillary width less than suborbital; lateral line present; scales ctenoid (Hubbs et al. 1991).

Distribution (Native and Introduced)

U.S. distribution: Occurs in the central United States to the south of the Great Lakes; a number of introductions have occurred into various systems as far south as the Rio Grande Basin (Hubbs et al 1991).

Louisiana distribution: Found statewide in Louisiana and is very common in borrow pits, small bayous, and drainage ditches (Douglas 1974).

Texas distribution: Found throughout the northern half of the state to the Colorado River drainage (Hubbs et al 1991). Warren et al. (2000) list the following drainage units for distribution of *Lepomis humilis* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River.

Abundance/Conservation status (Federal, State, NGO)

Populations in the southern United States are currently secure (Warren 2000).

Habitat Associations

Macrohabitat: Lakes, backwaters of streams, ponds and in barrow pits (Lee 1980; Ross 2001).

Mesohabitat: Found in quiet waters, vegetated areas; known from salinity of 0.74 ppt; tolerance for silt, mud, pollutants (Barney and Anson 1923; Miller 1964; Lee 1980). Collected from Allens Creek (including the Brazos River), Texas in turbid water over very soft sand/silt substrate; willows dominated stream bank cover; very little instream cover noted (Linam et al. 1994). Found in pool-rootwad, backwater, backwater-bank snag habitats in the Sulphur River, Texas (Gelwick and Morgan 2000; Morgan 2002; Osting et al. 2003); Burgess (2003) noted that adult *Lepomis humilis* were associated with channelized pools and were the only invertivorous species associated with the channelized reach of the South

Sulphur River (these sites contained predominately pool habitat, having similar characteristics for water velocity to those of backwaters). Rather common in silty bays, tributaries, and the headwaters of Lake Texoma (Oklahoma and Texas; Riggs and Bonn 1959). Species collected in shallow river-margin areas along the lower Brazos River, Texas (Li 2003). Due perhaps, in part to the parental care characteristic of *L. humilis*, the species was more abundant in Moehlman Slough, Texas (an oxbow lake of the Brazos River) where water levels are relatively stable and floods that disrupt nesting activity are less frequent, than in the river channel (Winemiller et al. 2004). *Lepomis humilis* has distinct sleeping posture: body from chin to pelvic fins touches the bottom while back part of body is elevated; pectoral fins spread at right angles to body, may also be in contact with the bottom. Fish usually return to specific area to sleep (Miller 1964).

Biology

Spawning season:, April-September in Louisiana, at temperatures above 18°C (Barney and Anson 1923); similar pattern likely in Mississippi (Cook 1959); May-July in northern portion of range (Lee 1980).

Spawning location: *Lithophils*; species restricted to spawning over gravel and rock substrates (Simon 1999). Males fan out a depression in shallow water (Miller 1964). Nests may be 15-18 cm in diameter, 3-4 cm deep at their center; constructed over mud, sand, or gravel (Barney and Anson 1923).

Reproductive Strategy: Male prepares for spawning by fanning out a depression in shallow water using powerful sweeping motions of his caudal fin. Male is almost vertical above the nest, while sweeping (Miller 1964). Males actively court females, by swimming quickly toward female, then rushing back to nest, producing a series of distinctive grunts the entire time (Gerald 1971).Guarders; nest spawners (Simon 1999); the male guards and fans eggs, keeping them oxygenated and free of silt, until hatching (Barney and Anson 1923; Lee 1980).

Fecundity: Fertilized eggs are demersal, adhesive and attach to stones at nest bottom. Ripe eggs average about 1 mm in diameter. Usually 6-15 eggs are released in each spawning sequence, which may be repeated several times in succession. Females may produce 175-4700 eggs during spawning season, depending upon body size. Eggs hatch in 5 days at water temperatures 18.3-21.1 degrees C (Barney and Anson 1923; Hildebrand and Towers 1928).

Age at maturation: Mature by second year. Females mature by about 30 mm TL (Barney and Anson 1923; Hildebrand and Towers 1928).

Migration: NA

Longevity: Up to 3 years, in Louisiana. 7 year lifespan documented in Iowa (Barney and Anson 1923).

Growth:Larvae are 10 mm TL at hatching.Individuals may reach 88 mm TL in first year (Barney and Anson 1923).

Food habits: Trophic classifications: insectivore; drift; trophic mode: water column/surface; feeding behavior: benthic and surface feeders. Tennessee specimens contained both chironomid larvae and terrestrial insects (Goldstein and Simon 1999). In Iowa, aquatic insects make up the diet of all size groups, especially midges (chironomids), caddisfly and mayfly larvae (Kutkuhn 1955). Miller (1964) notes species will only accept live food, in captivity.

Phylogeny and morphologically similar fishes

Lepomis humilis is the sister taxon to a clade including *L. auritus, L. megalotis,* and *L. microlophus,* among others (Mabee 1993). All *Lepomis* fishes are closely related; however, genetically, *L. humilis* is more closely related to *L. macrochirus* and *L. gulosus* (Avise and Smith 1977; Branson and Moore 1962). Young *L. humilis* are superficially similar to young of other *Lepomis,* especially *L. macrochirus* (bluegill), *L. cyanellus* (green sunfish), and *L. megalotis* (longear). *L. humilis* differ from all sunfishes in having very elongate sensory pores on margin of the preopercle and in having a pair of large sensory pits on the top of the head; width of each pit approximately equal to distance between pits. *L. humilis* differs from *L. cyanellus* in having fewer lateral scales (32-42 versus 41-53) and fewer anal rays (8-10 versus 13-14). *L. humilis* differs from *L. macrochirus* in lacking a spot at the base of the soft dorsal fin and from *L. megalotis* in having long, slender versus short, stubby gill rakers (Ross 2001).

Host Records

Cestoda: *Bothriocephalus claviceps, Proteocephalus ambloplitis.*
Trematoda: *Actinocleidus fergusoni, Actinocleidus maculatus, Bucephalus elegans, Cercaria flexicorpa, Cleidodiscus diversis, Cleidodiscus robustus, Pisciamphistoma stunkardi, Posthodiplostomum minimum, Urocleidus chaenobryttus, Urocleidus cyanellus, Urocleidus dispar, Urocleidus ferox.*
Nemata: *Camallanus oxycephalus, Camallanus trispinosus, Contracaecum spiculigerum, Spinitectus carolini.*
Acanthocephala: *Neoechinorhynchus constrictus*
(Mayberry et al. 2000).
Gyrodactylus macrochiri host (Harris et al 2004).

Commercial or Environmental Importance

Lepomis humilis reported to feed on mosquito larvae, thus species may be useful in mosquito control (Barney and Anson 1923). This species thrives in soft-bottomed pools and reservoirs and is tolerant of silt and less affected by pollution than other sunfishes, thus accounting for its expanding range and increase in numbers. One of the few species whose circumstance is improved by the same factors that place many other species in jeopardy (Boschung and Mayden 2004). Because of generally small size, *L. humilis* not important as a sportfish (Ross 2001 ; Boschung and Mayden 2004). Species serves as forage for larger species of *Lepomis* and for *Micropterus salmoides* (largemouth bass) in backwater areas (Ross 2001).

[*Additional literature noting collection of this species from Texas locations includes, but is not limited to the following*: Plum Creek drainage basin (Whiteside and McNatt 1972); Eagle Mountain Lake (Gruninger et al. 1977); Big Sandy Creek (Evans and Noble 1979); Amemiya

and Gold (1986); Bosque River (Linam and Kleinsasser 1987); Oyster Creek (Linam and Kleinsasser 1987); Rose and Echelle (1991); Sister Grove Creek (Meador and Matthews 1992; Matthews et al. 1996); Lake Texoma (Texas and Oklahoma; Gido et al. 2002).]

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Lepomis megalotis
longear sunfish

Type Locality
Kentucky, Licking, and Sandy Rivers, Kentucky (Rafinesque 1820).

Etymology/Derivation of Scientific Name
Lepomis, Greek, meaning "scaled gill cover", megalotis, Greek, meaning "great ear" (Pflieger 1975).

Synonymy
Ichthelis megalotis: Rafinesque 1820a:29; Nelson 1876:38.
Lepomis fallax Hay 1881:499.
Lepomis megalotis Hildebrand and Towers 1928:132; Cook 1959:180.

Characters
Maximum size: 200 mm SL (Bauer 1980).

Life colors: Back is brown to olive green. Scales on sides have brownish spots resulting in a brown background overlain with bright blue spots. Fins are olive with a tinge of orange or red, and belly is white to orange. Irregular

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blue lines on head; pupil is blue, with reddish iris (Ross 2001); opercle not dark to its margin (Hubbs et al. 1991). Colors are much more intense in breeding males, which also have blue to charcoal-colored pelvic fins and bright orange or red sides and belly. The head in breeding males is orange or red with bright blue stripes, the stripes extending onto the body in back of the head, but not onto the throat region. The membranes of median fins of breeding males are orange or red (Ross 2001). “Sneaker” males do not develop breeding coloration; instead they are cryptically colored (Jennings and Philipp 1992a). Young fish lack distinct bands on the side (Ross 2001).

Counts: 5-7 cheek scales; 13-15 pectoral rays; 38-49 lateral line scales; 3 anal spines (rarely 2 or 4); 6-13 dorsal fin spines; 6 or 7 branchiostegals (Hubbs et al 1991); 10-11 dorsal rays; 8-10 anal rays (Ross 2001).

Body shape: Deep-bodied (Ross 2001); body depth usually contained two to two and one-half times in standard length (Hubbs et al 1991).

Mouth position: Terminal, slightly oblique (Goldstein and Simon 1999).

External morphology: Anal base nearly straight; opercle produced into a thin flexible projection lying within the opercular membrane; posterior edge of opercle within opercular membrane fimbriate; pectoral fins short and rounded; pectoral fin contained 3.75 or more times in standard length; supramaxilla absent or shorter than breadth of maxilla; maxillary width less than suborbital; lateral line present; scales ctenoid (Hubbs et al. 1991).

Internal morphology: Intestine well differentiated; silvery peritoneum; pyloric caeca present (Goldstein and Simon 1999). No teeth on tongue or pterygoid; palatine teeth absent (Hubbs et al 1991). “Sneaker” males have significantly larger testes than parental males (Jennings and Philipp 1992a).

Distribution (Native and Introduced)

U.S. distribution: Wide ranging throughout much of the central United States (Hubbs et al. 1991). Restricted to fresh waters of east-central North America; west of Appalachians, occurs from southern Québec south to Gulf of Mexico in Alabama and western Florida; extends west through Texas and Rio Grande tributaries in northeast Mexico, north through eastern parts of the states from Oklahoma to southern Ontario (Bauer 1980).

Texas distribution: Found statewide in Texas except in the headwaters of the Canadian and Brazos rivers; a number of populations have been introduced in the state (Hubbs et al 1991). Warren et al. (2000) list the following drainage units for distribution of *Lepomis megalotis* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, NGO)

Populations in the southern United States are currently secure (Warren et al. 2000).

Habitat Associations

Macrohabitat: Reservoirs, small streams; generally absent from downstream lowland sections (Bauer 1980).

Mesohabitat: Abundant in clear, small upland streams with rocky bottoms and permanent or semi-permanent flows (Robison and Buchanan 1988). In upper reaches of Black Creek, Mississippi, habitats averaged 61 cm deep, had slow current flow (5.2 cm/s) and a silt, mud, or sand substratum (Ross et al. 1987). Species generally shows little movement in streams; however, when movements do occur they are more often downstream than upstream and average 17 km (Funk 1955).

Biology

Spawning season: Occurs during the late spring and early summer (Huck and Gunning 1967; Bietz 1981).

Spawning location: *Polyphils*; miscellaneous substrate and material nesters that have adhesive eggs either attached or occur in clusters on any available substrate (Simon 1999). Spawning occurs in shallow water with gravel bottom, shallow water and little current (Bietz 1981; Hubbs and Cooper 1935; Hankinson 1919).

Reproductive strategy: Guarders; nest spawners (Simon 1999). In preparation for spawning, males fan out a depression in shallow water, using vigorous motion of the caudal fin. Nest diameter is about twice the length of the fish (Huck and Gunning 1967; Bietz 1981). Males actively court females by quickly rushing back and forth from nest to the female, while making distinctive grunts (Gerald 1971). During spawning, male and female swim in circles around the nest, the female always nearer the center. After spawning, the male chases the female from the nests, then guards and aerates the eggs (by fanning water with pectoral and caudal fins) until hatching (Huck and Gunning 1967). *Lepomis megalotis* is more active in defense of nest than other sunfishes (Hankinson 1919). Nests are often built close together, forming large groups of territorial males during the spawning season (Jennings and Philipp 1992b), which allows for "sneaker" male behavior. “Sneaker” males, individuals of 40-85 mm TL, attempt to steal fertilizations from a normal, nesting male by darting into nest and fertilizing eggs when resident male is

spawning with a female (Jennings and Philipp 1992a). Some nesting/parental males will opportunistically engage in sneaker behavior with neighboring males that may be more attractive to females (larger males, with centrally located nesting sites in the spawning area; Keenleyside 1972; Jennings and Philipp 1992b).

Fecundity: Fertilized eggs demersal, adhesive, and average about 1.0 mm in diameter (Anjard 1974).

Age/Length at maturation: Both "sneaker" and parental males both mature after 2nd year. However, "sneaker" males are at about 40 mm TL when mature and parental males are at about 75 mm TL when mature due to different growth rates (Carlander 1977; Jennings and Philipp 1992b).

Migration:

Growth and population structure: In Bull Shoals Reservoir, Arkansas and Missouri, individuals reached 43.2 mm TL after one year, 81.3 mm TL after two, 104.1 mm TL after three, and 114.3 mm TL after four (Applegate et al 1967). Growth rates are generally faster in reservoir habitats than in streams, although, even in reservoirs, although fish may require five growing seasons to reach a minimum catch size of 127 mm TL. Fish in northern areas may have smaller body size (Carlander 1977). "Sneaker" males have significantly slower growth rates after 1st year due to majority of energy utilized in developing gonads rather than increasing length (Jennings and Philipp 1992a).

Longevity: 6 years in southern areas (Bacon and Kilambi 1968); fish in northern areas may live up to 9 years (Carlander 1977).

Food habits: Invertivore/piscivore. Individuals ingest mainly aquatic and terrestrial insects, other invertebrates and occasional small fish (Robison and Buchanan 1988). Species feeds extensively at the surface (Goldstein and Simon 1999). Applegate et al. (1966) listed diet of individuals smaller than 48 mm as being 86 % aquatic insects and Entomostraca; individuals between 48 -99 mm fed primarily on aquatic insects (48 %), fish eggs (23%), terrestrial insects (9%) and bryzoans (9%); those longer than 102 mm ate terrestrial insects (37%), fish (29%), and aquatic insects (15%). Bryant and Moen (1980) show population in DeGray Reservoir, Arkansas consuming insects (52.6%), crayfish (12.5%), fish (7.4%), and plant material (6.7%). Smaller than 48 mm TL fed mainly on aquatic insects and small crustaceans (copepods and cladocerans), fish larger than 102 mm TL also feed on aquatic insects, but diet also included fish eggs, terrestrial insects, and bryozoans (moss animals; Applegate et al. 1967).

Phylogeny and morphologically similar fishes

Lepomis marginatus (dollar sunfish) is closest relative (sister species; Mabee 1993) to *L. megalotis*; these two species comprise subspecies *Icthelis*. *L. megalotis* hybridizes extensively with other *Lepomis* (Bauer 1980). *L. megalotis* easily mistaken for *L. marginatus*, from which it differs in having 5-7 rather than 3-4 rows of cheek scales, 13-14 rather than 12 pectoral rays, and an opercular tab that is usually not slanted upward in adult males (the opercular tab of females and of young fish has an upward slant). Habitat also distinguishes these two species, with *L. megalotis* generally occurring in flowing water rather than in swamps (Ross 2001).

Host Records

Commercial or Environmental Importance

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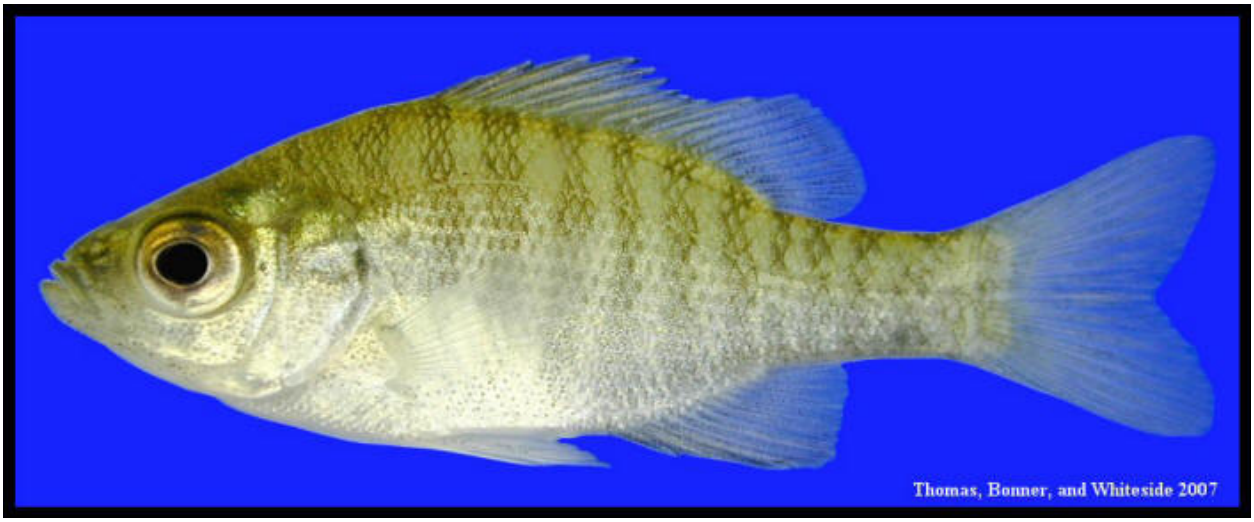

Lepomis macrochirus
bluegill

Type Locality:
"Ohio River" (Rafinesque 1819).

Etymology/Derivation of Scientific Name:
Lepomis, Greek, meaning "scaled gill cover"; *macrochirus*, Greek, meaning "large hand", perhaps in reference to the body shape (Pflieger 1975).

Synonymy:

Lepomis macrochira: Rafinesque 1819:420.
Ichthelis incisor: Nelson 1876:37.
Lepiopomus macrochirus: Jordan 1878.
Lepomis macrochirus: Forbes 1884:68.
Lepomis pallidus: Forbes 1884:67; Large 1903:25; Forbes and Richardson 1908:257-259.

Characters

Maximum size: 405 mm TL (Lee 1980).

Life colors: Dark spot on posterior part of dorsal fin; opercle not margined with scarlet (Hubbs et al 1991). Sides of head and chin bluish; back olivaceous to brown; sides bluish green shading ventrally to brownish orange or pinkish, with 5-9 distinct vertical bars; breast yellowish; abdomen yellowish white; fins olivaceous; opercular flap mostly black, sometimes with an iridescent blue anterior edge. Breast of breeding males copperish orange; head and body with greenish or bluish metallic overtones (Sublette et al. 1990).

Counts: 3 anal fin spines; 10-12 anal fin rays; fewer than 55 lateral line scales; 6-13 dorsal fin spines; 6 or 7 branchiostegals (Hubbs et al. 1991); 11-12 dorsal rays; 12-13 pectoral rays (Ross 2001).

Body shape: Deep bodied, laterally compressed (Ross 2001); body depth usually contained two to two and one-half times in standard length (Hubbs et al 1991).

Mouth position: Terminal, oblique (Sublette et al. 1990).

External morphology: Opercle flexible; gill rakers reaching at least to base of second below when depressed; pectoral fins long and pointed, upper pectoral fin rays much longer than lower; pectoral fin contained 3.5 or fewer times in SL; supramaxilla absent or shorter than breadth of maxilla; maxillary width less than suborbital; lateral line present (arched upward anteriorly; Ross 2001); scales ctenoid (Hubbs et al.1991). Sexes may be differentiated by the more conspicuous genital papilla of the female (McComish 1968).

Internal morphology: Intestine well differentiated; pyloric caeca present; silvery peritoneum (Goldstein and Simon 1999). Palantine teeth are usually absent (Hubbs et al. 1991; Ross 2001).

Distribution (Native and Introduced)

U.S. distribution: Occurs naturally in the United States east of the Rocky Mountains (Hubbs et al. 1991). Originally restricted to western and central North America where it ranged from coastal Virginia to Florida, west to Texas and northern Mexico, and north from western Minnesota to western New York; widely transplanted elsewhere in North America (Lee 1980).

Louisiana distribution: One of the most abundant species in Louisiana. Found mostly in non-flowing, mainly clear water with scattered areas of vegetation. The species is found statewide (Douglas 1974).

Texas distribution: Statewide (Hubbs et al. 1991). Warren et al. (2000) listed the following drainage units for distribution of *Lepomis macrochirus* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, NGO)

Populations in the southern Unites States are currently secure (Warren et al. 2000).

Habitat Associations

Macrohabitat: Lakes, ponds, rivers, and creeks (Lee 1980). In Brazos River, Texas, species rarely found in river channels, but abundant in oxbow lakes (Zeug et al 2005). One of the most abundant species collected from five stations on the mainstem of Sister Grove Creek (Trinity River basin), Texas (Matthews et al. 1996).

Mesohabitat: Inhabits shallow, warm, slow-flowing waters, often with abundant aquatic vegetation (Lee 1980). Occurring primarily in pools and backwaters, *L. microchirus* was sparsely but widely distributed throughout the Little River drainage (Brazos River, Texas), except that it was absent in all collections from the Blackland Prairie (Rose and Echelle 1981). In Lake Texoma (Texas and Oklahoma), this species was abundant along shores in clearer parts of lake; common in the tributaries and tail waters (Riggs and Bonn 1959). Younger fish utilize areas with cover while older fish seek more open water, generally resulting in lack of competition for food between size classes (Bianchi 1984; Mittelback 1984). Peterson and Ross (1991) note occurrence of species in waters with salinities of up to 10 ppt.

Biology

Spawning season: In Texas, peak gonadal development was reached around mid-April, spawning continued well into September (Schloemer 1947); March – September spawning reported by Estes (1949). Breder and Rosen (1966) note spawning from April – October. In Florida, spawning takes place at water temperatures of 21-32 degrees C (Clugston 1966).

Spawning location: Nest spawners; *Polyphils*; this nesting species is not particular in choice of substrates and may spawn over gravel, sand, clay, or detrital nests (Simon 1999). Nests usually placed in area free of plants and with a sand or gravel bottom. Males prepare nest by sweeping away silt and sand with tail so that coarser substrata (gravels) are exposed (Avila 1976); coarser particles provide interstitial spaces for the yolk-sac larvae and may function as a protective shelter (Ross 2001).

Reproductive strategy: Guarders (Simon 1999). *Lepomis microchirus* nest in colonies of 9 to 15 (Breder and Rosen 1966). Spawning males were more aggressive than non-spawning

males, often leaving the nest, which provided opportunities for other males to enter nest and engage female. In contrast to some sunfishes, males feed while defending their territory. Simultaneous polygamous spawning is natural, but rarely occurs (Avila 1976). In Florida, Clugston (1966) noted community spawning, with nests located very close together at depths of 457-914 mm. Males court females by rushing out toward them, then returning rapidly to the nest, producing a series of distinctive grunts during this display. Males may be attracted to areas of spawning by odor (Gerald 1971). Additional mating tactics have been described by Dominey (1980; 1981) and Gross (1982).

Fecundity: Fertilized eggs average 1.09-1.40 mm in diameter (Merriman 1971). In Texas, females spawned an average of 5 times a year, with a 120 mm female spwning about 80,000 eggs a year (Estes (1949). Ulrey et al. (1938) reported females 2 years of age produced more than 3800 eggs; those at 4 years, more than 19,000. In Deep Lake, Michigan, this species produced an average of nearly 18,000 fry per nest (Carbine 1939).

Age at maturation: Generally spawns first at one year of age, but as early as four months of age under favorable conditions (Swingle and Smith 1943).

Migration:

Longevity: Applegate et al. (1967) reported that fish do not live much beyond their fifth year. The oldest age reported from scale reading was year 11; life span apparently greater in the northern U.S. (Carlander 1977).

Food habits: Generalized wide spectrum feeder; actively feeding during daylight hours, with a minor feeding peak in the morning and a major peak in the evening (Carlander 1977; Sarker 1977). Feeding location determined by balance between abundance of food source and risk of exposure to predators; *L. microchirus* feeds in open water or vegetation, choosing the area that provides the greatest energy return, as relative abundances of zooplankton and aquatic insects associated with plants vary (Mittelbach 1981). Mittelbach (1984) demonstrated that individuals undergo pronounced shifts in both habitat and food items as they grow due to changes in vulnerability to predation. Competition between size classes is generally avoided as younger fish utilize areas with cover while older fish seek more open water (Bianchi 1984; Mittelbach 1984). Selection of foraging area is also affected by water temperatures, with fish preferring a temperature of 30 degrees C (Wildhaber and Hall 1988). Larvae and juveniles of 5-10 mm in length frequently ingest Cladocerans and copepod nauplii (Werner 1969; Beard 1982). Individuals reaching 20 mm have varied feeding habits, primarily consuming Cladocera (Chydorinae) and adult copepods and insects (mainly chironomids; Beard 1982). The primary diet of adults in various water bodies is comprised of aquatic insects, crayfish, and small fish, although zooplankton serves as the main food item in other bodies of water (Mittelbach 1984; Carlander 1977). This species also ingests aquatic vegetation including algae (Carlander 1977; Sublette et al. 1990). Based on the following data, Goldstein and Simon (1999) list first and second level trophic classifications as invertivore and drift; trophic mode listed as water column/surface: In Canada, populations primarily consumed insects, crustaceans, and plant material, with 50% of food volume consisting of chironomid larvae (Keast and Webb 1966); in late summer, when insects were

not as abundant, 22% of diet was plant material (Moffett and Hunt 1943; Goldstein and Simon 1999). The fish louse, *Argulus*, has been found in bluegill stomachs, suggesting individuals may perform "cleaning" function on infected fish (Carlander 1977).

Growth:In the southeast, individuals reach 48.3-88.9 mm TL, 83.8-132.1 mm TL, 101.6-160.0 mm TL, 121.9-182.9 mm TL, and 150.0-188.0 mm TL after years 1-5, respectively (Applegate et al. 1967). A study of *L. macrochirus* populations in Lakes Nasworthy and Bastrop, Texas, indicated that early growth of individuals was above average when compared to populations in other lakes in the more northern part of the U.S., but relative size decreased at later annuli, this may have resulted from warm temperatures. Females grew faster than males in both lakes (Serns and Strawn 1975). Growth rates are highest at summer water temperatures of 30-31°C (Beitinger and Magnuson 1979).

Phylogeny and morphologically similar fishes

Lepomis macrochirus most similar to *Lepomis humilis* (orangespotted sunfish; Branson et al. 1962) and *Lepomis microlophus* (redear sunfish), but differs from these species in having a distinct spot at the base of the soft dorsal fin; it differs also from the *L. microlophus* in having long and slender gill rakers and from *L. humilis* in lacking the elongate sensory pores on the preopercle margin (Ross 2001). Species hybridizes with *Lepomis auritus*, *L. cyanellus*, *L. gibosus*, *L. gulosus*, *L. humilis*, *L. megalotis*, *L. microlophus*, *L. punctatus*; artificial hybrids with *Pomoxis annularis* and *P. nigromaculatus* (Carlander 1977).

Host Records

L. macrochirus host to *Gyrodactylus* goerani, G. *macrochiri* (Hoffman et al 1964; Rawson et al 1973; Harris et al 2004), *Dactylogyrus aureus* (Mizelle and McDougal 1970), *Posthodiplostomum minimum* (Lewis and Nickum 1964; Meade and Bedinger 1967), *Tricodina* (Carlander 1977), *Eocollis arcanus* (Acanthocephalan; Meade and Harvey 1968).

Commercial or Environmental Importance

Parasite fauna of this species well known in Texas and may be utilized to monitor historical and present day health of watershed ecosystems (Bhuthimethee et al. 2005). Species has commonly been used for research in aquatic biology and ecotoxicology (Touart 1988). Pound for pound, this species is one of the best fighting and best tasting fishes (Ross 2001). Seasonal hooking mortality rates were estimated for *Lepomis macrochirus* caught in Choke Canyon and Cedar Lake reservoirs, in Texas. Results showed mortality to be significantly higher in summer than in winter, which in addition to high fishing pressure, high exploitation, and high catch-and-release rates, may significantly affect *L. macrochirus* populations (Coble 1988; Muoneke 1992). Species is important in pond management (Carlander 1977). Species impact as predators of crustaceans and insects is most impressive, as a population may eat six times its own weight during a single summer (Gerking 1962).

[*Additional literature noting collection of this species from Texas locations includes, but is not limited to the following*: Bonham (1946); lower Rio Grande (Robinson 1959; Edwards and Contreras-Balderas 1991); Neches and Trinity Rivers (Avise and Smith 1974); Devil's River (Harrell 1978); upper San Marcos River (Hays Co.; Underwood and Dronen 1984);

Dolman (1990); Sister Grove Creek (Meador and Matthews 1992); Pecos River (Rhodes and Hubbs 1992); Dumont and Dennis (1997).]

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Micropterus salmoides
largemouth bass

Type Locality

"Les rivieras de le Carolina"; Charleston, South Carolina, regarded as probable type locality (Lacepede 1802 *in*: Eschmeyer 1990).

Etymology/Derivation of Scientific Name

Micropterus, Greek, meaning "small fin", name resulting from an injury to the type specimen that made it appear that the posterior rays of the soft dorsal formed a separate fin; *salmoides*, from *Salmo*, the trout – species often called "trout" in the southern states (Pflieger 1975).

Synonymy

Labrus salmoides (Lacepede 1802:716 *in*: Eschmeyer 1990).

Characters

Maximum size: 700 cm TL (Lee 1980).

Life colors: Usually green with dark blotches that form a horizontal midlateral stripe. Underside is light green to almost white (Chilton 1997). Coloration and pattern varies depending on water condition, especially turbidity; colors more pronounced in clear water. Black, even-edged lateral line. Few scales on the lower side have dark bases and these do not form horizontal rows of spots. Specimens from turbid waters are much lighter and sometimes express no lateral band. Young under 150 mm TL often have a more continuous straighter-edged lateral band, a bi-colored tail (basal 2/3 whitish orange and posterior 1/3 dusky gray) and a small caudal spot (Douglas 1974; Williams 1983).

Counts: 55+ lateral line scales; 3 anal spines (rarely 2 or 4); 6-13 dorsal fin spines; 6 or 7 branchiostegals (Hubbs et al. 1991); 13-14 dorsal rays; 10-12 anal rays; 14-16 pectoral rays (Ross 2001).

Body shape: Body depth usually contained three to five times in standard length (Hubbs et al 1991).

Mouth position: Terminal, slightly oblique (Goldstein and Simon 1999); mouth extending well behind posterior eye margin in fish larger than about 152 mm SL (Ross 2001).

External morphology: Shortest dorsal fin spine contained 2.4 to 3.9 times in longest dorsal spine; bases of soft dorsal and anal fins without scales; lateral line present; scales ctenoid (Hubbs et al. 1991); first and second dorsal fins nearly separate (Ross 2001).

Internal morphology: Intestine well differientiated; peritoneum silvery (Goldstein and Simon 1999); pyloric caecae branched at base (Hubbs et al. 1991); tongue usually lacks a tooth patch (Ross 2001).

Distribution (Native and Introduced)

U.S. distribution: Wide-ranging species originally found throughout much of the United States east of the Rocky Mountains (Hubbs et al. 1991).

Louisiana distribution: Largemouth bass are found statewide and typically inhabit small creeks up to large lakes. They are more often found in non-flowing water with heavy aquatic vegetation (Douglas 1974).

Texas distribution: Entire state except Panhandle region (Hubbs et al. 1991). Warren et al. (2000) list the following drainage units for distribution of *Micropterus salmoides* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, NGO)

Populations in the southern United States are currently secure (Warren et al. 2000).

Habitat Associations

Macrohabitat: Lakes, ponds, reservoirs, backwaters, and slow-moving rivers and streams (Williams 1983; Chilton 1997; Ross 2001).

Mesohabitat: Prefers clear, quiet waters with aquatic vegetation (Lee 1980), but survives in a variety of mesohabitats (Chilton 1997). In Texas reservoirs, a strong positive correlation exists between abundance of *Micropterus salmoides* and amount of submerged vegetation; after about 20% surface coverage the relationship deteriorates (Durocher et al. 1984). In a Texas impoundment, species was associated with shoreline cover; association with cover decreased as water temperature increased; association with cover, on a daily basis, was greatest near dawn (Wildhaber and Neill 1992). Growth seems to be poor for fish in salinities of over 4 ppt (Peterson 1991); fish cannot survive for an extended period in salinities greater than 12 ppt (Meador and Kelso 1990).

Biology

Spawning season: Occurs in late winter or early spring, when water temperatures rise to about 15.5 degrees C (Coutant 1975) and continuing over a temperature range of 15-24 degrees C. In Pickwick Reservoir on the Tennessee River, spawning occurs from late March – mid-April (Miranda and Muncy 1987).

Spawning location: *Polyphils*; miscellaneous substrate and material nesters that have adhesive eggs either attached or occur in clusters on any available substrate (Simon 1999). Nests are constructed by males, generally in 0.33 – 1.33 m of water, and are often separated from each other by 2 m or greater distance; nests may be closer if underwater objects prevent bass from seeing one another (Clugston 1966; Heidenger 1976). Nests are usually constructed near submerged logs, brush piles, clumps of aquatic vegetation, or under overhanging limbs, usually over a firm bottom (Carr 1942; Vogele and Rainwater 1975; Ross 2001). Males will construct nests among the roots or underground stems of submerged plants when a firm substratum is absent (Bruno et al. 1990).

Reproductive strategy: Guarders; nest spawners (Simon 1999). While constructing the nest, male places his head at center of nest area and sweeps debris out in front of him by powerful undulation and lateral pushing movement of the whole body; male may repeat this process many times. Male also places head at center of nest, slowly pivoting around in a circle while actively beating pectoral, second dorsal, and caudal fins; consequently, the radius of nest is usually equal to length of the fish (Carr 1942). After construction of nest is complete, male leaves nest area to search for ripe females, luring them back to the nest with courtship displays which include rapid changes in color pattern. While spawning, male and female remain above the nest area side by side and angled in such a way that ventral areas of both are close together; eggs and sperm are shed at the same time. After spawning, male fans the eggs day and night and chases away potential predators (Carr 1942; Ross 2001). Male guards nest for several weeks. During this time male does not feed; male will remove a potential predator (or artificial bait) from nest, carrying it in his mouth (Carr 1942; Heidenger 1976).

When heavy fishing occurs over nest of a guarding male, he will be frightened away from the area, and a greater mortality of eggs and fry will result from this action (Carr 1942).

Fecundity: Fertilized eggs demersal and adhesive; ripe, water-hardened eggs relatively large, ranging from 1.4 – 1.8 mm in diameter, yellow to orange in color; nest may contain 5000 – 43,000 eggs (Carr 1942; Merriner 1971; Heidinger 1976). Hatching occurs in 3 days at a water temperature of 19.6 degrees C and in 4 days at 15.6 degrees C (Kramer and Smith 1960).

Age/size at maturation: Maturity related more to size than to age; females mature at about 200 g and 25 cm TL; males at 160 g and 22 cm TL (Heidinger 1976).

Migration: During spawning periods, in Florida, fish may travel about 3 km from their normal home range to shallow, protected spawning sites (Mesing and Wicker 1986).

Longevity: Females tend to live longer than males. In the southeast, males tend to have a maximum lifespan of 5-7 years, and females up to 10 years (Padfield 1951; Webb and Reeves 1975).

Growth and population structure: Growth rate greatest at water temperatures of 25-27 degrees C (Coutant 1975). Average TL for southeastern largemouth bass are 147-173 mm , 274-295 mm, 333-358 mm, 381-401 mm, 429-460 mm, and 455-500 mm for years 1-6 respectively (Schultz 1968; Webb and Reeves 1975). Females tend to grow somewhat faster than males, averaging about 25 mm longer than males by their fifth year, and attain larger maximum sizes (Padfield 1951; Webb and Reeves 1975).Newly hatched larvae are 3.0 – 5.5 mm TL; initially sink to bottom of nest area, where they lie on their sides with large yolk sac facing up for 5-7 days before moving into water column to begin feeding (Kramer and Smith 1960). Egg and larval development described by Carr (1942); Meyer (1970); Chew (1974), and Kramer and Smith (1960).

Food habits: Goldstein and Simon (1999) list first and second level trophic classifications as invertivore/carnivore and wholebody, respectively; sight feeder. Two basic feeding modes reported: midwater attack and benthic attack (Nyberg 1971). Fish rise from the nest and begin feeding on microcrustacean nauplii and rotifers at lengths ranging from 5.9 – 6.3 mm TL (Kramer and Smith 1960).Fish smaller than 48.3 mm TL feed on small crustaceans, but rotifers are no longer an item included in diet. Primary food items of fish 50.8-101.6 mm TL: aquatic insect larvae; water bugs (Corixidae); decapod crustaceans (including grass shrimp and crayfishes); and bluegill (*Lepomis macrochirus*), threadfin shad (*Dorosoma petenense*), and inland silverside (*Menidia beryllina*). Adults feed heavily on fishes including threadfin shad (*Dorosoma petenense*), gizzard shad (*Dorosoma cepedianum*), various minnows (*Cyprinidae*), sunfishes (*Centrarchidae*), and darters (*Percidae*), while continuing to consume aquatic insects (especially large insects such as dragonfly larvae; Carr 1942; McLane 1948; Applegate et al. 1967; Schramm and Maceina 1986; Matthews et al. 1992).

Phylogeny and morphologically similar fishes

Micropterus salmoides is sympatric with the spotted bass (*M. punctulatus*) and sometimes identities (especially of young) confused (Douglas 1974); however, young *M. salmoides* usually lack the white, black, and yellow-orange caudal fin coloration of *M. punctulatus* (Ross 2001). *M. salmoides* may be distinguished from other bass by the following characters: spinous and soft dorsal fins are nearly separate; 9-12 rows of cheek scales versus greater than 12; pyloric caecae are branched; maxilla extends posteriorly beyond the eye (Ross 2001).

Host Records

Gyrodactylus macrochiri (Rawson et al. 1973; Harris et al. 2004); *Textrema hopkinsi* (Dronen et al. 1977) ; Cestoda (5); Trematoda (28); Nemata (10); Acantocephala (3); Copepoda (3; Mayberry et al. 2000).

Commercial or Environmental Importance

This game species has been widely introduced and transplanted throughout the world (Hubbs et al. 1991). This species is by far the most sought-after recreational fish in Texas and beyond. Hundreds of clubs in Texas devoted to bass angling and conservation (Douglas 1974; Williams 1983; Chilton 1997).

Golden shiners (*Notemigonus crysoleucas*; Kramer and Smith 1960) and lake chubsuckers (*Erimyzon sucetta*; Carr 1942) have been documented from nesting areas of *Micropterus salmoides*; spawning over the area in order to take advantage of care given by the *M. salmoides* male.

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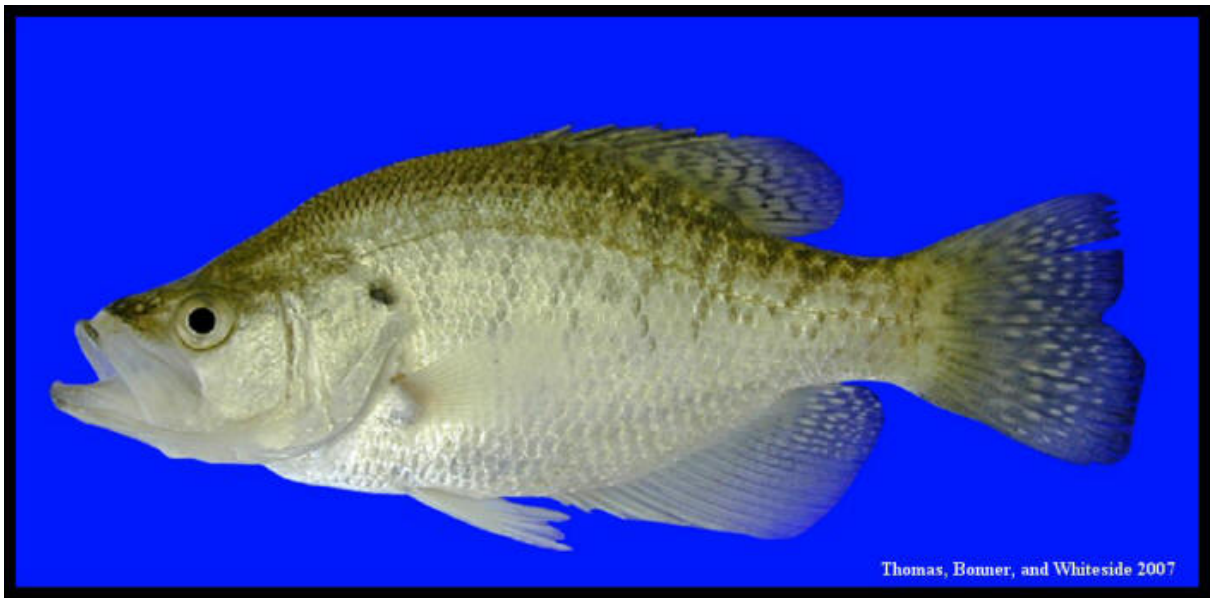

Pomoxis annularis
white crappie

Type Locality

Ohio River (Rafinesque 1818).

Etymology/Derivation of Scientific Name

Pomoxis, Greek, meaning "opercle sharp", in reference to the spines on the gill cover; *annularis*, Latin, meaning "having rings", in reference to the dark bands extending around the body (Pflieger 1975).

Synonymy

Pomoxis annularis: Rafinesque 1818:41; Large 1903:23; Forbes and Richardson 1908:238-240; O'Donnell 1935:487; Smith 1965:10.
Pomoxys annularis: Nelson 1876:37; Jordan 1878.

Characters

Maximum size: 510 mm TL (Carlander 1977).

Coloration: Body pigmentation in vertical bands (Hubbs et al. 1991). Eyes greenish yellow; upper head and back darkish greenish with bluish, greenish, and silver overtones; sides with greenish wash over silver ground color and with 5-10 darker, irregular vertical bars; ventral head and abdomen whitish. Dark spots present on the operculum. Dorsal, caudal, and anal fins marked with dark vermiculations and light spots (Sublette et al. 1990).

Counts: Usually 6 dorsal fin spines; 5-8 anal spines; 6 or 7 branchiostegals (Hubbs et al. 1991); 38-50 lateral line scales; 14-15 dorsal rays; 6 (5-6) anal spines; 17-19 anal rays; 15 pectoral rays (Ross 2001).

Body shape: Laterally compressed (Sublette et al. 1990).

Mouth position: Terminal, somewhat oblique (Goldstein and Simon 1999).

External morphology: Length of dorsal fin base less than distance from its origin to posterior margin of eye; lateral line present (complete and arched upward anteriorly; Ross 2001); scales ctenoid (Hubbs et al. 1991).

Internal morphology: Intestine well differentiated; silvery peritoneum; pyloric caecae present; jaws, palantines, and pharyngeal arches with numerous small, sharp teeth (Goldstein and Simon 1999; Sublette et al. 1990).

Distribution (Native and Introduced)

U.S. distribution: Natural range restricted to freshwaters of east central North America from southern Ontario and southwestern New York west of Appalachians, south to Gulf coast and west to Texas, South Dakota, and southern Minnesota; widely introduced into other suitable waters in United States (Lee 1980).

Louisiana distribution: This species ranges statewide and tolerant to a variety of habitats but is more common in the backwaters of rivers and streams and larger lakes with plentiful vegetation (Douglas 1974).

Texas distribution: Occurred naturally in the eastern two-thirds of Texas, but introduced populations now may be found statewide except in the upper Texas portions of the Rio Grande and Pecos basins (Hubbs et al 1991). Warren et al. (2000) list the following drainage units for distribution of *Pomoxis annularis* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, NGO)

Populations in the southern drainages are currently secure (Warren et al. 2000).

Habitat Associations

Macrohabitat: Streams, lakes, ponds, slow-moving areas of large rivers (Lee 1980). Species was rare in river channel samples, but abundant in oxbow lakes of the Brazos River, Texas (Zeug et al. 2005).

Mesohabitat: In Lake Texoma (Oklahoma-Texas) species was abundant in nearly all parts of lake down to a depth of 50 feet; most frequently taken at depths less than 10 feet during April and May, and at depths ranging from 25-40 feet, from November – February; occasionally found in tail waters (Riggs and Bonn 1959). In reservoirs, juvenile and nonspawning adults occur in open water and show pattern of vertical migration, moving nearer the surface at night. In summer, fish move to cool water and are found near or below thermocline in lakes.

As water in this area is often devoid of oxygen, fish may be forced into a narrow zone around thermocline where sufficient oxygen can be found, as well as lower water temperatures (O'Brien et al. 1984; Ross 2001).

Biology

Spawning season: In Texas, late March - early May (Schloemer 1947).

Spawning location: *Phytophils*; plant material nesters that have adhesive eggs and free embryos that hang on plants by cement glands (Simon 1999). Nesting at depths of 5 cm to 1.5 m, generally within 10 m of the shore, on hard clay or gravel, or on the roots of aquatic or terrestrial plants on which eggs are deposited (Hansen 1965; Siefert 1968). Demersal, adhesive eggs may drift outside of nest area and attach to logs, vegetation, or other structure (Hansen 1943, 1965). Taber (1969) reported that spawning was associated with inundated terrestrial vegetation in Lake Texoma, Oklahoma-Texas.

Reproductive strategy: Guarders; nest spawners (Simon 1999). Nests averaging 30 cm in diameter, irregularly shaped, often shallow and ill-defined, are built by the male who sweeps out sediment from an area using fin and body movements (females occasionally display nest-sweeping behavior); male actively defends territory of about 1 m^2 around the nest site (Hansen 1965; Siefert 1968). Male guards nest area against egg predators and may court and spawn with several females (Siefert 1968).

Fecundity: Morgan (1954) reported fecundity, indicated by ovarian egg counts, markedly varied with size of female; 149 mm TL individual producing about 1,900 eggs, while a 330 mm TL fish produced 325,677 eggs. Fertilized eggs are adhesive, demersal, averaging 0.90 mm in diameter (Hansen 1943). Eggs hatch in 42 hours at water temperature of 22.8 degrees C and in 93 hours at 14.4 degrees C. Larvae remain in nest area until 4.1-4.6 mm TL, this length usually reached between 2.1-6.8 days (Siefert 1968).

Age at maturation: In Texas, some individuals mature at age 1 (Carlander 1977); in Illinois, maturity was reached by 2 or 3 years (Hansen 1951).

Migration:

Longevity: About 8 years, may live up to 10 years in more northern areas (Muoneke et al. 1992).

Food habits: Goldstein and Simon (1999) list first and second trophic level classifications as invertivore/carnivore and whole body, respectively. Carlander (1977) lists rotifers, copepod nauplii, and *Bosmina* as first foods eaten, with *Daphnia, Diatomus,* and *Leptodora* eaten as size increased; zooplankton primary food source during first year, with some amphipods and chronomids taken in late fall and early spring; entomostraca continues to be significant food source throughout life in most water; insects and forage fish usually main food source for large crappies. Threadfin shad (*Dorosoma petenense*) comprised over 97% of the volume of food in the diet of the Benbrook Lake, Texas population, except period from March – May when plankton and insect larvae contributed up to 45% (Greene and Murphy 1971).

Growth:In Texas, average condition increased with length and also when numbers of crappies were reduced, condition was highest in the winter when metabolic rates were low and were lowest in the spring, when food was scarce, improving in summer and fall; little evidence of sex differences in growth (Carlander 1977). Averages of fish from Mississippi were: 114 mm TL after one year, 171 mm TL after two years, 223 mm TL after three years, 245 mm TL after four, 281 mm TL after five, 291 mm TL after six, 333 mm TL after seven, and 365 mm TL after eight (Hammers and Miranda 1991).

Phylogeny and morphologically similar fishes

This species is most similar to the black crappie (*Pomoxis nigromaculatus*), drom which it differs in having 5-6 rather than 7-8 dorsal spines, a shorter dorsal fin base (length of the fin is less than distance from dorsal origin to the eye), more distinct bands on sides, and a somewhat shallower body. White crappie differs from all other sunfishes in having less than 10 dorsal spines (Ross 2001). *P. annularis* more tolerant of turbidity and siltation than *P. nigromaculatus* (Carlander 1977; Lee 1980). *P. annularis* known to hybridize naturally with black crappie (*P. nigromaculatus*); artificially crossed with other genera (Schwartz 1972; Travnichek et al. 1996).

Host Records

Species reported to host: *Gyrodactylus goerani* (Harris et al. 2004); Cestoda (2), Trematoda (9), Nemata (4), Acanthocephala (2), Copepoda (3; Mayberry et al. 2000).

Commercial or Environmental Importance

Although the natural range of this species through most of the south-central U.S., widely stocked as a game fish (Hubbs et al 1991). One of the most important game fishes in Lake Texoma (Oklahoma-Texas; Riggs and Bonn 1959). In Missouri**,** ranks as one of most popular panfishes, as it is fairly large in size and readily caught (Pflieger 1975).

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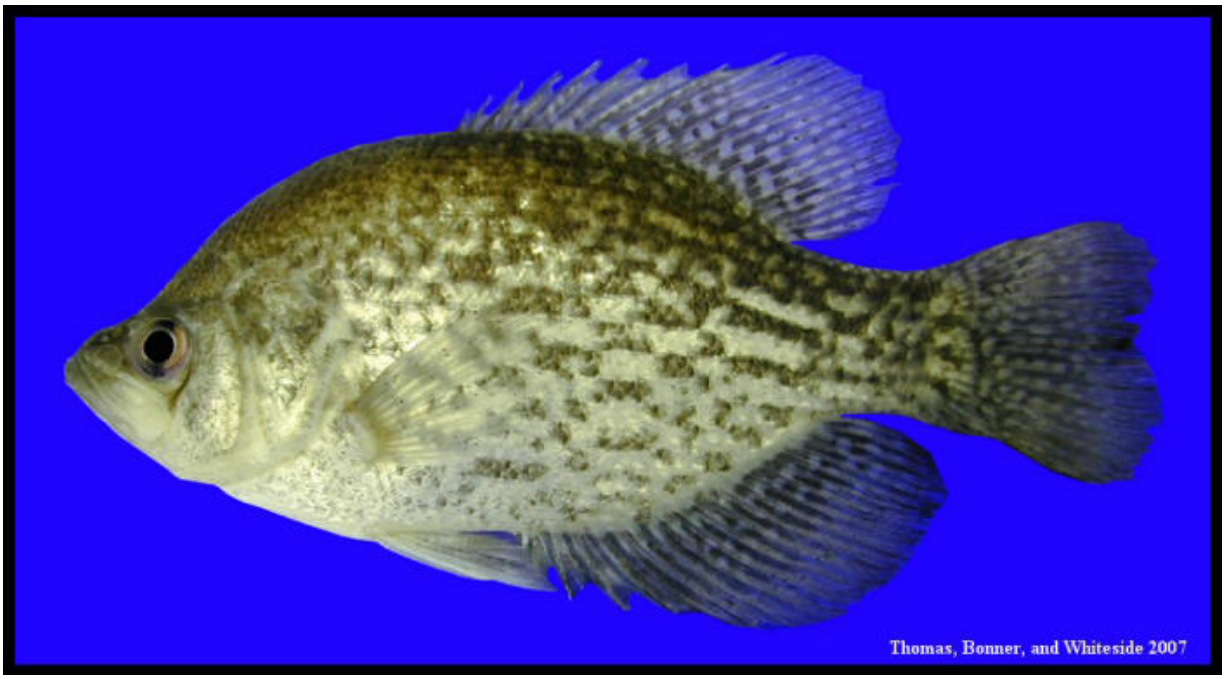

Pomoxis nigromaculatus
black crappie

Type Locality

Wabash River, Ohio (LeSueur 1829 *in*: Cuvier and Valenciennes 1829).

Etymology/Derivation of Scientific Name

Pomoxis – sharp opercle; as opposed to an extended in a flap as in some other sunfishes;
nigromaculatus – black spotted (Pflieger 1975).

Synonymy:

Cantharus nigro-mactulatus LeSueur 1829 *in*: Cuvier and Valenciennes 1829:65
Pomoxys nigromaculatus Hay 1881:500.
Pomoxis nigromaculatus Cook 1959:175.
Pomoxys sparoides Hay 1883:62
Pomoxis sparoides Hildebrand and Towers 1928:127
Pomoxis barberi Hildebrand and Towers 1928:128.

Characters

Maximum size: Up to 559 mm TL (Carlander 1977).

Life colors: Body pigmentation in scattered spots (Hubbs et al. 1991). Eyes yellowish brown; dark spot at margin of opercle. Upper head and back green with blueish, greenish, and silvery overtones; sides lighter green with randomly scattered dark splotches; ventral head and abdomen whitish. Dorsal, anal, and caudal fins with yellowish to greenish spots and vermiculations. Breeding male usually darker and more intensely colored than female

(Sublette et al.1990). Buchanan and Bryant (1973) note a black predorsal stripe, extending around the snout onto the chin, present in about 30% of specimens in some areas.

Counts: 7or 8 dorsal fin spines; 5-8 anal spines; 6 or 7 branchiostegals (Hubbs et al. 1991); 31-44 lateral line scales; about 29 long, slender gill rakers (Sublette et al. 1990); 14-16 dorsal rays; 17-19 anal rays; 14-15 pectoral rays (Ross 2001).

Body shape: Strongly compressed; greatest body depth about the origin of dorsal fin; back rounded (Sublette et al. 1991).

Mouth position: Terminal, oblique (Goldstein and Simon 1999).

External morphology: Length of dorsal fin base equal to or greater than distance from its origin to posterior margin of eye; lateral line present (complete and arched upward anteriorly; Ross 2001); scales ctenoid (Hubbs et al 1991); pectoral fins elongate, broad, rounded; pelvic fins thoracic, tips rounded; anal fin truncate to rounded; caudal fin slightly forked, lobes rounded (Sublette et al. 1990).

Internal morphology: Intestine well differentiated; peritoneum silvery; pyloric caecae present (Goldstein and Simon 1999); small, sharp teeth on jaws and palantines (Sublette et al. 1991).

Distribution (Native and Introduced)

U.S. distribution: Native range originally included eastern Great Plains, north through the Great Lakes region and east to the southern Atlantic coastal drainages of Virginia (Hubbs et al. 1991).

Louisiana distribution: This species is distributed statewide throughout Louisiana. It is very tolerant to a wide array of habitats but tends to be more common in backwaters of rivers and streams and in larger lakes with copious vegetation (Douglas 1974).

Texas distribution: Native range originally included the central part of the state eastward, exclusive of the Edwards Plateau (Hubbs et al. 1991). Warren et al. (2000) list the following drainage units for distribution of *Pomoxis nigromaculatus* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, NGO)

Populations in southern drainages are currently stable (Warren et al. 2000).

Habitat Associations

Macrohabitat: Inhabits large ponds and shallow areas of lakes (Lee 1980). Commonly found in slower sections of large streams, oxbow lakes, and reservoirs (Ross 2001).

Mesohabitat: Occurs in quiet warm waters; usually associated with abundant aquatic vegetation and sandy to muddy bottoms (Lee 1980). Occupy middle to upper sections of water column (Ross 2001). In reservoirs, they may be associated with inundated terrestrial vegetation, and as the material deteriorates over time, the black crappie may decline in abundance relative to the white crappie (Ball and Kilambi 1972). In Lake Texoma (Oklahoma-Texas), where the species was stocked shortly after impoundment, white crappie were reported by Riggs and Bonn (1959) to be very rare; only two specimens taken during 1954-1959, from a site along with several thousand white crappie. Fish move mostly at night or in the early morning, and in reservoirs (if not other habitats as well) tend to move from open waters during the day to shore at night (Guy et al. 1992; Keast and Fox 1992). Movement also increases during periods of rising barometric pressure (Guy et al. 1992).

Biology

Spawning season: In Texas, late March – early May (Schloemer 1947); in Florida, early spring (Reid 1949; Huish 1958).

Spawning habitat: In shallow water (Reid 1949; Huish 1958); fish prefer nesting areas near cover of some kind, especially emergent or floating vegetation (Reid 1949).

Reproductive Behavior: Guarders; nest spawners; phytophils, plant material nesters that have adhesive eggs and free embryos that hang on plants by cement glands. Species adapted to nesting on or above soft muddy bottoms (Simon 1999). Spawning behavior approximates that of the white crappie (*Pomoxis annularis*) except that nests are more associated with vegetation where possible and it may have a preference for cleaner substrates (Carlander 1977; Etnier and Starnes 1993). Males guard the nest, usually feeding on a close-by food source such as amphipods associated with vegetation during this time (Reid 1949).

Fecundity: Eggs demersal and adhesive; incubate in 48-68 hours at 18.3 degrees C; water-hardened, ripe eggs are small compared to other members of the family, averaging only 0.93 mm in diameter (Merriner 1971). Fish in the 3-8 year age group produce 3,000-188,000 eggs (Vessel and Eddy 1941).

Age at maturation:

Migration: Fish move into shallow water in early spring for spawning (Reid 1949; Huish 1958).

Growth and Population structure: In Alabama, fish averaged 136 mm TL after one year, 202 mm after two, 257 mm after three, and 299 mm TL after four years (Reed and Davies 1991).

Longevity: Up to 10 years (Huish 1958).

Food habits: Invertivore/carnivore (Goldstein and Simon 1999). Primarily nocturnal foragers, though may feed occasionally during the day (Huish 1958; Keast 1968a; Helfman 1981; Keast and Fox 1992). *Pomoxis nigromaculatus* are less efficient than white crappie (*P. annularis*) at taking fishes in turbid water, resulting in increased mortality of individuals

larger than 200 mm TL. Feeding activity may shift to late afternoon as a result of high turbidity (Ellison 1984). Very small fish eat mainly microcrustaceans (copepods and cladocerans) and midges (chironomids); fish about 60 - 115 mm TL consume mainly small crustaceans and small insect larvae and pupae, rarely fishes; fish 116 - 160 mm TL include fish regularly in the diet. Due to the fact that fish larger than 160 mm TL cannot ingest enough zooplankton to maintain a positive growth rate, they primarily consume minnows and sunfishes (Reid 1949; Ellison 1984). Keast and Webb (1966), Keast and Welch (1968), and Keast (1968a, 1968b) reported food volume up to 70% Chaoborus larvae, 50% cladocerans, 20% copepods, 25% fishes, 15% flying insects, 25% chironomid pupae and larvae, etc.; food habits of this species likely similar throughout range.

Phylogeny and morphologically similar fishes

The black crappie is most similar to the white crappie (*Pomoxis annularis*), but differs in having 7-8 rather than 5-6 dorsal spines, a longer dorsal fin base (the length of fin base is greater than or equal to the distance from dorsal origin to eye), and a somewhat deeper body. The black crappie differs from other centrarchids in having 7-8 dorsal spines versus 10 or more (Ross 2001). Black crappie generally prefer cleaner, deeper and cooler waters than do white crappie (Carlander 1977). Black crappie known to hybridize in nature only with the white crappie (*Pomoxis annularis*); artificially crossed with other genera (Schwartz 1972; Travnichek et al. 1996).

Host Records

Gyrodactylus goerani host**,** *Gyrodactylus lineadactylus* host (Harris et al. 2004). Listed for species throughout entire range: protozoans (14), trematodes (19), cestodes (5), nematodes (9), acanthocephalans (4), leeches (1; Hoffman 1967).

Commercial or Environmental Importance

In Texas, the black crappie has been widely introduced as a game species, although not to the extent of the white crappie (*Pomoxis annularis*; Hubbs et al. 1991). This species spawns about the same time as largemouth (*Micropterus salmoides*) or spotted (*Micropterus punctulatus*) basses, and is therefore less affected by bass predation; this may result in overpopulation and stunting (DeVries and Stein 1990; Reed and Davies 1991).

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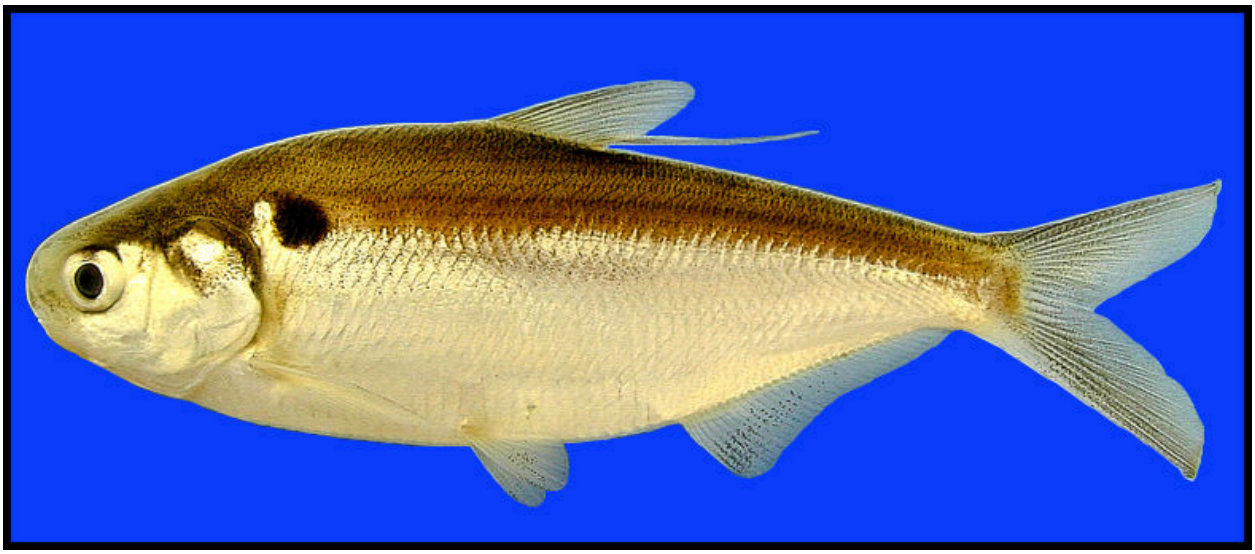
Clupeidae



Dorosoma cepedianum

gizzard shad

Type Locality

Delaware and Chesapeake bays (Lesueur 1818).

Etymology/Derivation of Scientific Name

Doro, meaning “lanceolate”; *soma*, meaning “body,” in reference to the body shape of the young; *cepedianum*, in honor of Bernard Germain Etienne de la Ville sur Ilion, Comte de La Cepede (1756-1825) who, during the French Revolution, was known as Citoyen Lacepede; it was during this time, amidst unfavorable conditions, that Lacepede authored *Histoire Naturelle des Poissons* (Scharph 2005).

Synonymy

Megalops cepediana Lesueur 1818:361.
Dorosoma cepedianum Hay 1881:502, 1883:67; Hildebrand and Towers 1928:114; Miller 1950:405, 1960:373; Cook 1959:67.

Characters

Maximum size: 521 mm (20.5 in) TL (Miller 1960).

Coloration: Dorsal region blue-green with 6-8 dark, horizontal stripes; lateral region silver-white with black shoulder spot; ventral region silver-white.

Counts: Anal fin soft rays 29-33 (Hubbs et al 1991); lateral scales59-67; midline of belly with 17-19 sharp scutes in front of pelvic fins and 10-12 behind (Miller and Robison 2004); dorsal fin soft rays 10-13 (Robison and Buchanan 1988).

Body shape: Deep body, laterally compressed.

Mouth position: Subterminal mouth.

Morphology: Blunt snout, adipose eyelid; axillary scale at base of pelvic fins; last ray of dorsal fin greatly elongated; ventral scales form a serrated edge. Gill rakers long and comblike (Miller and Robison 2004). Teeth present only on young fish; gizzard; long gut with numerous pyloric caeca; (Goldstein and Simon 1999).

Distribution (Native and Introduced)

U.S. distribution: Eastern part of US from Great Lakes to Mexico. Widely introduced.

Louisiana distribution: The gizzard shad is found in nearly all waters and dispersed statewide throughout Louisiana (Douglas 1974).

Texas distribution: Statewide; can be highly abundant in reservoirs, often constituting over half of the fish biomass (Hubbs et al. 1991). Warren et al. (2000) listed the following drainage units for distribution of gizzard shad in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

[*Additional literature noting collection of this species from Texas locations includes, but is not limited to the following*: Baughman (1946); Edwards and Contreras-Balderas (1991); Linam and Kleinsasser (1996); Gelwick et al. (2001).]

Abundance/Conservation status (Federal, State, Non-governmental organizations)

Currently stable in southern United States (Warren et al. 2000).

Habitat Associations

Macrohabitat: Natural inland lakes, ponds, and pools and backwaters of low gradient streams (Megrey 1980); reservoirs (Hubbs et al. 1991).

Mesohabitat: Species prefers warm water with high phytoplankton production; occupies littoral and limnetic regions in lakes and reservoirs. Commonly enters brackish water and occasionally marine waters (Megrey 1980). This species tolerates water temperatures as high as 35°C, 95° F (Miller 1960). Along the Texas coast, species found at salinities up to 33.7 ppt (Gunter 1945). As turbidity increases, larval shad will concentrate near the surface (Matthews 1984). Bodola (1966) noted that very young shad were found in mid-summer close to shore, usually in shallow water; shad older than age-group III were rarely found in shallow water; the preference for deeper water seemed to increase with age. Riggs and Bonn (1959) reported that gizzard shad were the most abundant species in Lake Texoma, Oklahoma and Texas, and its tail waters; juveniles and adults were commonly taken throughout the lake down to a depth of 40 feet, and large schools of young-of-year occurred frequently in shallow water or ranging through most parts of lake near the surface.

Biology

Spawning season: In fresh water, spawning occurs with rising water temperature, from April through June (Bodola 1966; Baglin and Kilambi 1968; Megrey 1980). In western Lake Erie, heaviest spawning occurred at water temperatures of 19.4°C (66.9° F) or greater (Bodola 1966).

Spawning Habitat:Nonguarders; open substratum spawners. Freshwater lithopelagophils; rock and gravel spawners with free pelagic embryos (Bodola 1966; Simon 1999). Bodola (1966) reported spawning on a bar in shallow water, with a substrate of sand, gravel, and boulders; eggs sink slowly after they are spawned, the capsules adhering to surfaces such as submerged aquatic plants and gravel upon contact.

Spawning behavior:Most spawning occurred during the evening and night; not all mature eggs are expelled at the same time, but female may spawn on more than one occasion (Bodola 1966). Schools of male and female shad swim near the surface, rolling and tumbling about each other; eggs and milt are released during the process (Miller 1960).

Fecundity: Depending upon size and age, females from Beaver and Bull Shoals reservoirs, Arkansas, contained about 20,000-170,000 mature ova (Kilambi and Baglin 1969). Range between 22,400 - 543,910 oocytes per fish measuring between 225-363 mm (8.86-14.3) SL; fish of 282-285 mm (11.1-11.2) SL had highest fecundity values (Bodola 1966). In Mississippi, Hildebrand and Towers (1928) reported collection, during the month of June, of a ripe female measuring 315 mm (12.4) in length and containing about 50,000 eggs. Hatching occurs in 95 hours at 16.1°C (61.0°F), or 36 hours at 26.7°C, 80.1°F (Bodola 1966; Robison and Buchanan 1988)

Age at maturation: Age 1 for a few; most by age 2; rarely at age 3 (Bodola 1966).

Migration: When ready to spawn, females migrated from deeper water to inshore spawning sites, returning to deeper water after spawning; males also migrated to the spawning sites (where they were 2-3 times as numerous as females;
Bodola 1966).

Growth and Population structure: In western Lake Erie, Bodola (1966) reported an abundance of age-groups 0, I, and II in samples, while age-group III was significantly less well represented, and older fish extremely scarce; seasonal growth was most rapid in July-August, and much reduced or absent January-April; males reached average standard lengths of 141 mm (5.55 in), 273 mm (10.7 in), 313 mm (12.3 in), 343 mm (13.5 in), and 349 mm (13.7 in), at the end of years 1-5, respectively; females attained standard lengths of 140 mm (5.51 in), 285 mm (11.2 in), 335 mm (13.2 in), 364 mm (14.3 in), and 386 mm (15.2 in), at the end of years 1-5, respectively. In Indiana, average standard lengths were 72 mm (2.83 in), 193 mm (7.60 in), 246 mm (9.69 in), 267 mm (10.5 in), 287 mm (11.3 in), and 325 mm (12.8 in) at the end of years 1-5, respectively. (Lagler and Applegate 1942).

Longevity: Up to 6 years (Kilambi and Baglin 1969).

Food habits: Goldstein and Simon (1999) list first and second level trophic classifications as herbivore and filter feeder, respectively. Completely herbivorous filter feeders (Whitehead 1985; Goldstein and Simon 1999).Juveniles feed on plankton (Goldstein and Simon 1999); adults consume zooplankton, microcrustaceans, phytoplankton, and detritus (Megrey 1980). Adults use hundreds of long, thin gill rakers to remove particulate matter from the water (Bodola 1966); adult fish also graze over the bottom ingesting detritus, sand and bottom ooze (Baker et al.1971).

Phylogeny and morphologically similar fishes

Closely related to *Dorosoma petenense* (threadfin shad), which has a terminal mouth, 42-48 lateral line scales, a shorter anal fin (20-27 rays), and fewer than 17 ventral scutes before the pelvic fins; the caudal fin and back are also more yellowish than in *D. cepedianum* (Miller and Robison 2004). Characteristics which differentiate *D. cepedianum* and *D. petenense* larvae: in fish ranging from 3-5 mm TL, *D. cepedianum* lack eye pigmentation, but the eye is pigmented in *D. petenense*; in fish ranging from 6-20 mm TL, *D. cepedianum* specimens have 46-54 total myomeres, while *D. petenense* specimens have 40-46 total myomeres; *D. cepedianum* sized >22 mm TL have 29-35 anal fin rays, while *D. petenense* sized >22 mm TL have 17-27 anal fin rays (Santucci and Heidinger 1986). Species hybridizes with *D. petenense* (Minckley and Krumholz 1960). *D. cepedianum* is superficially similar to *Hiodon alosoides* (goldeye), *Alosa chrysochloris* (skipjack herring), and *Brevoortia patronus* (Gulf menhaden) but differs in having an elongate last dorsal ray and median predorsal area naked and not crossed by scales (Boschung and Mayden 2004).

Host Records

Trematoda, Acanthocephala (Mayberry et al. 2000).

Commercial or Environmental Importance

Used as a forage fish in reservoirs, likely inhibits production of game fishes by interspecific competition when overabundant (Megrey 1980).

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Dorosoma petenense
threadfin shad

Type Locality
Lake Petén, Guatemala (Günther 1866).

Etymology/Derivation of Scientific Name
Doro, meaning "lanceolate";*soma*, meaning "body", in reference to the body shape of the young; *petenense*, for Lake Petén, Guatemala, the type locality (Scharpf 2005).

Synonymy
Meletta petenensis Günther 1866:603.
Signalosa atchafalayae Evermann and Kendall 1898:127.
Dorosoma petense Cook 1959:67.

Characters
Maximum size: 203 mm (7.99 in) TL (Lambou 1965).

Coloration: Dorsal region blue-green with yellow hue; lateral region silvery-white with black shoulder spot, ventral region silvery-white. Fins are yellow except for dorsal fin.

Counts: 40-48 lateral scales; 24-28 anal soft fin rays; 11-14 dorsal soft fin rays; 12-17 pectoral soft fin rays, 7-8 pelvic soft fin rays, 16-17 ventral scutes anterior to pelvic fin, and 9-11 postpelvic scutes (Miller 1963; Hubbs et al. 1991; Ross 2001).

Body shape: Deep body, laterally compressed.

Mouth position: Terminal mouth; level with eye (Hubbs et al. 1991).

Morphology: Adipose eyelid; axillary scale at base of pelvic fins; last ray of dorsal fin greatly elongated; ventral scales form a serrated edge. Numerous pyloric caeca (Goldstein and Simon 1999).

Distribution (Native and Introduced)

U.S. distribution: Native to Mississippi River drainage and gulf slope drainages from Florida to Central America (Hubbs et al. 1991).

Louisiana distribution: Common in most waters and distributed statewide in Louisiana (Douglas 1974).

Texas distribution: Eastern half of the state (Hubbs et al. 1991). Warren et al. (2000) listed the following drainage units for distribution of threadfin shad in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, Non-governmental organizations)

Currently stable in the southern United States (Warren et al. 2000).

Habitat Associations

Macrohabitat: Ponds, lakes, reservoirs, large rivers, and estuaries (Burgess 1980).

Mesohabitat: Generally pelagic midwater dwellers; prefer substrate of sand, mud, and organic debris (Wallus et al. 1990). Species often associated with flowing water (Burgess 1980), and moves in large schools (Wallus et al. 1990). In Texas, a preference is shown for brackish water with salinities of 10-20 ppt (Carlander 1969). Northern distribution limited by low tolerance of cold temperatures, 7-14°C (44.6-57.2°F) (Hubbs 1951; Burgess 1980). In laboratory experiments, Griffith (1978) found that feeding activity decreased at a water temperature of 10°C (50°F); fish were unresponsive to movements or vibrations when held at 6-7°C (42.8-44.6°F); fish did not survive when water temperature dropped below 5°C (41°F).

Biology

Spawning season: April through September; spawning reported to occur when temperatures are 14.4-27.2°C (57.9-81.0°F) (Carlander 1969; Wallus 1990).

Spawning location: In open waters, over plants or other objects (Miller 1963); spawn in aggregates under brush and floating logs, the eggs adhering to the brush (Carlander 1969; Burgess 1980; Wallus et al.1990).

Reproductive strategy: Nonguarders; open substratum spawners; phytophils - plant material nesters that have adhesive eggs and free embryos that hang on plants by cement glands (Wallus et al. 1990; Simon 1999). Threadfin shad school along the shoreline, with small groups of 1-2 females and 3-15 males breaking away and moving toward shore; the groups

swim erratically near surface, then move quickly toward a log, vegetation or other submerged object while releasing eggs and milt (Lambou 1965; Wallus et al. 1990).

Fecundity: Fecundity reported to range from 800-21,000 eggs (Wallus et al. 1990). A 102 mm female may have 6,700-12,400 eggs (Carlander 1969). Females of 100-140 mm SL carry 5,292-17,339 eggs (Kilambi and Baglin 1969).Mature ova range from 0.74 – 0.94 mm in diameter immediately prior to spawning; fecundity 900-21,000 eggs, this dependent on size of female (Johnson 1971).Fertilized eggs have a gelatinous covering; measure 0.75-1.20 mm in diameter; are spherical; demersal; adhesive to slightly adhesive; and light yellow, or opaque to creamy yellow; hatching occurs in 3 days at 26.7 °C (Wallus et al. 1990).Large die-offs reported after spawning (Berry et al 1959); however, a large number of females and males survived to reproduce again (Johnson 1971).

Age at maturation: Possibly age 0, most by age 1 (age class 1; Berry et al. 1959; Miller 1963; Carlander 1969; Burgess 1980).

Migration: After introduction into California in 1955, this species moved north to Yaquina Bay, or via marine migration (Burgess 1980).

Longevity: Up to age 2, in Florida (Berry et al. 1959) and age 4, in Arizona (Johnson 1970). Females tend to live longer (Parsons and Kimsey 1954).

Food habits: Planktivore (Carlander 1969; Burgess 1980); trophic subclass: filter feeder; trophic mode: pump filtration (Goldstein and Simon 1999).Diet includes phytoplankton such as blue-green bacteria, diatoms, and green algae; dipteran larvae; water mites; invertebrate eggs; and fish larvae (Haskell 1959; Miller 1967; Baker and Schmitz 1971; Goldstein and Simon 1999). Baker and Schmitz (1971) noted that threadfin shad feed more in the water column than does the similar species *D. cepedianum* (gizzard shad), thus ingesting less organic detritus.

Growth and Population structure: Length (TL) up to 130 mm (5.12 in) at age 0 (Carlander 1969).Females tend to reach larger sizes than males (Parsons and Kimsey 1954).

Phylogeny and morphologically similar fishes

Similar to *D. cepedianum* (gizzard shad), which has a subterminal mouth, 59-67 lateral line scales, a longer anal fin (29-35 rays), and17-19 sharp scutes before the pelvic fins; caudal fin and back of *D. petenense* are more yellowish than in *D. cepedianum* (Miller and Robison 2004).Characteristics which differentiate *D. petenense* and *D. cepedianum* larvae: in fish ranging from 3-5 mm TL, the eye is pigmented in *D. petenense*, but is not in *D. cepedianum*; in fish ranging from 6-20 mm TL, *D. petenense* has 40-46 total myomeres, while *D. cepedianum* has 46-54 total myomeres; *D. petenense* specimens >22 mm TL have 17-27 anal fin rays, while *D. cepedianum* specimens >22 mm TL have 29-35 anal fin rays(Santucci and Heidinger 1986). Often found in swifter flowing waters (e.g. bases of spillways) than *D. cepedianum* (Burgess 1980). Can hybridize with *D. cepedianum* (Minckley and Krumholz 1960). *D. cepedianum* is superficially similar to *Hiodon alosoides* (goldeye), *Alosa chrysochloris* (skipjack herring), and *Brevoortia patronus* (Gulf menhaden) but differs in

having an elongate last dorsal ray and median predorsal area naked and not crossed by scales (Boschung and Mayden 2004).

Host Records

Protozoa: *Crytobia* sp. (Hoffman 1967).

Commercial or Environmental Importance

Widely introduced as a forage fish in reservoirs (Hubbs et al. 1991).

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Cyprinidae

Picture by Chad Thomas, Texas State University-San Marcos

Notemigonus crysoleucas
golden shiner

Type Locality
New York (Mitchill 1814 *in:* Eschmeyer 1990).

Etymology/Derivation of Scientific Name
Notemigonus, Greek, "angled back;" *crysoleucas*, Greek, meaning "golden white," in reference to the body color (Pflieger 1997).

Synonymy
Cyprinus crysoleucas Mitchill 1814 *in:* Eschmeyer 1990:23.
Notemigonus chrysoleucas Hay 1881:512, 1883:71.
Notemigonus crysoleucas Hildebrand and Towers 1928:117; Cook 1959:103.

Characters
Maximum size: 367 mm (14.4 in) TL (McLane, 1955).

Coloration: Eyes and medial fins usually yellow-green (Hubbs et al 1991). Silver to olive green on back and upper sides, light gold or silver on lower sides, and silvery white undersides. Gold colors in fish inhabiting waters stained with tannins and silver colors in fish from clearer water. Fins clear to dusky. Males develop submarginal orange bands (more pronounced on leading rays) on the dorsal, caudal, anal, and pelvic fins, in the spring. Small fish have dark lateral band (Ross 2001).

Counts: Pharyngeal teeth in 0,4-4,0 or 0,5-5,0; 17-19 gill rakers on first gill arch (Hubbs et al 1991, 2008); 39-51 lateral line scales, 8 dorsal fin soft rays, 12-16 anal fin soft rays, 13-14 pectoral fin soft rays, and 9 (8-10) pelvic fin soft rays (Ross 2001).

Body shape: Deep, strongly compressed laterally; head triangular, small (Scott and Crossman 1973).

Mouth position: Oblique, nearly superior, opening narrow (Scott and Crossman 1973).

Morphology: Abdomen behind pelvic fins with fleshy keel over which the scales do not pass; gill rakers long and slender; lateral line greatly decurved; premaxillaries protractile; upper lip separated from skin of snout by a deep groove continuous across the midline; distance from origin of anal fin to end of caudal peduncle contained two and one-half or fewer times in distance from tip of snout to origin of anal fin (Hubbs et al 1991). Etnier and Starnes (1993) give a tubercle description provided by R. E. Jenkins: Nuptial males develop small, scattered tubercles on the side of the head from the internasal area to the occiput, on sides of the head, especially on posterior and ventral portions of opercles, and on lower jaw and brachiostegal rays; all lateral scales have several tiny, marginal tubercles; tiny tubercles occur on rays of all fins, including both dorsal and ventral surfaces of pectoral and pelvic fin rays.

Distribution (Native and Introduced)
U.S. distribution: Atlantic Slope from the Canadian Maritime Provinces south to Florida, west to Texas, and North to Saskatchewan (Lee 1980).

Texas distribution: Widely distributed throughout the state, primarily as a result of bait releases; species probably native only to the streams of eastern Texas (Hubbs et al 1991)

Abundance/Conservation status (Federal, State, Non-governmental organizations)

Populations in southern drainages are currently stable (Warren et al. 2000)

Habitat Associations

Macrohabitat: Water with access to shallow areas. Common to abundant in ponds and lakes. Often in streams and rivers where it may be abundant in sluggish areas (Lee 1980).

Mesohabitat: Slow, deep areas of streams and in oxbow lakes and reservoirs, commonly with submerged aquatic vegetation, but may also be fairly common in turbid oxbow lakes and sluggish streams (Cooper et al 1982); turbid waters of sluggish streams (Rose and Echelle 1981); turbid, shallow pools and riffles with sand and clay substrate, and turbid streams with very soft sand/silt substrate (Linam et al. 1994). Can survive at temperatures up to 40°C (104°F) (Alpaugh 1972). Enters brackish water (6.8 ppt. salt) in lower Mobile Delta (Swingle 1971).

Biology

Spawning season: In spring or summer, when water temperatures are above 20.6°C (69.1°F) (Cooper 1935).

Spawning habitat: Adhesive eggs attach to filamentous algae or other aquatic plants (Cooper 1935), and apparently sometimes over nests of largemouth bass (*Micropterus salmoides*), as their larvae benefit from the guarding habits of the males (Kramer and Smith 1960; Chew 1974).

Spawning Behavior: No information at this time.

Fecundity: Up to 200, 000 (NCWRC 1962). Eggs measuring 1 mm (0.04 in) in diameter (Cooper 1935). Four day incubation at approximately 24-27°C (75.2-80.6°F) (Dobie et al. 1956).

Age at maturation: Second or third summer, depending on rate of growth; maturity usually reached at a total length of 64-89 mm (2.52-3.50 in) (Cooper 1935).

Migration: Diel migrations from the littoral to limnetic zone. Golden shiners schooled in the littoral zone during the day, breaking up and migrating to open water regions just after sunset (Hall et al. 1979).

Growth and Population structure: Studies on 1, 058 shiners from 20 Michigan natural water localities show an average growth rate of approximately 76 mm (3.00 in) TL during second summer, 102 mm (4.02 in) TL during third summer, 114 mm (4.45 in) TL during fourth summer, and 140 mm (5.51 in) TL during the sixth. Females grow faster and attain a larger size (Cooper 1935). Newly hatched golden shiner larvae ranged from 4.0-4.3 mm (0.16-0.17 in) TL; For further larval development information see Buynak and Mohr (1980).

Longevity: Maximum age of eight summers; females live longer than males (Cooper 1935).

Food habits: Invertivore/herbivore; particulate feeder; midwater and surface feeder (Simon 1999). Main foods: Cladocera 90% by volume, flying insects 20%, chironomid pupae 30%, and filamentous algae (Keast and Webb 1966). Consume zooplankton during the lowlight hours after sunset and just before sunrise (Hall et al 1979). Will filter feed on smaller zooplankton, which may be beneficial when larger zooplankton are less abundant, or light level precludes capture of larger zooplankton (Ehlinger 1989).

Phylogeny and morphologically similar fishes

Notemigonous crysoleucas hybridizes with the morphologically similar rudd (*Scardinius erythrophthalmus*). *Notemigonous crysoleucas* differs from *S. erythrophthalmus* in lacking bright red fins and in having an unscaled (as opposed to scaled) abdominal keel, a higher lateral scale count (39-51 versus 38-41), and more gill rakers (16-23 versus 10-13) (Burkhead and Williams 1991).

Host Records

Trematoda: *Dactylogyrus auratus, Dactylogyrus aureus, Dactylogyrus parvicirrus, Posthodiplostomum minimum* (Mayberry et al., 2000). Hoffman (1967) lists the following parasites from species in North American waters: protozoans
(2), trematodes (15), cestodes (3), nematodes (3), acanthocephalans (3), leeches (3), and crustaceans (3).

Commercial or Environmental Importance

Scott and Crossman (1973) stated, “The golden shiner may well be the most popular of all bait fishes in North America.”

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Picture by Chad Thomas, Texas State University-San Marcos

Hybognathus nuchalis
Mississippi silvery minnow

Type Locality
Quincy, IL (Agassiz 1855).

Etymology/Derivation of Scientific Name
Hybognathus, Greek, "swollen jaw;" *nuchalis*, Latin, pertaining to the nape (Pflieger 1997).

Synonymy
H. argyritis removed from synonomy of *H. nuchalis* by Pflieger (1971). The Committee on Names of Fishes (Robins et al. 1980) recommended the addition of Mississippi to the common name, a modifier indicative of its geographic range (Becker 1983).

Hybognathus nuchalis Agassiz 1855:224.
Triodon amnigenus Hay 1883:68.

Characters
Maximum size: To 180 mm (7.09 in) (Page and Burr 1991).

Coloration: Belly and sides silvery. Iridescent, green-gold mid-dorsal stripe is broad and present anterior, as well as posterior to the dorsal fin (Fingerman and Suttkus 1961). Breeding male with light yellow along the sides and lower fins, and small tubercles on the body and fins (Becker 1983).

Counts: Pharyngeal teeth 0,4-4,0 (Page and Burr 1991). 34-41 lateral line scales; fewer than 10 dorsal fin soft rays (Hubbs et al. 1991); usually 8 anal soft fin rays; 15-16 pectoral fin soft rays (Fingerman and Suttkus 1961). 11-15 scale rows across belly (counted just in advance of pelvic insertion, excluding lateral line scales; Hubbs et al.1991).

Body shape: Subterete, with rounded profile (Fingermann and Suttkus 1961).

Mouth position: Small, slightly subterminal mouth, rear edge of mouth in front of eye (Page and Burr 1991).

Morphology: Scales with 10 radii (grooves); head width about equal to distance from tip of snout to back of eye; eye contained in snout about one and one-half times; first obvious dorsal fin ray a thin splint, closely attached to the following well developed but unbranched ray; lower lip thin; lateral line usually not decurved, either straight or with broad arch; premaxillaries protractile; upper lip separated from skin of snout by a deep groove continuous across the midline; distance from origin of anal fin to end of caudal peduncle contained two and one-half or fewer times in distance from tip of snout to origin of anal fin (Hubbs et al.1991). In spring, the nuchal region is somewhat swollen (Forbes and Richardson 1920). Intestine long and coiled, more than twice the length of the body (Hubbs et al.1991).

Distribution (Native and Introduced)
U.S. distribution: Mississippi basin from MN south to Brazos River, TX, and Mobile Bay drainage, AL (*H. nuchalis*); Rio Grande drainage of NM and TX (*H. amarus*; Pflieger 1980).

Texas distribution: Found in eastern TX streams, from the Brazos River eastward and northward to the Red River (Hubbs et al 1991).

Abundance/Conservation status (Federal, State, Non-governmental organizations)

Populations in southern drainages are currently stable (Warren et al. 2000).

Habitat Associations

Macrohabitat: Common in pools and backwaters of medium to large streams with low or moderate gradients (Pflieger
1980). In Texas, adults likely to inhabit smaller tributary streams and not the Brazos River main stem (Winemiller et al.
2004). Etnier and Starnes (1993) note that main stem rivers may be important to the early development or another aspect of life history.

Mesohabitat: Moderate current; silty, muddy, or rocky substrate (Fingerman and Suttkus 1961).

Biology

Spawning season: January through April (Burr and Mayden 1982). In Wisconsin, from the end of April or early May until at least the end of July. Females with mature eggs 0.8 mm (0.03 in) diameter were taken from two creeks, tributaries to the lower Wisconsin River, in mid and late July; no gravid females were found in collections made in August and September (Becker 1983).

Spawning habitat: Calm waters along the edge of streams and in the backwaters and overflow pools of large rivers (Burr and Mayden 1982). Adams and Hankinson (1926) note breeding principally in creeks and rivers in shallow water, in or near riffles.

Spawning Behavior: Lithopelagophils; rock and gravel spawners with pelagic free embryos. (Simon 1999).

Fecundity: In the Wisconsin River, in June, an individual , 102 mm (4.02 in) TL and 8.84 g, had ovaries 9.3% of the body weight, which contained 2, 054 yellow mature eggs 0.8-0.9 mm (0.03-0.04 in) diameter. A second female, 107 mm (4.21 in) TL and 10.75 g, held 3,105 mature eggs 0.7-0.9 mm (0.03-0.04 in) diameter; the ovaries were 9.3% of the body weight. No smaller, white, immature eggs were observed (Becker 1983).

Age at maturation: Two years (Becker 1983). Some females reach maturity at age 1 (Mansueti and Hardy 1967).

Migration: No information at this time.

Growth and Population Structure: In Wisconsin, reported growth averaged 75 mm (2.95 in) TL at age 1 and 100 mm (3.94 in) TL at age 2 (Becker 1983).

Longevity: 2 years (Becker 1983).

Food habits: Feeds in large schools near bottom, ingesting mud and bottom ooze from which it digests algae and other organic matter (Forbes and Richardson 1920). The long intestine facilitates the digestion of algae and other plant material (Page and Burr 1991). Hlohowskyj et al. (1989) indicated that the pharyngeal papillae of members of *Hybognathus* are arranged in an elaborate pattern and may be used as a filtering apparatus for trapping small food items.

Phylogeny and morphologically similar fishes:

Hybognathus nuchalis body shape is subterete; that of *H. hayi* is compressed. *H. hayi* has an angular profile; *H. nuchalis*
is rounded and individuals of the species lack diamond-appearing scales. Melanophores of the anterior part of the lateral
band of *H. hayi* are small and only slightly larger than the melanophores on the upper part of the sides and back, while the
large melanophores of the anterior part of the lateral band of *H. nuchalis* are usually noticeably larger than the melanophores
above the band. The median dorsal stripe in front of the dorsal fin is wider and darker in *H. nuchalis*. *H. hayi* has a much
shorter intestine in proportion to the standard length than does *H. nuchalis*. Snout is broadly rounded in *H. hayi* and can
hardly be seen when specimens are viewed ventrally, while the snout of *H. nuchalis* is more pointed and projects anteriorly
beyond the upper lip by about twice the thickness of the upper lip (Fingerman and Suttkus 1961).

Host Records

Trematoda (Posthodiplostomum minimum (Texas) (Mayberry et al., 2000).

Commercial or Environmental Importance

Commercially used as bait fish for larger game fish of inland fisheries (Becker 1983).

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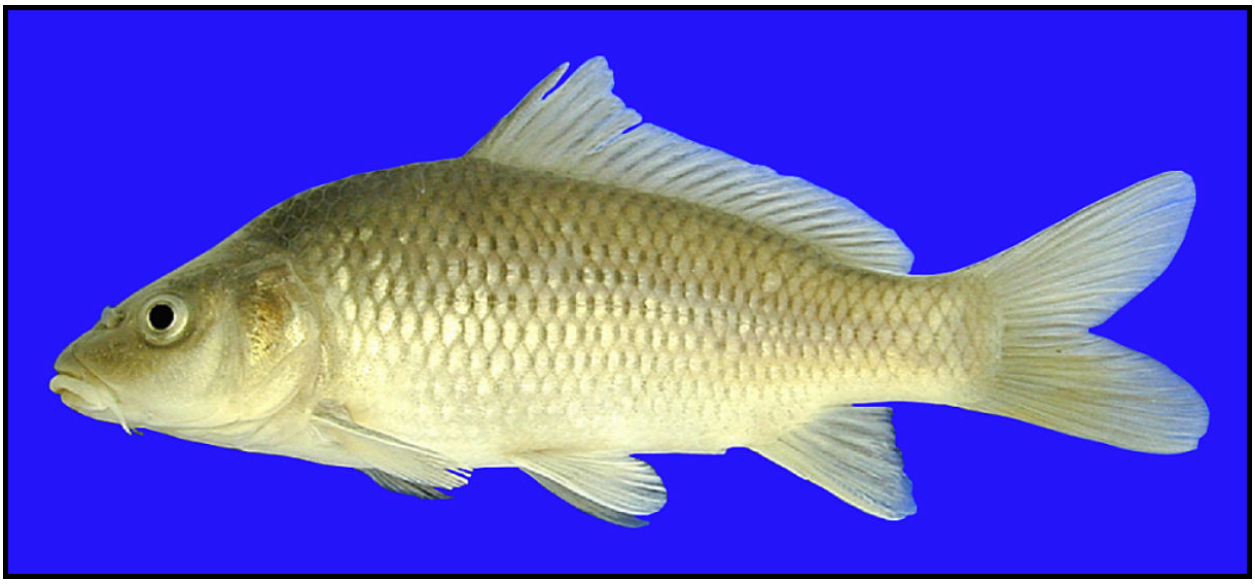

Cyprinus carpio
common carp

Type Locality
Europe (Linneaus 1758).

Etymology/Derivation of Scientific Name
Cyprinus – generic name first used by Linnaeus and probably derived from Cyprus, the island home of Venus, and an indirect reference to the fish's fecundity; *carpio* – Latin word for carp which was used by the Roman and Celtic peoples of Europe (Moyle 1976).

Synonymy
No information at this time.

Characters
Maximum size: Up to 1220 mm TL (Allen 1980).

Coloration: Dorsal region olive to gray; lateral region yellow-gold with silvery sheen; ventral region pale yellow. Dorsal and caudal fins gold-olive, other fins yellowish. Breeding males have a darker shade of the colors mentioned above with orange-gold fins. Juveniles have a dark vertical bar on caudal fin base. Peritoneum dusky (Goldstein and Simon 1999).

Pharyngeal teeth count: 1, 1, 3-3, 1, 1 (Hubbs et al. 1991). May encounter 1,2,3-3,2,1.

Counts: 35-38 lateral line scales (Hubbs et al. 1991); 21-33 gill rakers; 19 caudal fin soft rays; 18-22 dorsal fin soft rays; 4-6 anal fin soft rays; 14-18 pectoral fin soft rays; 8 or 9 pelvic fin soft rays (Heufelder and Fuiman 1982; Ross 2001).

Body shape: Deep bodied and compressed.

Mouth position: Terminal on young, becoming subterminal as fish age (Page and Burr 1991; Ross 2001).

Morphology: Pharyngeal teeth are molar-like (Goldstein and Simon 1999). Upper jaw with barbels on each side; some morphologies without barbels (Hubbs et al. 1991). Serrated spinous rays on dorsal and anal fins. Swee and McCrimmon (1966) noted that nuptial tubercles are typically present on the head and pectoral fin rays of the male during the spawning season.

Distribution (Native and Introduced)

U.S. distribution: Introduced in 1877; widely distributed in North America below 50th parallel; south to panhandle of Florida, west through Mississippi River basin, becoming less common in western United States (Allen 1980).

Louisiana distribution: Found typically in larger impounded water and large rivers. This species tends to inhabit lowlands of south central Louisiana where rice field drainage canals (Douglas 1974).

Texas distribution: Introduced statewide.

Abundance/Conservation status (Federal, State, Non-governmental organizations):

Broad and stable distribution in North America (Panek 1987).

Habitat Associations

Macrohabitat: Small backwater areas to large rivers and reservoirs. Most abundant in large bodies of water (Hubbs et al. 1991).

Mesohabitat: Ubiquitous among habitats (Allen 1980) usually avoid swift currents. In the Sulphur River, Texas, one of four dominant species in open-water group collections; positively associated with greater depths in the upstream reach and with pool habitats during the high flow range (Morgan 2002).). Upper lethal limit reported to range between 36°C and 41°C; species moderately tolerant of low dissolved oxygen conditions, with decrease in feeding and growth apparent at oxygen concentrations less than 3 ppm; species extremely tolerant of turbidity caused by particulate matter (clay, silt), the lethal level approaches 165,000 ppm (Panek 1987). Reported from brackish marshes with salinities up to 14 ppt (Crivelli 1981); however this species is rarely found in brackish areas as high salinities cause excretory problems and may interfere with water balance (Panek 1987). Young fish will bury themselves in mud or sand in an effort to avoid predation by birds (Panek 1987).

Biology

Spawning season: April to August, in Wisconsin (Miller 1952). Early-June to mid-July, in Lewis and Clark Lake (Missouri River), with water ranging between 18.3-23.9°C (Walburg and Nelson 1966). In Ontario, Canada, mid-May to early-August, with water temperatures ranging between 17 and 27°C; peak activity at 19-23°C (Swee and McCrimmon 1966). Spawning occurs from early spring (Panek 1987) to early summer (Breder and Rosen 1966).

Spawning location: Phytolithophils - nonobligatory plant spawner that deposit eggs on submerged items in shallow areas (Breder and Rosen 1966; Swee and McCrimmon 1966; Balon 1981; Simon 1999).Known to spawn in rivers, lakes, marshes, forested swamps, ponds, and sheltered, vegetated areas of streams; over aquatic vegetation, tree roots, on mud bottoms, and over debris covering bottom(Breder and Rosen 1966; Heufelder and Fuiman 1982; Panek 1987). In Ontario, Canada, spawning typically occurred in shallow water with muck bottom where eggs were scattered over available vegetation (Swee and McCrimmon 1966); occurred in shallow flooded area with abundant fixed vegetation, in southern France (Crivelli 1981).

Reproductive strategy: Nonguarders; open substratum spawners; phytolithophils: late hatching larvae with cement glands in free embryos, have larvae with moderately developed respiratory structures, and have larvae that are photophobic (Swee and McCrimmon 1966; Balon 1981; Simon 1999). Spawning occurs in shallow water, both day and night, and is accompanied by much splashing. One or more males will chase the female, prodding her in an effort to induce extrusion of eggs. Eggs and milt are released into the water during this process; the eggs sinking and adhering to aquatic vegetation, algae, or firm substrates (Breder and Rosen 1966; Panek 1987).

Fecundity: Eggs ranging from 36,000 to 2,208,000 (Swee and McCrimmon 1966; Crivelli 1981; Panek 1987).Eggs demersal, adhesive, 1.5-2.1 mm (0.06-0.08 in) in diameter; incubation period 90 hours at 13-17°C (55.4-62.6°F), 50 hours at 25-32°C (77.0-89.6°F) (Heufelder and Fuiman 1982; Panek 1987).Females can spawn multiple times a year (Swee and McCrimmon 1966).

Age at maturation: Variable; males generally mature by age 2 and females at age three (Panek 1987). Of Canadian populations, Swee and McCrimmon (1966) noted that males mature at ages 3 – 4, females at ages 4 – 5.

Migration: Relatively sedentary, at times they move moderate distances in streams, likely relating to habitat suitability (Funk 1955).In rivers, common carp may migrate long distances to find suitable spawning conditions; in large reservoirs inhabit overwintering areas near shallows were they will spawn (Panek 1987).

Longevity: Seldom beyond 20 years in the wild (Panek 1987), maximum known is 47 years for a fish kept in a pond; common carp in warmer waters live <11 years (Carlander 1969).

Food habits: Species classified as invertivore/detritivore; benthic/filter feeder; grazer/suction feeder; main diet items include plant tissue, aquatic insects, crustaceans, annelids, and mollusks (Goldstein and Simon 1999). Feeding usually occurs in shallow water, by rooting through the substrata; however, *C. carpio* also consume plankton suspended in midwater, and insects or plankton trapped in the surface film. Bottom feeding individuals take mouthfuls of benthic organic matter and release it in the water column in order to select certain food items. *C. carpio* actively feed at sunrise and sunset. Diet of young primarily consists of small crustaceans, snails, and midge larvae; zooplankton selected from water column is sometimes

an important diet item. Adults are omnivorous, consuming varying amounts of plant (rooted plants, algae, organic debris) and animals (midge larvae, crustaceans, small snails, freshwater clams). Pharyngeal teeth are well adapted for crushing and grinding larger food items (Panek 1987). Populations in two Colorado streams fed primarily on chironomid larvae and pupae; gut contents of stream fish also yielded large amounts of algae, sand, detritus, and terrestrial invertebrates. Fish inhabiting a Colorado pond fed primarily on chironomids, but also consumed large amounts of entomostracans and crayfish (Eder and Carlson 1977). In Lewis and Clark Lake (Missouri River), food items in order of volumetric importance were organic detritus (61%), insects (19%), microcrustaceans (10%), and phytoplankton (9%)(Walberg and Nelson 1966).

Growth:Highly variable; maximum average length (TL) is 445 mm (17.5 in) by the end of age 1,622 mm (24.5 in) by the end of age 2, 703 mm (27.7 in) by the end of age 3, 782 mm (30.8 in) by the end of age 4, and 831 mm (32.7 in) by the end of age 5 (Carlander 1969).

Phylogeny and morphologically similar fishes:

Subfamily Cyprinidae within the cyprinid group(Cavender and Coburn 1992). Often hybridizes with the non-native goldfish, *Carassius auratus* (Breder and Rosen 1966; Allen 1980). Goldfish (*Carrassius auratus*) lack barbels, and molar-like pharyngeal teeth.

Host Records:

Algae; Fungi; Protozoa (extensive); Trematoda (extensive); Cestoda; Nematoda (extensive); Leeches; Mollusca; Crustacea (extensive; Hoffman 1967; Panek 1987).

Commercial or Environmental Importance:

Individuals disturb benthos and increase turbidity as they stir up the bottom when feeding; consequently species is regarded as pest fish in North America (Allen 1980; Panek 1987).

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Ictaluridae

Ameiurus natalis
yellow bullhead

Type Locality
North America (Lesueur 1819).

Etymology/Derivation of Scientific Name
Ameiurus, Greek, meaning "privative curtailed," in reference to the caudal fin lacking a notch; *natalis*, Latin, meaning "having large buttocks" (Simon and Wallus 2004).

Synonymy
Pimelodus natalis Lesueur 1819:154.
Ameirus natalis Hildebrand and Towers 1928:121; Boschung 1989:69.
Ictalurus natalis Cook 1959:154 (Ross 2001).

Characters
Maximum size: 470 mm TL (Carlander 1969).

Coloration: Yellow-olive, brown, brownish black, or slate black above; bright yellow, yellow-white, or milk white below (Jones et al. 1978); chin barbels whitish (Knapp 1953; Hubbs et al. 1991). Peritoneum gray (Goldstein and Simon 1999).

Counts: 24-27 anal fin rays (Knapp 1953 ; Hubbs et al. 1991) ; 15-16 caudal fin rays (branched); 6 dorsal fin rays (Tin 1982).

Body shape: Moderately elongate, robust body, little compressed laterally; thick caudal peduncle (Simon and Wallus 2004); head rounded (Hubbs et al. 1991).

Mouth position: Terminal, slightly subterminal (Goldstein and Simon 1999).

External morphology: Caudal fin rounded; eye contained in snout length 2.6 or more times; adipose fin free at tip (Knapp 1953; Hubbs et al. 1991).

Internal morphology: Ratio of digestive tract to total length is DT 1.3 TL; intestine well differentiated (Goldstein and Simon 1999); premaxillary band of teeth on upper jaw without a lateral backward extension on each side (Hubbs et al. 1991).

Distribution (Native and Introduced)
U.S. distribution: Wide ranging in eastern North America (Hubbs et al. 1991).

Texas distribution: Occurs throughout all but the Trans-Pecos and Panhandle drainages (Hubbs et al. 1991). Warren et al. (2000) listed the following drainage units for distribution of *Ameiurus natalis* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, NGO)

Populations in the southern United States are currently secure (Warren et al. 2000).

Habitat Associations

Macrohabitat: Lakes, ponds, and slow moving streams (Knapp 1953; Glodek 1980; Simon and Wallus 2004). Collected from oxbow lakes (Zeug et al. 2005), in addition to the river channel of the middle Brazos River (Texas; Winemiller et al. 2000). Occurred throughout the Little River system (tributary of the Brazos River, central Texas); frequently found in the clear streams of the Balconian Province (Rose et al. 1981). According to Riggs and Bonn (1959), this species is known only from Briar and Buncombe creeks in Lake Texoma (a reservoir in Oklahoma and Texas), were it has been taken occasionally.

Mesohabitat: Common in areas of heavy vegetation in shallow water (Glodek 1980; Simon and Wallus 2004). Species prefers soft bottom and heavy weeds; inhabits clear and muddy waters, in lakes or rivers (Cahn 1927). Collected in greatest abundance at stations in a clear and shallow stream characterized by sand and clay substrate and heavy canopy cover from trees and willows; species was most common catfish in the upstream reach of Allens Creek (Brazos River), Texas (Linam et al. 1994). Results of a seven-year study to determine the effect of vegetation removal on fish populations in Lake Conroe (a large reservoir in Texas), showed no significant change in biomass or density of the *Ameiurus natalis* population (Bettoli et al. 1993). Relatively sedentary (Ball 1944; Shoemaker 1952); tagged specimens in a 10-acre lake traveled within 91 m area from point of release (Ball 1944). In Missouri streams, species sedentary, with tendency to travel greater distances upstream than downstream (Funk 1955). At an acclimation temperature of 25°C, specimens measuring 46-116 mm TL had critical thermal maxima (loss of equilibrium) of 38.0 ± 0.44°C, and an upper lethal tolerance of 39.8 ± 0.92°C (Carveth et al. 2004). In a study of diel activity, fish exhibited a nocturnal activity pattern (Reynolds and Casterlin 1977). In Target Lake, Wisconsin, Greenbank (1956) studied the movement of various fish species under the ice, and suggested that movement of *Ameiurus natalis* was conditioned by a reduction in light intensity; movement of this species was greatest when water was in virtual darkness.

Biology

Spawning season: Mid-May – early-June (Fowler 1917; Jones et al. 1978). Generally takes place during a two week time period, in the months of May – July depending on the region (Fowler 1917; Simon and Wallus 2004).

Spawning location: Spleophils – hole nesters (Wallace 1972; Simon 1999). In Illinois lakes, spawning occurs in heavy banks of weeds; in rivers, up under overhanging branches or at the entrance of deserted muskrat burrows (Cahn 1927). Adhesive eggs are laid in the hollow or small nest (usually only somewhat larger than the fish), or burrow (up to 60 cm long) and attach to vegetation (Fowler 1917).

Reproductive strategy: Guarders; nest spawners (Cahn 1927; Simon 1999). Both male and female excavate the nest; male will guard and brood the young, continuing their care for sometime after young leave the nest (Fowler 1917). In captivity, both male and female participated nest excavation by fanning with fins; the female also moved pebbles out of area using snout, and carried away gravel in her mouth. During spawning, male and female lie parallel facing opposite directions, each placing caudal fin over head of the other. Male arched ventral area toward urogenital area of female. This act was repeated several times and the eggs were deposited. After spawning, the female was chased from the nest and the male returned to fan and guard the nest site (Wallace 1972).

Fecundity: Usually 300 to 700 yellowish-white, adhesive eggs are deposited in a nest (Fowler 1917). In Minnesota, during the first week of July, three specimens, 254-279 mm TL, had egg counts of 3,950-4,270 (Vessel and Eddy 1941). A 282 mm TL specimen, collected from the Ouachita River drainage in Louisiana, contained 5387 ovarian eggs, 243 of which were ripe (Simon and Wallus 2004). Jones et al. (1978) reported fecundity of 1650-7000. Ripe ovarian eggs are light orange to orange (Simon and Wallus 2004). Fertilized eggs approximately 2.5-3.0 mm in diameter (Wallace 1969, 1972). Incubation period of 5-10 days at unspecified temperature (Jones et al. 1978; Simon and Wallus 2004).

Age/Size at maturation: Age 2 or 3, at a minimum length of 140 mm (Simon and Wallus 2004). Jones et al. (1978) reported that sexual maturation is reached during 3rd year, at a minimum size of about 127 mm.

Migration: No spawning migration (Simon and Wallus 2004).

Longevity: Six years (Schoffman 1955).

Food habits: Goldstein and Simon (1999) listed first and second trophic classifications for this species as invertivore/carnivore, and benthic/whole body, respectively. Stomachs from Virginia specimens contained decapods (Astacidae, Palaemonidae), ephemeropteran nymphs, annelid, coleopteran, and unidentified insect parts (Flemer and Woolcott 1966). Diet includes available animal matter, such as fish, crayfish, or any refuse they might find; mostly inactive during the day, feeding at dusk and far into the night (Cahn 1927).

Growth: Average growth in Reelfoot Lake, Tennessee: 184 mm TL (age 1), 333 mm (age 2), 371 mm (age 3), 402 mm (age 4), and 429 mm (age 5; Schoffman 1955). Growth rates in smaller streams may be considerably slower; in a small tributary in western Mississippi, Ross (2001) collected age class 2 and 3 fish measuring less than 200 mm SL.

Phylogeny and morphologically similar fishes:

Ameiurus natalis similar to the black bullhead *Ameiurus melas*; differs in having light chin barbels as opposed to black, having the third and fifth anal rays about equal to the posterior rays, and having a higher anal ray count (usually 24-27 versus 19-24; Ross 2001).

Host Records:

Mayberry et al. (2000) listed parasite species infecting Texas populations of *Ameiurus natalis* including Cestoda: Proteocephalidae, *Proteocephalus ambloplitis*; Trematoda: *Alloglossidium kenti*, *Cleidodiscus pricei*, *Phyllodistomum caudatum*, *Posthodiplostomum minimum*, *Gyrodactylus*; Nemata: *Spinectus carolini*, *Spinectus microcantus*, *Spyroxis contorta*.

Commercial or Environmental Importance:

Whittier and Hughes (1998) reported *Ameiurus natalis* to be tolerant or moderately tolerant of the following five ecosystem stress factors in lakes of the northeastern United States: eutrophication, turbidity, human activity in the watershed and along the shoreline, and species introductions; overall classification of species in this study was moderately tolerant. The yellow bullhead is said to be an excellent panfish (Cahn 1927; Knapp 1953).

[*Additional literature noting collection of this species from Texas locations includes, but is not limited to the following*: Hubbs (1954); Evans and Noble (1979); Kleinsasser and Linam (1987); Linam and Kleinsasser (1987a, 1987b); Matthews et al. (1996); Armstrong (1998).]

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Ictalurus furcatus
blue catfish

Type Locality

New Orleans (Lesueur 1840).

Etymology/Derivation of Scientific Name

Ictalurus, Greek, meaning “fish cat;” *furcatus*, Latin, meaning “forked,” in reference to the tail fin (Pflieger 1997).

Synonymy

Pimelodus furcatus Lesueur 1840:136.
Ictalurus furcatus Hildebrand and Towers 1928:119; Cook 1959:137.

Characters

Maximum size: 1194 mm TL (Glodek 1980).

Coloration: Back bluish grey; sides silvery grey (diffuse spotting apparent in some preserved specimens); abdomen grayish white (Sublette et al. 1990). Breeding male dark blue (Moyle 1976). Rio Grande River, Texas population reportedly differs from other blue catfish in that the juvenile and young are very speckled and many adults retain their spots (Wilcox 1960).

Counts: Anal fin rays 30-36 (Hubbs et al 1991); 6 dorsal rays; 8-10 pectoral rays; 8 pelvic rays; 14-21 gill rakers (Ross 2001).

Body shape: Moderately robust, elongate (Ross 2001); head rounded (Hubbs et al. 1991).

Mouth position: Subterminal (Goldstein and Simon 1999); lower jaw never protrudes beyond the upper jaw (Graham 1999).

External morphology: Caudal fin deeply forked; head rounded; adipose fin free at tip, not joined to caudal fin; eyes present (Hubbs et al 1991).Genital orifices of the male and female are distinct; in the male, papilla is more prominent with a circular opening; in the female, it is more recessed and the opening is slitlike (Moyle 1976).

Internal morphology: Premaxillary band of teeth on upper jaw without a lateral backward extension on each side (Hubbs et al 1991); swim bladder is restricted, forming two approximately equal chambers (Ross 2001).

Distribution (Native and Introduced)

U.S. distribution: Native to major rivers of Mississippi, Missouri, and Ohio basins of central and southern United States, south into Mexico and northern Guatemala; introduced to Rappahannock and James drainages, Virginia (Glodek 1980). Numbers in their native range have been greatly reduced due to alteration of riverine habitats, particularly on the periphery of their range (Graham 1999).

Louisiana distribution: The blue catfish can be found in larger streams throughout Louisiana and has been noted in drainage canals, impoundments, and silted bayous (Douglas 1974).

Texas distribution: Ranges in all except the northwestern part of the state (Hubbs et al. 1991). Warren et al. (2000) list the following drainage units for distribution of *Ictalurus furcatus* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, NGO)

Populations in southern drainages are currently stable (Warren et al. 2000).

Habitat Associations

Macrohabitat: In Texas, blue catfish usually inhabit larger rivers and streams (Hubbs et al 1991).

Mesohabitat: Inhabits mostly swift chutes and pools of noticeable current, and silt-free sand, gravel and rubble substrates (Glodek 1980; Pflieger 1975, 1997). Normally found in open waters of large reservoirs and main channels, backwaters, and in flowing rivers with strong current where water is normally turbid (Burr and Warren 1986).Will enter brackish water with salinities up to 3.7 ppt; occasionally found in salinities of 11-15 ppt (Perry 1968; Christmas and Waller 1973).

Biology

Spawning season: Occurs in late spring and early summer at water temperatures of 21-25 degrees C (Sublette et al. 1990). In Louisiana, spawning in April and May (Jordan and Evermann 1916; Pflieger 1975); in Illinois, spawning occurs in June (Smith 1979).

Spawning location: Nest (cavity) constructed by the male, often in pools and backwaters (Sublette et al. 1990; Simon 1999).

Reproductive behavior: Guarders; nest spawners; speleophils – hole nesters (Simon 1999). Nesting habits are similar to those of channel catfish (*Ictalurus punctatus*; Pflieger 1975). Nest is constructed and cared for by the parents until the young hatch (Smith 1979).

Fecundity: NA

Age/Size at maturation: In Louisiana, males are mature by 4th year at length of 490 mm TL; females at 5th year, at length of 590 mm TL (Perry and Carver 1973).

Migration: May undertake seasonal movements in response to changes in water temperature. In the lower Mississippi River, reported to move farther down river where water is warmest in winter, running upstream in summer (Jordan and Evermann 1916; Pflieger 1975).

Growth and Population structure: In Lake Texoma, Oklahoma, fish reach 5.7 inches at the end of 1st year, and averages 10, 13.8, 17.4, 21, 25.8, 30.3, 34.3, 40.4, 42.1 and 44 inches at the end of succeeding years (Jenkins 1956). Growth of *Ictalurus furcatus* in Lake Texoma is more rapid than that of channel catfish (*I. punctatus*), and almost the equivalent to that of the flathead catfish (*Pylodictus olivaris*; Pflieger 1975). In Sardis Reservoir in northern Mississippi, and in Kentucky Lake on the Tennessee River, blue catfish reached a TL of 88-135 mm after one year, and TL of 166-198 mm, 251-266 mm, 297-330 mm, 356-392 mm, 429-456 mm, 510-513 mm, 582-614 mm, and 698 mm for years 2-9, respectively (Conder and Hoffarth 1965; Schultz 1967).

Longevity: At least 14 years (Kelley 1969); Ross (2001) and Smith (1979) note that life expectancy is likely over 20 years due to large sizes found.

Food habits: First and second level trophic classifications listed as invertivore/carnivore and benthic/whole body, respectively; main food items including an array of invertebrates, fishes, and occasionally frogs (Goldstein and Simon 1999). Food items widely varied, seemingly upon prey availability. Some populations feed primarily on fishes, especially small minnow; in coastal areas, mainly bay anchovies (*Anchoa mitchilli*), but consuming crustaceans (penaeid shrimp and small crabs) as well. Other populations feed more on invertebrates such as crayfishes, larval dragonflies, hellgrammites, chironomid larvae, and mayfly larvae (Brown and Dendy 1961; Darnell 1961; Lambou 1961). Three general feeding stages noted during growth: Fish smaller than 100 mm SL feed in the water column on zooplankton (including calanoid copepods and mysid shrimp, in coastal areas). Individuals from 100-240 mm SL feed on small bottom-inhabiting invertebrates including immature aquatic insects, amphipods, mud crabs (*Rhithropanopeus*), mollusks (such as rangia clams, mussels, gastropods), and organic detritus. At 240 mm SL and larger, fish feed on large, mobile organisms including shrimp, crabs and fishes (Darnell 1958; Minckley 1962; Perry 1969; Davis 1979). Davis (1979) reported increased feeding activity at night, especially between midnight and sunrise.

Phylogeny and morphologically similar fishes

Ictalurus furcatus is a member of the *I. furcatus* species group, which is the sister group to the *I. punctatus* clade (Lundberg 1992). *I. furcatus* most closely resembles the headwater catfish (*I. lupus*) and the channel catfish (*I. punctatus*) but differs by a smaller eye situated more anteriorly; a longer and straighter margin on the anal fin; a median keel-like crest anterior to the dorsal fin; a crest on the dorsal edge of the opercle; the sides lacking dark spots; and a higher number of anal rays (*I. furcatus* usually >32; *I. puntatus* usually 25-28; *I. lupus* usually <25; Sublette et al. 1990).

Host Records

Commercial or Environmental Importance

Ictalurus furcatus considered recreationally valuable in the state of Texas, and is used to add diversity to fisheries (Graham 1999). *Ictalurus furcatus*, or its hybrid with the channel catfish (*I. punctatus*), has been reared commercially. However, the majority of commercial production of catfish in the United States is from *Ictalurus punctatus* (Stickney 1986; Sublette et al. 1990). Graham (1999) noted that the species lacks popularity with aquaculturists, but hybrids developed with channel catfish are frequently used in fee-fishing lakes because of their rapid growth and aggressive disposition. Related fossil ictalurid, *Ictalurus lambda*, known from Pliocene deposits of Kansas (Hubbs and Hibbard 1951).

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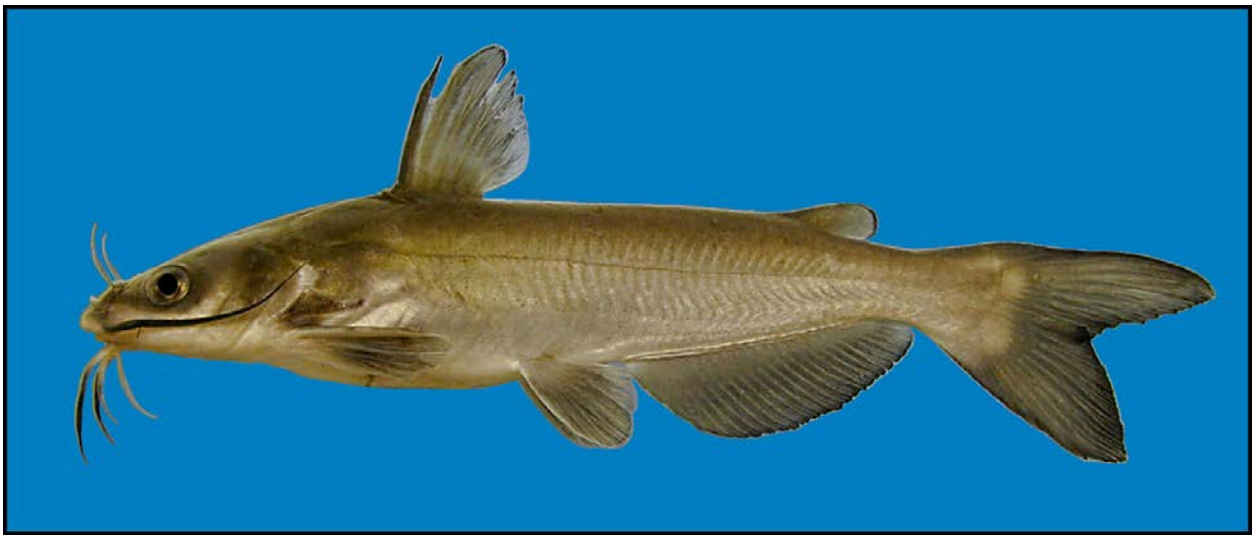

Ictalurus punctatus
channel catfish

Type Locality
Ohio River (Rafinesque 1818).

Etymology/Derivation of Scientific Name
Ictalurus, Greek, meaning "fish cat;" *punctatus*, Latin, meaning "spotted," in reference to the dark spots on the body (Pflieger 1997).

Synonymy
Silurus punctatus Rafinesque 1818b:355.
Ictalurus punctatus Hay 1881:513, 1883:72; Hildebrand and Towers 1928:120; Cook 1959:136.
Ictalurus anguilla Hildebrand and Towers 1928:120.

Characters
Maximum size: 1270 mm TL (Glodek 1980).

Life colors: Juvenile fish silvery to pinkish white, with margins of the dorsal, adipose, caudal, and anal fins outlined in black. Larger fish dark blue along back and upper sides; females are lighter colored than males. Heads of breeding males blue-black. Fingerling catfish develop black spots by about 60-70 mm SL; spots gradually disappear in fish older than 3-5 years (Canfield 1947). Nasal barbels unpigmented to lightly speckled with melanophores, becoming darker in older fish. In small fish, barbels on lower jaw are unpigmented, in large fish they are dusky. Long maxillary barbels usually dusky (Ross 2001).

Counts: Anal fin rays 27-29 (Hubbs et al. 1991) ; 6-7 dorsal rays; 7-9 pectoral rays; 8-9 pelvic rays; 13-18 gill rakers (Ross 2001).

Body shape: Elongate (Ross 2001).

Mouth position: Subterminal (Goldstein and Simon 1999).

External morphology: Lateral line complete, terminating at the base of the caudal rays (Sublette et al. 1990). Pectoral fin spine contained less than five times in standard length; caudal fin deeply forked; head rounded; adipose fin free at tip, not joined to caudal fin (Hubbs et al. 1991). Males with a distinctive urogenital papilla extending posteriorly, which is absent in females; there being one opening behind the vent in males, and two openings behind the vent in females (Moen 1959). In males, the head is wider than the body; in females, head is scarcely as wide as body (Davis 1959). In breeding male, head becomes massive because of the swelling of the cranial musculature. Fin membranes thickened in breeding males (Sublette et al. 1990). Breeding males also have thickened lips and swellings behind the eyes (Crawford 1957).

Internal morphology: Premaxillary band of teeth on upper jaw without a lateral backward extension on each side (Hubbs et al. 1991). Intestine well differentiated, coiled; peritoneum speckled with black; no pyloric caecae present (Goldstein and Simon 1999).

Distribution (Native and Introduced)

U.S. distribution: Widespread east of the Rocky Mountains in temperate North America (Hubbs et al. 1991).

Louisiana distribution: Found in most lakes and rivers of the United states and is found statewide in Louisiana (Douglas 1974).

Texas distribution: Ranges throughout state; presumably not native, but introduced, to the upper Rio Grande and Pecos basins (Hubbs et al. 1991). Warren et al. (2000) list the following drainage units for distribution of *Ictalurus punctatus* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, NGO)

Populations in the southern United States are currently secure (Warren et al. 2000).

Habitat Associations

Macrohabitat: Medium to large rivers (Glodek 1980). Etnier and Starnes (1993) noted species adaptation to additional habitats including reservoirs, natural lakes, farm ponds, and larger trout streams.

Mesohabitat: Clear water, with swift currents over sand or gravel-rocky bottoms (Glodek 1980). In the Guadalupe River system, Texas, juveniles most often taken in riffles, while

adults more common in pools (Hubbs et al. 1953). May enter brackish water (Scott and Crossman 1973), but seem to be limited by salinities of 1.7 ppt; occasionally collected at salinities of 11 ppt (Perry 1968; Ross 2001). Species prefers temperature range of 28-30 degrees C (Cheetham et al. 1976). However, fish can survive higher temperatures; upper lethal temperature for species ranges from 36.6-37.8 degrees C for acclimation temperatures of 26-34 degrees C (Allen and Strawn 1968). Becker (1983) notes that channel catfish are found in clear, rocky, well-oxygenated streams, as well as slow-moving, silty streams; often found downstream from power dams where water is fairly rapid. Further, in streams, young fish inhabitat slow riffles and turbulent areas near sand bars; adults are found under big rocks in deep pools or under log jams, during the day, entering shallow water at night. In Wisconsin, channel catfish collected in turbid water over substrates (decreasing order of frequency) of mud, sand, clay, gravel, silt, rubble, and boulders. Young fish form daytime aggregations near the bottom during their first 4-10 months of life; aggregations disperse nightly with fish moving along the bottom (Brown et al.1970).

Biology

Spawning season: Late spring and early summer (Ross 2001) occurs when the water warms to approximately 16-24 C (Appelget and Smith 1950; Crawford 1957; Jearld and Brown 1971).

Spawning location: Male selects a suitable site, usually a log or under rocks, sometimes female participates in site preparation (Clemens and Sneed 1957).

Reproductive strategy: Guarders; nest spawners; speleophils - hole nesters (Simon 1999). In streams, male locates suitable dark cavity or crevice under a ledge where rock strata outcrop in the channel, or beneath roots of a tree undercut by the current. In a lake or reservoir, under highly turbid conditions, nests may be made directly on the bottom in the mud. Normal development of young does not require a current or rocky substrate for spawning. Nail kegs, earthenware crocks, or milk cans are provided for fish spawning in ponds or hatcheries (Becker 1983). According to Marzolf (1957), 2-3 “telescoped” kegs provide a hollow area for spawning fish; the spawn is usually deposited in the middle keg. Prior to spawning, nest site is cleaned by the male, who vigorously fans with his fins and body (at times the female may participate in nest preparation; Clemens and Sneed 1957); the male then awaits a female that is ready to deposit her eggs (Davis 1959). Males may coat inside of nest area with mucus, creating a waxy appearance. Spawning occurs during the day, and the spawning female leaves or is chased away from nest by the male afterward. Male then guards nest and fans nest with fins (Brown 1942; Clemens and Sneed 1957). In Missouri ponds, fry normally remain in nest about 7 days, and are defended by the male (Marzolf 1957).

Fecundity: Spawning period from 4 – 6 hours; 150 eggs laid about 9 times per hour, for a total of 8,000 eggs. Females weighing 0.45 – 1.81 kg produced about 8,800 eggs per kilogram of body weight. Females usually void all eggs when they spawn (Clemmens and Sneed 1957). Large, yellowish eggs are 3.5-4.0 mm in diameter (Menzel 1945). Fertilized eggs hatch in 6 days at 25.0 degrees C and in 10 days at 15.6 degrees C (Brown 1942; Clemens and Sneed 1957). In Texas ponds, Toole (1951) reported eggs hatching in 5-10

days. Incubation of eggs at temperatures above 36 degrees C frequently results in deformed vertebrae (Allen and Strawn 1968).

Age/Size at maturation: In Texas ponds, catfish reported to mature 18 months after hatching (Carlander 1969). In Louisiana coastal areas, (with salinities up to 3.5 ppt) individuals mature by 2nd or 3rd year, at 330 – 339 mm TL for males and 350 – 359 mm TL for females (Perry and Carver 1973). Normally, fish are not mature until attaining a total length of 305 mm (Appelget and Smith 1950); as a result of wide variation in growth rates, fish may mature in 2-5 years or longer in more northern areas (DeRoth 1965).

Migration: Movement of reservoir populations increases during or immediately following periods of increased river flow. Reservoir and river populations of channel catfish show a general trend for upstream migration in the spring, followed by downstream movement in the fall (Duncan and Myers 1978; Dames et al. 1989). Dames et al. (1989) reported river populations showing greater movement in spring than in other seasons. Adults are capable of moving considerable distances in streams, though usually not more than 161 km (Funk 1955; Welker 1967); Dames et al. (1989) reported an individual in the Missouri River, Missouri, traveling 469 km upstream in a 72 day period (averaging 6.5 km/day); an individual in the St. Johns River, Florida, traveled 108 km upstream in 22 days (4.9 km/day; Hale et al. 1986).

Longevity: Normally live at least 6-10 years, though longer life spans have been reported (Sneed 1951; Conder and Hoffarth 1965; Jearld and Brown 1971); in Colorado, an introduced population included fish living 22 years (Tyus and Nikirk 1990); 40-year-old fish recorded in Canada (Carlander 1969).

Food habits: First level trophic classification: invertivore/carnivore; second level trophic classification: benthic/whole body (Goldstein and Simon 1999); consuming a variety of items including organic detritus, aquatic insect larvae and pupae, zooplankton and fishes. Main invertebrate prey items include midge larvae (chironomids), black fly larvae (simuliids), caddisflies, shrimp (astacids), and isopods. Fishes in diet includevarious minnows (Cyprinidae) and gizzard shad (*Dorosoma cepedianum*; Bailey and Harrison 1945; Dendy 1946; Mathur 1971; Robinette and Knight 1981; Weisburg and Janicki 1990); may also eat plants including filamentous green algae; Menzel 1945). Feeding activity in larger rivers with turbid water is mainly focused toward chironomids, caddisfly larvae, and other organisms inhabiting the bottom; minimal relationship between composition of organisms drifting in water column and food habits (Weisburg and Janicki 1990). In reservoirs, zooplankton (especially *Daphnia*), detritus of fine sand and mud, and fishes compose mush greater portion of diet (Mathur 1971). Flooding of streams allow channel catfish to eat terrestrial prey including earthworms, crickets, centipedes, and even mice and rats, as they are able to move out onto the inundated floodplains (Robinette and Knight 1981). Carlander (1969) listed unusual items found in stomachs, such as a snake skin, an adult bobwhite, and hydroids. Species feeds most actively from sundown – midnight, at water temperatures between 10-34.4 degrees C (Bailey and Harrison 1945). Numerous taste buds are located on the barbles and other areas of the fish aiding in the detection of prey (Joyce and Chapman 1978). Larval fish (alevins) feed primarily on midge larvae and pupae (Chironomidae); most activity occurring a few hours after dusk or just before dawn. Alevins remain inactive, on or

buried in the stream bottom, during the day. However, they are frequently found drifting in the water column at night, probably as a result of being displaced by currents as they are actively feeding along the bottom, rather than entering the water column purposefully (Armstrong and Brown 1983). Insects are primary food item of fish smaller than 102 mm TL (Bailey and Harrison 1945). While fish larger than 102 m TL continue to consume aquatic insects, they may begin to ingest large species of mayflies and caddidflies rather than small midges. Large fish show a greater tendency to take terrestrial insects, as well (Bailey and Harrison 1945). In Maryland, caddisfly larvae were an important food item of a wide size range of fish in large-river environment populations, composing 40-60% of the biomass of diet; midge larvae was a main food item (25-55% of biomass), and increased in importance in fish over 200 mm TL (Weisburg and Janicki 1990). According to Darnell (1958, 1961), in coastal areas, small bottom-inhabiting crustaceans (amphipods, isopods, xanthid crabs), midge larvae and pupae, and organic detritus were diet items of fish 76 – 119 mm SL. Larger fish included these same items, in addition to more fishes and larger crustaceans. Bailey and Harrison (1945) and Busbee (1968) reported fish larger than about 279 – 381 mm TL consuming fishes.

Growth:Growthextremely variable. Respective ranges of total lengths expected through the first 8 years of life in the Tennessee area were reported by Carlander (1969): 86 – 163, 170 – 239, 206 – 290, 241 – 333, 269 – 366, 295 - 404, 325 – 427, and 462 – 495 mm.Variable growth of populations in northern Mississippi reservoirs reported: averages of 72 – 102 mm TL after one year, 132 – 189 mm, 203 – 272 mm, 266 – 341 mm, 304 – 370 mm, 353 mm, and 425 mm for years 2-7, respectively (Schultz 1967). Appelget and Smith (1950) calculated total lengths from vertebrae at the end of each year of life from fish collected in a pool of the Mississippi River, in Lansing, Iowa: 1 – 75 mm; 2 – 161 mm; 3 – 231 mm; 4 – 299 mm; 5 – 361 mm; 6 – 423 mm; 7 – 488 mm; 8 – 536 mm; 9 – 620 mm; 10 – 676 mm; 11 – 658 mm; and 12 – 709 mm. Optimal temperature range for growth is apparently 28-30 degrees C (Cheetham et al. 1976).

Phylogeny and morphologically similar fishes

Ictalurus puntatus most closely resembles the headwater catfish (*I. lupus*), but the former is distinguishes by usually ≥25 anal fin rays (usually <25 for *I. lupus*) and caudal fin in younger specimens deeply forked with pointed lobes. *Ictalurus punctatus* can be distinguished from the blue catfish (*I. furcatus*) by the rounded anal fin (margin of anal fin almost straight in *I. furcatus*; Sublette et al. 1990). *Ictalurus punctatus* can be readily hybridized with the blue catfish (*I. furcatus*), and hybrids have a higher rate of growth than either parent (Stickney 1986).

Host Records

Cestoda (4); Trematoda (8); Nemata (6); Copepoda (4; Mayberry et al. 2000).

Commercial or Environmental Importance

Ictalurus puntatus is the most widely cultivated warm water species in North America (Stickney 1986).

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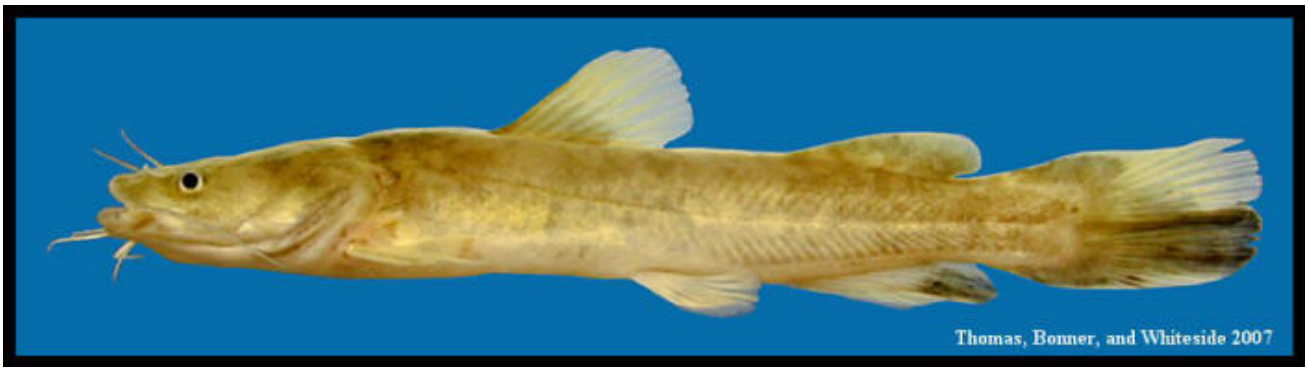

Pylodictis olivaris
flathead catfish

Type Locality

Ohio River (Rafinesque 1818).

Etymology/Derivation of Scientific Name

Pylodictis, Greek, meaning "mud fish;" *olivaris*, Latin, meaning "olive-colored" (Pflieger 1997).

Synonymy

Pilodictus olivaris Hay 1881:514.
Leptops olivaris Hay 1883:74; Evermann 1899:306; Hildebrand and Towers 1928:121.
Pylodictus olivaris Cook 1959:140.

Characters

Maximum size: 1410 mm TL (Carlander 1969).

Life colors: Back and sides gray to brown with dark brown-black mottling that may extend ventrally onto belly. Undersides of head and body white to yellow. Nasal and maxillary barbells dark; chin barbells white to yellow. In large fish, chin barbels may be slightly dusky, never black. Adipose fin dusky or mottled, frequently having a light margin in small fish. Pelvic, pectoral, and dorsal fins densely covered with melanophores in the basal half to three-quarters of the fins, the remaining marginal areas unpigmented. Anal fin dusky, frequently having a black marginal band. Caudal fin dusky. Immature fish have a light-colored patch on the tip of the upper lobe of the tail, which seems to disappear when fish mature (Ross 2001).

Counts: 8-10 gill rakers; 6-7 dorsal rays; 16-17 (14-17) anal rays; 8-11 pectoral rays; 9 pelvic rays (Ross 2001).

Body shape: Slender, elongated; becoming moderately robust as adults (Ross 2001). Head depressed (Hubbs et al. 1991).

Mouth position: Terminal (Goldstein and Simon 1999). Lower jaw projects forward beyond the upper jaw (Ross 2001).

External morphology: Adipose fin free at tip, not joined to caudal fin (Hubbs et al 1991). Anal fin base quite short, length goes into SL 5.3-6.3 times. Small eyes (Ross 2001). Males have prominent posteriorly directed genital papilla with a small rounded urogenital opening at tip. Females have a recessed genital papilla with a larger urogenital opening that appears as a long slit. Urogenital opening of adult female becomes inflamed in late spring and summer (period of greatest spawning activity; Johnson 1950; Turner and Summerfelt 1971). Genital papilla of immature females invaginated and hardly discernable (Turner and Summerfelt 1971).

Internal morphology: Premaxillary band of teeth on upper jaw with a lateral backward extension on each side (Hubbs et al. 1991). Ratio of digestive tract (DT) to total length (TL): DT 1.0 TL (Goldstein and Simon 1999).

Distribution (Native and Introduced)

U.S. distribution: Ranges throughout the Mississippi, Ohio, and Missouri basins southward along the Gulf drainages to Mexico (Hubbs et al. 1991).

Louisiana distribution: This species typically occurs in larger rivers and found most commonly in the deeper pools of low gradient streams and rivers. They tend to be more abundant below dams of major impoundments and common in rotenone samples of reservoirs in more north-eastern areas of the state (Douglas 1974).

Texas distribution: Species occurs statewide (Hubbs et al. 1991). Warren et al. (2000) list the following drainage units for distribution of *Pylodictis olivaris* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, NGO)

Southern drainage populations are currently stable (Warren et al. 2000).

Habitat Associations

Macrohabitat: Characteristic of deep holes of medium and large-sized rivers (Glodek 1980). Large streams (Minkley and Deacon 1959).

Mesohabitat: Deep, quiet pools of main rivers, being found in tributary streams only in deep pools adjacent to the main stream (Cowley and Sublette 1987).Young-of-the-year live in rubble bottomed riffles until between 2 and 4 inches in length. At that size fish become more evenly distributed in the stream; some remain in riffles, but more move into pools, deeper riffles, and into almost all other habitats. This random distribution seems the rule in fish ranging from 4 to 12 inches in length. Individuals measuring 12 to 16 inches in length were associated with cover at intermediate depths in the stream, while larger individuals, more

then 16 inches in length, almost invariably near more massive logs and drift usually in or near deep holes in the stream bed (Minkley and Deacon 1959).

Biology

Spawning season: In Texas, late June and July (Hubbs et al. 1953; Munger and Deacon 1959).

Spawning location: Nests constructed under logs or other concealing cover (Breder and Rosen 1966).

Spawning Behavior: Guarders; nest spawners; spleophils – hole nesters (Simon 1999). Nests constructed by both male and female. After chasing female from the nest, male remains to guard nest and care for eggs and young (Breder and Rosen 1966). Henderson (1965) reported that males in Texas hatchery pens behaved viciously while guarding eggs; male would “tear the female to pieces” when she attempted to enter the spawning jar which contained eggs; a number of females that had spawned were killed by the male, in spite of efforts to remove the female from the area as soon as possible.

Fecundity: Eggs are gelatinous, adhesive(Breder and Rosen 1966). In small hatchery-reared brood fish, spawns numbered from 3,000-5,000 eggs (Henderson 1965). In Kansas, Minckley and Deacon (1959) reported that females of 305-610 mm TL can produce from 6,900-11,300 eggs, averaging 2.8-3.2 mm diameter. Depending on size of females ranging from 1.05-11.66 kg, in an Oklahoma reservoir, 4,076 – 58,792 eggs were laid; ripe eggs averaged 3.7 mm diameter (Turner and Summerfelt 1971). Snow (1959) reported egg mass weighing slightly less than 1,089 g (2.4 lb) which contained about 15,000 eggs. Giudice (1965)reported hatching of eggs in 6-7 days at 23.9-27.8 degrees C; Snow (1959) reported hatching in 9 days at 24-25.9 degrees C, fry averaging 11 mm long.

Age/Size at maturation: In Texas reservoirs, individuals become sexually mature between ages 2 and 5 at a total length between 290 and 635mm (Munger et al. 1994).
Minckley and Deacon (1959) reported mature males at 3-4 years, and females at 4-5 years. Carlander (1969) reported males usually maturing at 3-5 years old, after exceeding 38 cm TL, while females mature at 4-6 years old, and in excess of 46 cm TL.

Migration: Sedentary (Funk 1957; Robinson 1977; Dames et al., 1989; Jackson 1999), with 1-3 'home sites' they return to after nighttime movements (Vokoun and Rabeni 2005).

Growth and Population Structure: Ross (2001) summarized large amount of age and growth data, noting that rates vary considerably among areas, and seem to be higher if individuals make early transition to a fish diet. In general, fish reach 51-353 mm TL at the end of one year, and 168-484 mm, 238-649 mm, 374-758 mm, 497-843 mm, 581-951 mm, 795-1054 mm, 824-1099 mm, and 1100 mm TL at ages 2-14 respectively.

Longevity: Lifespan can exceed 19 years (Carlander 1969).

Food habits: First and second level trophic classifications are invertivore/carnivore, and benthic and drift/whole body, respectively; feeding behavior: passive predator. Main food items of juveniles are microcrustaceans and insect larvae; main food items of adults are crayfishes, clams, and particularly fishes including *Carpiodes carpio, Notropis buchanani, N. lutrensis, N. stramineus, Semotilus atromaculatus, Ictalurus punctatus, Noturus nocturnus, Pylodictis olivaris, Lepomis megalotis, Percina phoxocephala,* and *Aplodinotus grunniens* (Minckley and Deacon; Goldstein and Simon 1999; Jackson 1999). Primarily nocturnal feeders (a time when prey are more vulnerable to visual deception; Moyle 1976) that forage in a wide variety of habitats (Etnier and Starnes 1993), including area shallow enough to expose dorsal fin (Trautman 1957); most feed by lunging and seizing prey after lying motionless (Minkley and Deacom 1959). Trautman (1957) reported having seen large individuals lying motionless on the bottom with an open mouth; personal communications from local Ohio fisherman conveyed reports of cover-seeking prey swimming into the open mouths of fishes; further, large numbers of hiding species such as rock bass (*Ambloplites rupestris*), spotted blackbass (*Micropterus puntulatus*), and small catfishes (Ictaluridae) have been found in stomachs of large flatheads, lending credence to these statements.

Phylogeny and morphologically similar fishes

Monotypic genus (Glodek 1980) *Pylodictis* apparently unchanged since mid-Miocene, forming the sister taxon to the blind, subterranean genus *Satan*; *Pylodictus* and *Satan* are sister group to a clade containing Noturus (Lundberg 1992; Ross 2001). Unlikely to be confused with other catfishes, as it differs from the channel (*Ictalurus punctatus*) and blue (*Ictalurus furcatus*) catfishes in having a rounded caudal fin (versus a forked), and from the bullheads (*Ameiurus*) in having a greatly flattened head, posterior extensions of the premaxillary tooth patch, and a projecting lower jaw (Ross 2001). Etnier and Starnes (1993) noted juveniles might be mistaken for one of the madtom species (*Noturus*); however the free posterior end of adipose fin of *Pylodictis* is apparent even in small sizes. *Pylodictis olivaris* reported to hybridize with the channel catfish (*Ictalurus punctatus*; Trautman 1957).

Host Records

In Kansas populations, the cestode, *Marsipometra,* was commonly found in the duodenum and nematodes occurred occasionally in the hindgut (Minkley and Deacon 1959). Becker (1983) noted that *Pylodictis olivaris* is host to the glochidia of a number of freshwater mussels, including *Amblema plicata, Megalonaias gigantean, Quadrula nodulata, Q. pustulosa, Q. quadrina,* and *Elliptio dilatata*.

Commercial or Environmental Importance

Rapid dispersal and population growth rates of introduced flathead catfish, along with their obligate carnivorous food habits, have caused concern among ichthyologists and management agencies (Brown et al. 2005). United States Fish and Wildlife Service had placed the flathead catfish as its highest priority among invasive animal species in the southeastern United States (Memorandum dated 3 November 1999; Brown et al. 2005). Species can attain sizes greater then 1000 mm TL, and weigh more than 50 kg, and is regarded by many anglers to be a big game fish (Carroll and Hall 1964; Jackson 1999). Overall U.S. angling record of 44.5 kg (98 lb) was caught in Texas in 1986 (Ross 2001).

Henderson (1965) noted that fingerling mortality was very high in ponds where large numbers of crayfish were present.

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Ameiurus melas
black bullhead

Type Locality
Ohio River (Rafinesque 1820).

Etymology/Derivation of Scientific Name
Greek, *Ameiurus*, meaning "privative curtailed," in reference to the caudal fin lacking a notch; and Greek, *melas*, meaning "black" (Simon and Wallus 2004).

Synonymy
Silurus melas Rafinesque 1820:51.
Amiuris melas Hay 1881:513, 1883:72.
Ameiurus melas Boschung 1989:68.
Ictalurus melas Cook 1959:139; Medford and Simco 1971:122; Mettee et al. 1987:125, 1989:94 (Ross 2001).

Characters
Maximum size: 620 mm TL (Page and Burr 1991).

Coloration: Chin barbels blackish (Hubbs et al. 1991). Back and sides are black or yellowish brown; undersides white. Fin membranes fairly densely pigmented, and are much blacker than rays. Young fish usually black (Ross 2001). Peritoneum heavily speckled with black (Goldstein and Simon 1999).

Counts: Anal fin rays 17-23 (Hubbs et al. 1991); 16-20 gill rakers; 6 dorsal rays; 6-9 pectoral rays; 7-8 pectoral rays (Ross 2001); 8-9 branchiostegal rays (Simon and Wallus 2004).

Body shape: Moderately elongate, robust body, little compressed laterally (Simon and Wallus 2004); head rounded (Hubbs et al. 1991).

Mouth position: Terminal; slightly subterminal (Goldstein and Simon 1999).

External morphology: Caudal fin square or slightly emarginated; eye contained in snout length 2.4 or fewer times; adipose fin free at tip (Hubbs et al. 1991); anal rays 3-5 are 1.5-2.0 times the length of the last few posterior rays (Ross 2001). In females urinary and genital ducts have separate external openings; in males, these ducts have only one common opening (Moen 1959).

Internal morphology: Ratio of digestive tract to total length: DT 0.8-1.5 TL; intestine well differentiated, coiled (Goldstein and Simon 1999); premaxillary band of teeth on upper jaw without a lateral backward extension on each side (Hubbs et al. 1991).

Distribution (Native and Introduced)

U.S. distribution: Southern ON, Great Lakes and St. Lawrence River, south to Gulf of Mexico, and from MT to Appalachians; widely introduced outside native range (Glodek 1980).

Texas distribution: Native distribution statewide, except Trans-Pecos drainages; widely introduced throughout the state (Hubbs et al. 1991). Warren et al. (2000) listed the following drainage units for distribution of *Ameiurus melas* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River. Natural range of the species occupies the Texan, Kansan, Austroriparian and Tamaulipan (except Rio Grande drainage) biotic provinces (Hubbs 1957).

Abundance/Conservation status (Federal, State, NGO):

Populations in the southern United States are currently stable (Warren et al. 2000).

Habitat Associations

Macrohabitat: Ponds, pools of all sizes in streams and rivers, and in swampy habitats throughout range (Glodek 1980); avoids large streams (Stevenson et al. 1974). Rarely found in Lake Texoma (Oklahoma and Texas) and tailwaters, but occasionally common in some larger tributaries; was common in lake following impoundment, but numbers have steadily declined (Riggs and Bonn 1959). Found in Brazos River (Texas) oxbow lakes (Winemiller et al. 2000; Zeug et al. 2005). Found only in cutoff pools and oxbows of the Illinois River in Oklahoma (Moore 1950).

Mesohabitat: Occurs in areas of sluggish current over soft substrates and around accumulated debris; usually found in small, low-gradient streams with turbid waters and silt bottoms; in large lakes, occupies shallow turbid waters over mud bottom with moderate amounts of rooted aquatic vegetation; found in muddy oxbows (Simon and Wallus 2004). In the Missouri River, Robinson (1977) reported collection of specimens exclusively in slow moving water along mud banks. Fish will reduce their buoyancy as stream flow increases, in order to prevent being carried away; the fish will increase pressure on the gases in the swimbladder, so that gases are released through the pneumatic duct or are absorbed into the blood (Machniak and Gee 1975). In Michigan, Cooper and Washburn (1949) reported that the species survived winterkill oxygen concentrations of <0.2-0.3 ppm. Campbell and Branson (1978) reported upper temperature tolerance from 36-38°C.

Biology

Spawning season: Spawns in late spring and early summer (Carlander 1969) when water temperatures reach 20-22°C (Wallace 1967; Dennison and Bulkley 1972).

Spawning location: Speleophils – hole nesters; cavity spawner (Wallace 1967; Simon 1999). In aquaria, a pair nested in a shallow depression scooped out of the bottom, the diameter of which was about equal to fish's length (Fowler 1917).

Reproductive strategy: Guarders; nest spawners (Simon 1999; Wallace 1967). Female excavated nest by fanning pelvic and anal fins, and pushing small pebbles away with snout. During spawning, male and female position themselves in opposite directions, the male twisting his caudal fin so that it covered the head and eyes of the female. Male positioned ventral part of body at 45° angle to abdomen of female. Eggs were deposited; the female fanned and guarded them on the first day, and the male did so on the following days (Wallace 1967). Both male and female assumed charge of nest and aggressively guarded the young (Fowler 1917). Forney (1955) observed one or more adults guarding schools of young fish, ranging in size from 15-25 mm TL, in the shallow area along the shore; adults apparently abandon young shortly after they have attained the latter size.

Fecundity: In Clear Lake, Iowa, fecundity varied widely among females, even for fish of similar sizes, with counts ranging from 2047-5495 (Dennison and Bulkley 1972). Forney (1955) reported average egg count of 3,283 from females measuring 203-227 mm TL, and an average of 3,845 eggs from 229-251 mm TL females, in Clear Lake, Iowa population. In aquaria, a female deposited 200 pale creamy-white eggs; eggs hatched in 5 days at unspecified temperature (Fowler 1917). Ripe ovarian eggs are golden yellow to orange, and are 2-3 mm in diameter; fertilized eggs are demersal, adhesive, 3 mm in diameter, covered in a gelatinous coat, and they adhere together in a mass when deposited (Simon and Wallus 2004).

Age/size at maturation: In the Mississippi River, Illinois, sexual maturity reached at 254 mm and at age III (Carlander 1969). Smallest mature female and male specimens from Clear Lake, Iowa, measured 171 mm TL and 215 mm TL, respectively (Dennison and Bulkley 1972).

Migration: NA

Longevity: 8 years (Forney 1955).

Food habits: Goldstein and Simon (1999) listed first and second level trophic classifications for the species as invertivore/carnivore, and benthic/whole body, respectively. Main food items include a variety of invertebrates and fish (Carlander 1969). Stomach contents of Wisconsin specimens 40-60 mm SL revealed 54.1% amphipods

(*Hyalella azteca*), 19.2% insect larvae, 15.1% organic detritus, 4.5% insect adults, 3.4% fungi and algae, 2.8% small crayfish, and 0.9% miscellaneous; peaks in feeding activity occurred just before dawn and shortly after dark (Darnell and Meierotto 1962). During periods of stable water levels in Beaver Reservoir (White River, Arkansas and Missouri), 72% of the food volume of young-of-the-year fish (<102 mm TL) was composed of Entomostraca, while 94% of the food volume of 102-287 mm TL fish was comprised of filamentous algae, organic detritus, and crayfish during the same period. In contrast, when water levels rose during winter and spring months, 56% of the food volume of fish >102 mm TL was composed of terrestrial animals, and 26% filamentous algae (Applegate and Mullan 1967). In Clear Lake, Iowa, the main food item of adults was chironomid larvae; young fish (<25 mm TL) fed exclusively on entomostraca, but insect larvae became an important food item as their size increased (Forney 1955). The Clear Lake, Iowa population increased utilization of small fish during the summer (Welker 1963). In central Kentucky, Campbell and Branson (1978) reported that the adult diet included various items, yet it was predominantly comprised of chironomid larvae; larval feeding was found to be highly selective, with fish consuming the aquatic amphipod *Hyalella*, ostracods, and adult copepods. In a dredged Iowa lake, yearling fish consumed mainly dipterous larvae and pupae, and mayfly nymphs, and displayed a tendency to consume larger food items as they progressed through the yearling stage; adults fed primarily on insects, but fed opportunistically, consuming a measurable amount of filamentous green algae (*Stigeoclonium*); adults showed preference for the shallow-water dwelling ceratopogonid (biting midge larvae; Kutkuhn 1955). Pearse (1918) summarized food content of specimens analyzed from Wisconsin lakes as 45.1% insects (35.2% larvae, 4.2% pupae, 5.7% adults), and 21.4% oligochaetes (young fish consuming more of this item than adults). Fish apparently have greatest digestive capacity during summer months; most likely, fish exist at reduced activity levels on stored fat and glycogen, during winter months (Nordlie 1966).

Growth: In Oklahoma, averaged 94 mm TL after one year, and 170, 229, 274, 312 and 351 mm TL after years 2-6 respectively; growth was faster in new populations, especially those in reservoirs, than that in streams and overly populated ponds (Houser and Collins 1962).

Phylogeny and morphologically similar fishes:

The yellow bullhead (*Ameiurus natalis*) has whitish chin barbels, 24-27 anal rays (Hubbs et al. 1991), and has the third to fifth anal rays about equal to the posterior anal rays (Ross 2001).

Host Records:

Mayberry et al. (2000) listed parasite species infecting *Ameiurus melas*, reported from Texas, including Cestoda (Proteocephalidae, Procephalus); Trematoda (*Allocreadium ictaluri*, *Alloglossidium geminus*, *Gyrodactylus*, *Phyllodistomum caudatum*, *Posthodiplostumum minimum*, *Pseudomagnivitellinum ictalurum*).

Commercial or Environmental Importance:

[*Additional literature noting collection of this species from Texas locations includes, but is not limited to the following*: Hubbs (1954); Gunter (1950); Whiteside and McNatt (1972); Champ et al. (1973); Carroll et al. (1977); Yeh (1977); Evans and Noble (1979); Rose and Echelle (1981); Platania (1990); Linam et al. (1994); Matthews et al. (1996); Armstrong (1998); Bonner and Wilde (2000); Edwards et al. (2002); Hebert and Gelwick (2003).]

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Palaemonidae

Palaemonetes paludosus
Glass Shrimp (Gibbes 1850)

Type Locality
Mississippi River Valley

Etymology/Derivation of Scientific Name

Synonymy
Eastern grass shrimp, ghost shrimp

Characters
Maximum size: 47 mm

Coloration: transparent to yellowish brown

Counts: upper rostrum with 6-8 teeth, 3-4 teeth on lower margin of rostrum, none on the tip; fused part of the two rami longer than free part

Body shape: body is shrimp-like

Mouth position: located sub-terminal on the carapace

External morphology: 2nd abdominal segment overlaps the 1st segment; 3rd pair of walking legs lack claws or chelae, second walking leg with an unjointed carpus, well-developed rostrum bearing dorsal and ventral teeth, smooth carapace and abdomen

Distribution (Native and Introduced)

Endemic to North America. Introduced into the lower Colorado River in California; likely introduced in Louisiana, Texas, and Oklahoma

U.S. distribution: Freshwater ponds, lakes, and streams in the coastal plain of North America east of the Allegheny Mountains, from Florida to New Jersey

Louisiana distribution: The species is found in the Mississippi River basin, including the Mississippi River and the Pearl River. It is thought to be introduced to the state and not a native species.

Abundance/Conservation status (Federal, State, NGO)
Glass shrimp are common in the Mississippi River Basin. Not currently listed as threatened or endangered.

Habitat Associations
Macrohabitat: This shrimp inhabits primarily freshwater rivers and streams; have been found in brackish water.

Mesohabitat: Prefer salinities of 0-10 ppt, but can tolerate salinity of 30 ppt. Preferred water temperatures range from 10° to 35°C. They reside in some sort of aquatic cover and are most abundant in dense beds of submerged vegetation. Eastern grass shrimp are not common in areas of little or no vegetation. In summer months these shrimp are abundant among semi-aquatic grasses and water hyacinths.

Biology
Spawning season: Extends from February through October; potentially year round in warmer waters; breeding temps range from 18° to 33°C.

Spawning location: Freshwater rivers and streams.

Reproductive strategy: Glass shrimp reproduce sexually, with the females becoming receptive to males after molting. Copulation occurs within 7 hours of molting. A spermatophore is extruded by the male and transferred to the female, where it remains until oviposition. Oviposition occurs within seven hours after sperm transfer. Part of the spermatophore dissolves and the spermatozoa are released. Ova are fertilized externally as they are extruded, then adhere to the pleopods and setae on the ventral surface of the female's abdomen.

Fecundity: Egg counts ranged from 8–85

Age/Size at maturation: Juveniles reach maturity at 1.5 to months old and about 15–18 mm carapace length

Migration: Grass shrimp tend to avoid fast currents and migrate in the direction of tidal currents.

Longevity: The lifespan is 6 to 13 months; the older, overwintering shrimp usually spawn early in the year and die by the next winter; most young-of-the-year spawn late in the year as adults; postlarvae that survive the fall and winter spawn in the following spring

Food habits: Their diet is dominated by algae, though depending on availability they may

be detritivores, primary consumers, or secondary consumers

Growth: 3.25mm per month in summer and fall

Phylogeny and morphologically similar fishes: similar to other species of grass shrimp

Commercial or Environmental Importance: Numerous fish species, some of which are valuable sport and commercial fishes, eat large quantities of glass shrimp. As prey, they plan an important part in the transfer of energy from the producer level to higher consumer levels.

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Macrobrachium ohione
River Shrimp (Smith 1874)

Type Locality
Mississippi River Valley

Etymology/Derivation of Scientific Name

Synonymy
Ohio shrimp, Ohio river shrimp, river shrimp

Characters
Maximum size: 10 cm (4 in), but average 60 mm

Coloration: color pale gray with blue spots

Pharyngeal teeth count: NA

Counts: upper rostrum with 9-13 teeth, of which 3-4 are behind the orbit margin, 1-3 teeth on lower margin of rostrum, lower and upper teeth at a distance from tip of rostrum

Body shape: body is shrimp-like

Mouth position: located sub-terminal on the carapace

External morphology: 2nd abdominal segment overlaps the 1st segment; 1st 2 pair of walking legs chelate (clawed), 3rd pair never chelate; 2nd pair walking legs greatly elongated (more so in females), longer than other legs, extending past tip of rostrum, claw enlarged; carpus (segment next to claws) of the 2nd legs whole, not separated

Distribution (Native and Introduced)

Endemic to North America. One of several species of Macrobrachium that inhabit coastal river systems emptying into the Gulf of Mexico and the s.e. Atlantic coast of the U.S.A.

U.S. distribution: the most widely distributed and abundant of the six river shrimp species in the United States and originally was described from the Ohio River. It also is found in the middle and lower Mississippi River from Illinois to Louisiana, west to Oklahoma and Texas, in the Atlantic drainage from Virginia to northern Florida, and in the Gulf region in Alabama and Mississippi.

Louisiana distribution: The species is abundant in the Atchafalaya River up to 250 km upstream from the delta, as well as several hundred km upstream from the Gulf of Mexico in the lower Mississippi River. It is till common and an important ecosystem component in many rivers; populations in Louisiana remain robust, though some more northern populations have declined.

Abundance/Conservation status (Federal, State, NGO)

Before dams and other flow-control systems were implemented, this species was common in the Ohio and Mississippi river systems. Ohio Shrimp may have declined as a result of waterway channelization and habitat loss in parts of its range. Changes in river physiography that fragment main channel borders and isolate side channels during moderate to low river elevation can reduce Ohio Shrimp populations. In parts of its range, reduced connectivity with the floodplain—because of levees, closing structures, and wing dikes—has also contributed to Ohio Shrimp declines.

Habitat Associations

Macrohabitat: This shrimp inhabits primarily freshwater rivers and streams; however, their life cycle is associated with estuarine waters for reproduction.

Mesohabitat: Ohio shrimp apparently prefer low velocity water; however, open side channels, a preferred habitat of Ohio shrimp, have flow during normal river elevations. Ohio shrimp prefer borders of the main channel, especially when the borders are flooded and plant and animal material are available for foraging. Ohio Shrimp have been reported to have greater abundance in areas with suspended particulate matter, which may be a predator avoidance response. Ohio shrimp occupy low visibility physical habitats that are also occupied by predatory fishes, such as flathead catfish, a species that is not native to South Carolina.

Biology

Spawning season: early spring associated with flood flow conditions, migrates to spawning areas mostly at night

Spawning location: coastal estuaries

Reproductive strategy: the Ohio shrimp is amphidromous. The larvae must live in saltwater and move to fresh water as adults. This is accomplished by having the larvae drift, free-floating, down the river until they reach water where the salinity is high enough to support

them. Females carrying eggs may also migrate downstream before releasing the larvae to reduce the time required for travel.

Fecundity: The female lays 20–75 eggs each breeding season.

Age/Size at maturation: Females reach maturity at 15–17 mm carapace length (CL) while males matured later at 18–22 mm CL. Females bred at two and three years of age, while males bred three times at two, three, and four years.

Migration: Ohio shrimp must migrate between salty water and fresh water in order to reproduce. The mothers, or else the newly hatched larvae, must travel to saltwater estuaries in the Mississippi Delta, or the larvae will die. Later, as adults, they must travel upstream into fresh water to mate and produce eggs. Upstream migration takes place from mid-July through September. Downstream migration occurs in early spring during flood flow events.

Longevity: The minimum lifespan for females was approximately 29 months and for males, 48 months.

Food habits: considered omnivores, but do feed primarily on algae and detritus

Growth: 1 to 2 mm per day

Phylogeny and morphologically similar fishes: similar to other species of grass shrimp

Host Records: NA

Commercial or Environmental Importance: There has been a commercial fishery throughout its native range for bait as well as for human consumption for many years, abundant enough that until the 1930s it was sold commercially for people to eat and use as bait. In Louisiana, it's still a popular bait for catching catfish.

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Sciaenidae

q

Aplodinotus grunniens
freshwater drum

Type Locality
Ohio River (Rafinesque 1819).

Etymology/Derivation of Scientific Name:
Aplodinotus, Greek, meaning "single back," in reference to the dorsal fin; *grunniens*, Latin, meaning "grunting," in reference to sounds production in this species (Pflieger 1997) .

Synonymy
Aplodinotus grunniens Rafinesque 1819:418; Hildebrand and Towers 1928:135; Cook 1959:211.
Amblodon Wailes 1854:333.
Haploidontus grunniens Hay 1883:64.

Characters
Maximum size: 696 mm TL (Wrenn 1969).

Coloration: Monotone silver; Dorsal and caudal fins outlined with black pigments.

Pharyngeal teeth count: NA

Counts: Fewer than 60 lateral line scales (Hubbs et al. 1991);10 dorsal spines; 30 dorsal rays; 20-24 gill rakers (Knapp 1953); 2 anal spines; 6-7 anal rays; 15-16 pectoral rays; 1 pelvic spine; 5 pelvic rays (Ross 2001).

Body shape: Strongly arched body, laterally compressed.

Mouth position: Subterminal (Goldstein and Simon 1999).

External morphology: Shortest dorsal spine <1/2 of longest dorsal spine, forming a distinct, deep notch between spiny dorsal fin and soft dorsal fin rays. Anteriorly-arched lateral line extends into caudal fin.

Distribution (Native and Introduced)

U.S. distribution: Central North America from Canada to Central America (Hubbs et al. 1991).Apparently has greatest latitudinal range of any North American freshwater fish (Fremling 1980).

Louisiana distribution: Though this species is found statewide, it is more commonly found in large rivers and lakes. Shallow areas with high turbidity, specifically the Red and Mississippi River are preferred habitats (Douglas 1974).

Texas distribution: Widely occurring except in the Panhandle region (Hubbs et al. 1991). Warren et al. (2000) listed the following drainage units for distribution of *Aplodinotus grunniens* in the state: Red River (from the mouth upstream to and including the Kiamichi River), Sabine Lake (including minor coastal drainages west to Galveston Bay), Galveston Bay (including minor coastal drainages west to mouth of Brazos River), Brazos River, Colorado River, San Antonio Bay (including minor coastal drainages west of mouth of Colorado River to mouth of Nueces River), Nueces River.

Abundance/Conservation status (Federal, State, NGO):

Currently stable in southern US (Warren et al. 2000). Edwards and Contreras-Balderas (1991) reported a general decline of this species in the lower Rio Grande in the last 100-year period.

Habitat Associations

Macrohabitat: Turbid to clear lakes and rivers, but does occur in a wide variety of habitats (Fremling 1980).

Mesohabitat: Benthic habitats of large, shallow bodies of water (to 40-60 feet; Scott and Crossman 1973). More commonly associated with large woody debris than open areas in Kansas reservoir (Willis and Jones 1986). In large rivers, fish may move distances of at least 161 km (Funk 1955). In Lake Texoma (Oklahoma-Texas), larvae responded to increased turbidity by moving up near the surface, instead of remaining in deep water during daylight hours, as typical (Matthews 1984). Gido and Matthews (2000) reported marked seasonal abundance patterns for large fish in Lake Texoma (Oklahoma-Texas), with peak in abundance during warm seasons; the abundance of juvenile (< 200 mm SL) fish increased during summer; also, large fish increased in relative abundance during increased periods of reservoir volume. Riggs and Bonn (1959) noted that the species was fairly common in most deeper parts of Lake Texoma (Oklahoma-Texas), and was abundant in the tail waters. Li (2003) reported that the species was commonly collected in deepwater sites of the lower

Brazos River, Texas, during summer and winter seasons; was positively associated with conductivity and strongly associated with summer samples. After reaching 25 mm in length, fish are found on or near bottom (Priegel 1967b). Individuals have been observed to become distressed when water temperatures exceed 25.6°C, and when dissolved oxygen concentrations remain low over an extended period (Priegel 1967b).

Biology

Spawning season: In May and June, usually at water temperatures between 18-26°C (Wrenn 1969; Swedberg and Walburg 1970; Fremling 1980).

Spawning location: Open water. In the Upper Mississippi River, eggs and larvae were abundant in the main channel collections (Holland 1986).

Reproductive strategy: Nonguarders; open substratum spawners; pelagophils – characterized by numerous buoyant eggs (Simon 1999). Eggs and sperm released in the water column; eggs are buoyant, larvae are planktonic (Daiber 1953). Males "drum" communicate to form spawning aggregates by vibrating specialized muscles against gas bladder (Fremling 1980); only sexually mature males possess this structure, which may be fully developed by the third year of life (Priegel 1967b).

Fecundity: 600,000 eggs for large females (3.5 kg; Wrenn 1969; Fremling 1980). Number of vitellogenic oocytes ranged from 34,000 to 66,500, in 6-9 year-old fish measuring from 307-386 mm long; egg diameters post fertilization ranged from 1.39 to 1.57 mm; hatching occurred in 27 hours at a water temperature of 23°C (Swedberg and Walburg 1970).Large-yolked, unfertilized eggs from a mature 5-year-old female averaged 0.72 mm in diameter (Daiber 1953).

Age/Size at maturation: Ages 4 to 6, with males measuring at least 203 mm TL and females 221 mm TL (Diaber 1953; Priegel 1969; Wrenn 1969). Dryer (2007) reported that maturation occurred most often during years 3 – 4, in Alabama populations.

Migration: NA

Longevity: Rypel (2007) reported males up to 21 years and females up to 32 years in Alabama populations.

Food habits: Primarily a benthic feeder, consuming insect larvae, crustaceans, fish, clams, and snails; molar-like pharyngeal teeth aid in masticating mollusks (Fremling 1980).Consumes mayflies and amphipods; fish and crayfish appear more frequently in diet of larger individuals (Daiber 1952). In Lake Winnebago, Wisconsin, midge larvae was main food item in diet of fish over 40 mm (1.6 inches), and copepods (*Cyclops*) were main food item for fish under 40 mm (1.6 inches; Preigel 1967a). In Lewis and Clark Lake (Missouri River), *Daphnia* and *Cyclops* were important food items for fish 6-15 mm long; bottom fauna became main food item in diet of fish > 20 mm (Swedberg and Walburg 1970). In a Tennessee reservoir without mollusks, diet switched to fish; all size groups collected included individuals that had consumed insects (larvae and pupae of chaoborines and small

chironomids) or plankton (Leptodora; Dendy 1946). Will feed at all hours of the day (Priegel 1967b).

Growth:In an Alabama reservoir, estimated total lengths (mm) per age group were 81 (age 1), 145 (age 2), 198 (age 3), 241 (age 4), 295 (age 5), 348 (age 6), 406 (age 7), 475 (age 8), 551 (age 9), 607 (age 10), 648 (age 11), 676 (age 12), and 696 mm (age 13; Wrenn 1969). Average total lengths of fish from the Salt River, Missouri (lower station): 119 mm at the end of year 1, and 203, 257, and 279 mm at the end of years 2-4, respectively; averages from the Salt River (middle station): 130 mm at the end of year 1, and 218, 267, and 320 mm at the end of years 2-4, respectively (Purkett 1958). In a study of sexual dimorphism in Alabama populations, females were significantly larger and had significantly higher growth rates than males. Males and females had similar growth rates from 0-4 years of age, but showed significantly different growth rates across subsequent ages; females grew significantly faster through adulthood (Rypel 2007).

Phylogeny and morphologically similar fishes:

Aplodinotus grunniens is the only North American freshwater representative of Family Sciaenidae (Barney 1926).

Host Records:

Reported from Texas populations: Trematoda: *Homalometron armatum*; Nemata: *Camallanus oxycephalus*, *Contracaecum*, *Rhabdochona decatrurensis*, *Spinitectus gracilis*; Copepoda: *Argulus flavescens*, *Ergasilus arthrosis* (Mayberry et al. 2000)

Commercial or Environmental Importance

In Texas, this species is commonly referred to as the gaspergou, or simply “gou”. The otolith (inner ear bone) and pharyngeal teeth were regarded as good luck pieces by Native Americans; even today, otoliths are prized as jewelry pieces and charms, in some regions (Knapp 1953).

[*Additional literature noting collection of this species from Texas locations includes, but is not limited to the following*: Baughman (1946); Robinson (1959); Uyeno and Miller (1962); Swift (1968); Kasper and McClure (1976); Rose and Echelle (1981); Matthews et al. (1985); Kleinsasser and Linam (1987); Linam and Kleinsasser (1987); Linam et al. (1994); Li and Gelwick (2005).]

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Date Filed	10/11/2018
Officers	LAURA R. LANDREAUX, MANAGER , Incorporator/Organizer MARK A KEPPLER , Tax Preparer
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10K and 10Q Reports

June 1, 2021

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-K

(Mark One)

☑ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the Fiscal Year Ended December 31, 2020

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number	Registrant, State of Incorporation or Organization, Address of Principal Executive Offices, Telephone Number, and IRS Employer Identification No.	Commission File Number	Registrant, State of Incorporation or Organization, Address of Principal Executive Offices, Telephone Number, and IRS Employer Identification No.
1-11299	ENTERGY CORPORATION (a Delaware corporation) 639 Loyola Avenue New Orleans, Louisiana 70113 Telephone (504) 576-4000 72-1229752	1-35747	ENTERGY NEW ORLEANS, LLC (a Texas limited liability company) 1600 Perdido Street New Orleans, Louisiana 70112 Telephone (504) 670-3700 82-2212934
1-10764	ENTERGY ARKANSAS, LLC (a Texas limited liability company) 425 West Capitol Avenue Little Rock, Arkansas 72201 Telephone (501) 377-4000 83-1918668	1-34360	ENTERGY TEXAS, INC. (a Texas corporation) 10055 Grogans Mill Road The Woodlands, Texas 77380 Telephone (409) 981-2000 61-1435798
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1-31508	ENTERGY MISSISSIPPI, LLC (a Texas limited liability company) 308 East Pearl Street Jackson, Mississippi 39201 Telephone (601) 368-5000 83-1950019		

Table of Contents

Securities registered pursuant to Section 12(b) of the Act:

Registrant	Title of Class	Trading Symbol	Name of Each Exchange on Which Registered
Entergy Corporation	Common Stock, $0.01 Par Value	ETR	New York Stock Exchange
	Common Stock, $0.01 Par Value	ETR	NYSE Chicago, Inc.
Entergy Arkansas, LLC	Mortgage Bonds, 4.875% Series due September 2066	EAI	New York Stock Exchange
Entergy Louisiana, LLC	Mortgage Bonds, 4.875% Series due September 2066	ELC	New York Stock Exchange
Entergy Mississippi, LLC	Mortgage Bonds, 4.90% Series due October 2066	EMP	New York Stock Exchange
Entergy New Orleans, LLC	Mortgage Bonds, 5.0% Series due December 2052	ENJ	New York Stock Exchange
	Mortgage Bonds, 5.50% Series due April 2066	ENO	New York Stock Exchange
Entergy Texas, Inc.	5.375% Series A Preferred Stock, Cumulative, No Par Value (Liquidation Value $25 Per Share)	ETI/PR	New York Stock Exchange

Securities registered pursuant to Section 12(g) of the Act:

Registrant	Title of Class
Entergy Texas, Inc.	Common Stock, no par value

Indicate by check mark if the registrants are well-known seasoned issuers, as defined in Rule 405 of the Securities Act.

	Yes	No
Entergy Corporation	✓	
Entergy Arkansas, LLC	✓	
Entergy Louisiana, LLC	✓	
Entergy Mississippi, LLC		✓
Entergy New Orleans, LLC		✓
Entergy Texas, Inc.	✓	
System Energy Resources, Inc.		✓

Indicate by check mark if the registrants are not required to file reports pursuant to Section 13 or Section 15(d) of the Act.

	Yes	No
Entergy Corporation		✓
Entergy Arkansas, LLC		✓
Entergy Louisiana, LLC		✓
Entergy Mississippi, LLC		✓
Entergy New Orleans, LLC		✓
Entergy Texas, Inc.		✓
System Energy Resources, Inc.		✓

Indicate by check mark whether the registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days. Yes ☑ No ☐

Indicate by check mark whether the registrants have submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrants were required to submit such files). Yes ☑ No ☐

Indicate by check mark whether each registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of “large accelerated filer,” “accelerated filer,” “smaller reporting company,” and “emerging growth company” in Rule 12b-2 of the Securities Exchange Act of 1934.

	Large Accelerated Filer	Accelerated Filer	Non-accelerated Filer	Smaller reporting company	Emerging growth company
Entergy Corporation	✓				
Entergy Arkansas, LLC			✓		
Entergy Louisiana, LLC			✓		
Entergy Mississippi, LLC			✓		
Entergy New Orleans, LLC			✓		
Entergy Texas, Inc.			✓		
System Energy Resources, Inc.			✓		

If an emerging growth company, indicate by check mark if the registrants have elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrant has filed a report on and attestation to its management's assessment of the effectiveness of its internal control over financial reporting under Section 404(b) of the Sarbanes-Oxley Act (15 U.S.C. 7262(b)) by the registered public accounting firm that prepared or issued its audit report.

Entergy Corporation	☑
Entergy Arkansas, LLC	
Entergy Louisiana, LLC	
Entergy Mississippi, LLC	
Entergy New Orleans, LLC	
Entergy Texas, Inc.	
System Energy Resources, Inc.	

Indicate by check mark whether the registrants are shell companies (as defined in Rule 12b-2 of the Exchange Act.) Yes ☐ No ☑

Common Stock Outstanding		**Outstanding at January 29, 2021**
Entergy Corporation	($0.01 par value)	200,479,995

System Energy Resources, Inc. meets the requirements set forth in General Instruction I(1) of Form 10-K and is therefore filing this Form 10-K with reduced disclosure as allowed in General Instruction I(2). System Energy Resources, Inc. is reducing its disclosure by not including Part III, Items 10 through 13 in its Form 10-K.

The aggregate market value of Entergy Corporation Common Stock, $0.01 Par Value, held by non-affiliates as of the end of the second quarter of 2020 was $18.8 billion based on the reported last sale price of $93.81 per share for such stock on the New York Stock Exchange on June 30, 2020. Entergy Corporation is the sole holder of the common stock of Entergy Texas, Inc. and System Energy Resources, Inc. Entergy Corporation is the direct and indirect holder of the common membership interests of Entergy Utility Holding Company, LLC, which is the sole holder of the common membership interests of Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, and Entergy New Orleans, LLC.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the Proxy Statement of Entergy Corporation to be filed in connection with its Annual Meeting of Stockholders, to be held May 7, 2021, are incorporated by reference into Part III hereof.

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TABLE OF CONTENTS

	SEC Form 10-K Reference Number	Page Number
Forward-looking information		v
Definitions		viii
Entergy Corporation and Subsidiaries		
Management's Financial Discussion and Analysis	Part II. Item 7.	1
Report of Management		37
Selected Financial Data - Five-Year Comparison	Part II. Item 6.	38
Report of Independent Registered Public Accounting Firm		39
Consolidated Income Statements For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	43
Consolidated Statements of Comprehensive Income For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	45
Consolidated Statements of Cash Flows For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	46
Consolidated Balance Sheets, December 31, 2020 and 2019	Part II. Item 8.	48
Consolidated Statements of Changes in Equity for the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	50
Notes to Financial Statements		
Note 1. Summary of Significant Accounting Policies	Part II. Item 8.	51
Note 2. Rate and Regulatory Matters	Part II. Item 8.	61
Note 3. Income Taxes	Part II. Item 8.	104
Note 4. Revolving Credit Facilities, Lines of Credit, and Short-term Borrowings	Part II. Item 8.	124
Note 5. Long-term Debt	Part II. Item 8.	128
Note 6. Preferred Equity	Part II. Item 8.	138
Note 7. Common Equity	Part II. Item 8.	140
Note 8. Commitments and Contingencies	Part II. Item 8.	145
Note 9. Asset Retirement Obligations	Part II. Item 8.	153
Note 10. Leases	Part II. Item 8.	157
Note 11. Retirement, Other Postretirement Benefits, and Defined Contribution Plans	Part II. Item 8.	163
Note 12. Stock-based Compensation	Part II. Item 8.	191
Note 13. Business Segment Information	Part II. Item 8.	196
Note 14. Acquisitions, Dispositions, and Impairment of Long-lived Assets	Part II. Item 8.	199
Note 15. Risk Management and Fair Values	Part II. Item 8.	202
Note 16. Decommissioning Trust Funds	Part II. Item 8.	221
Note 17. Variable Interest Entities	Part II. Item 8.	228
Note 18. Transactions with Affiliates	Part II. Item 8.	230
Note 19. Revenue	Part II. Item 8.	231
Note 20. Quarterly Financial Data	Part II. Item 8.	236
Entergy's Business		
Risk Factors Summary		239
Utility	Part I. Item 1.	241
Entergy Wholesale Commodities	Part I. Item 1.	263
Regulation of Entergy's Business	Part I. Item 1.	266
Litigation		282
Human Capital		283
Availability of SEC filings and other information on Entergy's website		285

Risk Factors	Part I. Item 1A.	286
Unresolved Staff Comments	Part I. Item 1B.	None
Entergy Arkansas, LLC and Subsidiaries		
Management's Financial Discussion and Analysis	Part II. Item 7.	311
Report of Independent Registered Public Accounting Firm		330
Consolidated Income Statements For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	332
Consolidated Statements of Cash Flows For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	333
Consolidated Balance Sheets, December 31, 2020 and 2019	Part II. Item 8.	334
Consolidated Statements of Changes in Member's Equity for the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	336
Selected Financial Data - Five-Year Comparison	Part II. Item 6.	337
Entergy Louisiana, LLC and Subsidiaries		
Management's Financial Discussion and Analysis	Part II. Item 7.	338
Report of Independent Registered Public Accounting Firm		355
Consolidated Income Statements For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	357
Consolidated Statements of Comprehensive Income For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	358
Consolidated Statements of Cash Flows For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	359
Consolidated Balance Sheets, December 31, 2020 and 2019	Part II. Item 8.	360
Consolidated Statements of Changes in Equity for the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	362
Selected Financial Data - Five-Year Comparison	Part II. Item 6.	363
Entergy Mississippi, LLC		
Management's Financial Discussion and Analysis	Part II. Item 7.	364
Report of Independent Registered Public Accounting Firm		377
Income Statements For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	379
Statements of Cash Flows For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	381
Balance Sheets, December 31, 2020 and 2019	Part II. Item 8.	382
Statements of Changes in Member's Equity for the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	384
Selected Financial Data - Five-Year Comparison	Part II. Item 6.	385
Entergy New Orleans, LLC and Subsidiaries		
Management's Financial Discussion and Analysis	Part II. Item 7.	386
Report of Independent Registered Public Accounting Firm		400
Consolidated Income Statements For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	402
Consolidated Statements of Cash Flows For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	403
Consolidated Balance Sheets, December 31, 2020 and 2019	Part II. Item 8.	404
Consolidated Statements of Changes in Member's Equity for the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	406
Selected Financial Data - Five-Year Comparison	Part II. Item 6.	407
Entergy Texas, Inc. and Subsidiaries		
Management's Financial Discussion and Analysis	Part II. Item 7.	408
Report of Independent Registered Public Accounting Firm		421
Consolidated Income Statements For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	423

Consolidated Statements of Cash Flows For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	425
Consolidated Balance Sheets, December 31, 2020 and 2019	Part II. Item 8.	426
Consolidated Statements of Changes in Equity for the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	428
Selected Financial Data - Five-Year Comparison	Part II. Item 6.	429
System Energy Resources, Inc.		
Management's Financial Discussion and Analysis	Part II. Item 7.	430
Report of Independent Registered Public Accounting Firm		445
Income Statements For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	447
Statements of Cash Flows For the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	449
Balance Sheets, December 31, 2020 and 2019	Part II. Item 8.	450
Statements of Changes in Common Equity for the Years Ended December 31, 2020, 2019, and 2018	Part II. Item 8.	452
Selected Financial Data - Five-Year Comparison	Part II. Item 6.	453
Properties	Part I. Item 2.	454
Legal Proceedings	Part I. Item 3.	454
Mine Safety Disclosures	Part I. Item 4.	454
Information about Executive Officers of Entergy Corporation	Part I. and Part III. Item 10.	454
Market for Registrants' Common Equity and Related Stockholder Matters	Part II. Item 5.	456
Selected Financial Data	Part II. Item 6.	457
Management's Discussion and Analysis of Financial Condition and Results of Operations	Part II. Item 7.	457
Quantitative and Qualitative Disclosures About Market Risk	Part II. Item 7A.	457
Financial Statements and Supplementary Data	Part II. Item 8.	457
Changes in and Disagreements with Accountants on Accounting and Financial Disclosure	Part II. Item 9.	457
Controls and Procedures	Part II. Item 9A.	457
Attestation Report of Registered Public Accounting Firm	Part II. Item 9A.	459
Directors, Executive Officers, and Corporate Governance of the Registrants	Part III. Item 10.	460
Executive Compensation	Part III. Item 11.	465
Security Ownership of Certain Beneficial Owners and Management	Part III. Item 12.	511
Certain Relationships and Related Party Transactions and Director Independence	Part III. Item 13.	515
Principal Accountant Fees and Services	Part III. Item 14.	516
Exhibits and Financial Statement Schedules	Part IV. Item 15.	519
Form 10-K Summary	Part IV. Item 16.	519
Exhibit Index		520
Signatures		534
Consents of Independent Registered Public Accounting Firm		541
Report of Independent Registered Public Accounting Firm		542
Index to Financial Statement Schedules		S-1

This combined Form 10-K is separately filed by Entergy Corporation and its six "Registrant Subsidiaries:" Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC, Entergy Texas, Inc., and System Energy Resources, Inc. Information contained herein relating to any individual company is filed by such company on its own behalf. Each company makes representations only as to itself and makes no other representations whatsoever as to any other company.

The report should be read in its entirety as it pertains to each respective reporting company. No one section of the report deals with all aspects of the subject matter. Separate Item 6, 7, and 8 sections are

provided for each reporting company, except for the Notes to the financial statements. The Notes to the financial statements for all of the reporting companies are combined. All Items other than 6, 7, and 8 are combined for the reporting companies.

FORWARD-LOOKING INFORMATION

In this combined report and from time to time, Entergy Corporation and the Registrant Subsidiaries each makes statements as a registrant concerning its expectations, beliefs, plans, objectives, goals, projections, strategies, and future events or performance. Such statements are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "could," "project," "believe," "anticipate," "intend," "expect," "estimate," "continue," "potential," "plan," "predict," "forecast," and other similar words or expressions are intended to identify forward-looking statements but are not the only means to identify these statements. Although each of these registrants believes that these forward-looking statements and the underlying assumptions are reasonable, it cannot provide assurance that they will prove correct. Any forward-looking statement is based on information current as of the date of this combined report and speaks only as of the date on which such statement is made. Except to the extent required by the federal securities laws, these registrants undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

Forward-looking statements involve a number of risks and uncertainties. There are factors that could cause actual results to differ materially from those expressed or implied in the forward-looking statements, including (a) those factors discussed or incorporated by reference in Item 1A. Risk Factors, (b) those factors discussed or incorporated by reference in Management's Financial Discussion and Analysis, and (c) the following factors (in addition to others described elsewhere in this combined report and in subsequent securities filings):

- resolution of pending and future rate cases and related litigation, formula rate proceedings and related negotiations, including various performance-based rate discussions, Entergy's utility supply plan, and recovery of fuel and purchased power costs, as well as delays in cost recovery resulting from these proceedings;
- continuing long-term risks and uncertainties associated with the termination of the System Agreement in 2016, including the potential absence of federal authority to resolve certain issues among the Utility operating companies and their retail regulators;
- regulatory and operating challenges and uncertainties and economic risks associated with the Utility operating companies' participation in MISO, including the benefits of continued MISO participation, the effect of current or projected MISO market rules and market and system conditions in the MISO markets, the allocation of MISO system transmission upgrade costs, the MISO-wide base rate of return on equity allowed or any MISO-related charges and credits required by the FERC, and the effect of planning decisions that MISO makes with respect to future transmission investments by the Utility operating companies;
- changes in utility regulation, including with respect to retail and wholesale competition, the ability to recover net utility assets and other potential stranded costs, and the application of more stringent return on equity criteria, transmission reliability requirements or market power criteria by the FERC or the U.S. Department of Justice;
- changes in the regulation or regulatory oversight of Entergy's nuclear generating facilities and nuclear materials and fuel, including with respect to the planned or actual shutdown and sale of each of the nuclear generating facilities owned or operated by Entergy Wholesale Commodities, and the effects of new or existing safety or environmental concerns regarding nuclear power plants and nuclear fuel;
- resolution of pending or future applications, and related regulatory proceedings and litigation, for license modifications or other authorizations required of nuclear generating facilities and the effect of public and political opposition on these applications, regulatory proceedings, and litigation;
- the performance of and deliverability of power from Entergy's generation resources, including the capacity factors at Entergy's nuclear generating facilities;
- increases in costs and capital expenditures that could result from changing regulatory requirements, emerging operating and industry issues, and the commitment of substantial human and capital resources required for the safe and reliable operation and maintenance of Entergy's nuclear generating facilities;
- Entergy's ability to develop and execute on a point of view regarding future prices of electricity, natural gas, and other energy-related commodities;

FORWARD-LOOKING INFORMATION (Continued)

- prices for power generated by Entergy's merchant generating facilities and the ability to hedge, meet credit support requirements for hedges, sell power forward or otherwise reduce the market price risk associated with those facilities, including the Entergy Wholesale Commodities nuclear plants, especially in light of the planned shutdown and sale of each of these nuclear plants;
- the prices and availability of fuel and power Entergy must purchase for its Utility customers, and Entergy's ability to meet credit support requirements for fuel and power supply contracts;
- volatility and changes in markets for electricity, natural gas, uranium, emissions allowances, and other energy-related commodities, and the effect of those changes on Entergy and its customers;
- changes in law resulting from federal or state energy legislation or legislation subjecting energy derivatives used in hedging and risk management transactions to governmental regulation;
- changes in environmental laws and regulations, agency positions or associated litigation, including requirements for reduced emissions of sulfur dioxide, nitrogen oxide, greenhouse gases, mercury, particulate matter and other regulated air emissions, heat and other regulated discharges to water, requirements for waste management and disposal and for the remediation of contaminated sites, wetlands protection and permitting, and changes in costs of compliance with environmental laws and regulations;
- changes in laws and regulations, agency positions, or associated litigation related to protected species and associated critical habitat designations;
- the effects of changes in federal, state, or local laws and regulations, and other governmental actions or policies, including changes in monetary, fiscal, tax, environmental, trade/tariff, domestic purchase requirements, or energy policies;
- the effects of full or partial shutdowns of the federal government or delays in obtaining government or regulatory actions or decisions;
- uncertainty regarding the establishment of interim or permanent sites for spent nuclear fuel and nuclear waste storage and disposal and the level of spent fuel and nuclear waste disposal fees charged by the U.S. government or other providers related to such sites;
- variations in weather and the occurrence of hurricanes and other storms and disasters, including uncertainties associated with efforts to remediate the effects of hurricanes (including from Hurricane Laura, Hurricane Delta, and Hurricane Zeta), ice storms, or other weather events and the recovery of costs associated with restoration, including accessing funded storm reserves, federal and local cost recovery mechanisms, securitization, and insurance, as well as any related unplanned outages;
- the risk that an incident at any nuclear generation facility in the U.S. could lead to the assessment of significant retrospective assessments and/or retrospective insurance premiums as a result of Entergy's participation in a secondary financial protection system, a utility industry mutual insurance company, and industry self-insurance programs;
- effects of climate change, including the potential for increases in extreme weather events and sea levels or coastal land and wetland loss;
- changes in the quality and availability of water supplies and the related regulation of water use and diversion;
- Entergy's ability to manage its capital projects, including completion of projects timely and within budget and to obtain the anticipated performance or other benefits, and its operation and maintenance costs;
- Entergy's ability to purchase and sell assets at attractive prices and on other attractive terms;
- the economic climate, and particularly economic conditions in Entergy's Utility service area and the northern United States and events and circumstances that could influence economic conditions in those areas, including power prices, and the risk that anticipated load growth may not materialize;
- changes to federal income tax laws and regulations, including continued impact of the Tax Cuts and Jobs Act and its intended and unintended consequences on financial results and future cash flows;
- the effects of Entergy's strategies to reduce tax payments;
- changes in the financial markets and regulatory requirements for the issuance of securities, particularly as they affect access to capital and Entergy's ability to refinance existing securities, execute share repurchase programs, and fund investments and acquisitions;

FORWARD-LOOKING INFORMATION (Concluded)

- actions of rating agencies, including changes in the ratings of debt and preferred stock, changes in general corporate ratings, and changes in the rating agencies' ratings criteria;
- changes in inflation and interest rates;
- the effects of litigation and government investigations or proceedings;
- changes in technology, including (i) Entergy's ability to implement new or emerging technologies, (ii) the impact of changes relating to new, developing, or alternative sources of generation such as distributed energy and energy storage, renewable energy, energy efficiency, demand side management and other measures that reduce load and government policies incentivizing development of the foregoing, and (iii) competition from other companies offering products and services to Entergy's customers based on new or emerging technologies or alternative sources of generation;
- Entergy's ability to effectively formulate and implement plans to reduce its carbon emission rate and aggregate carbon emissions, including its commitment to achieve net-zero carbon emissions by 2050, and the potential impact on its business of attempting to achieve such objectives;
- the effects, including increased security costs, of threatened or actual terrorism, cyber-attacks or data security breaches, natural or man-made electromagnetic pulses that affect transmission or generation infrastructure, accidents, and war or a catastrophic event such as a nuclear accident or a natural gas pipeline explosion;
- the effects of a global event or pandemic, such as the COVID-19 global pandemic, including economic and societal disruptions; volatility in the capital markets (and any related increased cost of capital or any inability to access the capital markets or draw on available bank credit facilities); reduced demand for electricity, particularly from commercial and industrial customers; increased or unrecoverable costs; supply chain, vendor, and contractor disruptions; delays in completion of capital or other construction projects, maintenance, and other operations activities, including prolonged or delayed outages; impacts to Entergy's workforce availability, health, or safety; increased cybersecurity risks as a result of many employees telecommuting; increased late or uncollectible customer payments; regulatory delays; executive orders affecting, or increased regulation of, Entergy's business; changes in credit ratings or outlooks as a result of any of the foregoing; or other adverse impacts on Entergy's ability to execute on its business strategies and initiatives or, more generally, on Entergy's results of operations, financial condition, and liquidity;
- Entergy's ability to attract and retain talented management, directors, and employees with specialized skills;
- Entergy's ability to attract, retain, and manage an appropriately qualified workforce;
- changes in accounting standards and corporate governance;
- declines in the market prices of marketable securities and resulting funding requirements and the effects on benefits costs for Entergy's defined benefit pension and other postretirement benefit plans;
- future wage and employee benefit costs, including changes in discount rates and returns on benefit plan assets;
- changes in decommissioning trust fund values or earnings or in the timing of, requirements for, or cost to decommission Entergy's nuclear plant sites and the implementation of decommissioning of such sites following shutdown;
- the decision to cease merchant power generation at all Entergy Wholesale Commodities nuclear power plants by mid-2022, including the implementation of the planned shutdowns and sales of Indian Point 2, Indian Point 3, and Palisades;
- the effectiveness of Entergy's risk management policies and procedures and the ability and willingness of its counterparties to satisfy their financial and performance commitments;
- the potential for the factors listed herein to lead to the impairment of long-lived assets; and
- Entergy and its subsidiaries' ability to successfully execute on their business strategies, including their ability to complete strategic transactions that Entergy may undertake.

DEFINITIONS

Certain abbreviations or acronyms used in the text and notes are defined below:

Abbreviation or Acronym	Term
AFUDC	Allowance for Funds Used During Construction
ALJ	Administrative Law Judge
ANO 1 and 2	Units 1 and 2 of Arkansas Nuclear One (nuclear), owned by Entergy Arkansas
APSC	Arkansas Public Service Commission
ASU	Accounting Standards Update issued by the FASB
Board	Board of Directors of Entergy Corporation
Cajun	Cajun Electric Power Cooperative, Inc.
capacity factor	Actual plant output divided by maximum potential plant output for the period
City Council	Council of the City of New Orleans, Louisiana
COVID-19	The novel coronavirus disease declared a pandemic by the World Health Organization and the Centers for Disease Control and Prevention in March 2020
D.C. Circuit	U.S. Court of Appeals for the District of Columbia Circuit
DOE	United States Department of Energy
Entergy	Entergy Corporation and its direct and indirect subsidiaries
Entergy Corporation	Entergy Corporation, a Delaware corporation
Entergy Gulf States, Inc.	Predecessor company for financial reporting purposes to Entergy Gulf States Louisiana that included the assets and business operations of both Entergy Gulf States Louisiana and Entergy Texas
Entergy Gulf States Louisiana	Entergy Gulf States Louisiana, L.L.C., a Louisiana limited liability company formally created as part of the jurisdictional separation of Entergy Gulf States, Inc. and the successor company to Entergy Gulf States, Inc. for financial reporting purposes. The term is also used to refer to the Louisiana jurisdictional business of Entergy Gulf States, Inc., as the context requires. Effective October 1, 2015, the business of Entergy Gulf States Louisiana was combined with Entergy Louisiana.
Entergy Louisiana	Entergy Louisiana, LLC, a Texas limited liability company formally created as part of the combination of Entergy Gulf States Louisiana and the company formerly known as Entergy Louisiana, LLC (Old Entergy Louisiana) into a single public utility company and the successor to Old Entergy Louisiana for financial reporting purposes.
Entergy Texas	Entergy Texas, Inc., a Texas corporation formally created as part of the jurisdictional separation of Entergy Gulf States, Inc. The term is also used to refer to the Texas jurisdictional business of Entergy Gulf States, Inc., as the context requires.
Entergy Wholesale Commodities	Entergy's non-utility business segment primarily comprised of the ownership, operation, and decommissioning of nuclear power plants, the ownership of interests in non-nuclear power plants, and the sale of the electric power produced by its operating power plants to wholesale customers
EPA	United States Environmental Protection Agency
ERCOT	Electric Reliability Council of Texas
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
FitzPatrick	James A. FitzPatrick Nuclear Power Plant (nuclear), previously owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment, which was sold in March 2017
Grand Gulf	Unit No. 1 of Grand Gulf Nuclear Station (nuclear), 90% owned or leased by System Energy

DEFINITIONS (Continued)

Abbreviation or Acronym	Term
GWh	Gigawatt-hour(s), which equals one million kilowatt-hours
Independence	Independence Steam Electric Station (coal), owned 16% by Entergy Arkansas, 25% by Entergy Mississippi, and 7% by Entergy Power, LLC
Indian Point 2	Unit 2 of Indian Point Energy Center (nuclear), owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment, which ceased power production in April 2020
Indian Point 3	Unit 3 of Indian Point Energy Center (nuclear), owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment
IRS	Internal Revenue Service
ISO	Independent System Operator
kV	Kilovolt
kW	Kilowatt, which equals one thousand watts
kWh	Kilowatt-hour(s)
LDEQ	Louisiana Department of Environmental Quality
LPSC	Louisiana Public Service Commission
Mcf	1,000 cubic feet of gas
MISO	Midcontinent Independent System Operator, Inc., a regional transmission organization
MMBtu	One million British Thermal Units
MPSC	Mississippi Public Service Commission
MW	Megawatt(s), which equals one thousand kilowatts
MWh	Megawatt-hour(s)
Nelson Unit 6	Unit No. 6 (coal) of the Nelson Steam Electric Generating Station, 70% of which is co-owned by Entergy Louisiana (57.5%) and Entergy Texas (42.5%) and 10.9% of which is owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment
Net debt to net capital ratio	Gross debt less cash and cash equivalents divided by total capitalization less cash and cash equivalents
Net MW in operation	Installed capacity owned and operated
NRC	Nuclear Regulatory Commission
NYPA	New York Power Authority
Palisades	Palisades Nuclear Plant (nuclear), owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment
Parent & Other	The portions of Entergy not included in the Utility or Entergy Wholesale Commodities segments, primarily consisting of the activities of the parent company, Entergy Corporation
Pilgrim	Pilgrim Nuclear Power Station (nuclear), previously owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment, which ceased power production in May 2019 and was sold in August 2019
PPA	Purchased power agreement or power purchase agreement
PRP	Potentially responsible party (a person or entity that may be responsible for remediation of environmental contamination)
PUCT	Public Utility Commission of Texas

DEFINITIONS (Concluded)

Abbreviation or Acronym	Term
Registrant Subsidiaries	Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC, Entergy Texas, Inc., and System Energy Resources, Inc.
River Bend	River Bend Station (nuclear), owned by Entergy Louisiana
RTO	Regional transmission organization
SEC	Securities and Exchange Commission
System Agreement	Agreement, effective January 1, 1983, as modified, among the Utility operating companies relating to the sharing of generating capacity and other power resources. The agreement terminated effective August 2016.
System Energy	System Energy Resources, Inc.
TWh	Terawatt-hour(s), which equals one billion kilowatt-hours
Unit Power Sales Agreement	Agreement, dated as of June 10, 1982, as amended and approved by the FERC, among Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and System Energy, relating to the sale of capacity and energy from System Energy's share of Grand Gulf
Utility	Entergy's business segment that generates, transmits, distributes, and sells electric power, with a small amount of natural gas distribution
Utility operating companies	Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas
Vermont Yankee	Vermont Yankee Nuclear Power Station (nuclear), previously owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment, which ceased power production in December 2014 and was disposed of in January 2019
Waterford 3	Unit No. 3 (nuclear) of the Waterford Steam Electric Station, owned by Entergy Louisiana
weather-adjusted usage	Electric usage excluding the effects of deviations from normal weather
White Bluff	White Bluff Steam Electric Generating Station, 57% owned by Entergy Arkansas

ENTERGY CORPORATION AND SUBSIDIARIES

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

Entergy operates primarily through two business segments: Utility and Entergy Wholesale Commodities.

- The **Utility** business segment includes the generation, transmission, distribution, and sale of electric power in portions of Arkansas, Mississippi, Texas, and Louisiana, including the City of New Orleans; and operation of a small natural gas distribution business.
- The **Entergy Wholesale Commodities** business segment includes the ownership, operation, and decommissioning of nuclear power plants located in the northern United States and the sale of the electric power produced by its operating plants to wholesale customers. Entergy Wholesale Commodities also provides services to other nuclear power plant owners and owns interests in non-nuclear power plants that sell the electric power produced by those plants to wholesale customers. See "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" below for discussion of the operation and planned shutdown and sale of each of the Entergy Wholesale Commodities nuclear power plants.

Following are the percentages of Entergy's consolidated revenues generated by its operating segments and the percentage of total assets held by them. Net income or loss generated by the operating segments is discussed in the sections that follow.

Segment	% of Revenue			% of Total Assets		
	2020	2019	2018	2020	2019	2018
Utility	91	88	87	96	96	93
Entergy Wholesale Commodities	9	12	13	7	8	11
Parent & Other (a)	—	—	—	(3)	(4)	(4)

See Note 13 to the financial statements for further financial information regarding Entergy's business segments.

(a) Parent & Other includes eliminations, which are primarily intersegment activity.

The COVID-19 Pandemic

The COVID-19 pandemic and the measures to control it have adversely affected economic activity and conditions worldwide and have affected the demand for the products and services of many businesses in Entergy's service area. Entergy experienced a decline in sales volume in 2020 compared to 2019 due to the COVID-19 pandemic, especially in the commercial and industrial sectors. In addition, Entergy experienced negative changes to its customers' payment patterns and its operating cash flow activity in 2020 compared to 2019 due to the COVID-19 pandemic. These negative changes include an increase in uncollectible accounts.

Entergy provides critical services to its customers and has implemented its comprehensive incident response plan, which contemplates major events such as storms or pandemics. Entergy's focus during the COVID-19 pandemic has been on the safety and wellness of its employees; providing safe, reliable service for its customers; analyzing and addressing the financial effects of the COVID-19 pandemic; and continuing its plans for the future. Entergy implemented precautionary measures for safety on and off the job for employees and contractors working at plants and in the field and implemented telecommuting practices for employees who can work from home. Entergy temporarily suspended service disconnections for customers and is working with regulators to address routine and non-routine matters and allow continuation of capital spending plans. The Utility operating companies have received accounting orders to defer costs associated with COVID-19. To date, Entergy has not had material effects to its major projects or capital spending plans. Entergy is working with suppliers and contractors for continued availability of resources, equipment, and supplies to keep operations and major projects going forward and on schedule. Entergy implemented expense-related spending reductions in 2020, which did not affect safety or service reliability, in order to offset some of the financial effects of the COVID-19 pandemic.

Although Entergy has taken these actions in response to the COVID-19 pandemic, uncertainty exists regarding the full depth and length of the effects of COVID-19 on Entergy's sales volume, revenue, collections and cash flows, expenses, liquidity, and capital needs. Entergy will continue to monitor actively the COVID-19 pandemic and related developments affecting its workforce, customers, suppliers, operations, and financial condition.

Hurricane Laura, Hurricane Delta, and Hurricane Zeta

In August and October 2020, Hurricane Laura, Hurricane Delta, and Hurricane Zeta caused significant damage to portions of the Utility's service territories in Louisiana, including New Orleans, Texas, and to a lesser extent, in Arkansas and Mississippi. The storms resulted in widespread power outages, significant damage to distribution and transmission infrastructure, and the loss of sales during the outages. Additionally, as a result of Hurricane Laura's extensive damage to the grid infrastructure serving the impacted area, large portions of the underlying transmission system required nearly a complete rebuild. Total restoration costs for the repair and/or replacement of the electrical system damaged by Hurricane Laura, Hurricane Delta, and Hurricane Zeta are currently estimated to be approximately $2.4 billion, including approximately $1.98 billion in capital costs and approximately $420 million in non-capital costs. The majority of the costs were incurred by Entergy Louisiana, with a substantial portion also incurred by Entergy Texas. The estimate includes all costs to restore power and repair or replace the damages from the hurricanes, except for the cost to repair or replace damage incurred to an Entergy Louisiana transmission line in southeast Louisiana, and the amount of that cost could be significant. The restoration plan for this transmission line and the related cost estimate is still being evaluated. Also, Utility revenues were adversely affected in 2020, primarily due to power outages resulting from the hurricanes.

Entergy recorded accounts payable and corresponding construction work in progress and regulatory assets for the estimated costs incurred that were necessary to return customers to service. Entergy recorded the regulatory assets in accordance with its accounting policies and based on the historic treatment of such costs in its service area because management believes that recovery through some form of regulatory mechanism is probable. There are well-established mechanisms and precedent for addressing these catastrophic events and providing for recovery of prudently incurred storm costs in accordance with applicable regulatory and legal principles. Because Entergy has not gone through the regulatory process regarding these storm costs, there is an element of risk, and Entergy is unable to predict with certainty the degree of success it may have in its recovery initiatives, the amount of restoration costs that it may ultimately recover, or the timing of such recovery.

The Utility operating companies are considering all available avenues to recover storm-related costs from Hurricane Laura, Hurricane Delta, and Hurricane Zeta, including accessing funded storm reserve escrows and securitization. In November 2020, Entergy Louisiana drew $257 million from its funded storm reserves. Each Utility operating company is responsible for its restoration cost obligations and for recovering or financing its storm-related costs. Storm cost recovery or financing will be subject to review by applicable regulatory authorities.

In October 2020, Entergy Louisiana filed an application at the LPSC seeking approval of certain ratemaking adjustments to facilitate issuance of shorter-term bonds to provide interim financing for restoration costs associated with Hurricane Laura, Hurricane Delta, and Hurricane Zeta. Subsequently, Entergy Louisiana and the LPSC staff filed a joint motion seeking approval to exclude from the derivation of Entergy Louisiana's capital structure and cost rate of debt for ratemaking purposes, including the allowance for funds used during construction, shorter-term debt up to $1.1 billion issued by Entergy Louisiana to fund costs associated with Hurricane Laura, Hurricane Delta, and Hurricane Zeta on an interim basis. In November 2020 the LPSC issued an order approving the joint motion, and Entergy Louisiana issued $1.1 billion of 0.62% Series mortgage bonds due November 2023.

In December 2020, Entergy Louisiana provided the LPSC with notification that it intends to initiate a storm cost recovery proceeding in the near future, which will permit the LPSC to retain any outside consultants and counsel needed to review the storm cost recovery application. In February 2021 the LPSC voted to retain outside

counsel and consultants to assist in the review of Entergy Louisiana's upcoming storm cost recovery application, which is expected to be filed in March 2021.

February 2021 Winter Storms

In February 2021, the United States experienced winter storms and extreme cold temperatures, including in Entergy's service area. The impact of the storms and the extreme cold temperatures affected Entergy's operational assets and the availability of generation across the area. In order to balance the system, MISO directed Entergy to conduct rolling power outages. Entergy's system is now back to normal operations. The severe weather event also affected the market for natural gas due to the severe cold's effects on the gas supply system and increased demand for gas to support electricity loads. Entergy's preliminary estimate for the cost of mobilizing crews and restoring power is approximately $125 million to $140 million, primarily at Entergy Louisiana and Entergy Mississippi. Natural gas purchases for February 1st through 25th, 2021, for Entergy were approximately $510 million, including $105 million for Entergy Arkansas, $190 million for Entergy Louisiana, $45 million for Entergy Mississippi, $15 million for Entergy New Orleans, and $155 million for Entergy Texas. This compares to natural gas purchases for February 2020 for Entergy of $80 million, including $10 million for Entergy Arkansas, $39 million for Entergy Louisiana, $14 million for Entergy Mississippi, $7 million for Entergy New Orleans, and $10 million for Entergy Texas.

The Utility operating companies each have fuel recovery mechanisms in place to recover their natural gas costs. With the potential effect of the higher natural gas costs on customers, the Utility operating companies plan to work with their retail regulators to recover these costs in a manner that mitigates the effects on customer bills. The Utility operating companies also expect to work with their regulators as the regulators review other effects of the winter storm.

Results of Operations

2020 Compared to 2019

Following are income statement variances for Utility, Entergy Wholesale Commodities, Parent & Other, and Entergy comparing 2020 to 2019 showing how much the line item increased or (decreased) in comparison to the prior period.

	Utility	Entergy Wholesale Commodities	Parent & Other (a)	Entergy
		(In Thousands)		
2019 Net Income (Loss) Attributable to Entergy Corporation	$1,410,813	$146,682	($316,269)	$1,241,226
Operating revenues	(413,271)	(351,850)	84	(765,037)
Fuel, fuel-related expenses, and gas purchased for resale	(434,394)	(30,900)	27	(465,267)
Purchased power	(297,505)	8,940	(27)	(288,592)
Other regulatory charges (credits)	40,829	—	—	40,829
Other operation and maintenance	(84,548)	(177,945)	(7,262)	(269,755)
Asset write-offs, impairments, and related charges	—	(263,404)	—	(263,404)
Taxes other than income taxes	15,743	(6,987)	339	9,095
Depreciation and amortization	179,298	(46,119)	(109)	133,070
Other income	(23,947)	(151,832)	37,047	(138,732)
Interest expense	59,456	(7,018)	(9,200)	43,238
Other expenses	(4,863)	(34,848)	—	(39,711)
Income taxes	(301,945)	266,232	84,032	48,319
Preferred dividend requirements of subsidiaries	1,301	—	—	1,301
2020 Net Income (Loss) Attributable to Entergy Corporation	$1,800,223	($64,951)	($346,938)	$1,388,334

(a) Parent & Other includes eliminations, which are primarily intersegment activity.

Refer to "**SELECTED FINANCIAL DATA - FIVE-YEAR COMPARISON OF ENTERGY CORPORATION AND SUBSIDIARIES**" which accompanies Entergy Corporation's financial statements in this report for further information with respect to operating statistics.

Results of operations for 2020 include resolution of the 2014-2015 IRS audit, which resulted in a reduction in deferred income tax expense of $230 million that includes a $396 million reduction in deferred income tax expense at Utility related to the basis of assets contributed in the 2015 Entergy Louisiana and Entergy Gulf States Louisiana business combination, including the recognition of previously uncertain tax positions, and deferred income tax expense of $105 million at Entergy Wholesale Commodities and $61 million at Parent and Other resulting from the revaluation of net operating losses as a result of the release of the reserves. See Note 3 to the financial statements for further discussion of the IRS audit resolution.

Results of operations for 2019 include: 1) a loss of $190 million ($156 million net-of-tax) as a result of the sale of the Pilgrim plant in August 2019; 2) a $156 million reduction in income tax expense recognized by Entergy Wholesale Commodities as a result of an internal restructuring; and 3) impairment charges of $100 million ($79 million net-of-tax) due to costs being charged directly to expense as incurred as a result of the impaired value of the Entergy Wholesale Commodities nuclear plants' long-lived assets due to the significantly reduced remaining

estimated operating lives associated with management's strategy to exit the Entergy Wholesale Commodities' merchant power business. See Note 3 to the financial statements for further discussion of the internal restructuring. See "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" below for discussion of management's strategy to shut down and sell all of the remaining plants in Entergy Wholesale Commodities' merchant nuclear fleet and see Note 14 to the financial statements for further discussion of the impairment and related charges and the sale of the Pilgrim plant.

Operating Revenues

Utility

Following is an analysis of the change in operating revenues comparing 2020 to 2019:

	Amount
	(In Millions)
2019 operating revenues	$9,584
Fuel, rider, and other revenues that do not significantly affect net income	(792)
Volume/weather	(164)
System Energy provision for rate refund	(25)
Return of unprotected excess accumulated deferred income taxes to customers	194
Retail electric price	374
2020 operating revenues	**$9,171**

The Utility operating companies' results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not affect net income. "Fuel, rider, and other revenues that do not significantly affect net income" includes the revenue variance associated with these items.

The volume/weather variance is primarily due to decreased commercial and industrial usage as a result of the COVID-19 pandemic and the effects of Hurricane Laura, Hurricane Delta, and Hurricane Zeta, in addition to the effect of less favorable weather on residential and commercial sales, partially offset by an increase in residential usage as a result of the COVID-19 pandemic. The decrease in industrial usage is partially offset by an increase in demand from expansion projects, primarily in the transportation and chemicals industries. See "**The COVID-19 Pandemic**" above for discussion of the COVID-19 pandemic. See "**Hurricane Laura, Hurricane Delta, and Hurricane Zeta**" above for discussion of the storms.

The System Energy provision for rate refund variance is due to a provision for rate refund recorded in 2020 to reflect a one-time credit of $25 million provided for in the Federal Power Act section 205 filing made by System Energy in December 2020. See Note 2 to the financial statements for further discussion of the proceedings involving System Energy at the FERC.

The return of unprotected excess accumulated deferred income taxes to customers resulted from activity at the Utility operating companies in response to the enactment of the Tax Cuts and Jobs Act. The return of unprotected excess accumulated deferred income taxes began in second quarter 2018. In 2020, $68 million was returned to customers through reductions in operating revenues as compared to $262 million in 2019. There is no effect on net income as the reductions in operating revenues were offset by reductions in income tax expense. See Note 2 to the financial statements for further discussion of regulatory activity regarding the Tax Cuts and Jobs Act.

The retail electric price variance is primarily due to:

- interim increases in Entergy Louisiana's formula rate plan revenues effective June 2019 due to the inclusion of the first-year revenue requirement for the J. Wayne Leonard Power Station (formerly St. Charles Power Station) and effective April 2020 due to the inclusion of the first-year revenue requirement for the Lake Charles Power Station and increases in formula rate plan revenues effective September 2019 and September 2020;
- increases in Entergy Mississippi's formula rate plan rates effective with the first billing cycles of July 2019 and April 2020 and an interim capacity rate adjustment to the formula rate plan effective January 2020 to recover non-fuel related costs of acquiring and operating the Choctaw Generating Station;
- an increase in Entergy Arkansas's formula rate plan rates effective with the first billing cycle of January 2020;
- the implementation of a vegetation management rider at Entergy Mississippi effective with the April 2020 billing cycle; and
- increases in Entergy Texas's transmission cost recovery factor rider effective January 2020 and distribution cost recovery factor rider effective October 2020.

The increase was partially offset by the effects of Entergy New Orleans's rate reduction implemented with April 2020 bills that was effective August 2019 in accordance with the City Council resolution and related agreement in principle reached in the 2018 base rate case.

See Note 2 to the financial statements for further discussion of the regulatory proceedings discussed above.

Entergy Wholesale Commodities

Operating revenues for Entergy Wholesale Commodities decreased from $1,295 million for 2019 to $943 million for 2020 primarily due to the shutdown of Indian Point 2 in April 2020 and the shutdown of Pilgrim in May 2019.

Following are key performance measures for Entergy Wholesale Commodities for 2020 and 2019:

	2020	2019
Owned capacity (MW) (a)	2,246	3,274
GWh billed	20,581	28,088
Entergy Wholesale Commodities Nuclear Fleet		
Capacity factor	93%	93%
GWh billed	18,863	25,928
Average energy price ($/MWh)	$40.33	$39.10
Average capacity price ($/kW-month)	$1.92	$4.25
Refueling outage days:		
Indian Point 3	—	29
Palisades	52	—

(a) The reduction in owned capacity is due to the shutdown of the 1,028 MW Indian Point 2 plant in April 2020.

Other Income Statement Items

Utility

Other operation and maintenance expenses decreased from $2,563 million for 2019 to $2,478 million for 2020 primarily due to:

- a decrease of $42 million in nuclear generation expenses primarily due to lower nuclear labor costs, including contract labor, and a lower scope of work performed in 2020 as compared to 2019, in part as a result of the COVID-19 pandemic;
- a decrease of $25 million primarily due to contract costs in 2019 related to initiatives to explore new customer products and services;
- a decrease of $20 million in non-nuclear generation expenses due to a lower scope of work performed during plant outages in 2020 as compared to prior year, including a delay in plant outages as a result of the COVID-19 pandemic, and lower long-term service agreement expenses, partially offset by higher expenses associated with plants placed in service, including the J. Wayne Leonard Power Station (formerly St. Charles Power Station), which began commercial operation in May 2019, the Choctaw Generating Station, which was purchased in October 2019, and the Lake Charles Power Station, which began commercial operation in March 2020;
- higher nuclear insurance refunds of $18 million; and
- an $11 million write-off in 2019 of specific costs related to the potential construction of scrubbers at the White Bluff plant at Entergy Arkansas. See Note 2 to the financial statements for discussion of the write-off.

The decrease was partially offset by:

- an increase of $10 million in compensation and benefits costs primarily due to an increase in net periodic pension and other postretirement benefits costs as a result of a decrease in the discount rate used to value the benefit liabilities, partially offset by lower incentive-based compensation accruals in 2020 as compared to prior year. See "**Critical Accounting Estimates**" below and Note 11 to the financial statements for further discussion of pension and other postretirement benefit costs;
- an increase of $5 million primarily due to the 2019 deferral by Entergy New Orleans of costs related to its 2018 rate case and a system conversion for Algiers customers as a result of the 2018 combined rate case resolution approved by the City Council. See Note 2 to the financial statements for further discussion of the rate case resolution; and
- several individually insignificant items.

Depreciation and amortization expenses increased primarily due to additions to plant in service, including the J. Wayne Leonard Power Station (formerly St. Charles Power Station), the Lake Charles Power Station, and the Choctaw Generating Station, and new depreciation rates at Entergy Mississippi, as approved by the MPSC.

Other regulatory charges (credits) - net for 2020 included a provision of $43.5 million to reflect the 2019 historical year netting adjustment included in the APSC's December 2020 order in Entergy Arkansas's 2020 formula rate plan proceeding. See Note 2 to the financial statements for discussion of Entergy Arkansas's 2020 formula rate plan proceedings.

Other income decreased primarily due to:

- a decrease in the allowance for equity funds used during construction due to higher construction work in progress in 2019, including the J. Wayne Leonard Power Station (formerly St. Charles Power Station) project and the Lake Charles Power Station project, partially offset by construction work in progress in 2020 related to the Montgomery County Power Station project; and

- an increase in net periodic pension and other postretirement benefits non-service pension costs as a result of a decrease in the discount rate used to value the benefits liabilities. See "**Critical Accounting Estimates**" below and Note 11 to the financial statements for further discussion of pension and other postretirement benefit costs.

The decrease was partially offset by changes in decommissioning trust fund activity.

Interest expense increased primarily due to:

- the issuances by Entergy Texas of $300 million in September 2019 and $175 million in March 2020 of 3.55% Series mortgage bonds;
- the issuances by Entergy Louisiana of $300 million of 4.20% Series mortgage bonds and $350 million of 2.90% Series mortgage bonds, each in March 2020, and $525 million of 4.20% Series mortgage bonds in March 2019;
- the issuances by Entergy Arkansas of $350 million of 4.20% Series mortgage bonds in March 2019 and $100 million of 4.0% Series mortgage bonds in March 2020; and
- the issuances by Entergy Mississippi of $135 million of 3.85% Series mortgage bonds in November 2019 and $170 million of 3.50% Series mortgage bonds in May 2020.

See Note 5 to the financial statements for a discussion of long-term debt.

Entergy Wholesale Commodities

Other operation and maintenance expenses decreased from $678 million for 2019 to $500 million for 2020 primarily due to:

- a decrease of $154 million resulting from the absence of expenses from the Pilgrim plant after it was shut down in May 2019 and the Indian Point 2 plant after it was shut down in April 2020; and
- a decrease of $23 million in severance and retention expenses. Severance and retention expenses were incurred in 2020 and 2019 due to management's strategy to exit the Entergy Wholesale Commodities merchant power business.

See "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" below for a discussion of management's strategy to shut down and sell all of the remaining plants in Entergy Wholesale Commodities' merchant nuclear fleet. See Note 13 to the financial statements for further discussion of severance and retention expenses resulting from management's strategy to shut down and sell all of the remaining plants in Entergy Wholesale Commodities' merchant nuclear fleet. See Note 14 to the financial statements for further discussion of the sale of the Pilgrim plant.

Asset write-offs, impairments, and related charges for 2020 include impairment charges of $19 million ($15 million net-of-tax) primarily as a result of expenditures for capital assets. Asset write-offs, impairments, and related charges for 2019 include a loss of $190 million ($156 million net-of-tax) as a result of the sale of the Pilgrim plant in August 2019 and impairment charges of $100 million ($79 million net-of-tax) primarily related to nuclear refueling outage spending and expenditures for capital assets. These costs were charged to expense as incurred as a result of the impaired fair value of the Entergy Wholesale Commodities nuclear plants' long-lived assets due to the significantly reduced remaining estimated operating lives associated with management's strategy to exit the Entergy Wholesale Commodities merchant power business. See "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" below for a discussion of management's strategy to shut down and sell all of the remaining plants in Entergy Wholesale Commodities' merchant nuclear fleet. See Note 14 to the financial statements for a discussion of the impairment of long-lived assets and the sale of the Pilgrim plant.

Depreciation and amortization expenses decreased primarily due to the absence of depreciation expense from the Indian Point 2 plant, after it was shut down in April 2020.

Other income decreased primarily due to lower gains on decommissioning trust fund investments and a decrease in intercompany interest income resulting from repayment in second quarter 2020 of an intercompany loan to Entergy Corporation. See Notes 15 and 16 to the financial statements for a discussion of decommissioning trust fund investments.

Other expenses decreased primarily due to the absence of decommissioning expense from the Pilgrim plant, after it was sold in August 2019. See Note 14 to the financial statements for a discussion of the sale of the Pilgrim plant.

Parent and Other

Other income increased primarily due to the absence of the elimination of other income at Entergy Wholesale Commodities after repayment of an intercompany loan in second quarter 2020 and a $15 million charitable donation made in 2019 to fund the Entergy Charitable Foundation for three years.

Income Taxes

See Note 3 to the financial statements for a reconciliation of the federal statutory rate of 21% to the effective income tax rates, and for additional discussion regarding income taxes.

The effective income tax rate for 2020 was (9.5%). The difference in the effective income tax rate versus the federal statutory rate of 21% was primarily due to completion of the 2014-2015 IRS audit effectively settling the tax positions for those years. See Note 3 to the financial statements for a discussion of the 2014-2015 IRS audit.

The effective income tax rate for 2019 was (15.6%). The difference in the effective income tax rate versus the federal statutory rate of 21% was primarily due to amortization of excess accumulated deferred income taxes, recognition of a deferred tax asset associated with a previously unrecognized net operating loss carryover, a charitable tax deduction, and the effects of restructuring transactions within Entergy Wholesale Commodities, partially offset by valuation allowances recorded against deferred tax assets associated with the disposition of Vermont Yankee and the carryover of business interest expense. See Notes 2 and 3 to the financial statements for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act. See Note 3 to the financial statements for a discussion of the internal restructuring at Entergy Wholesale Commodities. See Note 14 to the financial statements for a discussion of the tax effects of the Vermont Yankee disposition.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Results of Operations**" in Item 7 of Entergy's Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 21, 2020 for discussion of results of operations for 2019 compared to 2018.

Entergy Wholesale Commodities Exit from the Merchant Power Business

Entergy Wholesale Commodities includes the ownership of the following nuclear reactors as of December 31, 2020:

	Location	Market	Capacity	Status
Indian Point 2	Buchanan, NY	NYISO	1,028 MW	Shut down in April 2020
Indian Point 3	Buchanan, NY	NYISO	1,041 MW	Planned shutdown in April 2021
Palisades	Covert, MI	MISO	811 MW	Planned shutdown in May 2022

Entergy sold its FitzPatrick plant to Exelon in March 2017 and, as discussed below, transferred its Vermont Yankee plant to NorthStar in January 2019 and sold its Pilgrim plant to Holtec in August 2019. The Palisades and Indian Point plants are under contract to be sold, subject to certain conditions, after they are shut down. Entergy also sold the Rhode Island State Energy Center, a natural gas-fired combined cycle generating plant, in December 2015.

These plant sales and contracts to sell are the result of a strategy that Entergy has undertaken to manage and reduce the risk of the Entergy Wholesale Commodities business, including exiting the merchant power business. Management evaluated the challenges for each of the plants based on a variety of factors such as their market for both energy and capacity, their size, their contracted positions, and the amount of investment required to continue to operate and maintain the safety and integrity of the plants, including the estimated asset retirement costs. Changes to current assumptions regarding the remaining operating life of a plant, the decommissioning timeline and process, or the length of time that Entergy will continue to own a plant could result in revisions to the asset retirement obligations and affect compliance with certain NRC minimum financial assurance requirements for meeting obligations to decommission the plants. Increases in the asset retirement obligations are likely to result in an increase in operating expense in the period of a revision. The possibility that a plant may have an operating life shorter than previously assumed could result in the need for additional contributions to decommissioning trust funds, or the posting of parent guarantees, letters of credit, or other surety mechanisms.

Entergy Wholesale Commodities also includes the ownership of two non-operating nuclear facilities, Big Rock Point in Michigan and Indian Point 1 in New York, that were acquired when Entergy purchased the Palisades and Indian Point 2 nuclear plants, respectively. Big Rock Point is under contract to be sold with the Palisades plant and Indian Point 1 is under contract to be sold with the Indian Point 2 and Indian Point 3 plants. In addition, Entergy Wholesale Commodities provides operations and management services, including decommissioning-related services, to nuclear power plants owned by non-affiliated entities in the United States. A relatively minor portion of the Entergy Wholesale Commodities business is the ownership of interests in non-nuclear power plants that sell the electric power produced by those plants to wholesale customers.

Shutdown and Disposition of Vermont Yankee

On December 29, 2014, the Vermont Yankee plant ceased power production and entered its decommissioning phase. In November 2016, Entergy entered into an agreement to transfer 100% of the membership interests in Entergy Nuclear Vermont Yankee, LLC to a subsidiary of NorthStar. Entergy Nuclear Vermont Yankee was the owner of the Vermont Yankee plant. The transaction included the transfer of the nuclear decommissioning trust fund and the asset retirement obligation for the spent fuel management and decommissioning of the plant.

In March 2018, Entergy and NorthStar entered into a settlement agreement and a Memorandum of Understanding with State of Vermont agencies and other interested parties that set forth the terms on which the agencies and parties supported the Vermont Public Utility Commission's approval of the transaction. The agreements provided additional financial assurance for decommissioning, spent fuel management and site restoration, and detailed the site restoration standards. In October 2018 the NRC issued an order approving the application to transfer Vermont Yankee's license to NorthStar for decommissioning. In December 2018 the Vermont Public Utility Commission issued an order approving the transaction consistent with the Memorandum of Understanding's terms. On January 11, 2019, Entergy and NorthStar closed the transaction.

Entergy Nuclear Vermont Yankee had an outstanding credit facility that was used to pay for dry fuel storage costs. This credit facility was guaranteed by Entergy Corporation. A subsidiary of Entergy assumed the obligations under the credit facility, and it remains outstanding. At the closing of the sale transaction, NorthStar caused Entergy Nuclear Vermont Yankee, renamed NorthStar Vermont Yankee, to issue a $139 million promissory note to the Entergy subsidiary that assumed the credit facility obligations. The amount of the note includes the

balance outstanding on the credit facility, as well as borrowing fees and costs incurred by Entergy in connection with the credit facility.

With the receipt of the NRC and Vermont Public Utility Commission approvals and the resolution among the parties of the significant conditions of the sale, Entergy concluded that as of December 31, 2018 Vermont Yankee was in held for sale status. Entergy accordingly evaluated Vermont Yankee's asset retirement obligation in light of the terms of the transaction and evaluated the remaining values of the Vermont Yankee assets. These evaluations resulted in an increase in the asset retirement obligation and $173 million of related asset impairment and other charges in the fourth quarter 2018. See Note 9 to the financial statements for additional discussion of the asset retirement obligation. See Note 14 to the financial statements for discussion of the closing of the Vermont Yankee transaction.

Shutdown and Sale of Pilgrim

In October 2015, Entergy determined that it would close the Pilgrim plant, and Pilgrim ceased operations in May 2019. See Note 14 to the financial statements for discussion of the impairment charges associated with the decision to cease operations earlier than expected.

On July 30, 2018, Entergy entered into a purchase and sale agreement with Holtec International to sell to a Holtec subsidiary 100% of the equity interests in Entergy Nuclear Generation Company, LLC, the owner of Pilgrim, for $1,000 (subject to adjustments for net liabilities and other amounts). On August 22, 2019, the NRC approved the transfer of Pilgrim's facility licenses to Holtec. At that time, hearing requests filed by the Commonwealth of Massachusetts and Pilgrim Watch challenging Holtec's financial qualifications and the sufficiency of the NRC's review of the associated environmental impacts of the license transfer were pending with the NRC commissioners. The NRC approval order included a condition acknowledging the NRC's longstanding authority to modify, condition, or rescind the license transfer order as a result of any hearing that may be conducted. On August 26, 2019, as permitted by the August 22 order, Entergy and Holtec closed the transaction.

On September 25, 2019, Massachusetts filed a petition with the U.S. Court of Appeals for the District of Columbia Circuit, asking the court to vacate the NRC's August 22 license transfer approval order and related approvals. On November 22, 2019, Entergy and Holtec filed a motion to dismiss Massachusetts' petition; the NRC also filed a motion to dismiss on the same date. On January 22, 2020, Massachusetts filed a second petition with the D.C. Circuit asking the court to review the NRC's December 17, 2019 order denying its stay motion. On June 16, 2020, Holtec and Massachusetts reached a settlement to resolve issues related to the Pilgrim transaction. Pursuant to the settlement agreement, Massachusetts withdrew its hearing request pending before the NRC and withdrew both of its petitions for review before the D.C. Circuit, thereby terminating Massachusetts's pending legal challenges to the Pilgrim transfer. The NRC denied Pilgrim Watch's hearing request in November 2020, and Pilgrim Watch did not file a judicial appeal of the NRC's denial order.

The sale of Entergy Nuclear Generation Company, LLC to Holtec included the transfer of the nuclear decommissioning trust and obligation for spent fuel management and plant decommissioning. The transaction resulted in a loss of $190 million ($156 million net-of-tax) in 2019. See Note 14 to the financial statements for discussion of the closing of the Pilgrim transaction.

Planned Shutdown and Sale of Indian Point 2 and Indian Point 3

In April 2007, Entergy submitted to the NRC a joint application to renew the operating licenses for Indian Point 2 and Indian Point 3 for an additional 20 years. In January 2017, Entergy reached a settlement with New York State, several State agencies, and Riverkeeper, Inc., under which Indian Point 2 and Indian Point 3 would cease commercial operation by April 30, 2020 and April 30, 2021, respectively, subject to certain conditions, including New York State's withdrawal of opposition to Indian Point's license renewals and issuance of contested permits and similar authorizations. Operations could be extended up to four additional years for each unit by

mutual agreement of Entergy and New York State based on an exigent reliability need for Indian Point generation. In September 2018 the NRC issued renewed operating licenses for Indian Point 2 through April 2024 and for Indian Point 3 through April 2025. Pursuant to the January 2017 settlement agreement, Indian Point 2 ceased commercial operations on April 30, 2020, and Indian Point 3 is expected to cease commercial operations on April 30, 2021. See Note 14 to the financial statements for discussion of the impairment charges associated with the decision to shut down the Indian Point plants.

Other provisions of the settlement include termination of all then-existing investigations of Indian Point by the parties to the agreement, which include the New York State Department of Environmental Conservation, the New York State Department of State, the New York State Department of Public Service, the New York State Department of Health, and the New York State Attorney General. The settlement recognizes the right of New York State agencies to pursue new investigations and enforcement actions with respect to new circumstances or existing conditions that become materially exacerbated.

Another provision of the settlement obligates Entergy to establish a $15 million fund for environmental projects and community support. Apportionment and allocation of funds to beneficiaries are to be determined by mutual agreement of New York State and Entergy. The settlement recognizes New York State's right to perform an annual inspection of Indian Point, with scope and timing to be determined by mutual agreement.

In April 2019, Entergy entered into an agreement to sell, directly or indirectly, 100% of the equity interests in the subsidiaries that own Indian Point 1, Indian Point 2, and Indian Point 3, after Indian Point 3 has been shut down and defueled, to a Holtec subsidiary for decommissioning the plants. The sale will include the transfer of the licenses, spent fuel, decommissioning liabilities, and nuclear decommissioning trusts for the three units.

The transaction is subject to closing conditions, including approval from the NRC. In November 2019, Entergy and Holtec submitted a license transfer application to the NRC. The NRC issued an order approving the application in November 2020, subject to the NRC's authority to condition, revise, or rescind the approval order based on the resolution of four pending hearing requests. A substantially identical condition was imposed in the NRC's August 2019 order approving the license transfer for Pilgrim. In January 2021 the NRC issued an order denying all four hearing requests challenging the license transfer application. In January 2021, New York State filed a petition for review with the D.C. Circuit asking the court to vacate the NRC's January 2021 order denying the State's hearing request, as well as the NRC's November 2020 order approving the license transfers. In January 2021 the D.C. Circuit issued a scheduling order, setting deadlines for initial procedural filings in March 2021. Any other petitioners seeking judicial review of the January 2021 NRC order must file their petitions by March 16, 2021.

Entergy and Holtec also submitted a petition to the New York State Public Service Commission in November 2019 seeking an order from the New York Public Service Commission disclaiming jurisdiction or abstaining from review of the transaction or, alternatively, approving the transaction. Closing is also conditioned on obtaining from the New York State Department of Environmental Conservation an agreement related to Holtec's decommissioning plan as being consistent with applicable standards. The transaction closing is targeted for May 2021, following the defueling of Indian Point 3.

As consideration for the transfer to Holtec of its interest in Indian Point, Entergy will receive nominal cash consideration. The Indian Point transaction is expected to result in a loss based on the difference between Entergy's adjusted net investment in the subsidiaries at closing and the sale price net of any agreed adjustments. As of December 31, 2020, Entergy's adjusted net investment in the Indian Point units was $255 million. The primary variables in the ultimate loss that Entergy will incur are the values of the nuclear decommissioning trusts and the asset retirement obligations at closing, the financial results from plant operations until the closing, and the level of any unrealized deferred tax balances at closing. The terms of the transaction include limitations on withdrawals from the nuclear decommissioning trusts to fund decommissioning activities and controls on how Entergy manages the investment of nuclear decommissioning trust assets between signing and closing; however, the agreement does not require a minimum level of funding in the nuclear decommissioning trusts as a condition to closing.

Planned Shutdown and Sale of Palisades

Almost all of the Palisades output is sold under a power purchase agreement with Consumers Energy, entered into when the plant was acquired in 2007, that is scheduled to expire in 2022. The PPA prices currently exceed market prices. In December 2016, Entergy reached an agreement with Consumers Energy to amend the existing PPA to terminate early, on May 31, 2018. Pursuant to the agreement to amend the PPA, Consumers Energy would pay Entergy $172 million for the early termination of the PPA. The PPA amendment agreement was subject to regulatory approvals, including approval by the Michigan Public Service Commission. Separately, Entergy intended to shut down the Palisades nuclear power plant permanently on October 1, 2018, after refueling in the spring of 2017 and operating through the end of that fuel cycle.

In September 2017 the Michigan Public Service Commission issued an order conditionally approving the PPA amendment transaction, but only granting Consumers Energy recovery of $136.6 million of the $172 million requested early termination payment. As a result, Entergy and Consumers Energy agreed to terminate the PPA amendment agreement. Entergy continues to operate Palisades under the existing PPA with Consumers Energy, instead of shutting down in the fall of 2018 as previously planned. Entergy intends to shut down the Palisades nuclear power plant permanently no later than May 31, 2022. As a result of the increase in the expected operating life of the plant, the expected probability-weighted undiscounted net cash flows as of September 30, 2017 exceeded the carrying value of the plant and related assets. Accordingly, nuclear fuel spending, nuclear refueling outage spending, and expenditures for capital assets incurred at Palisades after September 30, 2017 are no longer charged to expense as incurred, but recorded as assets and depreciated or amortized, subject to the typical periodic impairment reviews prescribed in the accounting rules.

On July 30, 2018, Entergy entered into a purchase and sale agreement with Holtec International to sell to a Holtec subsidiary 100% of the equity interests in the subsidiary that owns Palisades and the Big Rock Point Site. The sale will include the transfer of the nuclear decommissioning trust and obligation for spent fuel management and plant decommissioning. In February 2020 the parties signed an amendment to the purchase and sale agreement to remove the closing condition that the nuclear decommissioning trust fund must have a specified amount and Entergy agreed to contribute $20 million to the nuclear decommissioning trust fund at closing, among other amendments. At the closing of the sale transaction, the Holtec subsidiary will pay $1,000 (subject to adjustment for net liabilities and other amounts) for the equity interests in the subsidiary that owns Palisades and the Big Rock Point Site.

The Palisades transaction is subject to certain closing conditions, including: the permanent shutdown of Palisades and the transfer of all nuclear fuel from the reactor vessel to the spent nuclear fuel pool; NRC regulatory approval for the transfer of the Palisades and Big Rock Point operating and independent spent fuel storage installation licenses; receipt of a favorable private letter ruling from the IRS; and, the Pilgrim transaction having closed. In December 2020, Entergy and Holtec submitted a license transfer application to the NRC requesting approval to transfer the Palisades and Big Rock Point licenses from Entergy to Holtec. The NRC has indicated that it expects to complete its review of the application by January 2022. In February 2021 the Michigan Attorney General; the Environmental Law & Policy Center; and Beyond Nuclear, Michigan Safe Energy Future, and Don't Waste Michigan filed with the NRC petitions to intervene and requests for hearing challenging the license transfer application.

Subject to the above conditions, the Palisades transaction is expected to close by the end of 2022. As of December 31, 2020, Entergy's adjusted net investment in Palisades was $75 million. The primary variables in the ultimate loss or gain that Entergy will incur on the transaction are the values of the nuclear decommissioning trust and the asset retirement obligations at closing, the financial results from plant operations until the closing, and the level of any unrealized deferred tax balances at closing. Palisades completed its final refueling outage in October 2020.

Costs Associated with Exit of the Entergy Wholesale Commodities Business

Entergy incurred approximately $71 million in costs in 2020, $91 million in costs in 2019, and $139 million in costs in 2018 associated with management's strategy to exit the Entergy Wholesale Commodities merchant power business, primarily employee retention and severance expenses and other benefits-related costs, and contracted economic development contributions. Entergy expects to incur employee retention and severance expenses of approximately $40 million in 2021 and $15 million in 2022 associated with the exit from the merchant power business. See Note 13 to the financial statements for further discussion of these costs.

Entergy Wholesale Commodities incurred $19 million in 2020, $100 million in 2019, and $532 million in 2018 of impairment charges related to nuclear fuel spending, nuclear refueling outage spending, expenditures for capital assets, and asset retirement obligation revisions. These costs were charged to expense as incurred as a result of the impaired value of certain of the Entergy Wholesale Commodities nuclear plants' long-lived assets due to the significantly reduced remaining estimated operating lives associated with management's strategy to exit the Entergy Wholesale Commodities merchant power business. Entergy expects to continue to charge Indian Point Energy Center capital asset costs to expense as incurred because Entergy expects its value to continue to be impaired. See Note 14 to the financial statements for further discussion of the impairment charges.

Liquidity and Capital Resources

This section discusses Entergy's capital structure, capital spending plans and other uses of capital, sources of capital, and the cash flow activity presented in the cash flow statement.

Capital Structure

Entergy's debt to capital ratio is shown in the following table. The increase in the debt to capital ratio is primarily due to the net issuance of debt in 2020. See Note 5 to the financial statements for a discussion of long-term debt.

	December 31, 2020	December 31, 2019
Debt to capital	68.3%	65.5%
Effect of excluding securitization bonds	(0.2%)	(0.4%)
Debt to capital, excluding securitization bonds (a)	68.1%	65.1%
Effect of subtracting cash	(1.7%)	(0.5%)
Net debt to net capital, excluding securitization bonds (a)	66.4%	64.6%

(a) Calculation excludes the Arkansas, Louisiana, New Orleans, and Texas securitization bonds, which are non-recourse to Entergy Arkansas, Entergy Louisiana, Entergy New Orleans, and Entergy Texas, respectively.

21.4% of the debt outstanding at December 31, 2020 is at the parent company, Entergy Corporation, 78.0% is at the Utility, and 0.6% is at Entergy Wholesale Commodities. Net debt consists of debt less cash and cash equivalents. Debt consists of notes payable and commercial paper, finance lease obligations, and long-term debt, including the currently maturing portion. Capital consists of debt, common shareholders' equity, and subsidiaries' preferred stock without sinking fund. Net capital consists of capital less cash and cash equivalents. Entergy uses the debt to capital ratios excluding securitization bonds in analyzing its financial condition and believes they provide useful information to its investors and creditors in evaluating Entergy's financial condition because the securitization bonds are non-recourse to Entergy, as more fully described in Note 5 to the financial statements. Entergy also uses the net debt to net capital ratio excluding securitization bonds in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy's financial condition because net debt indicates Entergy's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

The Utility operating companies and System Energy seek to optimize their capital structures in accordance with regulatory requirements and to control their cost of capital while also maintaining equity capitalization at a level consistent with investment-grade debt ratings. To the extent that their operating cash flows are in excess of planned investments, cash may be used to reduce outstanding debt or may be paid as a dividend to their parent, or both, in appropriate amounts to maintain the capital structure. To the extent that their operating cash flows are insufficient to support planned investments, the Utility operating companies and System Energy may issue incremental debt or reduce dividends, or both, to maintain their capital structures. In addition, Entergy may make equity contributions to the Utility operating companies and System Energy to maintain their capital structures in certain circumstances such as financing of large transactions or payments that would materially alter the capital structure if financed entirely with debt and reduced dividends.

Long-term debt, including the currently maturing portion, makes up most of Entergy's total debt outstanding. Following are Entergy's long-term debt principal maturities and estimated interest payments as of December 31, 2020. To estimate future interest payments for variable rate debt, Entergy used the rate as of December 31, 2020. The amounts below include payments on System Energy's Grand Gulf sale-leaseback transaction, which are included in long-term debt on the balance sheet.

Long-term debt maturities and estimated interest payments	2021	2022	2023	2024-2025	after 2025
			(In Millions)		
Utility	$1,761	$1,166	$2,938	$2,800	$20,943
Entergy Wholesale Commodities	142	—	—	—	—
Parent and Other	99	737	73	1,102	2,589
Total	$2,002	$1,903	$3,011	$3,902	$23,532

Note 5 to the financial statements provides more detail concerning long-term debt outstanding.

Entergy Corporation has in place a credit facility that has a borrowing capacity of $3.5 billion and expires in September 2024. The facility includes fronting commitments for the issuance of letters of credit against $20 million of the total borrowing capacity of the credit facility. The commitment fee is currently 0.225% of the undrawn commitment amount. Commitment fees and interest rates on loans under the credit facility can fluctuate depending on the senior unsecured debt ratings of Entergy Corporation. The weighted average interest rate for the year ended December 31, 2020 was 2.35% on the drawn portion of the facility.

As of December 31, 2020, amounts outstanding and capacity available under the $3.5 billion credit facility are:

Capacity	Borrowings	Letters of Credit	Capacity Available
	(In Millions)		
$3,500	$165	$6	$3,329

A covenant in Entergy Corporation's credit facility requires Entergy to maintain a consolidated debt ratio, as defined, of 65% or less of its total capitalization. The calculation of this debt ratio under Entergy Corporation's credit facility is different than the calculation of the debt to capital ratio above. One such difference is that it excludes the effects, among other things, of certain impairments related to the Entergy Wholesale Commodities nuclear generation assets. Entergy is currently in compliance with the covenant and expects to remain in compliance with this covenant. If Entergy fails to meet this ratio, or if Entergy or one of the Utility operating companies (except Entergy New Orleans) defaults on other indebtedness or is in bankruptcy or insolvency proceedings, an acceleration of the Entergy Corporation credit facility's maturity date may occur.

Entergy Corporation has a commercial paper program with a Board-approved program limit of up to $2 billion. As of December 31, 2020, Entergy Corporation had $1.627 billion of commercial paper outstanding. The weighted-average interest rate for the year ended December 31, 2020 was 1.39%.

Finance lease obligations are a minimal part of Entergy's overall capital structure. Following are Entergy's payment obligations under those leases.

	2021	2022	2023	2024-2025	after 2025
			(In Millions)		
Finance lease payments	$14	$13	$12	$18	$17

Leases are discussed in Note 10 to the financial statements.

Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas each had credit facilities available as of December 31, 2020 as follows:

Company	Expiration Date	Amount of Facility	Interest Rate (a)	Amount Drawn as of December 31, 2020	Letters of Credit Outstanding as of December 31, 2020
Entergy Arkansas	April 2021	$25 million (b)	1.27%	—	—
Entergy Arkansas	September 2024	$150 million (c)	1.27%	—	—
Entergy Louisiana	September 2024	$350 million (c)	1.27%	—	—
Entergy Mississippi	April 2021	$10 million (d)	1.65%	—	—
Entergy Mississippi	April 2021	$35 million (d)	1.65%	—	—
Entergy Mississippi	April 2021	$37.5 million (d)	1.65%	—	—
Entergy New Orleans	November 2021	$25 million (c)	1.42%	—	$0.8 million
Entergy Texas	September 2024	$150 million (c)	1.65%	—	$1.3 million

(a) The interest rate is the estimated interest rate as of December 31, 2020 that would have been applied to outstanding borrowings under the facility.

(b) Borrowings under this Entergy Arkansas credit facility may be secured by a security interest in its accounts receivable at Entergy Arkansas's option.

(c) The credit facility includes fronting commitments for the issuance of letters of credit against a portion of the borrowing capacity of the facility as follows: $5 million for Entergy Arkansas; $15 million for Entergy Louisiana; $10 million for Entergy New Orleans; and $30 million for Entergy Texas.

(d) Borrowings under the Entergy Mississippi credit facilities may be secured by a security interest in its accounts receivable at Entergy Mississippi's option.

Each of the credit facilities requires the Registrant Subsidiary borrower to maintain a debt ratio, as defined, of 65% or less of its total capitalization. Each Registrant Subsidiary is in compliance with this covenant.

In addition, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas each entered into one or more uncommitted standby letter of credit facilities as a means to post collateral to support its obligations to MISO. Following is a summary of the uncommitted standby letter of credit facilities as of December 31, 2020:

Company	Amount of Uncommitted Facility	Letter of Credit Fee	Letters of Credit Issued as of December 31, 2020 (a) (b)
Entergy Arkansas	$25 million	0.78%	$1 million
Entergy Louisiana	$125 million	0.78%	$2.2 million
Entergy Mississippi	$65 million	0.78%	$1 million
Entergy New Orleans	$15 million	1.00%	$1 million
Entergy Texas	$50 million	0.70%	$6.2 million

(a) As of December 31, 2020, letters of credit posted with MISO covered financial transmission right exposure of $0.3 million for Entergy Louisiana, $0.2 million for Entergy Mississippi, $0.2 million for Entergy New Orleans, and $0.5 million for Entergy Texas. See Note 15 to the financial statements for discussion of financial transmission rights.

(b) As of December 31, 2020, in addition to the $1 million MISO letter of credit, Entergy Mississippi has $1 million of non-MISO letters of credit outstanding under this facility.

Operating Lease Obligations and Guarantees of Unconsolidated Obligations

Entergy has a minimal amount of operating lease obligations and guarantees in support of unconsolidated obligations. Entergy's guarantees in support of unconsolidated obligations are not likely to have a material effect on Entergy's financial condition, results of operations, or cash flows. Following are Entergy's payment obligations as of December 31, 2020 on non-cancelable operating leases with a term over one year:

	2021	2022	2023	2024-2025	after 2025
			(In Millions)		
Operating lease payments	$66	$57	$47	$59	$21

Leases are discussed in Note 10 to the financial statements.

Summary of Contractual Obligations of Consolidated Entities

Contractual Obligations	2021	2022-2023	2024-2025	after 2025	Total
			(In Millions)		
Long-term debt (a)	$2,002	$4,914	$3,902	$23,532	$34,350
Finance lease payments (b)	$14	$25	$18	$17	$74
Operating leases (b) (c)	$66	$104	$59	$21	$250
Purchase obligations (d)	$1,182	$2,076	$1,651	$3,541	$8,450

(a) Includes estimated interest payments. Long-term debt is discussed in Note 5 to the financial statements.

(b) Lease obligations are discussed in Note 10 to the financial statements.

(c) Does not include power purchase agreements that are accounted for as leases that are included in purchase obligations.

(d) Purchase obligations represent the minimum purchase obligation or cancellation charge for contractual obligations to purchase goods or services. Almost all of the total are fuel and purchased power obligations.

In addition to the contractual obligations stated above, Entergy currently expects to contribute approximately $356 million to its pension plans and approximately $39.9 million to other postretirement plans in 2021, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021. See "**Critical Accounting Estimates - Qualified Pension and Other Postretirement Benefits**" below and Note 11 for a discussion of qualified pension and other postretirement benefits funding.

Also in addition to the contractual obligations, Entergy has $979 million of unrecognized tax benefits and interest net of unused tax attributes for which the timing of payments beyond 12 months cannot be reasonably estimated due to uncertainties in the timing of effective settlement of tax positions. See Note 3 to the financial statements for additional information regarding unrecognized tax benefits.

Capital Expenditure Plans and Other Uses of Capital

Following are the amounts of Entergy's planned construction and other capital investments by operating segment for 2021 through 2023.

Planned construction and capital investments	2021	2022	2023
		(In Millions)	
Utility:			
Generation	$1,080	$1,155	$2,030
Transmission	720	610	675
Distribution	1,180	1,350	1,560
Utility Support	495	440	335
Total	3,475	3,555	4,600
Entergy Wholesale Commodities and Other	10	5	5
Total	$3,485	$3,560	$4,605

In addition to the planned spending in the table above, the Utility also expects to pay for $1,055 million of capital investments in 2021 related to Hurricane Laura, Hurricane Delta, and Hurricane Zeta restoration work that have been accrued as of December 31, 2020.

Planned construction and capital investments refer to amounts Entergy plans to spend on routine capital projects that are necessary to support reliability of its service, equipment, or systems and to support normal customer growth. In addition to routine capital projects, they also refer to amounts Entergy plans to spend on non-routine capital investments for which Entergy is either contractually obligated, has Board approval, or otherwise expects to make to satisfy regulatory or legal requirements. Amounts include the following types of construction and capital investments:

- Investments in renewables and other generation, including the Sunflower Solar Facility, Searcy Solar Facility, Walnut Bend Solar Facility, West Memphis Solar Facility, Liberty County Solar Facility, and Hardin County Peaking Facility, and potential construction of additional generation.
- Investments in Entergy's Utility nuclear fleet.
- Transmission spending to enhance reliability, reduce congestion, and enable economic growth.
- Distribution spending to enhance reliability and improve service to customers, including investment to support advanced metering.
- Entergy Wholesale Commodities investments such as component replacements, software and security, and dry cask storage.

For the next several years, the Utility's owned generating capacity is projected to be adequate to meet MISO reserve requirements; however, in the longer-term additional supply resources will be needed, and its supply plan initiative

will continue to seek to transform its generation portfolio with new generation resources. Opportunities resulting from the supply plan initiative, including new projects or the exploration of alternative financing sources, could result in increases or decreases in the capital expenditure estimates given above. Estimated capital expenditures are also subject to periodic review and modification and may vary based on the ongoing effects of business restructuring, regulatory constraints and requirements, environmental regulations, business opportunities, market volatility, economic trends, changes in project plans, and the ability to access capital.

Renewables

Sunflower Solar Facility

In November 2018, Entergy Mississippi announced that it signed an agreement for the purchase of an approximately 100 MW solar photovoltaic facility that will be sited on approximately 1,000 acres in Sunflower County, Mississippi. The estimated base purchase price is approximately $138.4 million. The estimated total investment, including the base purchase price and other related costs, for Entergy Mississippi to acquire the Sunflower Solar Facility is approximately $153.2 million. The purchase is contingent upon, among other things, obtaining necessary approvals, including full cost recovery, from applicable federal and state regulatory and permitting agencies. The project is being built by Sunflower County Solar Project, LLC, an indirect subsidiary of Recurrent Energy, LLC. Entergy Mississippi will purchase the facility upon mechanical completion and after the other purchase contingencies have been met. In December 2018, Entergy Mississippi filed a joint petition with Sunflower Solar Project with the MPSC for Sunflower Solar Project to construct and for Entergy Mississippi to acquire and thereafter own, operate, improve, and maintain the solar facility. Entergy Mississippi proposed revisions to its formula rate plan that would provide for a mechanism, the interim capacity rate adjustment mechanism, in the formula rate plan to recover the non-fuel related costs of additional owned capacity acquired by Entergy Mississippi, including the annual ownership costs of the Sunflower Solar Facility. In December 2019 the MPSC approved Entergy Mississippi's proposed revisions to its formula rate plan to provide for an interim capacity rate adjustment mechanism. Recovery through the interim capacity rate adjustment requires MPSC approval for each new resource. In August 2019 consultants retained by the Mississippi Public Utilities Staff filed a report expressing concerns regarding the project economics. In March 2020, Entergy Mississippi filed supplemental testimony addressing questions and observations raised by the consultants retained by the Mississippi Public Utilities Staff and proposing an alternative structure for the transaction that would reduce its cost. A hearing before the MPSC was held in March 2020. In April 2020 the MPSC issued an order approving certification of the Sunflower Solar Facility and its recovery through the interim capacity rate adjustment mechanism, subject to certain conditions including: (i) that Entergy Mississippi pursue a partnership structure through which the partnership would acquire and own the facility under the build-own-transfer agreement and (ii) that if Entergy Mississippi does not consummate the partnership structure under the terms of the order, there will be a cap of $136 million on the level of recoverable costs. Closing is targeted to occur by the end of 2021.

Searcy Solar Facility

In March 2019, Entergy Arkansas announced that it signed an agreement for the purchase of an approximately 100 MW solar energy facility that will be sited on approximately 800 acres in White County near Searcy, Arkansas. The purchase is contingent upon, among other things, obtaining necessary approvals from applicable federal and state regulatory and permitting agencies. The project is being constructed by a subsidiary of NextEra Energy Resources. Entergy Arkansas will purchase the facility upon mechanical completion and after the other purchase contingencies have been met. Closing is expected to occur by the end of 2021. In May 2019, Entergy Arkansas filed a petition with the APSC seeking a finding that the transaction is in the public interest and requesting all necessary approvals. In September 2019 other parties filed testimony largely supporting the resource acquisition but disputing Entergy Arkansas's proposed method of cost recovery. Entergy Arkansas filed its rebuttal testimony in October 2019. In February 2020, Entergy Arkansas, the Attorney General, and the APSC general staff filed a partial settlement agreement asking the APSC to approve, based on the record in the proceeding, all issues except certain issues that are submitted to the APSC for determination. In April 2020 the APSC issued an order

approving Entergy Arkansas's acquisition of the Searcy Solar facility as being in the public interest, but declined to approve Entergy Arkansas's preferred cost recovery rider mechanism, finding instead, based on the particular facts and circumstances presented, that the formula rate plan rider was a sufficient recovery mechanism for this resource.

Liberty County Solar Facility

In September 2020, Entergy Texas filed an application seeking PUCT approval to amend Entergy Texas's certificate of convenience and necessity to acquire the 100 MW Liberty County Solar Facility and a determination that Entergy Texas's acquisition of the facility through a tax equity partnership is in the public interest. In its preliminary order, the PUCT determined that, in considering Entergy Texas's application, it would not specifically address whether Entergy Texas's use of a tax equity partnership is in the public interest. A procedural schedule was established with a hearing on the merits scheduled in April 2021. Closing is expected to occur in 2023.

Walnut Bend Solar Facility

In October 2020, Entergy Arkansas filed a petition with the APSC seeking a finding that the purchase of the 100 MW Walnut Bend Solar Facility is in the public interest. Entergy Arkansas requested a decision by the APSC by June 15, 2021 and primarily requests cost recovery through the formula rate plan rider. A procedural schedule was established with a hearing scheduled in April 2021. Closing is expected to occur in 2022.

West Memphis Solar Facility

In January 2021, Entergy Arkansas filed a petition with the APSC seeking a finding that the purchase of the 180 MW West Memphis Solar Facility is in the public interest. Entergy Arkansas requested a decision by the APSC by September 7, 2021 and primarily requests cost recovery through the formula rate plan rider. Closing is expected to occur in 2023.

Dividends and Stock Repurchases

Declarations of dividends on Entergy's common stock are made at the discretion of the Board. Among other things, the Board evaluates the level of Entergy's common stock dividends based upon earnings per share from the Utility operating segment and the Parent and Other portion of the business, financial strength, and future investment opportunities. At its January 2021 meeting, the Board declared a dividend of $0.95 per share. Entergy paid $748 million in 2020, $712 million in 2019, and $648 million in 2018 in cash dividends on its common stock.

In accordance with Entergy's stock-based compensation plans, Entergy periodically grants stock options, restricted stock, performance units, and restricted stock unit awards to key employees, which may be exercised to obtain shares of Entergy's common stock. According to the plans, these shares can be newly issued shares, treasury stock, or shares purchased on the open market. Entergy's management has been authorized by the Board to repurchase on the open market shares up to an amount sufficient to fund the exercise of grants under the plans.

In addition to the authority to fund grant exercises, the Board has authorized share repurchase programs to enable opportunistic purchases in response to market conditions. In October 2010 the Board granted authority for a $500 million share repurchase program. As of December 31, 2020, $350 million of authority remains under the $500 million share repurchase program. The amount of repurchases may vary as a result of material changes in business results or capital spending or new investment opportunities, or if limitations in the credit markets continue for a prolonged period.

Sources of Capital

Entergy's sources to meet its capital requirements and to fund potential investments include:

- internally generated funds;
- cash on hand ($1,759 million as of December 31, 2020);
- storm reserve escrow accounts;
- debt and equity issuances in the capital markets, including debt issuances to refund or retire currently outstanding or maturing indebtedness;
- bank financing under new or existing facilities or commercial paper; and
- sales of assets.

Circumstances such as weather patterns, fuel and purchased power price fluctuations, and unanticipated expenses, including unscheduled plant outages and storms, could affect the timing and level of internally generated funds in the future. In addition to the financings necessary to meet capital requirements and contractual obligations, the Registrant Subsidiaries expect to continue, when economically feasible, to retire higher-cost debt and replace it with lower-cost debt if market conditions permit.

Provisions within the organizational documents relating to preferred stock or membership interests of certain of Entergy Corporation's subsidiaries could restrict the payment of cash dividends or other distributions on their common and preferred equity. All debt and preferred equity issuances by the Registrant Subsidiaries require prior regulatory approval and their debt issuances are also subject to issuance tests set forth in bond indentures and other agreements. Entergy believes that the Registrant Subsidiaries have sufficient capacity under these tests to meet foreseeable capital needs.

The FERC has jurisdiction over securities issuances by the Utility operating companies and System Energy. The City Council has concurrent jurisdiction over Entergy New Orleans's securities issuances with maturities longer than one year. The APSC has concurrent jurisdiction over Entergy Arkansas's issuances of securities secured by Arkansas property, including first mortgage bond issuances. No regulatory approvals are necessary for Entergy Corporation to issue securities. The current FERC-authorized short-term borrowing limits and long-term financing authorization for Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy are effective through July 2022. Entergy Arkansas has obtained first mortgage bond/secured financing authorization from the APSC that extends through December 2022. Entergy New Orleans also has obtained long-term financing authorization from the City Council that extends through July 2022. Entergy Arkansas, Entergy Louisiana, and System Energy each have obtained long-term financing authorization from the FERC that extends through July 2022 for issuances by the nuclear fuel company variable interest entities. In addition to borrowings from commercial banks, the Registrant Subsidiaries may also borrow from the Entergy System money pool and from other internal short-term borrowing arrangements. The money pool and the other internal borrowing arrangements are inter-company borrowing arrangements designed to reduce Entergy's subsidiaries' dependence on external short-term borrowings. Borrowings from internal and external short-term borrowings combined may not exceed the FERC-authorized limits. See Notes 4 and 5 to the financial statements for further discussion of Entergy's borrowing limits, authorizations, and amounts outstanding.

Equity Issuances and Equity Distribution Program

Entergy Corporation currently expects to issue approximately $2.5 billion of equity through 2024. Entergy is considering various methods, including, among others, at the market distributions, block trades, and preferred equity issuances. In January 2021, Entergy entered into an equity distribution sales agreement with several counterparties establishing an at the market equity distribution program, pursuant to which Entergy may offer and sell from time to time shares of its common stock. The sales agreement provides that, in addition to the issuance and sale of shares of Entergy common stock, Entergy may also enter into forward sale agreements for the sale of its

common stock. The aggregate number of shares of common stock sold under this sales agreement and under any forward sale agreement may not exceed an aggregate gross sales price of $1 billion.

Cash Flow Activity

As shown in Entergy's Consolidated Statements of Cash Flows, cash flows for the years ended December 31, 2020, 2019, and 2018 were as follows:

	2020	2019	2018
		(In Millions)	
Cash and cash equivalents at beginning of period	$426	$481	$781
Net cash provided by (used in):			
Operating activities	2,690	2,817	2,385
Investing activities	(4,772)	(4,510)	(4,106)
Financing activities	3,415	1,638	1,421
Net increase (decrease) in cash and cash equivalents	1,333	(55)	(300)
Cash and cash equivalents at end of period	$1,759	$426	$481

2020 Compared to 2019

Operating Activities

Net cash flow provided by operating activities decreased by $127 million in 2020 primarily due to:

- an increase of $224 million in storm spending in 2020 as compared to 2019 primarily due to spending in 2020 on Hurricane Laura, Hurricane Delta, and Hurricane Zeta restoration. See "**Hurricane Laura, Hurricane Delta, and Hurricane Zeta**" above for discussion of storm restoration efforts;
- the timing of recovery of fuel and purchased power costs in 2020 as compared to the prior year. See Note 2 to the financial statements for a discussion of fuel and purchased power cost recovery;
- lower collections of receivables from customers, in part due to the COVID-19 pandemic;
- the effect of less favorable weather on billed Utility sales in 2020; and
- an increase of $32 million in incentive-based compensation payments in 2020.

The decrease was partially offset by:

- the decrease in the return of unprotected excess accumulated deferred income taxes to Utility customers. See Note 2 to the financial statements for a discussion of the regulatory activity regarding the Tax Cuts and Jobs Act;
- a decrease of $86 million in severance and retention payments in 2020 as compared to 2019. See "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" above for a discussion of management's strategy to exit the Entergy Wholesale Commodities' merchant power business;
- a decrease of $83 million in pension contributions in 2020 as compared to 2019. See "**Critical Accounting Estimates**" below and Note 11 to the financial statements for discussion of qualified pension and other postretirement benefits funding;
- an increase of $71 million in proceeds received from the DOE resulting from litigation regarding spent nuclear fuel storage costs that were previously expensed. See Note 8 to the financial statements for discussion of the spent nuclear fuel litigation;
- the timing of payments to vendors;
- a decrease of $34 million in spending on nuclear refueling outages; and

- an increase of $25 million of nuclear insurance refunds.

Investing Activities

Net cash flow used in investing activities increased by $262 million in 2020 primarily due to:

- an increase of $942 million in storm spending in 2020, primarily on Hurricane Laura, Hurricane Delta, and Hurricane Zeta restoration. See "**Hurricane Laura, Hurricane Delta, and Hurricane Zeta**" above for discussion of storm restoration efforts;
- the purchase of Washington Parish Energy Center by Entergy Louisiana in November 2020 for approximately $222 million. See Note 14 to the financial statements for further discussion of the Washington Parish Energy Center purchase;
- an increase of $140 million in distribution construction expenditures primarily due to investment in the reliability and infrastructure of the distribution system, including increased spending on advanced metering infrastructure;
- an increase of $87 million in nuclear fuel purchases due to variations from year to year in the timing and pricing of fuel reload requirements, materials and services deliveries, and the timing of cash payments during the nuclear fuel cycle;
- an increase of $43 million primarily due to changes in collateral posted to provide credit support to secure its obligations under agreements to sell power produced by Entergy Wholesale Commodities' power plants; and
- $25 million in plant upgrades for the Choctaw Generating Station in March 2020. See Note 14 to the financial statements for discussion of the Choctaw Generating Station purchase.

The increase was partially offset by:

- a decrease of $309 million of non-nuclear generation construction expenditures primarily due to higher spending in 2019 on the Montgomery County Power Station, Lake Charles Power Station, and J. Wayne Leonard Power Station (formerly St. Charles Power Station) projects;
- the purchase of the Choctaw Generating Station in October 2019 for approximately $305 million;
- an increase of $303 million in net receipts from storm reserve escrow accounts;
- a decrease of $141 million in transmission construction expenditures primarily due to the timing of work performed in 2020 as compared to 2019;
- an increase of $70 million in proceeds received from the DOE in 2020 as compared to the prior year resulting from litigation regarding spent nuclear fuel storage costs that were previously capitalized. See Note 8 to the financial statements for discussion of the spent nuclear fuel litigation;
- a decrease of $44 million in information technology construction expenditures primarily due to decreased spending on various technology projects; and
- a decrease of $23 million in nuclear construction expenditures primarily due to a lower scope of work performed on various nuclear projects in 2020 as compared to 2019.

Financing Activities

Net cash flow provided by financing activities increased by $1,777 million in 2020 primarily due to:

- long-term debt activity providing approximately $4,467 million of cash in 2020 compared to providing approximately $1,685 million in 2019; and
- the repurchase in first quarter 2019 of $50 million of Class A mandatorily redeemable preferred membership units in Entergy Holdings Company LLC, a wholly-owned Entergy subsidiary, that were held by a third party.

The increase was partially offset by:

- proceeds of $608 million from the issuance of common stock in May 2019 as a result of the settlement of equity forwards. See Note 7 to the financial statements for discussion of the equity forward sale agreements;
- an increase of $324 million in net repayments of commercial paper in 2020 compared to 2019;
- a decrease of $52 million in treasury stock issuances in 2020 due to a larger amount of previously repurchased Entergy Corporation common stock issued in 2019 to satisfy stock option exercises;
- an increase of $37 million in common stock dividends paid as a result of an increase in the number of shares outstanding and an increase in the dividend paid per share in 2020 compared to 2019; and
- the issuance of $35 million aggregate liquidation value 5.375% Series A preferred stock in September 2019 by Entergy Texas.

For the details of Entergy's commercial paper program, see Note 4 to the financial statements. See Note 5 to the financial statements for details of long-term debt.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources - Cash Flow Activity**" in Item 7 of Entergy's Annual Report on Form 10-K for the year ended December 31, 2019 filed with the SEC on February 21, 2020 for discussion of operating, investing, and financing cash flow activities for 2019 compared to 2018.

Rate, Cost-recovery, and Other Regulation

State and Local Rate Regulation and Fuel-Cost Recovery

The rates that the Utility operating companies charge for their services significantly influence Entergy's financial position, results of operations, and liquidity. These companies are regulated and the rates charged to their customers are determined in regulatory proceedings. Governmental agencies, including the APSC, the LPSC, the MPSC, the City Council, and the PUCT, are primarily responsible for approval of the rates charged to customers. Following is a summary of the Utility operating companies' authorized returns on common equity:

Company	Authorized Return on Common Equity
Entergy Arkansas	9.25% - 10.25%
Entergy Louisiana	9.2% - 10.4% Electric; 9.3% - 10.3% Gas
Entergy Mississippi	8.89% - 10.93%
Entergy New Orleans	8.85% - 9.85%
Entergy Texas	9.65%

The Utility operating companies' base rate, fuel and purchased power cost recovery, and storm cost recovery proceedings are discussed in Note 2 to the financial statements.

Federal Regulation

The FERC regulates wholesale sales of electricity rates and interstate transmission of electricity, including rates for System Energy's sales of capacity and energy from Grand Gulf to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans pursuant to the Unit Power Sales Agreement. The current return on equity and capital structure of System Energy are currently the subject of complaints filed by certain of the operating companies' retail regulators. The current return on equity under the Unit Power Sales Agreement is 10.94%. Prior to each operating company's termination of participation in the System Agreement (Entergy

Arkansas in December 2013, Entergy Mississippi in November 2015, and Entergy Louisiana, Entergy New Orleans, and Entergy Texas each in August 2016), the Utility operating companies engaged in the coordinated planning, construction, and operation of generating and bulk transmission facilities under the terms of the System Agreement, which was a rate schedule approved by the FERC. Certain of the Utility operating companies' retail regulators are pursuing litigation involving the System Agreement at the FERC and in federal courts. See Note 2 to the financial statements for discussion of the complaints filed with the FERC challenging System Energy's return on equity and capital structure, System Energy's treatment of uncertain tax positions and the Grand Gulf sale leaseback arrangement, and a separate request for the FERC to initiate a broader investigation of rates under the Unit Power Sales Agreement.

Market and Credit Risk Sensitive Instruments

Market risk is the risk of changes in the value of commodity and financial instruments, or in future net income or cash flows, in response to changing market conditions. Entergy holds commodity and financial instruments that are exposed to the following significant market risks.

- The commodity price risk associated with the sale of electricity by the Entergy Wholesale Commodities business.
- The interest rate and equity price risk associated with Entergy's investments in pension and other postretirement benefit trust funds. See Note 11 to the financial statements for details regarding Entergy's pension and other postretirement benefit trust funds.
- The interest rate and equity price risk associated with Entergy's investments in nuclear plant decommissioning trust funds, particularly in the Entergy Wholesale Commodities business. See Note 16 to the financial statements for details regarding Entergy's decommissioning trust funds.
- The interest rate risk associated with changes in interest rates as a result of Entergy's outstanding indebtedness. Entergy manages its interest rate exposure by monitoring current interest rates and its debt outstanding in relation to total capitalization. See Notes 4 and 5 to the financial statements for the details of Entergy's debt outstanding.

The Utility has limited exposure to the effects of market risk because it operates primarily under cost-based rate regulation. To the extent approved by their retail regulators, the Utility operating companies use commodity and financial instruments to hedge the exposure to price volatility inherent in their purchased power, fuel, and gas purchased for resale costs that are recovered from customers.

Entergy's commodity and financial instruments are also exposed to credit risk. Credit risk is the risk of loss from nonperformance by suppliers, customers, or financial counterparties to a contract or agreement. Entergy is also exposed to a potential demand on liquidity due to credit support requirements within its supply or sales agreements.

Commodity Price Risk

Power Generation

As a wholesale generator, Entergy Wholesale Commodities' core business is selling energy, measured in MWh, to its customers. Entergy Wholesale Commodities enters into forward contracts with its customers and also sells energy in the day ahead or spot markets. Entergy Wholesale Commodities also sells unforced capacity, which allows load-serving entities to meet specified reserve and related requirements placed on them by the ISOs in their respective areas. Entergy Wholesale Commodities' forward physical power contracts consist of contracts to sell energy only, contracts to sell capacity only, and bundled contracts in which it sells both capacity and energy. While the terminology and payment mechanics vary in these contracts, each of these types of contracts requires Entergy Wholesale Commodities to deliver MWh of energy, make capacity available, or both. In addition to its forward physical power contracts, Entergy Wholesale Commodities may also use a combination of financial contracts,

including swaps, collars, and options, to manage forward commodity price risk. The sensitivities may not reflect the total maximum upside potential from higher market prices. The information contained in the following table represents projections at a point in time and will vary over time based on numerous factors, such as future market prices, contracting activities, and generation. Following is a summary of Entergy Wholesale Commodities' current forward capacity and generation contracts as well as total revenue projections based on market prices as of December 31, 2020.

Entergy Wholesale Commodities Nuclear Portfolio

	2021	2022
Energy		
Percent of planned generation under contract (a):		
Unit-contingent (b)	98%	99%
Planned generation (TWh) (c) (d)	9.6	2.8
Average revenue per MWh on contracted volumes:		
Expected based on market prices as of December 31, 2020	$54.5	$47.1
Capacity		
Percent of capacity sold forward (e):		
Bundled capacity and energy contracts (f)	68%	97%
Capacity contracts (g)	29%	—%
Total	97%	97%
Planned net MW in operation (average) (d)	1,158	338
Average revenue under contract per kW per month (applies to capacity contracts only)	$0.1	$—
Total Energy and Capacity Revenues (h)		
Expected sold and market total revenue per MWh	$54.0	$46.8
Sensitivity: -/+ $10 per MWh market price change	$53.8 - $54.2	$46.7 - $47.0

(a) Percent of planned generation output sold or purchased forward under contracts, forward physical contracts, forward financial contracts, or options that mitigate price uncertainty. Positions that are not classified as hedges are netted in the planned generation under contract.

(b) Transaction under which power is supplied from a specific generation asset; if the asset is not operating, the seller is generally not liable to the buyer for any damages. Certain unit-contingent sales include a guarantee of availability. Availability guarantees provide for the payment to the power purchaser of contract damages, if incurred, in the event the seller fails to deliver power as a result of the failure of the specified generation unit to generate power at or above a specified availability threshold. All of Entergy's outstanding guarantees of availability provide for dollar limits on Entergy's maximum liability under such guarantees.

(c) Amount of output expected to be generated by Entergy Wholesale Commodities nuclear resources considering plant operating characteristics and outage schedules.

(d) Assumes the planned shutdown of Indian Point 3 on April 30, 2021 and planned shutdown of Palisades on May 31, 2022. For a discussion regarding the planned shutdown of the Indian Point 3 and Palisades plants, see "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" above.

(e) Percent of planned qualified capacity sold to mitigate price uncertainty under physical or financial transactions.

(f) A contract for the sale of installed capacity and related energy, priced per megawatt-hour sold.

(g) A contract for the sale of an installed capacity product in a regional market.

(h) Includes assumptions on converting a portion of the portfolio to contracted with fixed price and excludes non-cash revenue from the amortization of the Palisades below-market purchased power agreement, mark-to-market activity, and service revenues.

Some of the agreements to sell the power produced by Entergy Wholesale Commodities' power plants contain provisions that require an Entergy subsidiary to provide credit support to secure its obligations under the agreements. The Entergy subsidiary is required to provide credit support based upon the difference between the current market prices and contracted power prices in the regions where Entergy Wholesale Commodities sells power. The primary form of credit support to satisfy these requirements is an Entergy Corporation guarantee. Cash and letters of credit are also acceptable forms of credit support. At December 31, 2020, based on power prices at that time, Entergy had liquidity exposure of $62 million under the guarantees in place supporting Entergy Wholesale Commodities transactions and $6 million of posted cash collateral. In the event of a decrease in Entergy Corporation's credit rating to below investment grade, based on power prices as of December 31, 2020, Entergy would have been required to provide approximately $30 million of additional cash or letters of credit under some of the agreements. As of December 31, 2020, the liquidity exposure associated with Entergy Wholesale Commodities assurance requirements, including return of previously posted collateral from counterparties, would increase by $22 million for a $1 per MMBtu increase in gas prices in both the short- and long-term markets.

As of December 31, 2020, substantially all the credit exposure associated with the planned energy output under contract for Entergy Wholesale Commodities nuclear plants through 2022 is with counterparties or their guarantors that have public investment grade credit ratings.

Nuclear Matters

Entergy's Utility and Entergy Wholesale Commodities businesses include the ownership and operation of nuclear generating plants and are, therefore, subject to the risks related to such ownership and operation. These include risks related to: the use, storage, and handling and disposal of high-level and low-level radioactive materials; the substantial financial requirements, both for capital investments and operational needs, including the financial requirements to address emerging issues like stress corrosion cracking of certain materials within the plant systems to position Entergy's nuclear fleet to meet its operational goals; the performance and capacity factors of these nuclear plants; the risk of an adverse outcome to an expected challenge to the prudence of operations at Grand Gulf; the implementation of plans to exit the Entergy Wholesale Commodities merchant power business by 2022 and the post-shutdown decommissioning of these plants; regulatory requirements and potential future regulatory changes, including changes affecting the regulations governing nuclear plant ownership, operations, license amendments, and decommissioning; the availability of interim or permanent sites for the disposal of spent nuclear fuel and nuclear waste, including the fees charged for such disposal; the sufficiency of nuclear decommissioning trust fund assets and earnings to complete decommissioning of each site when required; and limitations on the amounts and types of insurance commercially available for losses in connection with nuclear plant operations and catastrophic events such as a nuclear accident.

NRC Reactor Oversight Process

The NRC's Reactor Oversight Process is a program to collect information about plant performance, assess the information for its safety significance, and provide for appropriate licensee and NRC response. The NRC evaluates plant performance by analyzing two distinct inputs: inspection findings resulting from the NRC's inspection program and performance indicators reported by the licensee. The evaluations result in the placement of each plant in one of the NRC's Reactor Oversight Process Action Matrix columns: "licensee response column," or Column 1, "regulatory response column," or Column 2, "degraded cornerstone column," or Column 3, and "multiple/repetitive degraded cornerstone column," or Column 4. Plants in Column 1 are subject to normal NRC inspection activities. Plants in Column 2, Column 3, or Column 4 are subject to progressively increasing levels of inspection by the NRC with, in general, progressively increasing levels of associated costs. Nuclear generating

plants owned and operated by Entergy's Utility and Entergy Wholesale Commodities businesses are currently in Column 1, except for Grand Gulf, which is in Column 2.

In November 2020 the NRC placed Grand Gulf in Column 2 based on the incidence of three unplanned plant scrams during the second and third quarters of 2020. Two of the scram events related to new turbine control system components that failed, and a third related to a feedwater valve positioner that failed, all of which had been replaced in a refueling outage that ended in May 2020. The NRC plans to conduct a supplemental inspection of Grand Gulf in accordance with its inspection procedures for nuclear plants in Column 2. As a consequence of two additional Grand Gulf scrams during the fourth quarter 2020, System Energy expects Grand Gulf to be placed into Column 3 based on plant performance indicators for the four quarters ended December 31, 2020. This will involve an additional supplemental NRC inspection of Grand Gulf in accordance with its inspection procedures for nuclear plants in Column 3.

Critical Accounting Estimates

The preparation of Entergy's financial statements in conformity with generally accepted accounting principles requires management to apply appropriate accounting policies and to make estimates and judgments that can have a significant effect on reported financial position, results of operations, and cash flows. Management has identified the following accounting estimates as critical because they are based on assumptions and measurements that involve a high degree of uncertainty, and the potential for future changes in these assumptions and measurements could produce estimates that would have a material effect on the presentation of Entergy's financial position, results of operations, or cash flows.

Nuclear Decommissioning Costs

Entergy subsidiaries own nuclear generation facilities in both the Utility and Entergy Wholesale Commodities operating segments. Regulations require Entergy subsidiaries to decommission the nuclear power plants after each facility is taken out of service, and cash is deposited in trust funds during the facilities' operating lives in order to provide for this obligation. Entergy conducts periodic decommissioning cost studies to estimate the costs that will be incurred to decommission the facilities. The following key assumptions have a significant effect on these estimates.

- Timing - In projecting decommissioning costs, two assumptions must be made to estimate the timing of plant decommissioning. First, the date of the plant's retirement must be estimated for those plants that do not have an announced shutdown date. The estimate may include assumptions regarding the possibility that the plant may have an operating life shorter than the operating license expiration. Second, an assumption must be made regarding whether all decommissioning activity will proceed immediately upon plant retirement, or whether the plant will be placed in SAFSTOR status. SAFSTOR is decommissioning a facility by placing it in a safe, stable condition that is maintained until it is subsequently decontaminated and dismantled to levels that permit license termination, normally within 60 years from permanent cessation of operations. A change of assumption regarding either the period of continued operation, the use of a SAFSTOR period, or whether Entergy will continue to hold the plant or the plant is held for sale can change the present value of the asset retirement obligation.
- Cost Escalation Factors - Entergy's current decommissioning cost studies include an assumption that decommissioning costs will escalate over present cost levels by factors ranging from approximately 2% to 3% annually. A 50-basis point change in this assumption could change the estimated present value of the decommissioning liabilities by approximately 6% to 18%. The timing assumption influences the significance of the effect of a change in the estimated inflation or cost escalation rate because the effect increases with the length of time assumed before decommissioning activity ends.
- Spent Fuel Disposal - Federal law requires the DOE to provide for the permanent storage of spent nuclear fuel, and legislation has been passed by Congress to develop a repository at Yucca Mountain, Nevada. The DOE has not yet begun accepting spent nuclear fuel and is in non-compliance with federal law. The DOE

continues to delay meeting its obligation and Entergy's nuclear plant owners are continuing to pursue damage claims against the DOE for its failure to provide timely spent fuel storage. Until a federal site is available, however, nuclear plant operators must provide for interim spent fuel storage on the nuclear plant site, which can require the construction and maintenance of dry cask storage sites or other facilities. The costs of developing and maintaining these facilities during the decommissioning period can have a significant effect (as much as an average of 20% to 30% of total estimated decommissioning costs). Entergy's decommissioning studies include cost estimates for spent fuel storage. These estimates could change in the future, however, based on the expected timing of when the DOE begins to fulfill its obligation to receive and store spent nuclear fuel. See Note 8 to the financial statements for further discussion of Entergy's spent nuclear fuel litigation.

- Technology and Regulation - Over the past several years, more practical experience with the actual decommissioning of nuclear facilities has been gained and that experience has been incorporated into Entergy's current decommissioning cost estimates. Given the long duration of decommissioning projects, additional experience, including technological advancements in decommissioning, could be gained and affect current cost estimates. In addition, if regulations regarding nuclear decommissioning were to change, this could affect cost estimates.
- Interest Rates - The estimated decommissioning costs that are the basis for the recorded decommissioning liability are discounted to present value using a credit-adjusted risk-free rate. When the decommissioning liability is revised, increases in cash flows are discounted using the current credit-adjusted risk-free rate. Decreases in estimated cash flows are discounted using the credit-adjusted risk-free rate used previously in estimating the decommissioning liability that is being revised. Therefore, to the extent that a revised cost study results in an increase in estimated cash flows, a change in interest rates from the time of the previous cost estimate will affect the calculation of the present value of the revised decommissioning liability.

Revisions of estimated decommissioning costs that decrease the liability also result in a decrease in the asset retirement cost asset. For the non-rate-regulated portions of Entergy's business for which the plant's value is impaired, these reductions will immediately reduce operating expenses in the period of the revision if the reduction of the liability exceeds the amount of the undepreciated plant asset at the date of the revision. Revisions of estimated decommissioning costs that increase the liability result in an increase in the asset retirement cost asset, which is then depreciated over the asset's remaining economic life. For a plant in the non-rate-regulated portions of Entergy's business for which the plant's value is impaired, however, including a plant that is shutdown, or is nearing its shutdown date, the increase in the liability is likely to immediately increase operating expense in the period of the revision and not increase the asset retirement cost asset. See Note 14 to the financial statements for further discussion of impairment of long-lived assets and Note 9 to the financial statements for further discussion of asset retirement obligations.

Utility Regulatory Accounting

Entergy's Utility operating companies and System Energy are subject to retail regulation by their respective state and local regulators and to wholesale regulation by the FERC. Because these regulatory agencies set the rates the Utility operating companies and System Energy are allowed to charge customers based on allowable costs, including a reasonable return on equity, the Utility operating companies and System Energy apply accounting standards that require the financial statements to reflect the effects of rate regulation, including the recording of regulatory assets and liabilities. Regulatory assets represent incurred costs that have been deferred because they are probable of future recovery from customers through regulated rates. Regulatory liabilities represent the excess recovery of costs that have been deferred because it is probable such amounts will be returned to customers through future regulated rates. See Note 2 to the financial statements for a discussion of rate and regulatory matters, including details of Entergy's and the Registrant Subsidiaries' regulatory assets and regulatory liabilities.

For each regulatory jurisdiction in which they conduct business, the Utility operating companies and System Energy assess whether the regulatory assets and regulatory liabilities continue to meet the criteria for probable future recovery or settlement at each balance sheet date and when regulatory events occur. This

assessment includes consideration of recent rate orders, historical regulatory treatment for similar costs, and factors such as changes in applicable regulatory and political environments. If the assessments made by the Utility operating companies and System Energy are ultimately different than actual regulatory outcomes, it could materially affect the results of operations, financial position, and cash flows of Entergy or the Registrant Subsidiaries.

Impairment of Long-lived Assets

Entergy has significant investments in long-lived assets in both of its operating segments, and Entergy evaluates these assets against the market economics and under the accounting rules for impairment when there are indications that an impairment may exist. This evaluation involves a significant degree of estimation and uncertainty. In the Entergy Wholesale Commodities business, Entergy's investments in merchant generation assets are subject to impairment if adverse market or regulatory conditions arise, particularly if it leads to a decision or an expectation that Entergy will operate or own a plant for a shorter period than previously expected; if there is a significant adverse change in the physical condition of a plant; or, if capital investment in a plant significantly exceeds previously-expected amounts.

If an asset is considered held for use, and Entergy concludes that events and circumstances are present indicating that an impairment analysis should be performed under the accounting standards, the sum of the expected undiscounted future cash flows from the asset are compared to the asset's carrying value. The carrying value of the asset includes any capitalized asset retirement cost associated with the decommissioning liability; therefore, changes in assumptions that affect the decommissioning liability can increase or decrease the carrying value of the asset subject to impairment. If the expected undiscounted future cash flows exceed the carrying value, no impairment is recorded. If the expected undiscounted future cash flows are less than the carrying value and the carrying value exceeds the fair value, Entergy is required to record an impairment charge to write the asset down to its fair value. If an asset is considered held for sale, an impairment is required to be recognized if the fair value (less costs to sell) of the asset is less than its carrying value.

The expected future cash flows are based on a number of key assumptions, including:

- Future power and fuel prices - Electricity and gas prices can be very volatile. This volatility increases the imprecision inherent in the long-term forecasts of commodity prices that are a key determinant of estimated future cash flows.
- Market value of generation assets - Valuing assets held for sale requires estimating the current market value of generation assets. While market transactions provide evidence for this valuation, these transactions are relatively infrequent, the market for such assets is volatile, and the value of individual assets is affected by factors unique to those assets.
- Future operating costs - Entergy assumes relatively minor annual increases in operating costs. Technological or regulatory changes that have a significant effect on operations could cause a significant change in these assumptions.
- Timing and the life of the asset - Entergy assumes an expected life of the asset. A change in the timing assumption, whether due to management decisions regarding operation of the plant, the regulatory process, or operational or other factors, could have a significant effect on the expected future cash flows and result in a significant effect on operations.

See Note 14 to the financial statements for a discussion of impairment conclusions related to the Entergy Wholesale Commodities nuclear plants.

Taxation and Uncertain Tax Positions

Management exercises significant judgment in evaluating the potential tax effects of Entergy's operations, transactions, and other events. Entergy accounts for uncertain income tax positions using a recognition model under

a two-step approach with a more likely-than-not recognition threshold and a measurement approach based on the largest amount of tax benefit that is greater than 50% likely of being realized upon settlement. Management evaluates each tax position based on the technical merits and facts and circumstances of the position, assuming the position will be examined by a taxing authority having full knowledge of all relevant information. Significant judgment is required to determine whether available information supports the assertion that the recognition threshold has been met. Additionally, measurement of unrecognized tax benefits to be recorded in the consolidated financial statements is based on the probability of different potential outcomes. Income tax expense and tax positions recorded could be significantly affected by events such as additional transactions contemplated or consummated by Entergy as well as audits by taxing authorities of the tax positions taken in transactions. Management believes that the financial statement tax balances are accounted for and adjusted appropriately each quarter as necessary in accordance with applicable authoritative guidance; however, the ultimate outcome of tax matters could result in favorable or unfavorable effects on the consolidated financial statements. Entergy's income taxes, including unrecognized tax benefits, open audits, and other significant tax matters are discussed in Note 3 to the financial statements.

Included in the IRS examination of Entergy's 2015 tax returns is the tax effect of the October 2015 combination of two Entergy utility companies, Entergy Gulf States Louisiana and Entergy Louisiana. Entergy Louisiana maintained a carryover tax basis in the assets received and the tax consequences provided for an increase in tax basis as well. This resulted in recognition in 2015 of a $334 million permanent difference and income tax benefit, net of the uncertain tax position recorded on the transaction. As discussed in Note 3 to the financial statements, the IRS completed its examination of the 2014 and 2015 tax years and issued its 2014-2015 Revenue Agent Report in November 2020. Entergy Louisiana reversed the provision for uncertain tax positions with respect to the business combination. See additional discussion of the 2014 and 2015 IRS audit in Note 3 to the financial statements.

In addition, as discussed in Note 3 to the financial statements, in 2015, System Energy and Entergy Louisiana adopted a new method of accounting for income tax return purposes in which nuclear decommissioning liabilities are treated as production costs of electricity includable in cost of goods sold. The new method resulted in a reduction of taxable income of $1.2 billion for System Energy and $2.2 billion for Entergy Louisiana in 2015. In the third quarter 2020 the IRS issued Notices of Proposed Adjustment concerning this uncertain tax position allowing System Energy to include $102 million of its decommissioning liability in cost of goods sold and Entergy Louisiana to include $221 million of its decommissioning liability in cost of goods sold. The Notices of Proposed Adjustment will not be appealed.

As a result of System Energy being allowed to include part of its decommissioning liability in cost of goods sold, System Energy and Entergy recorded a deferred tax liability of $26 million. System Energy also recorded federal and state taxes payable of $402 million; on a consolidated basis, however, Entergy utilized tax loss carryovers to offset the federal taxable income adjustment and accordingly did not record federal taxes payable as a result of the outcome of this uncertain tax position.

As a result of Entergy Louisiana being allowed to include part of its decommissioning liability in cost of goods sold, Entergy Louisiana and Entergy recorded a deferred tax liability of $60 million. Both Entergy Louisiana and Entergy utilized tax loss carryovers to offset the taxable income adjustment and accordingly did not record taxes payable as a result of the outcome of this uncertain tax position.

The partial disallowance of the uncertain tax position to include the decommissioning liability in cost of goods sold resulted in a $1.5 billion decrease in the balance of unrecognized tax benefits related to federal and state taxes for Entergy. Additionally, both System Energy and Entergy Louisiana recorded a reduction to their balances of unrecognized tax benefits for federal and state taxes of $461 million and $1.1 billion, respectively.

The tax treatment of Entergy Louisiana's accrued regulatory liabilities associated with the Vidalia purchased power agreement and business combination guaranteed customer credits, which are discussed in Note 2

to the financial statements, has been resolved in a manner that results in a $190 million increase to previously reported taxable income. Entergy Louisiana and Entergy utilized tax loss carryovers to offset the taxable income adjustment, however, which allowed both Entergy Louisiana and Entergy to reduce their balances of federal and state unrecognized tax benefits by $74 million.

See Note 3 to the financial statements for discussion of the effects of the Tax Cuts and Jobs Act, the federal income tax legislation enacted in December 2017.

Qualified Pension and Other Postretirement Benefits

Entergy sponsors qualified, defined benefit pension plans that cover substantially all employees, including cash balance plans and final average pay plans. Additionally, Entergy currently provides other postretirement health care and life insurance benefits for substantially all full-time employees whose most recent date of hire or rehire is before July 1, 2014 and who reach retirement age and meet certain eligibility requirements while still working for Entergy.

Entergy's reported costs of providing these benefits, as described in Note 11 to the financial statements, are affected by numerous factors including the provisions of the plans, changing employee demographics, and various actuarial calculations, assumptions, and accounting mechanisms. Because of the complexity of these calculations, the long-term nature of these obligations, and the importance of the assumptions utilized, Entergy's estimate of these costs is a critical accounting estimate for the Utility and Entergy Wholesale Commodities segments.

Assumptions

Key actuarial assumptions utilized in determining qualified pension and other postretirement health care and life insurance costs include discount rates, projected healthcare cost rates, expected long-term rate of return on plan assets, rate of increase in future compensation levels, retirement rates, expected timing and form of payments, and mortality rates.

Annually, Entergy reviews and, when necessary, adjusts the assumptions for the pension and other postretirement plans. Every three-to-five years, a formal actuarial assumption experience study that compares assumptions to the actual experience of the pension and other postretirement health care and life insurance plans is conducted. The interest rate environment over the past few years and volatility in the financial equity markets have affected Entergy's funding and reported costs for these benefits.

Discount rates

In selecting an assumed discount rate to calculate benefit obligations, Entergy uses a yield curve based on high-quality corporate debt with cash flows matching the expected plan benefit payments. In estimating the service cost and interest cost components of net periodic benefit cost, Entergy discounts the expected cash flows by the applicable spot rates.

Projected health care cost trend rates

Entergy's health care cost trend is affected by both medical cost inflation, and with respect to capped costs under the plan, the effects of general inflation. Entergy reviews actual recent cost trends and projected future trends in establishing its health care cost trend rates.

Expected long-term rate of return on plan assets

In determining its expected long-term rate of return on plan assets used in the calculation of benefit plan costs, Entergy reviews past performance, current and expected future asset allocations, and capital market

assumptions of its investment consultant and some of its investment managers. Entergy conducts periodic asset/liability studies in order to set its target asset allocations.

In 2017, Entergy confirmed its liability-driven investment strategy for its pension assets, which recommended that the target asset allocation adjust dynamically over time, based on the funded status of the plan, to an ultimate allocation of 35% equity securities and 65% fixed income securities. The ultimate asset allocation is expected to be attained when the plan is 100% funded. The target pension asset allocation for 2020 was 58% equity and 42% fixed income securities.

In 2017, Entergy implemented a new asset allocation strategy for its non-taxable and taxable other postretirement assets, based on the funded status of each sub-account within each trust. The new strategy no longer focuses on targeting an overall asset allocation for each trust, but rather a target asset allocation for each sub-account within each trust that adjusts dynamically based on the funded status. The 2020 weighted average target postretirement asset allocation is 44% equity and 56% fixed income securities. See Note 11 to the financial statements for discussion of the current asset allocations for Entergy's pension and other postretirement assets.

Costs and Sensitivities

The estimated 2021 and actual 2020 qualified pension and other postretirement costs and related underlying assumptions and sensitivities are shown below:

Costs	Estimated 2021	2020
	(In millions)	
Qualified pension cost	$360.1	$373.8 (a)
Other postretirement income	($25.6)	($17.2)

Assumptions	2021	2020
Discount rates		
Qualified pension		
Service cost	2.81%	3.42%
Interest cost	2.08%	2.99%
Other postretirement		
Service cost	2.98%	3.27%
Interest cost	1.86%	2.41%
Expected long-term rates of return		
Qualified pension assets	6.75%	7.00%
Other postretirement - non-taxable assets	6.00% - 6.75%	6.25% - 7.00%
Other postretirement - taxable assets - after tax rate	5.00%	5.25%
Weighted-average rate of increase in future compensation	3.98% - 4.40%	3.98% - 4.40%
Assumed health care cost trend rates		
Pre-65 retirees	5.87%	6.13%
Post-65 retirees	6.31%	6.25%
Ultimate rate	4.75%	4.75%
Year ultimate rate is reached and beyond		
Pre-65 retirees	2030	2027
Post-65 retirees	2028	2027

(a) In 2020 qualified pension cost included settlement costs of $36.9 million.

Actual asset returns have an effect on Entergy's qualified pension and other postretirement costs. In 2020, Entergy's actual annual return on qualified pension assets was approximately 16% and for other postretirement assets was approximately 12%, as compared with the 2020 expected long-term rates of return discussed above.

The following chart reflects the sensitivity of qualified pension cost and qualified pension projected benefit obligation to changes in certain actuarial assumptions (dollars in millions):

Actuarial Assumption	Change in Assumption	Impact on 2021 Qualified Pension Cost	Impact on 2020 Qualified Projected Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$25	$260
Rate of return on plan assets	(0.25%)	$16	$—
Rate of increase in compensation	0.25%	$9	$46

The following chart reflects the sensitivity of postretirement benefit cost and accumulated postretirement benefit obligation to changes in certain actuarial assumptions (dollars in millions):

Actuarial Assumption	Change in Assumption	Impact on 2021 Postretirement Benefit Cost	Impact on 2020 Accumulated Postretirement Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$2	$39
Health care cost trend	0.25%	$2	$26

Each fluctuation above assumes that the other components of the calculation are held constant.

Accounting Mechanisms

In accordance with pension accounting standards, Entergy utilizes a number of accounting mechanisms that reduce the volatility of reported pension costs. Differences between actuarial assumptions and actual plan results are deferred and are amortized into expense only when the accumulated differences exceed 10% of the greater of the projected benefit obligation or the market-related value of plan assets. If necessary, the excess is amortized over the average remaining service period of active employees or the average remaining life expectancy of plan participants if almost all are inactive. Additionally, accounting standards allow for the deferral of prior service costs/credits arising from plan amendments that attribute an increase or decrease in benefits to employee service in prior periods. Prior service costs/credits are then amortized into expense over the average future working life of active employees. Certain decisions, including workforce reductions, plan amendments, and plant shutdowns may significantly reduce the expense amortization period and result in immediate recognition of certain previously-deferred costs and gains/losses in the form of curtailment gains or losses. Similarly, payments made to settle benefit obligations, including lump sum benefit payments, can also result in accelerated recognition in the form of settlement losses or gains.

Entergy calculates the expected return on pension and other postretirement benefit plan assets by multiplying the long-term expected rate of return on assets by the market-related value (MRV) of plan assets. In general, Entergy determines the MRV of its pension plan assets by calculating a value that uses a 20-quarter phase-in of the difference between actual and expected returns and for its other postretirement benefit plan assets Entergy uses fair value.

Accounting standards require an employer to recognize in its balance sheet the funded status of its benefit plans. See Note 11 to the financial statements for a further discussion of Entergy's funded status.

Employer Contributions

Entergy contributed $316.3 million to its qualified pension plans in 2020. Entergy estimates pension contributions will be approximately $356 million in 2021; although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021.

Minimum required funding calculations as determined under Pension Protection Act guidance are performed annually as of January 1 of each year and are based on measurements of the assets and funding liabilities as measured at that date. Any excess of the funding liability over the calculated fair market value of assets results in a funding shortfall that, under the Pension Protection Act, must be funded over a seven-year rolling period. The Pension Protection Act also imposes certain plan limitations if the funded percentage, which is based on calculated fair market values of assets divided by funding liabilities, does not meet certain thresholds. For funding purposes, asset gains and losses are smoothed in to the calculated fair market value of assets. The funding liability is based upon a weighted average 24-month corporate bond rate published by the U.S. Treasury which is generally subject to a corridor of the 25-year average of prior segment rates. Periodic changes in asset returns and interest rates can affect funding shortfalls and future cash contributions.

Entergy contributed $48.2 million to its postretirement plans in 2020 and plans to contribute $39.9 million in 2021.

Other Contingencies

As a company with multi-state utility operations, Entergy is subject to a number of federal and state laws and regulations and other factors and conditions in the areas in which it operates, which potentially subjects it to environmental, litigation, and other risks. Entergy periodically evaluates its exposure for such risks and records a provision for those matters which are considered probable and estimable in accordance with generally accepted accounting principles.

Environmental

Entergy must comply with environmental laws and regulations applicable to air emissions, water discharges, solid waste (including coal combustion residuals), hazardous waste, toxic substances, protected species, and other environmental matters. Under these various laws and regulations, Entergy could incur substantial costs to comply or address any impacts to the environment. Entergy conducts studies to determine the extent of any required remediation and has recorded liabilities based upon its evaluation of the likelihood of loss and expected dollar amount for each issue. Additional sites or issues could be identified which require environmental remediation or corrective action for which Entergy could be liable. The amounts of environmental liabilities recorded can be significantly affected by the following external events or conditions.

- Changes to existing federal, state, or local regulation by governmental authorities having jurisdiction over air quality, water quality, control of toxic substances and hazardous and solid wastes, and other environmental matters.
- The identification of additional impacts, sites, issues, or the filing of other complaints in which Entergy may be asserted to be a potentially responsible party.
- The resolution or progression of existing matters through the court system or resolution by the EPA or relevant state or local authority.

Litigation

Entergy is regularly named as a defendant in a number of lawsuits involving employment, customers, and injuries and damages issues, among other matters. Entergy periodically reviews the cases in which it has been named as defendant and assesses the likelihood of loss in each case as probable, reasonably possible, or remote and records liabilities for cases that have a probable likelihood of loss and the loss can be estimated. Given the environment in which Entergy operates, and the unpredictable nature of many of the cases in which Entergy is named as a defendant, the ultimate outcome of the litigation to which Entergy is exposed has the potential to materially affect the results of operations, financial position, and cash flows of Entergy or the Registrant Subsidiaries.

New Accounting Pronouncements

See Note 1 to the financial statements for discussion of new accounting pronouncements.

ENTERGY CORPORATION AND SUBSIDIARIES
REPORT OF MANAGEMENT

Management of Entergy Corporation and its subsidiaries has prepared and is responsible for the financial statements and related financial information included in this document. To meet this responsibility, management establishes and maintains a system of internal controls over financial reporting designed to provide reasonable assurance regarding the preparation and fair presentation of financial statements in accordance with generally accepted accounting principles. This system includes communication through written policies and procedures, an employee Code of Entegrity, and an organizational structure that provides for appropriate division of responsibility and training of personnel. This system is also tested by a comprehensive internal audit program.

Entergy management assesses the design and effectiveness of Entergy's internal control over financial reporting on an annual basis. In making this assessment, management uses the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control - Integrated Framework. The 2013 COSO Framework was utilized for management's assessment. Management acknowledges, however, that all internal control systems, no matter how well designed, have inherent limitations and can provide only reasonable assurance with respect to financial statement preparation and presentation.

Entergy Corporation's independent registered public accounting firm, Deloitte & Touche LLP, has issued an attestation report on the effectiveness of Entergy Corporation's internal control over financial reporting as of December 31, 2020.

In addition, the Audit Committee of the Board of Directors, composed solely of independent Directors, meets with the independent auditors, internal auditors, management, and internal accountants periodically to discuss internal controls, and auditing and financial reporting matters. The Audit Committee appoints the independent auditors annually, seeks shareholder ratification of the appointment, and reviews with the independent auditors the scope and results of the audit effort. The Audit Committee also meets periodically with the independent auditors and the chief internal auditor without management present, providing free access to the Audit Committee.

Based on management's assessment of internal controls using the 2013 COSO criteria, management believes that Entergy and each of the Registrant Subsidiaries maintained effective internal control over financial reporting as of December 31, 2020. Management further believes that this assessment, combined with the policies and procedures noted above, provides reasonable assurance that Entergy's and each of the Registrant Subsidiaries' financial statements are fairly and accurately presented in accordance with generally accepted accounting principles.

LEO P. DENAULT
Chairman of the Board and Chief Executive Officer of Entergy Corporation

ANDREW S. MARSH
Executive Vice President and Chief Financial Officer of Entergy Corporation, Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC, Entergy Texas, Inc., and System Energy Resources, Inc.

LAURA R. LANDREAUX
Chair of the Board, President, and Chief Executive Officer of Entergy Arkansas, LLC

PHILLIP R. MAY, JR.
Chairman of the Board, President, and Chief Executive Officer of Entergy Louisiana, LLC

HALEY R. FISACKERLY
Chairman of the Board, President, and Chief Executive Officer of Entergy Mississippi, LLC

DAVID D. ELLIS
Chairman of the Board, President, and Chief Executive Officer of Entergy New Orleans, LLC

SALLIE T. RAINER
Chair of the Board, President, and Chief Executive Officer of Entergy Texas, Inc.

RODERICK K. WEST
Chairman of the Board, President, and Chief Executive Officer of System Energy Resources, Inc.

ENTERGY CORPORATION AND SUBSIDIARIES
SELECTED FINANCIAL DATA - FIVE-YEAR COMPARISON

	2020	2019	2018	2017	2016
	(In Thousands, Except Percentages and Per Share Amounts)				
Operating revenues	$10,113,636	$10,878,673	$11,009,452	$11,074,481	$10,845,645
Net income (loss)	$1,406,653	$1,258,244	$862,555	$425,353	($564,503)
Earnings (loss) per share:					
Basic	$6.94	$6.36	$4.68	$2.29	($3.26)
Diluted	$6.90	$6.30	$4.63	$2.28	($3.26)
Dividends declared per share	$3.74	$3.66	$3.58	$3.50	$3.42
Return on common equity	13.13 %	13.02 %	10.08 %	5.12 %	(6.73 %)
Book value per share, year-end	$54.56	$51.34	$46.78	$44.28	$45.12
Total assets	$58,239,212	$51,723,912	$48,275,066	$46,707,149	$45,904,434
Long-term obligations (a)	$21,477,974	$17,351,449	$15,758,083	$14,535,077	$14,695,422

(a) Includes long-term debt (excluding currently maturing debt), non-current finance lease obligations, and subsidiary preferred stock without sinking fund that is not presented as equity on the balance sheet.

	2020	2019	2018	2017	2016
			(Dollars In Millions)		
Utility electric operating revenues:					
Residential	$3,550	$3,532	$3,566	$3,355	$3,288
Commercial	2,293	2,476	2,426	2,480	2,362
Industrial	2,331	2,541	2,499	2,584	2,327
Governmental	212	228	226	231	217
Total billed retail	8,386	8,777	8,717	8,650	8,194
Sales for resale	296	286	300	253	236
Other	365	367	367	376	437
Total	$9,047	$9,430	$9,384	$9,279	$8,867
Utility billed electric energy sales (GWh):					
Residential	35,173	36,094	37,107	33,834	35,112
Commercial	26,466	28,755	29,426	28,745	29,197
Industrial	47,117	48,483	48,384	47,769	45,739
Governmental	2,414	2,579	2,581	2,511	2,547
Total retail	111,170	115,911	117,498	112,859	112,595
Sales for resale	13,658	13,210	11,715	11,550	11,054
Total	124,828	129,121	129,213	124,409	123,649
Entergy Wholesale Commodities:					
Operating revenues	$943	$1,295	$1,469	$1,657	$1,850
Billed electric energy sales (GWh)	20,581	28,088	29,875	30,501	35,881

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and Board of Directors of
Entergy Corporation and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Entergy Corporation and Subsidiaries (the "Corporation") as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, cash flows, and changes in equity for each of the three years in the period ended December 31, 2020, and the related notes (collectively, referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Corporation as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Corporation's internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control—Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated February 26, 2021, expressed an unqualified opinion on the Corporation's internal control over financial reporting.

Basis for Opinion

These financial statements are the responsibility of the Corporation's management. Our responsibility is to express an opinion on the Corporation's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Corporation in accordance with the US federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Rate and Regulatory Matters —Entergy Corporation and Subsidiaries—Refer to Note 2 to the financial statements

Critical Audit Matter Description

The Corporation is subject to rate regulation by the Arkansas Public Service Commission, Louisiana Public Service Commission, Mississippi Public Service Commission, City Council of New Orleans, Louisiana, and Public Utility Commission of Texas (the "Commissions"), which have jurisdiction with respect to the rates of electric companies in Arkansas, Louisiana, Mississippi, Texas, and the City of New Orleans, and to wholesale rate regulation by the Federal Energy Regulatory Commission ("FERC"). Management has determined it meets the requirements under accounting principles generally accepted in the United States of America to prepare its financial statements applying

the specialized rules to account for the effects of cost-based rate regulation. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures, such as property, plant, and equipment; regulatory assets and liabilities; income taxes; operating revenues; operation and maintenance expense; and depreciation and amortization expense.

The Corporation's rates are subject to regulatory rate-setting processes and annual earnings oversight. Because the Commissions and the FERC set the rates, the Corporation is allowed to charge customers based on allowable costs, including a reasonable return on equity, and the Corporation applies accounting standards that require the financial statements to reflect the effects of rate regulation, including the recording of regulatory assets and liabilities. The Corporation assesses whether the regulatory assets and regulatory liabilities continue to meet the criteria for probable future recovery or settlement at each balance sheet date and when regulatory events occur. This assessment includes consideration of recent rate orders, historical regulatory treatment for similar costs, and factors such as changes in applicable regulatory and political environments. While the Corporation has indicated it expects to recover costs from customers through regulated rates, there is a risk that the Commissions and the FERC will not approve: (1) full recovery of the costs of providing utility service or (2) full recovery of amounts invested in the utility business and a reasonable return on that investment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about impacted account balances and disclosures and the high degree of subjectivity involved in assessing the impact of future regulatory orders on the financial statements. Management judgments include assessing the (1) likelihood of recovery in future rates of incurred costs, (2) likelihood of refunds to customers, and (3) ongoing complaints filed with the FERC against System Energy. Auditing management's judgments regarding the outcome of future decisions by the Commissions and the FERC involved especially subjective judgment and specialized knowledge of accounting for rate regulation and the rate-setting process.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertainty of future decisions by the Commissions and the FERC included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of (1) the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets; and (2) a refund or a future reduction in rates that should be reported as regulatory liabilities. We also tested the effectiveness of management's controls over the initial recognition of amounts as property, plant, and equipment; regulatory assets or liabilities; and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or of a future reduction in rates.

- We evaluated the Corporation's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.

- We read relevant regulatory orders issued by the Commissions and the FERC for the Corporation and other public utilities, regulatory statutes, interpretations, procedural memorandums, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the Commissions' and the FERC's treatment of similar costs under similar circumstances. We evaluated the external information and compared to management's recorded regulatory asset and liability balances for completeness.

- For regulatory matters in process, we inspected the Corporation's filings with the Commissions and the FERC, including the annual formula rate plan filings, base rate case filings, and open complaints filed with the FERC against System Energy, and considered the filings with the Commissions and the FERC by intervenors that may impact the Corporation's future rates, for any evidence that might contradict management's assertions.

- We obtained an analysis from management and support from the Corporation's internal and external legal counsel, as appropriate, regarding probability of recovery for regulatory assets or refund or future reduction in rates for regulatory liabilities not yet addressed in a regulatory order, including the complaints filed with the FERC against System Energy, to assess management's assertion that amounts are probable of recovery or a future reduction in rates.

Uncertain Tax Positions—Entergy Wholesale Commodities—Refer to Note 3 to the financial statements

Critical Audit Matter Description

The Corporation accounts for uncertain income tax positions under a two-step approach with a more likely-than-not recognition threshold and a measurement approach based on the largest amount of tax benefit that is greater than fifty percent likely of being realized upon settlement. The Corporation has uncertain tax positions which require management to make significant judgments and assumptions to determine whether available information supports the assertion that the recognition threshold is met, particularly related to the technical merits and facts and circumstances of each position, as well as the probability of different potential outcomes. These uncertain tax positions could be significantly affected by events such as additional transactions contemplated or consummated by the Corporation as well as audits by taxing authorities of the tax positions. The net unrecognized tax benefit of $979 million at December 31, 2020, includes uncertain tax positions related to Entergy Wholesale Commodities.

Given the subjectivity of estimating these uncertain tax positions, auditing the uncertain tax positions involved especially subjective judgment.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertain tax positions included the following, among others:

- We tested the effectiveness of controls related to uncertain tax positions, including those over the recognition and measurement of the income tax benefits.
- We evaluated the Corporation's disclosures, and the balances recorded, related to uncertain tax positions.
- We evaluated the methods and assumptions used by management to estimate the uncertain tax positions by testing the underlying data that served as the basis for the uncertain tax position.
- With the assistance of our income tax specialists, we tested the technical merits of the uncertain tax positions and management's key estimates and judgments made by:
    - Assessing the technical merits of the uncertain tax positions by comparing to similar cases filed with the Internal Revenue Service.
    - Evaluating the reasonableness and consistency of the probabilities applied to the uncertain tax position by comparing to probabilities used on similar uncertain tax positions.
    - Considering the impact of changes or settlements in the tax environment on management's methods and assumptions used to estimate the uncertain tax positions.

Nuclear Decommissioning Costs—Entergy Wholesale Commodities—Refer to Note 9 to the financial statements

Critical Audit Matter Description

The Corporation owns nuclear generation facilities in the Entergy Wholesale Commodities operating segment where regulation requires the Corporation to decommission its nuclear power plants after each facility is taken out of service. The Corporation periodically conducts decommissioning cost studies, which requires management to make significant judgments and assumptions, specifically related to future dismantlement, site restoration, spent fuel management, and license termination costs. The liability for Entergy Wholesale Commodities nuclear decommissioning was $2.6 billion at December 31, 2020.

Auditing management's judgments regarding the nuclear decommissioning costs, including estimates for future dismantlement, site restoration, spent fuel management, and license termination costs, involved especially subjective judgment in evaluating the appropriateness of the estimates and assumptions.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the underlying costs for nuclear decommissioning included the following, among others:

- We tested the effectiveness of the control over nuclear decommissioning where management evaluates whether estimates and assumptions need to be updated for each of the nuclear power plants.
- We evaluated the Corporation's disclosures related to the estimated nuclear decommissioning costs, including the balances recorded.
- We evaluated management's ability to accurately estimate the costs for nuclear decommissioning by comparing the cost estimates to actual nuclear decommissioning costs of similar asset retirement obligations at the Corporation.
- With the assistance of our environmental specialists, we completed a search of environmental regulations to evaluate any regulatory changes that may affect the nuclear decommissioning cost estimates.

/s/ DELOITTE & TOUCHE LLP

New Orleans, Louisiana
February 26, 2021

We have served as the Corporation's auditor since 2001.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED INCOME STATEMENTS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands, Except Share Data)		
OPERATING REVENUES			
Electric	$9,046,643	$9,429,978	$9,384,111
Natural gas	124,008	153,954	156,436
Competitive businesses	942,985	1,294,741	1,468,905
TOTAL	10,113,636	10,878,673	11,009,452
OPERATING EXPENSES			
Operation and Maintenance:			
Fuel, fuel-related expenses, and gas purchased for resale	1,564,371	2,029,638	2,147,793
Purchased power	904,268	1,192,860	1,658,799
Nuclear refueling outage expenses	184,157	204,927	153,826
Other operation and maintenance	3,002,626	3,272,381	3,346,397
Asset write-offs, impairments, and related charges	26,623	290,027	532,321
Decommissioning	381,861	400,802	388,508
Taxes other than income taxes	652,840	643,745	641,952
Depreciation and amortization	1,613,086	1,480,016	1,369,442
Other regulatory charges (credits) - net	14,609	(26,220)	301,049
TOTAL	8,344,441	9,488,176	10,540,087
OPERATING INCOME	1,769,195	1,390,497	469,365
OTHER INCOME			
Allowance for equity funds used during construction	119,430	144,974	129,602
Interest and investment income	392,818	547,912	63,864
Miscellaneous - net	(210,633)	(252,539)	(129,754)
TOTAL	301,615	440,347	63,712
INTEREST EXPENSE			
Interest expense	837,981	807,382	768,322
Allowance for borrowed funds used during construction	(52,318)	(64,957)	(60,974)
TOTAL	785,663	742,425	707,348
INCOME (LOSS) BEFORE INCOME TAXES	1,285,147	1,088,419	(174,271)
Income taxes	(121,506)	(169,825)	(1,036,826)
CONSOLIDATED NET INCOME	1,406,653	1,258,244	862,555
Preferred dividend requirements of subsidiaries	18,319	17,018	13,894
NET INCOME ATTRIBUTABLE TO ENTERGY CORPORATION	$1,388,334	$1,241,226	$848,661
Earnings per average common share:			
Basic	$6.94	$6.36	$4.68
Diluted	$6.90	$6.30	$4.63
Basic average number of common shares outstanding	200,106,945	195,195,858	181,409,597
Diluted average number of common shares outstanding	201,102,220	196,999,284	183,378,513

See Notes to Financial Statements.

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ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	For the Years Ended December 31,		
	2020	**2019**	**2018**
	(In Thousands)		
Net Income	$1,406,653	$1,258,244	$862,555
Other comprehensive income (loss)			
Cash flow hedges net unrealized gain (loss)			
(net of tax expense (benefit) of ($14,776), $28,516, and $5,830)	(55,487)	115,026	22,098
Pension and other postretirement liabilities			
(net of tax expense (benefit) of $5,600, ($6,539), and $30,299)	22,496	(25,150)	90,143
Net unrealized investment gains (losses)			
(net of tax expense of $17,586, $14,023, and $6,393)	30,704	27,183	(28,771)
Other comprehensive income (loss)	(2,287)	117,059	83,470
Comprehensive Income	1,404,366	1,375,303	946,025
Preferred dividend requirements of subsidiaries	18,319	17,018	13,894
Comprehensive Income Attributable to Entergy Corporation	$1,386,047	$1,358,285	$932,131

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING ACTIVITIES			
Consolidated net income	$1,406,653	$1,258,244	$862,555
Adjustments to reconcile consolidated net income to net cash flow provided by operating activities:			
Depreciation, amortization, and decommissioning, including nuclear fuel amortization	2,257,750	2,182,313	2,040,555
Deferred income taxes, investment tax credits, and non-current taxes accrued	(131,114)	193,950	(256,848)
Asset write-offs, impairments, and related charges	26,379	226,678	491,739
Changes in working capital:			
Receivables	(139,296)	(101,227)	98,546
Fuel inventory	(27,458)	(28,173)	45,839
Accounts payable	137,457	(71,898)	97,312
Taxes accrued	207,556	(20,784)	39,272
Interest accrued	7,662	937	5,220
Deferred fuel costs	(49,484)	172,146	(25,829)
Other working capital accounts	(143,451)	(3,108)	(164,173)
Changes in provisions for estimated losses	(291,193)	19,914	35,706
Changes in other regulatory assets	(784,494)	(545,559)	189,193
Changes in other regulatory liabilities	238,669	(14,781)	(803,323)
Changes in pensions and other postretirement liabilities	50,379	187,124	(304,941)
Other	(76,149)	(639,149)	34,424
Net cash flow provided by operating activities	2,689,866	2,816,627	2,385,247
INVESTING ACTIVITIES			
Construction/capital expenditures	(4,694,076)	(4,197,667)	(3,942,010)
Allowance for equity funds used during construction	119,430	144,862	130,195
Nuclear fuel purchases	(215,664)	(128,366)	(302,584)
Payment for purchase of plant or assets	(247,121)	(305,472)	(26,623)
Proceeds from sale of assets	—	28,932	24,902
Insurance proceeds received for property damages	—	7,040	18,270
Changes in securitization account	5,099	3,298	(5,844)
Payments to storm reserve escrow account	(2,273)	(8,038)	(6,551)
Receipts from storm reserve escrow account	297,588	—	—
Decrease (increase) in other investments	(12,755)	30,319	(54,500)
Litigation proceeds for reimbursement of spent nuclear fuel storage costs	72,711	2,369	59,643
Proceeds from nuclear decommissioning trust fund sales	3,107,812	4,121,351	6,484,791
Investment in nuclear decommissioning trust funds	(3,203,057)	(4,208,870)	(6,485,676)
Net cash flow used in investing activities	(4,772,306)	(4,510,242)	(4,105,987)

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,		
	2020	**2019**	**2018**
		(In Thousands)	
FINANCING ACTIVITIES			
Proceeds from the issuance of:			
Long-term debt	12,619,201	9,304,396	8,035,536
Preferred stock of subsidiary	—	33,188	73,330
Treasury stock	42,600	93,862	103,315
Common stock	—	607,650	499,272
Retirement of long-term debt	(8,152,378)	(7,619,380)	(6,965,738)
Repurchase / redemptions of preferred stock	—	(50,000)	(53,868)
Changes in credit borrowings and commercial paper - net	(319,238)	4,389	364,031
Other	(7,524)	(7,732)	26,453
Dividends paid:			
Common stock	(748,342)	(711,573)	(647,704)
Preferred stock	(18,502)	(16,438)	(14,185)
Net cash flow provided by financing activities	3,415,817	1,638,362	1,420,442
Net increase (decrease) in cash and cash equivalents	1,333,377	(55,253)	(300,298)
Cash and cash equivalents at beginning of period	425,722	480,975	781,273
Cash and cash equivalents at end of period	$1,759,099	$425,722	$480,975
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid (received) during the period for:			
Interest - net of amount capitalized	$803,923	$778,209	$734,845
Income taxes	($31,228)	($40,435)	$19,825

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
ASSETS

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$128,851	$34,242
Temporary cash investments	1,630,248	391,480
Total cash and cash equivalents	1,759,099	425,722
Accounts receivable:		
Customer	833,478	595,509
Allowance for doubtful accounts	(117,794)	(7,404)
Other	135,208	219,870
Accrued unbilled revenues	434,835	400,617
Total accounts receivable	1,285,727	1,208,592
Deferred fuel costs	4,380	—
Fuel inventory - at average cost	172,934	145,476
Materials and supplies - at average cost	962,185	824,989
Deferred nuclear refueling outage costs	179,150	157,568
Prepayments and other	196,424	283,645
TOTAL	4,559,899	3,045,992
OTHER PROPERTY AND INVESTMENTS		
Decommissioning trust funds	7,253,215	6,404,030
Non-utility property - at cost (less accumulated depreciation)	343,328	332,864
Other	214,222	496,452
TOTAL	7,810,765	7,233,346
PROPERTY, PLANT, AND EQUIPMENT		
Electric	59,696,443	54,271,467
Natural gas	610,768	547,110
Construction work in progress	2,012,030	2,823,291
Nuclear fuel	601,281	677,181
TOTAL PROPERTY, PLANT, AND EQUIPMENT	62,920,522	58,319,049
Less - accumulated depreciation and amortization	24,067,745	23,136,356
PROPERTY, PLANT, AND EQUIPMENT - NET	38,852,777	35,182,693
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets (includes securitization property of $119,238 as of December 31, 2020 and $239,219 as of December 31, 2019)	6,076,549	5,292,055
Deferred fuel costs	240,422	239,892
Goodwill	377,172	377,172
Accumulated deferred income taxes	76,289	64,461
Other	245,339	288,301
TOTAL	7,015,771	6,261,881
TOTAL ASSETS	$58,239,212	$51,723,912

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
LIABILITIES AND EQUITY

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT LIABILITIES		
Currently maturing long-term debt	$1,164,015	$795,012
Notes payable and commercial paper	1,627,489	1,946,727
Accounts payable	2,739,437	1,499,861
Customer deposits	401,512	409,171
Taxes accrued	441,011	233,455
Interest accrued	201,791	194,129
Deferred fuel costs	153,113	197,687
Pension and other postretirement liabilities	61,815	66,184
Current portion of unprotected excess accumulated deferred income taxes	63,683	76,457
Other	206,640	201,780
TOTAL	7,060,506	5,620,463
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	4,361,772	4,401,190
Accumulated deferred investment tax credits	212,494	207,113
Regulatory liability for income taxes-net	1,521,757	1,633,159
Other regulatory liabilities	2,323,851	1,961,005
Decommissioning and asset retirement cost liabilities	6,469,452	6,159,212
Accumulated provisions	242,835	534,028
Pension and other postretirement liabilities	2,853,013	2,798,265
Long-term debt (includes securitization bonds of $174,635 as of December 31, 2020 and $297,981 as of December 31, 2019)	21,205,761	17,078,643
Other	807,219	852,749
TOTAL	39,998,154	35,625,364
Commitments and Contingencies		
Subsidiaries' preferred stock without sinking fund	219,410	219,410
EQUITY		
Common stock, $0.01 par value, authorized 500,000,000 shares; issued 270,035,180 shares in 2020 and in 2019	2,700	2,700
Paid-in capital	6,549,923	6,564,436
Retained earnings	9,897,182	9,257,609
Accumulated other comprehensive loss	(449,207)	(446,920)
Less - treasury stock, at cost (69,790,346 shares in 2020 and 70,886,400 shares in 2019)	5,074,456	5,154,150
Total common shareholders' equity	10,926,142	10,223,675
Subsidiaries' preferred stock without sinking fund	35,000	35,000
TOTAL	10,961,142	10,258,675
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$ 58,239,212	$ 51,723,912

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
For the Years Ended December 31, 2020, 2019, and 2018

		Common Shareholders' Equity				
	Subsidiaries' Preferred Stock	Common Stock	Treasury Stock	Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Income (Loss)	Total
				(In Thousands)			
Balance at December 31, 2017	$ —	$ 2,548	$ (5,397,637)	$ 5,433,433	$ 7,977,702	$ (23,531)	$ 7,992,515
Implementation of accounting standards					576,257	(632,617)	(56,360)
Balance at January 1, 2018	$—	$2,548	($5,397,637)	$5,433,433	$8,553,959	($656,148)	$7,936,155
Consolidated net income (a)	13,894	—	—	—	848,661	—	862,555
Other comprehensive income	—	—	—	—	—	83,470	83,470
Settlement of equity forwards through common stock issuance	—	68	—	499,932	—	—	500,000
Common stock issuance costs	—	—	—	(728)	—	—	(728)
Common stock issuances related to stock plans	—	—	123,918	18,794	—	—	142,712
Common stock dividends declared	—	—	—	—	(647,704)	—	(647,704)
Subsidiaries' capital stock redemptions	—	—	—	—	(1,723)	—	(1,723)
Preferred dividend requirements of subsidiaries (a)	(13,894)	—	—	—	—	—	(13,894)
Reclassification pursuant to ASU 2018-02	—	—	—	—	(32,043)	15,505	(16,538)
Balance at December 31, 2018	—	2,616	(5,273,719)	5,951,431	8,721,150	(557,173)	8,844,305
Implementation of accounting standards	—	—	—	—	6,806	(6,806)	—
Balance at January 1, 2019	—	2,616	(5,273,719)	5,951,431	8,727,956	(563,979)	8,844,305
Consolidated net income (a)	17,018	—	—	—	1,241,226	—	1,258,244
Other comprehensive income	—	—	—	—	—	117,059	117,059
Settlement of equity forwards through common stock issuance	—	84	—	607,566	—	—	607,650
Common stock issuance costs	—	—	—	(7)	—	—	(7)
Common stock issuances related to stock plans	—	—	119,569	5,446	—	—	125,015
Common stock dividends declared	—	—	—	—	(711,573)	—	(711,573)
Subsidiary's preferred stock issuance	35,000	—	—	—	—	—	35,000
Preferred dividend requirements of subsidiaries (a)	(17,018)	—	—	—	—	—	(17,018)
Balance at December 31, 2019	35,000	2,700	(5,154,150)	6,564,436	9,257,609	(446,920)	10,258,675
Implementation of accounting standards	—	—	—	—	(419)		(419)
Balance at January 1, 2020	35,000	2,700	(5,154,150)	6,564,436	9,257,190	(446,920)	10,258,256
Consolidated net income (a)	18,319	—	—	—	1,388,334	—	1,406,653
Other comprehensive loss	—	—	—	—	—	(2,287)	(2,287)
Common stock issuances related to stock plans	—	—	79,694	(14,513)	—	—	65,181
Common stock dividends declared	—	—	—	—	(748,342)	—	(748,342)
Preferred dividend requirements of subsidiaries (a)	(18,319)	—	—	—	—	—	(18,319)
Balance at December 31, 2020	$35,000	$2,700	($5,074,456)	$6,549,923	$9,897,182	($449,207)	$10,961,142

See Notes to Financial Statements.

(a) Consolidated net income and preferred dividend requirements of subsidiaries include $16.5 million for 2020, $16.5 million for 2019, and $13.9 million for 2018 of preferred dividends on subsidiaries' preferred stock without sinking fund that is not presented as equity.

ENTERGY CORPORATION AND SUBSIDIARIES

NOTES TO FINANCIAL STATEMENTS

NOTE 1. SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

The accompanying consolidated financial statements include the accounts of Entergy Corporation and its subsidiaries. As required by generally accepted accounting principles in the United States of America, all intercompany transactions have been eliminated in the consolidated financial statements. Entergy's Registrant Subsidiaries (Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy) also include their separate financial statements in this Form 10-K. The Registrant Subsidiaries and many other Entergy subsidiaries also maintain accounts in accordance with FERC and other regulatory guidelines.

Use of Estimates in the Preparation of Financial Statements

In conformity with generally accepted accounting principles in the United States of America, the preparation of Entergy Corporation's consolidated financial statements and the separate financial statements of the Registrant Subsidiaries requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities, revenues, and expenses, and the disclosure of contingent assets and liabilities. Adjustments to the reported amounts of assets and liabilities may be necessary in the future to the extent that future estimates or actual results are different from the estimates used.

Revenues and Fuel Costs

See Note 19 to the financial statements for a discussion of Entergy's and the Registrant Subsidiaries' revenues and fuel costs.

Property, Plant, and Equipment

Property, plant, and equipment is stated at original cost less regulatory disallowances and impairments. Depreciation is computed on the straight-line basis at rates based on the applicable estimated service lives of the various classes of property. For the Registrant Subsidiaries, the original cost of plant retired or removed, less salvage, is charged to accumulated depreciation. Normal maintenance, repairs, and minor replacement costs are charged to operating expenses. Certain combined-cycle gas turbine generating units are maintained under long-term service agreements with third-party service providers. The costs under these agreements are split between operating expenses and capital additions based upon the nature of the work performed. Substantially all of the Registrant Subsidiaries' plant is subject to mortgage liens.

Electric plant includes the portion of Grand Gulf that was sold and leased back in a prior period. For financial reporting purposes, this sale and leaseback arrangement is reported as a financing transaction.

Net property, plant, and equipment for Entergy (including property under lease and associated accumulated amortization) by business segment and functional category, as of December 31, 2020 and 2019, is shown below:

2020	Entergy	Utility	Entergy Wholesale Commodities	Parent & Other
		(In Millions)		
Production				
Nuclear	$7,526	$7,493	$33	$—
Other	6,346	6,270	76	—
Transmission	8,758	8,758	—	—
Distribution	10,805	10,805	—	—
Other	2,804	2,792	5	7
Construction work in progress	2,012	2,008	4	—
Nuclear fuel	601	548	53	—
Property, plant, and equipment - net	$38,853	$38,674	$171	$7

2019	Entergy	Utility	Entergy Wholesale Commodities	Parent & Other
		(In Millions)		
Production				
Nuclear	$7,439	$7,369	$70	$—
Other	5,253	5,139	114	—
Transmission	7,383	7,383	—	—
Distribution	8,972	8,972	—	—
Other	2,636	2,620	8	8
Construction work in progress	2,823	2,814	9	—
Nuclear fuel	677	614	63	—
Property, plant, and equipment - net	$35,183	$34,911	$264	$8

Depreciation rates on average depreciable property for Entergy approximated 2.8% in 2020, 2.8% in 2019, and 2.8% in 2018. Included in these rates are the depreciation rates on average depreciable Utility property of 2.7% in 2020, 2.6% in 2019, and 2.6% in 2018, and the depreciation rates on average depreciable Entergy Wholesale Commodities property of 12.7% in 2020, 18.3% in 2019, and 18.6% in 2018. The depreciation rates for Entergy Wholesale Commodities reflect the significantly reduced remaining estimated operating lives associated with management's strategy to shut down and sell all of the remaining plants in Entergy Wholesale Commodities' merchant nuclear fleet. The decrease in the depreciation rate in 2020 for Entergy Wholesale Commodities is due to the shutdown of Indian Point 2 in April 2020.

Entergy amortizes nuclear fuel using a units-of-production method. Nuclear fuel amortization is included in fuel expense in the income statements. Because the values of their long-lived assets are impaired, and their remaining estimated operating lives significantly reduced, the Entergy Wholesale Commodities nuclear plants, except for Palisades, charge nuclear fuel costs directly to expense when incurred because their undiscounted cash flows are insufficient to recover the carrying amount of these capital additions.

Non-utility property - at cost (less accumulated depreciation) for Entergy is reported net of accumulated depreciation of $191 million as of December 31, 2020 and $184 million as of December 31, 2019.

Construction expenditures included in accounts payable is $745 million as of December 31, 2020 and $406 million as of December 31, 2019.

Net property, plant, and equipment for the Registrant Subsidiaries (including property under lease and associated accumulated amortization) by company and functional category, as of December 31, 2020 and 2019, is shown below:

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Millions)			
Production						
Nuclear	$1,622	$3,980	$—	$—	$—	$1,891
Other	803	3,660	868	416	523	—
Transmission	2,053	3,756	1,235	111	1,566	37
Distribution	2,666	4,130	1,651	576	1,782	—
Other	506	984	325	326	273	26
Construction work in progress	234	667	135	12	880	60
Nuclear fuel	163	210	—	—	—	175
Property, plant, and equipment - net	$8,047	$17,388	$4,214	$1,441	$5,023	$2,189

2019	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Millions)			
Production						
Nuclear	$1,611	$4,042	$—	$—	$—	$1,716
Other	785	2,789	845	192	528	—
Transmission	1,966	2,944	1,136	96	1,202	39
Distribution	2,457	3,078	1,489	505	1,443	—
Other	454	884	309	270	256	30
Construction work in progress	198	1,384	88	202	760	165
Nuclear fuel	196	268	—	—	—	150
Property, plant, and equipment - net	$7,667	$15,389	$3,867	$1,265	$4,189	$2,100

Depreciation rates on average depreciable property for the Registrant Subsidiaries are shown below:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
2020	2.6%	2.4%	3.5%	3.1%	3.1%	2.1%
2019	2.5%	2.4%	3.2%	3.2%	3.0%	2.1%
2018	2.5%	2.3%	3.2%	3.5%	2.7%	1.9%

Non-utility property - at cost (less accumulated depreciation) for Entergy Louisiana is reported net of accumulated depreciation of $179.8 million as of December 31, 2020 and $168.5 million as of December 31, 2019. Non-utility property - at cost (less accumulated depreciation) for Entergy Mississippi is reported net of accumulated depreciation of $0.5 million as of December 31, 2020 and $0.5 million as of December 31, 2019. Non-utility

property - at cost (less accumulated depreciation) for Entergy Texas is reported net of accumulated depreciation of $4.9 million as of December 31, 2019.

As of December 31, 2020, construction expenditures included in accounts payable are $59.7 million for Entergy Arkansas, $460.5 million for Entergy Louisiana, $31.4 million for Entergy Mississippi, $9.2 million for Entergy New Orleans, $116.8 million for Entergy Texas, and $17.7 million for System Energy. As of December 31, 2019, construction expenditures included in accounts payable are $67.9 million for Entergy Arkansas, $115.1 million for Entergy Louisiana, $34.2 million for Entergy Mississippi, $18.4 million for Entergy New Orleans, $88.1 million for Entergy Texas, and $23.2 million for System Energy.

Jointly-Owned Generating Stations

Certain Entergy subsidiaries jointly own electric generating facilities with affiliates or third parties. All parties are required to provide their own financing. The investments, fuel expenses, and other operation and maintenance expenses associated with these generating stations are recorded by the Entergy subsidiaries to the extent of their respective undivided ownership interests. As of December 31, 2020, the subsidiaries' investment and accumulated depreciation in each of these generating stations were as follows:

Generating Stations		Fuel Type	Total Megawatt Capability (a)	Ownership	Investment	Accumulated Depreciation
					(In Millions)	
Utility business:						
Entergy Arkansas -						
Independence	Unit 1	Coal	822	31.50 %	$142	$105
Independence	Common Facilities	Coal		15.75 %	$43	$30
White Bluff	Units 1 and 2	Coal	1,640	57.00 %	$585	$383
Ouachita (b)	Common Facilities	Gas		66.67 %	$173	$154
Union (c)	Common Facilities	Gas		25.00 %	$29	$7
Entergy Louisiana -						
Roy S. Nelson	Unit 6	Coal	524	40.25 %	$291	$209
Roy S. Nelson	Unit 6 Common Facilities	Coal		20.98 %	$21	$9
Big Cajun 2	Unit 3	Coal	558	24.15 %	$151	$128
Big Cajun 2	Unit 3 Common Facilities	Coal		8.05 %	$5	$3
Ouachita (b)	Common Facilities	Gas		33.33 %	$90	$77
Acadia	Common Facilities	Gas		50.00 %	$21	$1
Union (c)	Common Facilities	Gas		50.00 %	$59	$8
Entergy Mississippi -						
Independence	Units 1 and 2 and Common Facilities	Coal	1,664	25.00 %	$284	$173
Entergy New Orleans -						
Union (c)	Common Facilities	Gas		25.00 %	$29	$7
Entergy Texas -						
Roy S. Nelson	Unit 6	Coal	524	29.75 %	$206	$119
Roy S. Nelson	Unit 6 Common Facilities	Coal		15.52 %	$7	$3
Big Cajun 2	Unit 3	Coal	558	17.85 %	$113	$82
Big Cajun 2	Unit 3 Common Facilities	Coal		5.95 %	$4	$1
System Energy -						
Grand Gulf (d)	Unit 1	Nuclear	1,396	90.00 %	$5,310	$3,280
Entergy Wholesale Commodities:						
Independence	Unit 2	Coal	842	14.37 %	$74	$55
Independence	Common Facilities	Coal		7.18 %	$20	$14
Roy S. Nelson	Unit 6	Coal	524	10.90 %	$117	$67
Roy S. Nelson	Unit 6 Common Facilities	Coal		5.68 %	$3	$1

(a) "Total Megawatt Capability" is the dependable load carrying capability as demonstrated under actual operating conditions based on the primary fuel (assuming no curtailments) that each station was designed to utilize.

(b) Ouachita Units 1 and 2 are owned 100% by Entergy Arkansas and Ouachita Unit 3 is owned 100% by Entergy Louisiana. The investment and accumulated depreciation numbers above are only for the common facilities and not for the generating units.

(c) Union Unit 1 is owned 100% by Entergy New Orleans, Union Unit 2 is owned 100% by Entergy Arkansas, Union Units 3 and 4 are owned 100% by Entergy Louisiana. The investment and accumulated depreciation numbers above are only for the specified common facilities and not for the generating units.

(d) Includes a leasehold interest held by System Energy. System Energy's Grand Gulf lease obligations are discussed in Note 5 to the financial statements.

Nuclear Refueling Outage Costs

Nuclear refueling outage costs are deferred during the outage and amortized over the estimated period to the next outage because these refueling outage expenses are incurred to prepare the units to operate for the next operating cycle without having to be taken off line. Because the value of their long-lived assets are impaired, and their remaining estimated operating lives significantly reduced, the Entergy Wholesale Commodities nuclear plants, except for Palisades, charge nuclear refueling outage costs directly to expense when incurred because their undiscounted cash flows are insufficient to recover the carrying amount of these costs.

Allowance for Funds Used During Construction (AFUDC)

AFUDC represents the approximate net composite interest cost of borrowed funds and a reasonable return on the equity funds used for construction by the Registrant Subsidiaries. AFUDC increases both the plant balance and earnings and is realized in cash through depreciation provisions included in the rates charged to customers.

Income Taxes

Entergy Corporation and the majority of its subsidiaries file a United States consolidated federal income tax return. In September 2019, Entergy Utility Holding Company, LLC and its regulated wholly-owned subsidiaries including Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, and Entergy New Orleans, LLC became eligible to join and joined the Entergy Corporation consolidated federal income tax group. These changes do not affect the accrual or allocation of income taxes for the Registrant Subsidiaries. Each tax-paying entity records income taxes as if it were a separate taxpayer and consolidating adjustments are allocated to the tax filing entities in accordance with Entergy's intercompany income tax allocation agreements. Deferred income taxes are recorded for temporary differences between the book and tax basis of assets and liabilities, and for certain losses and credits available for carryforward.

Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion of the deferred tax assets will not be realized. Deferred tax assets and liabilities are adjusted for the effects of changes in tax laws and rates in the period in which the tax or rate was enacted. See the "**Other Tax Matters - Tax Cuts and Jobs Act**" section in Note 3 to the financial statements for discussion of the effects of the enactment of the Tax Cuts and Jobs Act in December 2017.

The benefits of investment tax credits are deferred and amortized over the average useful life of the related property, as a reduction of income tax expense, for such credits associated with rate-regulated operations in accordance with ratemaking treatment.

Earnings (Loss) per Share

The following table presents Entergy's basic and diluted earnings per share calculation included on the consolidated statements of operations:

	For the Years Ended December 31,					
	2020		2019		2018	
	(In Millions, Except Per Share Data)					
		$/share		$/share		$/share
Net income attributable to Entergy Corporation	$1,388.3		$1,241.2		$848.7	
Basic shares and earnings per average common share	200.1	$6.94	195.2	$6.36	181.4	$4.68
Average dilutive effect of:						
Stock options	0.5	(0.02)	0.6	(0.02)	0.3	(0.01)
Other equity plans	0.5	(0.02)	0.8	(0.03)	0.7	(0.02)
Equity forwards	—	—	0.4	(0.01)	1.0	(0.02)
Diluted shares and earnings per average common shares	201.1	$6.90	197.0	$6.30	183.4	$4.63

The calculation of diluted earnings per share excluded 523,999 options outstanding at December 31, 2020, 173,290 options outstanding at December 31, 2019, and 956,550 options outstanding at December 31, 2018 because they were antidilutive.

Stock-based Compensation Plans

Entergy grants stock options, restricted stock, performance units, and restricted stock unit awards to key employees of the Entergy subsidiaries under its Equity Ownership Plans, which are shareholder-approved stock-based compensation plans. These plans are described more fully in Note 12 to the financial statements. The cost of the stock-based compensation is charged to income over the vesting period. Awards under Entergy's plans generally vest over three years. Entergy accounts for forfeitures of stock-based compensation when they occur. Entergy recognizes all income tax effects related to share-based payments through the income statement.

Accounting for the Effects of Regulation

Entergy's Utility operating companies and System Energy are rate-regulated enterprises whose rates meet three criteria specified in accounting standards. The Utility operating companies and System Energy have rates that (i) are approved by a body (its regulator) empowered to set rates that bind customers; (ii) are cost-based; and (iii) can be charged to and collected from customers. These criteria may also be applied to separable portions of a utility's business, such as the generation or transmission functions, or to specific classes of customers. Because the Utility operating companies and System Energy meet these criteria, each of them capitalizes costs that would otherwise be charged to expense if the rate actions of its regulator make it probable that those costs will be recovered in future revenue. Such capitalized costs are reflected as regulatory assets in the accompanying financial statements. When an enterprise concludes that recovery of a regulatory asset is no longer probable, the regulatory asset must be removed from the entity's balance sheet.

An enterprise that ceases to meet the three criteria for all or part of its operations should report that event in its financial statements. In general, the enterprise no longer meeting the criteria should eliminate from its balance sheet all regulatory assets and liabilities related to the applicable operations. Additionally, if it is determined that a regulated enterprise is no longer recovering all of its costs, it is possible that an impairment may exist that could require further write-offs of plant assets.

Entergy Louisiana does not apply regulatory accounting standards to the Louisiana retail deregulated portion of River Bend, the 30% interest in River Bend formerly owned by Cajun, or its steam business, unless specific cost recovery is provided for in tariff rates. The Louisiana retail deregulated portion of River Bend is operated under a deregulated asset plan representing a portion (approximately 15%) of River Bend plant costs, generation, revenues, and expenses established under a 1992 LPSC order. The plan allows Entergy Louisiana to sell the electricity from the deregulated assets to Louisiana retail customers at 4.6 cents per kWh or off-system at higher prices, with certain provisions for sharing incremental revenue above 4.6 cents per kWh between customers and shareholders.

Regulatory Asset or Liability for Income Taxes

Accounting standards for income taxes provide that a regulatory asset or liability be recorded if it is probable that the currently determinable future increase or decrease in regulatory income tax expense will be recovered from or returned to customers through future rates. There are two main sources of Entergy's regulatory asset or liability for income taxes. There is a regulatory asset related to the ratemaking treatment of the tax effects of book depreciation for the equity component of AFUDC that has been capitalized to property, plant, and equipment but for which there is no corresponding tax basis. Equity-AFUDC is a component of property, plant, and equipment that is included in rate base when the plant is placed in service. There is a regulatory liability related to the adjustment of Entergy's net deferred income taxes that was required by the enactment in December 2017 of a change in the federal corporate income tax rate, which is discussed in Note 2 and 3 to the financial statements.

Cash and Cash Equivalents

Entergy considers all unrestricted highly liquid debt instruments with an original maturity of three months or less at date of purchase to be cash equivalents.

Securitization Recovery Trust Accounts

The funds that Entergy Arkansas, Entergy Louisiana, Entergy New Orleans, and Entergy Texas hold in their securitization recovery trust accounts are not classified as cash and cash equivalents or restricted cash and cash equivalents because of their nature, uses, and restrictions. These funds are classified as part of other current assets and other investments, depending on the timeframe within which the Registrant Subsidiary expects to use the funds.

Allowance for Doubtful Accounts

The allowance for doubtful accounts reflects Entergy's best estimate of losses on the accounts receivable balances. The allowance is calculated as the historical rate of customer write-offs multiplied by the current accounts receivable balance, taking into account the length of time the receivable balances have been outstanding. Although the rate of customer write-offs has historically experienced minimal variation, management monitors the current condition of individual customer accounts to manage collections and ensure bad debt expense is recorded in a timely manner. Utility operating company customer accounts receivable are written off consistent with approved regulatory requirements. See Note 19 to the financial statements for further details on the allowance for doubtful accounts.

Investments

Entergy records decommissioning trust funds on the balance sheet at their fair value. Unrealized gains and losses on investments in equity securities held by the nuclear decommissioning trust funds are recorded in earnings as they occur rather than in other comprehensive income. Because of the ability of the Registrant Subsidiaries to recover decommissioning costs in rates and in accordance with the regulatory treatment for decommissioning trust funds, the Registrant Subsidiaries have recorded an offsetting amount of unrealized gains/(losses) on investment securities in other regulatory liabilities/assets. For the 30% interest in River Bend formerly owned by Cajun,

Entergy Louisiana records an offsetting amount in other deferred credits for the unrealized trust earnings not currently expected to be needed to decommission the plant. Decommissioning trust funds for the Entergy Wholesale Commodities nuclear plants do not meet the criteria for regulatory accounting treatment. Accordingly, unrealized gains/(losses) recorded on the equity securities in the trust funds are recognized in earnings. Unrealized gains recorded on the available-for-sale debt securities in the trust funds are recognized in the accumulated other comprehensive income component of shareholders' equity. Unrealized losses (where cost exceeds fair market value) on the available-for-sale debt securities in the trust funds are also recorded in the accumulated other comprehensive income component of shareholders' equity unless the unrealized loss is other than temporary and therefore recorded in earnings. A portion of Entergy's decommissioning trust funds were held in a wholly-owned registered investment company, and unrealized gains and losses on both the equity and debt securities held in the registered investment company were recognized in earnings. In December 2020, Entergy liquidated its interest in the registered investment company. The assessment of whether an investment in an available-for-sale debt security has suffered an other-than-temporary impairment is based on whether Entergy has the intent to sell or more likely than not will be required to sell the debt security before recovery of its amortized costs. Further, if Entergy does not expect to recover the entire amortized cost basis of the debt security, an other-than-temporary impairment is considered to have occurred and it is measured by the present value of cash flows expected to be collected less the amortized cost basis (credit loss). Effective January 1, 2020, with the adoption of ASU 2016-13, Entergy estimates the expected credit losses for its available for sale securities based on the current credit rating and remaining life of the securities. To the extent an expected credit loss is realized, the individual security comprising the loss is written off against this allowance. Entergy's trusts are managed by third parties who operate in accordance with agreements that define investment guidelines and place restrictions on the purchases and sales of investments. See Note 16 to the financial statements for details on the decommissioning trust funds.

Equity Method Investments

Entergy owns investments that are accounted for under the equity method of accounting because Entergy's ownership level results in significant influence, but not control, over the investee and its operations. Entergy records its share of the investee's comprehensive earnings and losses in income and as an increase or decrease to the investment account. Any cash distributions are charged against the investment account. Entergy discontinues the recognition of losses on equity investments when its share of losses equals or exceeds its carrying amount for an investee plus any advances made or commitments to provide additional financial support.

Derivative Financial Instruments and Commodity Derivatives

The accounting standards for derivative instruments and hedging activities require that all derivatives be recognized at fair value on the balance sheet, either as assets or liabilities, unless they meet various exceptions including the normal purchase/normal sale criteria. The changes in the fair value of recognized derivatives are recorded each period in current earnings or other comprehensive income, depending on whether a derivative is designated as part of a hedge transaction and the type of hedge transaction. Due to regulatory treatment, an offsetting regulatory asset or liability is recorded for changes in fair value of recognized derivatives for the Registrant Subsidiaries.

Contracts for commodities that will be physically delivered in quantities expected to be used or sold in the ordinary course of business, including certain purchases and sales of power and fuel, meet the normal purchase, normal sales criteria and are not recognized on the balance sheet. Revenues and expenses from these contracts are reported on a gross basis in the appropriate revenue and expense categories as the commodities are received or delivered.

For other contracts for commodities in which Entergy is hedging the variability of cash flows related to a variable-rate asset, liability, or forecasted transactions that qualify as cash flow hedges, the changes in the fair value of such derivative instruments are reported in other comprehensive income. To qualify for hedge accounting, the relationship between the hedging instrument and the hedged item must be documented to include the risk

management objective and strategy and, at inception and on an ongoing basis, the effectiveness of the hedge in offsetting the changes in the cash flows of the item being hedged. Gains or losses accumulated in other comprehensive income are reclassified to earnings in the periods when the underlying transactions actually occur. Prior to 2019, the ineffective portions of all hedges are recognized in current-period earnings. Effective January 1, 2019 with the adoption of ASU 2017-12 there will no longer be separate recognition of the ineffective portion of highly effective hedges. Changes in the fair value of derivative instruments that are not designated as cash flow hedges are recorded in current-period earnings on a mark-to-market basis.

Entergy has determined that contracts to purchase uranium do not meet the definition of a derivative under the accounting standards for derivative instruments because they do not provide for net settlement and the uranium markets are not sufficiently liquid to conclude that forward contracts are readily convertible to cash. If the uranium markets do become sufficiently liquid in the future and Entergy begins to account for uranium purchase contracts as derivative instruments, the fair value of these contracts would be accounted for consistent with Entergy's other derivative instruments. See Note 15 to the financial statements for further details on Entergy's derivative instruments and hedging activities.

Fair Values

The estimated fair values of Entergy's financial instruments and derivatives are determined using historical prices, bid prices, market quotes, and financial modeling. Considerable judgment is required in developing the estimates of fair value. Therefore, estimates are not necessarily indicative of the amounts that Entergy could realize in a current market exchange. Gains or losses realized on financial instruments other than those instruments held by the Entergy Wholesale Commodities business are reflected in future rates and therefore do not affect net income. Entergy considers the carrying amounts of most financial instruments classified as current assets and liabilities to be a reasonable estimate of their fair value because of the short maturity of these instruments. See Note 15 to the financial statements for further discussion of fair value.

Impairment of Long-lived Assets

Entergy periodically reviews long-lived assets held in all of its business segments whenever events or changes in circumstances indicate that recoverability of these assets is uncertain. Generally, the determination of recoverability is based on the undiscounted net cash flows expected to result from such operations and assets. Projected net cash flows depend on the expected operating life of the assets, the future operating costs associated with the assets, the efficiency and availability of the assets and generating units, and the future market and price for energy and capacity over the remaining life of the assets. Because the values of the long-lived assets are impaired, and the remaining estimated operating lives significantly reduced, the Entergy Wholesale Commodities nuclear plants, except for Palisades, are charging additional expenditures for capital assets directly to expense when incurred. See Note 14 to the financial statements for further discussions of the impairments of the Entergy Wholesale Commodities nuclear plants.

River Bend AFUDC

The River Bend AFUDC gross-up is a regulatory asset that represents the incremental difference imputed by the LPSC between the AFUDC actually recorded by Entergy Louisiana on a net-of-tax basis during the construction of River Bend and what the AFUDC would have been on a pre-tax basis. The imputed amount was only calculated on that portion of River Bend that the LPSC allowed in rate base and is being amortized through August 2025.

Reacquired Debt

The premiums and costs associated with reacquired debt of Entergy's Utility operating companies and System Energy (except that portion allocable to the deregulated operations of Entergy Louisiana) are included in

regulatory assets and are being amortized over the life of the related new issuances, or over the life of the original debt issuance if the debt is not refinanced, in accordance with ratemaking treatment.

Taxes Imposed on Revenue-Producing Transactions

Governmental authorities assess taxes that are both imposed on and concurrent with a specific revenue-producing transaction between a seller and a customer, including, but not limited to, sales, use, value added, and some excise taxes. Entergy presents these taxes on a net basis, excluding them from revenues, unless required to report them differently by a regulatory authority.

New Accounting Pronouncements

In December 2019 the FASB issued ASU No. 2019-12, "Income Taxes (Topic 740): Simplifying the Accounting for Income Taxes." The ASU removes certain exceptions for recognizing deferred taxes for investments, performing intra-period allocation, and calculating income taxes in interim periods. The ASU also adds guidance to reduce complexity in certain areas, including allocating taxes to members of a consolidated group. Entergy adopted ASU 2019-12 in the first quarter 2021 on a prospective basis. Entergy does not expect that the adoption of ASU 2019-12 will materially affect its results of operations, financial position, or cash flows.

NOTE 2. RATE AND REGULATORY MATTERS (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Regulatory Assets and Regulatory Liabilities

Regulatory assets represent probable future revenues associated with costs that Entergy expects to recover from customers through the regulatory ratemaking process under which the Utility business operates. Regulatory liabilities represent probable future reductions in revenues associated with amounts that Entergy expects to benefit customers through the regulatory ratemaking process under which the Utility business operates. In addition to the regulatory assets and liabilities that are specifically disclosed on the face of the balance sheets, the tables below provide detail of "Other regulatory assets" and "Other regulatory liabilities" that are included on Entergy's and the Registrant Subsidiaries' balance sheets as of December 31, 2020 and 2019:

Other Regulatory Assets

Entergy

	2020	2019
	(In Millions)	
Pension & postretirement costs (Note 11 - **Qualified Pension Plans**, **Other Postretirement Benefits**, and **Non-Qualified Pension Plans**) (a)	$3,027.5	$2,942.4
Asset retirement obligation - recovery dependent upon timing of decommissioning of nuclear units or dismantlement of non-nuclear power plants (Note 9) (a)	1,018.9	920.4
Removal costs (Note 9)	893.8	421.0
Storm damage costs, including hurricane costs - recovered through securitization and retail rates (Note 2 - **Hurricane Laura, Hurricane Delta, and Hurricane Zeta** and **Storm Cost Recovery Filings with Retail Regulators** and Note 5 - **Securitization Bonds**)	379.2	372.8
Retired electric and gas meters - recovered through retail rates as determined by retail regulators	192.1	205.6
Opportunity Sales - recovery will be determined after final order in proceeding (Note 2 - **Entergy Arkansas Opportunity Sales Proceeding**) (b)	131.8	116.3
Deferred COVID-19 costs recovery period to be determined (Note 2 - **Retail Rate Proceedings**) (b)	105.7	—
Unamortized loss on reacquired debt - recovered over term of debt	79.2	66.6
Retail rate deferrals - recovered through rate riders as rates are redetermined by retail regulators	66.0	15.7
Attorney General litigation costs - recovered over a six-year period through March 2026 (b)	25.3	29.5
New nuclear generation development costs - recovery through formula rate plan December 2014 through November 2022 (b)	14.2	21.6
Little Gypsy costs – recovered through securitization (Note 5 - **Entergy Louisiana Securitization Bonds - Little Gypsy**)	7.5	29.9
Other	135.3	150.3
Entergy Total	$6,076.5	$5,292.1

Entergy Arkansas

	2020	2019
	(In Millions)	
Pension & postretirement costs (Note 11 - **Qualified Pension Plans**, **Other Postretirement Benefits**, and **Non-Qualified Pension Plans**) (a)	$831.5	$796.5
Asset retirement obligation - recovery dependent upon timing of decommissioning of nuclear units or dismantlement of non-nuclear power plants (Note 9) (a)	479.3	433.0
Removal costs (Note 9)	212.6	168.9
Opportunity sales - recovery will be determined after final order in proceeding (Note 2 - **Entergy Arkansas Opportunity Sales Proceeding**) (b)	131.8	116.3
Retired electric meters - recovered over 15-year period through March 2034	46.9	50.4
Storm damage costs - recovered either through securitization or retail rates (Note 5 - Entergy Arkansas Securitization Bonds**)**	42.7	46.1
Unamortized loss on reacquired debt - recovered over term of debt	24.7	18.3
Retail rate deferrals - recovered through rate riders as rates are redetermined annually (b)	12.6	2.3
Deferred COVID-19 costs - recovery period to be determined (Note 2 - **Retail Rate Proceedings**) (b)	10.5	—
ANO Fukushima and Flood Barrier costs - recovered through retail rates through February 2026 (Note 2 - **Retail Rate Proceedings**) (b)	9.1	10.9
Other	30.7	24.2
Entergy Arkansas Total	$1,832.4	$1,666.9

Entergy Louisiana

	2020	2019
	(In Millions)	
Pension & postretirement costs (Note 11 - **Qualified Pension Plans** and **Non-Qualified Pension Plans**) (a)	$799.4	$787.7
Removal costs (Note 9)	302.5	—
Asset Retirement Obligation - recovery dependent upon timing of decommissioning of nuclear units or dismantlement of non-nuclear power plants (Note 9) (a)	299.0	262.5
Retired electric meters - recovered over a 22-year period through July 2041	96.4	101.1
Storm damage costs - recovered through retail rates (Note 2 - **Hurricane Laura, Hurricane Delta, and Hurricane Zeta** and **Storm Cost Recovery Filings with Retail Regulators**)	94.0	45.7
Deferred COVID-19 costs - recovery period to be determined (Note 2 - **Retail Rate Proceedings**) (b)	48.8	—
Unamortized loss on reacquired debt - recovered over term of debt	26.6	20.4
New nuclear generation development costs - recovery through formula rate plan December 2014 through November 2022 (b)	14.0	21.2
Business combination external costs deferral - recovery through formula rate plan December 2015 through November 2025 (b)	9.2	10.8
River Bend AFUDC - recovered through August 2025 (Note 1 - **River Bend AFUDC**)	7.2	9.1
Little Gypsy costs – recovered through securitization (Note 5 - **Entergy Louisiana Securitization Bonds - Little Gypsy**)	5.1	27.6
Other	23.9	29.1
Entergy Louisiana Total	$1,726.1	$1,315.2

Entergy Mississippi

	2020	2019
	(In Millions)	
Pension & postretirement costs (Note 11 - **Qualified Pension Plans**, **Other Postretirement Benefits**, and **Non-Qualified Pension Plans**) (a)	$242.7	$234.4
Removal costs (Note 9)	107.3	80.8
Retail rate deferrals - returned through rate riders as rates are redetermined annually	44.3	7.5
Attorney General litigation costs - recovered over a six-year period through March 2026 (b)	25.3	29.5
Deferred COVID-19 costs - recovery period to be determined (Note 2 - **Retail Rate Proceedings**) (b)	19.2	—
Unamortized loss on reacquired debt - recovered over term of debt	13.5	14.9
Asset retirement obligation - recovery dependent upon timing of dismantlement of non-nuclear power plants (Note 9) (a)	7.9	7.8
Other	7.1	3.1
Entergy Mississippi Total	$467.3	$378.0

Entergy New Orleans

	2020	2019
	(In Millions)	
Pension & postretirement costs (Note 11 - **Qualified Pension Plans**, **Other Postretirement Benefits**, and **Non-Qualified Pension Plans**) (a)	$75.7	$85.9
Removal costs - (Note 9)	63.2	52.9
Storm damage costs, including hurricane costs - recovered through securitization and retail rates (Note 2 - **Hurricane Laura, Hurricane Delta, and Hurricane Zeta** and Note 5 - Entergy New Orleans Securitization Bonds - Hurricane Isaac)	55.2	59.6
Retired meters - recovered over a 12-year period through July 2031 (b)	21.7	24.6
Deferred COVID-19 costs recovery period to be determined (Note 2 - **Retail Rate Proceedings**) (b)	14.3	—
Rate case costs - recovered over a three-year period through July 2022 (Note 2 - **Retail Rate Proceedings**)	5.7	7.0
Asset retirement obligation - recovery dependent upon timing of dismantlement of non-nuclear power plants (Note 9) (a)	5.2	4.9
New Orleans Power Station deferral – recovered over a five-year period through October 2025 (Note 2 - **Retail Rate Proceedings**)	5.0	—
Algiers customer migration costs - recovered over a five-year period through July 2024 (Note 2 - **Retail Rate Proceedings**)	3.9	4.9
Unamortized loss on reacquired debt - recovered over term of debt	1.9	2.3
Other	15.0	17.3
Entergy New Orleans Total	$266.8	$259.4

Entergy Texas

	2020	2019
	(In Millions)	
Storm damage costs, including hurricane costs - recovered through securitization and retail rates (Note 2 - **Hurricane Laura, Hurricane Delta, and Hurricane Zeta** and Note 5 - **Entergy Texas Securitization Bonds**)	$187.3	$221.4
Pension & postretirement costs (Note 11 - **Qualified Pension Plans**, **Other Postretirement Benefits**, and **Non-Qualified Pension Plans**) (a)	140.1	167.7
Removal costs (Note 9)	115.3	42.5
Retired electric meters - recovered over 13-year period through February 2032	26.0	28.4
Neches and Sabine costs - recovered over a 10-year period through September 2028 (Note 2 - **Retail Rate Proceedings**)	18.8	21.2
Deferred COVID-19 costs recovery period to be determined (Note 2 - **Retail Rate Proceedings**) (b)	12.9	—
Unamortized loss on reacquired debt - recovered over term of debt	10.5	7.7
Transition to competition costs - recovered over a 15-year period through February 2021	2.1	14.9
Other	11.7	8.8
Entergy Texas Total	$524.7	$512.6

System Energy

	2020	2019
	(In Millions)	
Asset retirement obligation - recovery dependent upon timing of decommissioning (Note 9) (a)	$226.3	$210.9
Pension & postretirement costs (Note 11 - **Qualified Pension Plans** and **Other Postretirement Benefits**) (a)	217.8	200.3
Removal costs - recovered through depreciation rates (Note 9)	92.9	75.9
Unamortized loss on reacquired debt - recovered over term of debt	2.0	3.0
System Energy Total	$ 539.0	$ 490.1

(a) Does not earn a return on investment, but is offset by related liabilities.
(b) Does not earn a return on investment.

Hurricane Laura, Hurricane Delta, and Hurricane Zeta

In August and October 2020, Hurricane Laura, Hurricane Delta, and Hurricane Zeta caused significant damage to portions of the Utility's service territories in Louisiana, including New Orleans, Texas, and, to a lesser extent, in Arkansas and Mississippi. The storms resulted in widespread power outages, significant damage to distribution and transmission infrastructure, and the loss of sales during the outages. Additionally, as a result of Hurricane Laura's extensive damage to the grid infrastructure serving the impacted area, large portions of the underlying transmission system required nearly a complete rebuild. Total restoration costs for the repair and/or replacement of the electrical system damaged by Hurricane Laura, Hurricane Delta, and Hurricane Zeta are currently estimated to be approximately $2.4 billion, including $2.0 billion at Entergy Louisiana, $300 million at Entergy Texas, and $40 million at Entergy New Orleans. The estimate includes approximately $1.98 billion in capital costs, including $1.67 billion at Entergy Louisiana, $245 million at Entergy Texas, and $30 million at Entergy New Orleans and approximately $420 million in non-capital costs, including $330 million at Entergy Louisiana, $55 million at Entergy Texas, and $10 million at Entergy New Orleans. This estimate includes all costs to restore power and repair or replace the damages from the hurricanes, except for the cost to repair or replace damage incurred to an Entergy Louisiana transmission line in southeast Louisiana, and the amount of that cost could be significant. The restoration plan for this transmission line and the related cost estimate is still being evaluated.

Entergy recorded accounts payable and corresponding construction work in progress and regulatory assets for the estimated costs incurred that were necessary to return customers to service. Entergy recorded the regulatory assets in accordance with its accounting policies and based on the historic treatment of such costs in its service area because management believes that recovery through some form of regulatory mechanism is probable. There are well-established mechanisms and precedent for addressing these catastrophic events and providing for recovery of prudently incurred storm costs in accordance with applicable regulatory and legal principles. Because Entergy has not gone through the regulatory process regarding these storm costs, there is an element of risk, and Entergy is unable to predict with certainty the degree of success it may have in its recovery initiatives, the amount of restoration costs that it may ultimately recover, or the timing of such recovery.

The Utility operating companies are considering all available avenues to recover storm-related costs from Hurricane Laura, Hurricane Delta, and Hurricane Zeta including accessing funded storm reserve escrows and securitization. In November 2020, Entergy Louisiana drew $257 million from its funded storm reserves. Each Utility operating company is responsible for its restoration cost obligations and for recovering or financing its storm-related costs. Storm cost recovery or financing will be subject to review by applicable regulatory authorities.

In October 2020, Entergy Louisiana filed an application at the LPSC seeking approval of certain ratemaking adjustments to facilitate issuance of shorter-term bonds to provide interim financing for restoration costs associated with Hurricane Laura, Hurricane Delta, and Hurricane Zeta. Subsequently, Entergy Louisiana and the LPSC staff

filed a joint motion seeking approval to exclude from the derivation of Entergy Louisiana's capital structure and cost rate of debt for ratemaking purposes, including the allowance for funds used during construction, shorter-term debt up to $1.1 billion issued by Entergy Louisiana to fund costs associated with Hurricane Laura, Hurricane Delta, and Hurricane Zeta costs on an interim basis. In November 2020 the LPSC issued an order approving the joint motion, and Entergy Louisiana issued $1.1 billion of 0.62% Series mortgage bonds due November 2023.

In December 2020, Entergy Louisiana provided the LPSC with notification that it intends to initiate a storm cost recovery proceeding in the near future, which will permit the LPSC to retain any outside consultants and counsel needed to review the storm cost recovery application. In February 2021 the LPSC voted to retain outside counsel and consultants to assist in the review of Entergy Louisiana's upcoming storm cost recovery application, which is expected to be filed in March 2021.

Other Regulatory Liabilities

Entergy

	2020	2019
	(In Millions)	
Unrealized gains on nuclear decommissioning trust funds (Note 16) (a)	$1,694.1	$1,300.1
Louisiana Act 55 financing savings obligation (Note 3) (b)	144.3	97.1
Vidalia purchased power agreement (Note 8) (b)	115.7	127.3
Retail rate rider over-recovery - refunded through rate riders as rates are redetermined annually	75.1	62.3
Grand Gulf sale-leaseback - (Note 5 - **Grand Gulf Sale-Leaseback Transactions)**	55.6	55.6
Entergy Arkansas's accumulated accelerated Grand Gulf amortization - will be returned to customers when approved by the APSC and the FERC	44.4	44.4
Future formula rate plan revenue reductions (Note 2 - **Retail Rate Proceedings**)	43.5	51.1
Asset retirement obligation - return to customers dependent upon timing of decommissioning (Note 9) (a)	29.7	37.2
Internal restructuring guaranteed tax credits (Note 2 - Internal Restructuring)	26.4	33.0
Business combination guaranteed customer benefits - returned to customers through retail rates and fuel rates December 2015 through November 2024	21.5	35.7
Advanced metering system (AMS) surcharge - return to customers dependent upon AMS spend	20.1	25.3
Excess decommissioning recovery for Willow Glen - (Note 14 - **Dispositions)**	—	21.2
Entergy Mississippi's accumulated accelerated Grand Gulf amortization - amortized and credited through the Unit Power Sales Agreement	10.7	17.8
Income tax rate change - returned to electric and gas customers through retail rates (Note 2 - **Retail Rate Proceedings**)	7.3	13.9
Other	35.5	39.0
Entergy Total	$2,323.9	$1,961.0

Entergy Arkansas

	2020	2019
	(In Millions)	
Unrealized gains on nuclear decommissioning trust funds (Note 16) (a)	$597.4	$460.3
Future formula rate plan revenue reductions (Note 2 - **Retail Rate Proceedings**)	43.5	46.6
Internal restructuring guaranteed customer credits (Note 2 - **Retail Rate Proceedings**)	26.4	33.0
Retail rate rider over-recovery - refunded through rate riders as rates are redetermined annually	19.6	19.7
Entergy Arkansas Total	$686.9	$559.6

Entergy Louisiana

	2020	2019
	(In Millions)	
Unrealized gains on nuclear decommissioning trust funds (Note 16) (a)	$567.7	$436.5
Louisiana Act 55 financing savings obligation (Note 3)	144.3	97.1
Vidalia purchased power agreement (Note 8) (b)	115.7	127.3
Asset Retirement Obligation - return to customers dependent upon timing of decommissioning (Note 9) (a)	29.7	37.1
Business combination guaranteed customer benefits - returned to customers through retail rates and fuel rates December 2015 through November 2024	21.5	35.7
Excess decommissioning recovery for Willow Glen - returned over one-year period through retail rates (Note 14 - **Dispositions**)	—	21.2
Other	39.4	39.2
Entergy Louisiana Total	$918.3	$794.1

Entergy Mississippi

	2020	2019
	(In Millions)	
Retail rate rider over-recovery - refunded through rate riders as rates are redetermined annually	$14.2	$14.6
Grand Gulf Over-Recovery - returned to customers through rate riders as rates are redetermined annually	1.0	2.4
Future formula rate plan revenue reductions (Note 2 - **Retail Rate Proceedings**)	—	4.5
Other	0.6	—
Entergy Mississippi Total	$15.8	$21.5

Entergy Texas

	2020	2019
	(In Millions)	
Advanced metering system (AMS) surcharge - returned to customers dependent upon AMS spend	$20.1	$25.3
Income tax rate change - refunded through a rate rider (Note 2 - **Retail Rate Proceedings**)	6.5	10.4
Transition to competition costs - returned to customers through rate riders when rates are redetermined periodically	3.2	3.8
Other	2.5	2.6
Entergy Texas Total	$32.3	$42.1

System Energy

	2020	2019
	(In Millions)	
Unrealized gains on nuclear decommissioning trust funds (Note 16) (a)	$529.0	$403.3
Grand Gulf sale-leaseback - (Note 5 - **Grand Gulf Sale-Leaseback Transactions)**	55.6	55.6
Entergy Arkansas's accumulated accelerated Grand Gulf amortization - will be returned to customers when approved by the APSC and the FERC	44.4	44.4
Grand Gulf sale-leaseback accumulated deferred income taxes (a)	25.7	12.3
Entergy Mississippi's accumulated accelerated Grand Gulf amortization - amortized and credited through the Unit Power Sales Agreement	10.7	17.8
System Energy Total	$665.4	$533.4

(a) Offset by related asset.

(b) As a result of the enactment of the Tax Cuts and Jobs Act, in December 2017, and the lowering of the federal corporate income tax rate from 35% to 21% effective January 2018, the Vidalia purchased power agreement regulatory liability was reduced by $30.5 million and the Louisiana Act 55 financing savings obligation regulatory liabilities were reduced by $25 million, with corresponding increases to Other regulatory credits on the income statement. The effects of the Tax Cuts and Jobs Act are discussed further in Note 3 to the financial statements.

Regulatory activity regarding the Tax Cuts and Jobs Act

See the "**Other Tax Matters** - **Tax Cuts and Jobs Act**" section in Note 3 to the financial statements for discussion of the effects of the December 2017 enactment of the Tax Cuts and Jobs Act, including its effects on Entergy's and the Registrant Subsidiaries' regulatory asset/liability for income taxes.

Entergy Arkansas

Consistent with its previously stated intent to return unprotected excess accumulated deferred income taxes to customers as expeditiously as possible, Entergy Arkansas initiated a tariff proceeding in February 2018 proposing to establish a tax adjustment rider to provide retail customers with certain tax benefits of $467 million associated with the Tax Act. For the residential customer class, unprotected excess accumulated deferred income taxes were returned to customers over a 21-month period from April 2018 through December 2019. For all other customer classes, unprotected excess accumulated deferred income taxes were returned to customers over a nine-month period from April 2018 through December 2018. A true-up provision also was included in the rider, with any over- or under-returned unprotected excess accumulated deferred income taxes credited or billed to customers during the billing month of January 2020, with any residual amounts of over- or under-returned unprotected excess

accumulated deferred income taxes to be flowed through Entergy Arkansas's energy cost recovery rider. In March 2018 the APSC approved the tax adjustment rider effective with the first billing cycle of April 2018.

As discussed below, in July 2018, Entergy Arkansas made its formula rate plan filing to set its formula rate for the 2019 calendar year. A hearing was held in May 2018 regarding the APSC's inquiries into the effects of the Tax Act, including Entergy Arkansas's proposal to utilize its formula rate plan rider for its customers to realize the remaining benefits of the Tax Act. Entergy Arkansas's formula rate plan rider included a netting adjustment that compared actual annual results to the allowed rate of return on common equity. In July 2018 the APSC issued an order agreeing with Entergy Arkansas's proposal to have the effects of the Tax Act on current income tax expense flow through Entergy Arkansas's formula rate plan rider and with Entergy Arkansas's treatment of protected and unprotected excess accumulated deferred income taxes. The APSC also directed Entergy Arkansas to submit in the tax adjustment rider proceeding, discussed above, the adjustments to all other riders affected by the Tax Act and to include an amendment for a true up mechanism where a rider affected by the Tax Act does not already contain a true-up mechanism. Pursuant to a 2018 settlement agreement in Entergy Arkansas's formula rate plan proceeding, Entergy Arkansas also removed the net operating loss accumulated deferred income tax asset caused by the Tax Act from Entergy Arkansas's tax adjustment rider. Entergy Arkansas's compliance tariff filings were accepted by the APSC in October 2018. In February 2021, pursuant to its 2020 formula rate plan evaluation report settlement, Entergy Arkansas flowed $5.6 million in credits to customers through the tax adjustment rider based on the outcome of certain federal tax positions and a decrease in the state tax rate; the tax adjustment rider will be closed after the credits are issued.

Entergy Louisiana

In an electric formula rate plan settlement approved by the LPSC in April 2018 the parties agreed that Entergy Louisiana would return to customers one-half of its eligible unprotected excess deferred income taxes from May 2018 through December 2018 and return to customers the other half from January 2019 through August 2022. In addition, the settlement provided that in order to flow back to customers certain other tax benefits created by the Tax Act, Entergy Louisiana established a regulatory liability effective January 1, 2018 in the amount of $9.1 million per month to reflect these tax benefits already included in retail rates until new base rates under the formula rate plan were established in September 2018, and this regulatory liability was returned to customers over the September 2018 through August 2019 formula rate plan rate-effective period. The LPSC staff and intervenors in the settlement reserved the right to obtain data from Entergy Louisiana to confirm the determination of excess accumulated deferred income taxes resulting from the Tax Act and the analysis thereof as part of the formula rate plan review proceeding for the 2017 test year filing which, as discussed below, Entergy Louisiana filed in June 2018.

Entergy Mississippi

Entergy Mississippi filed its 2018 formula rate plan in March 2018 and included a proposal to return all of its unprotected excess accumulated deferred income taxes to customers through rates or in exchange for other assets, or a combination of both, by the end of 2018. In June 2018 the MPSC approved a stipulation filed by Entergy Mississippi and the Mississippi Public Utilities Staff in Entergy Mississippi's formula rate plan filing that addressed Entergy Mississippi's 2018 formula rate plan evaluation report and the ratemaking effects of the Tax Act. The stipulation provided for incorporating the reduction of the statutory federal income tax rate through Entergy Mississippi's formula rate plan. The stipulation approved in June 2018 provided for the flow-back of protected excess accumulated deferred income taxes over the remaining lives of the assets through the formula rate plan. The stipulation also provided for the offset of unprotected excess accumulated deferred income taxes of $127.2 million against net utility plant and $2.2 million against other regulatory assets, and the return to customers of the remaining balance of unprotected excess accumulated deferred income taxes as recovery of a portion of fuel oil inventory and customer bill credits over a three-month period from July 2018 through September 2018, with an insignificant true-up reflected in the November 2018 power management rider filing. Entergy Mississippi recorded the reduction against net utility plant and other regulatory assets in June 2018. In third quarter 2018, Entergy Mississippi returned

unprotected excess accumulated deferred income taxes of $25.8 million through customer bill credits and $5.8 million through the sale of fuel oil inventory.

Entergy New Orleans

After enactment of the Tax Act the City Council passed a resolution ordering Entergy New Orleans to, effective January 1, 2018, record deferred regulatory liabilities to account for the Tax Act's effect on Entergy New Orleans's revenue requirement and to make a filing by mid-March 2018 regarding the Tax Act's effects on Entergy New Orleans's operating income and rate base and potential mechanisms for customers to receive benefits of the Tax Act. The City Council's resolution also directed Entergy New Orleans to request that Entergy Services file with the FERC for revisions of the Unit Power Sales Agreement and MSS-4 replacement tariffs to address the return of excess accumulated deferred income taxes. Entergy submitted filings of this type to the FERC.

In March 2018, Entergy New Orleans filed its response to the resolution stating that the Tax Act reduced income tax expense from what was then reflected in rates by approximately $8.2 million annually for electric operations and by approximately $1.3 million annually for gas operations. In the filing, Entergy New Orleans proposed to return to customers from June 2018 through August 2019 the benefits of the reduction in income tax expense and its unprotected excess accumulated deferred income taxes through a combination of bill credits and investments in energy efficiency programs, grid modernization, and Smart City projects. Entergy New Orleans submitted supplemental information in April 2018 and May 2018. Shortly thereafter, Entergy New Orleans and the City Council's advisors reached an agreement in principle that provides for benefits that will be realized by Entergy New Orleans customers through bill credits that started in July 2018 and offsets to future investments in energy efficiency programs, grid modernization, and Smart City projects, as well as additional benefits related to the filings made at the FERC. The agreement in principle was approved by the City Council in June 2018.

Entergy Texas

After enactment of the Tax Act the PUCT issued an order requiring most utilities, including Entergy Texas, beginning January 25, 2018, to record a regulatory liability for the difference between revenues collected under existing rates and revenues that would have been collected had existing rates been set using the new federal income tax rates and also for the balance of excess accumulated deferred income taxes. Entergy Texas had previously provided information to the PUCT staff and stated that it expected the PUCT to address the lower tax expense as part of Entergy Texas's rate case expected to be filed in May 2018.

In May 2018, Entergy Texas filed its 2018 base rate case with the PUCT. Entergy Texas's proposed rates and revenues reflected the inclusion of the federal income tax reductions due to the Tax Act. The PUCT issued an order in December 2018 establishing that 1) $25 million be credited to customers through a rider to reflect the lower federal income tax rate applicable to Entergy Texas from January 2018 through the date new rates were implemented, 2) $242.5 million of protected excess accumulated deferred income taxes be returned to customers through base rates under the average rate assumption method over the lives of the associated assets, and 3) $185.2 million of unprotected excess accumulated deferred income taxes be returned to customers through a rider. The unprotected excess accumulated deferred income taxes rider includes carrying charges and is in effect over a period of 12 months for larger customers and over a period of four years for other customers.

System Energy

In a filing made with the FERC in March 2018, System Energy proposed revisions to the Unit Power Sales Agreement to reflect the effects of the Tax Act. In the filing System Energy proposed to return identified quantities of unprotected excess accumulated deferred income taxes to its customers by the end of 2018. In May 2018 the FERC accepted System Energy's proposed tax revisions with an effective date of June 1, 2018, subject to refund and the outcome of settlement and hearing procedures. Settlement discussions were terminated in April 2019, and a hearing was held in March 2020. The retail regulators of the Utility operating companies that are parties to the Unit

Power Sales Agreement challenged the treatment and amount of excess accumulated deferred income tax liabilities associated with uncertain tax positions related to nuclear decommissioning. In July 2020 the presiding ALJ in the proceeding issued an initial decision finding that there is an additional $147 million in unprotected excess accumulated deferred income taxes related to System Energy's uncertain decommissioning tax deduction. The initial decision determined that System Energy should have included the $147 million in its March 2018 filing. System Energy had not included credits related to the effect of the Tax Act on the uncertain decommissioning tax position because it was uncertain whether the IRS would allow the deduction. The initial decision rejected both System Energy's alternative argument that any crediting should occur over a ten-year period and the retail regulators' argument that any crediting should occur over a two-year period. Instead, the initial decision concluded that System Energy should credit the additional unprotected excess accumulated deferred income taxes in a single lump sum revenue requirement reduction following a FERC order addressing the initial decision.

The ALJ initial decision is an interim step in the FERC litigation process. In September 2020, System Energy filed a brief on exceptions with the FERC, re-urging its positions and requesting the reversal of the ALJ's initial decision. In December 2020, the LPSC, APSC, MPSC, City Council, and FERC trial staff filed briefs opposing exceptions. The FERC will review the case and issue an order in the proceeding, and the FERC may accept, reject, or modify the ALJ's initial decision in whole or in part. Credits, if any, that might be required will only become due after the FERC issues its order reviewing the initial decision.

As discussed below in "**Grand Gulf Sale-leaseback Renewal Complaint and Uncertain Tax Position Rate Base Issue**," in September 2020 the IRS issued a Notice of Proposed Adjustment (NOPA) and Entergy executed it. In September 2020, System Energy filed a motion to lodge the NOPA into the record in the FERC proceeding. In October 2020 the LPSC, APSC, MPSC, City Council, and FERC trial staff filed oppositions to System Energy's motion. As a result of the NOPA, System Energy filed, in October 2020, a new Federal Power Act section 205 filing at the FERC to credit the excess accumulated deferred income taxes resulting from the decommissioning uncertain tax position. System Energy proposes to credit the entire amount of the excess accumulated deferred income taxes arising from the successful portion of the decommissioning uncertain tax position by issuing a one-time credit of $17.8 million. In November 2020, the LPSC, APSC, MPSC, and City Council filed a protest to the filing, and System Energy responded.

In November 2020 the IRS issued the Revenue Agent's Report (RAR) for the 2014-2015 tax years and in December 2020 Entergy executed it. In December 2020, System Energy filed a motion to lodge the RAR into the record in the FERC proceeding addressing the Tax Cuts and Jobs Act. In January 2021 the LPSC, APSC, MPSC, and City Council filed a joint answer opposing System Energy's motion, and the FERC trial staff also filed an answer opposing System Energy's motion.

As a result of the RAR, in December 2020, System Energy also filed an amendment to its Federal Power Act section 205 filing to credit excess accumulated deferred income taxes arising from the successful portion of the decommissioning uncertain tax position. The amendment proposed the inclusion of the RAR as support for the filing. In December 2020, the LPSC, APSC, and City Council filed a protest in response to the amendment, reiterating objections to the filing to credit excess accumulated deferred income taxes arising from the successful portion of the decommissioning uncertain tax position. In February 2021 the FERC issued an order accepting System Energy's Federal Power Act section 205 filing subject to refund, setting it for hearing, and holding the hearing in abeyance.

In November 2020, System Energy filed a motion to vacate the ALJ's decision, arguing that it had been overtaken by changed circumstances because of the IRS's determination resulting from the NOPA and RAR. In January 2021 the LPSC, APSC, MPSC, and City Council filed a joint answer opposing System Energy's motion, and the FERC trial staff also filed an answer opposing System Energy's motion. There is no formal deadline for FERC to rule on the motion.

Fuel and purchased power cost recovery

The Utility operating companies are allowed to recover fuel and purchased power costs through fuel mechanisms included in electric and gas rates that are recorded as fuel cost recovery revenues. The difference between revenues collected and the current fuel and purchased power costs is generally recorded as "Deferred fuel costs" on the Utility operating companies' financial statements. The table below shows the amount of deferred fuel costs as of December 31, 2020 and 2019 that Entergy expects to recover (or return to customers) through fuel mechanisms, subject to subsequent regulatory review.

	2020	2019
	(In Millions)	
Entergy Arkansas (a)	$15.2	$14.0
Entergy Louisiana (b)	$170.4	$112.5
Entergy Mississippi	($14.7)	($70.4)
Entergy New Orleans (b)	$6.2	($0.8)
Entergy Texas	($85.4)	($13.0)

(a) Includes $68.2 million in 2020 and $67.7 million in 2019 of fuel and purchased power costs whose recovery periods are indeterminate but are expected to be recovered over a period greater than twelve months.

(b) Includes $168.1 million in both years for Entergy Louisiana and $4.1 million in both years for Entergy New Orleans of fuel, purchased power, and capacity costs, which do not currently earn a return on investment and whose recovery periods are indeterminate but are expected to be recovered over a period greater than twelve months.

Entergy Arkansas

Energy Cost Recovery Rider

Entergy Arkansas's retail rates include an energy cost recovery rider to recover fuel and purchased energy costs in monthly customer bills. The rider utilizes the prior calendar-year energy costs and projected energy sales for the twelve-month period commencing on April 1 of each year to develop an energy cost rate, which is redetermined annually and includes a true-up adjustment reflecting the over- or under-recovery, including carrying charges, of the energy costs for the prior calendar year. The energy cost recovery rider tariff also allows an interim rate request depending upon the level of over- or under-recovery of fuel and purchased energy costs.

In January 2014, Entergy Arkansas filed a motion with the APSC relating to its upcoming energy cost rate redetermination filing that was made in March 2014. In that motion, Entergy Arkansas requested that the APSC authorize Entergy Arkansas to exclude from the redetermination of its 2014 energy cost rate $65.9 million of incremental fuel and replacement energy costs incurred in 2013 as a result of the ANO stator incident. Entergy Arkansas requested that the APSC authorize Entergy Arkansas to retain that amount in its deferred fuel balance, with recovery to be reviewed in a later period after more information was available regarding various claims associated with the ANO stator incident. In February 2014 the APSC approved Entergy Arkansas's request to retain that amount in its deferred fuel balance. In July 2017, Entergy Arkansas filed for a change in rates pursuant to its formula rate plan rider. In that proceeding, the APSC approved a settlement agreement agreed upon by the parties, including a provision that requires Entergy Arkansas to initiate a regulatory proceeding for the purpose of recovering funds currently withheld from rates and related to the stator incident, including the $65.9 million of deferred fuel and purchased energy costs previously noted, subject to certain timelines and conditions set forth in the settlement agreement. See the "**ANO Damage, Outage, and NRC Reviews**" section in Note 8 to the financial statements for further discussion of the ANO stator incident.

In March 2017, Entergy Arkansas filed its annual redetermination of its energy cost rate pursuant to the energy cost recovery rider, which reflected an increase in the rate from $0.01164 per kWh to $0.01547 per kWh. The APSC staff filed testimony in March 2017 recommending that the redetermined rate be implemented with the first billing cycle of April 2017 under the normal operation of the tariff. Accordingly, the redetermined rate went into effect on March 31, 2017 pursuant to the tariff. In July 2017 the Arkansas Attorney General requested additional information to support certain of the costs included in Entergy Arkansas's 2017 energy cost rate redetermination.

In March 2018, Entergy Arkansas filed its annual redetermination of its energy cost rate pursuant to the energy cost recovery rider, which reflected an increase in the rate from $0.01547 per kWh to $0.01882 per kWh. The Arkansas Attorney General filed a response to Entergy Arkansas's annual redetermination filing requesting that the APSC suspend the proposed tariff to investigate the amount of the redetermination or, alternatively, to allow recovery subject to refund. Among the reasons the Attorney General cited for suspension were questions pertaining to how Entergy Arkansas forecasted sales and potential implications of the Tax Act. Entergy Arkansas replied to the Attorney General's filing and stated that, to the extent there are questions pertaining to its load forecasting or the operation of the energy cost recovery rider, those issues exceed the scope of the instant rate redetermination. Entergy Arkansas also stated that potential effects of the Tax Act are appropriately considered in the APSC's separate proceeding regarding potential implications of the tax law. The APSC general staff filed a reply to the Attorney General's filing and agreed that Entergy Arkansas's filing complied with the terms of the energy cost recovery rider. The redetermined rate became effective with the first billing cycle of April 2018. Subsequently in April 2018 the APSC issued an order declining to suspend Entergy Arkansas's energy cost recovery rider rate and declining to require further investigation at that time of the issues suggested by the Attorney General in the proceeding. Following a period of discovery, the Attorney General filed a supplemental response in October 2018 raising new issues with Entergy Arkansas's March 2018 rate redetermination and asserting that $45.7 million of the increase should be collected subject to refund pending further investigation. Entergy Arkansas filed to dismiss the Attorney General's supplemental response, the APSC general staff filed a motion to strike the Attorney General's filing, and the Attorney General filed a supplemental response disputing Entergy Arkansas and the APSC staff's filing. Applicable APSC rules and processes authorize its general staff to initiate periodic audits of Entergy Arkansas's energy cost recovery rider. In late-2018 the APSC general staff notified Entergy Arkansas it has initiated an audit of the 2017 fuel costs. The time in which the audit will be complete is uncertain at this time.

In March 2019, Entergy Arkansas filed its annual redetermination of its energy cost rate pursuant to the energy cost recovery rider, which reflected a decrease from $0.01882 per kWh to $0.01462 per kWh and became effective with the first billing cycle in April 2019. In March 2019 the Arkansas Attorney General filed a response to Entergy Arkansas's annual adjustment and included with its filing a motion for investigation of alleged overcharges to customers in connection with the FERC's October 2018 order in the opportunity sales proceeding. Entergy Arkansas filed its response to the Attorney General's motion in April 2019 in which Entergy Arkansas stated its intent to initiate a proceeding to address recovery issues related to the October 2018 FERC order. In May 2019, Entergy Arkansas initiated the opportunity sales recovery proceeding, discussed below, and requested that the APSC establish that proceeding as the single designated proceeding in which interested parties may assert claims related to the appropriate retail rate treatment of the FERC October 2018 order and related FERC orders in the opportunity sales proceeding. In June 2019 the APSC granted Entergy Arkansas's request and also denied the Attorney General's motion in the energy cost recovery proceeding seeking an investigation into Entergy Arkansas's annual energy cost recovery rider adjustment and referred the evaluation of such matters to the opportunity sales recovery proceeding.

In March 2020, Entergy Arkansas filed its annual redetermination of its energy cost rate pursuant to the energy cost recovery rider, which reflected a decrease from $0.01462 per kWh to $0.01052 per kWh. The redetermined rate became effective with the first billing cycle in April 2020 through the normal operation of the tariff.

Entergy Louisiana

Entergy Louisiana recovers electric fuel and purchased power costs for the billing month based upon the level of such costs incurred two months prior to the billing month. Entergy Louisiana's purchased gas adjustments include estimates for the billing month adjusted by a surcharge or credit that arises from an annual reconciliation of fuel costs incurred with fuel cost revenues billed to customers, including carrying charges.

In July 2014 the LPSC authorized its staff to initiate an audit of the fuel adjustment clause filings by Entergy Gulf States Louisiana, whose business was combined with Entergy Louisiana in 2015. The audit includes a review of the reasonableness of charges flowed through Entergy Gulf States Louisiana's fuel adjustment clause for the period from 2010 through 2013. In January 2019 the LPSC staff consultant issued its audit report. In its report, the LPSC staff consultant recommended that Entergy Louisiana refund approximately $900,000, plus interest, to customers based upon the imputation of a claim of vendor fault in servicing its nuclear plant. Entergy Louisiana recorded a provision in the first quarter 2019 for the potential outcome of the audit. In August 2019, Entergy Louisiana filed direct testimony challenging the basis for the LPSC staff's recommended disallowance and providing an alternative calculation of replacement power costs should it be determined that a disallowance is appropriate. Entergy Louisiana's calculation would require no refund to customers.

In July 2014 the LPSC authorized its staff to initiate an audit of Entergy Louisiana's fuel adjustment clause filings. The audit includes a review of the reasonableness of charges flowed by Entergy Louisiana through its fuel adjustment clause for the period from 2010 through 2013. In January 2019 the LPSC staff issued its audit report recommending that Entergy Louisiana refund approximately $7.3 million, plus interest, to customers based upon the imputation of a claim of vendor fault in servicing its nuclear plant. Entergy Louisiana recorded a provision in the first quarter 2019 for the potential outcome of the audit. In August 2019, Entergy Louisiana filed direct testimony challenging the basis for the LPSC staff's recommended disallowance and providing an alternative calculation of replacement power costs should it be determined that a disallowance is appropriate. Entergy Louisiana's calculation would require a refund to customers of approximately $4.3 million, plus interest, as compared to the LPSC staff's recommendation of $7.3 million, plus interest. Responsive testimony was filed by the LPSC staff and intervenors in September 2019; all parties either agreed with or did not oppose Entergy Louisiana's alternative calculation of replacement power costs.

In November 2019 the pending LPSC proceedings for the 2010-2013 Entergy Louisiana and Entergy Gulf States Louisiana audits were consolidated to facilitate a settlement of both fuel audits. In December 2019 an unopposed settlement was reached that requires a refund to legacy Entergy Louisiana customers of approximately $2.3 million, including interest, and no refund to legacy Entergy Gulf States Louisiana customers. The LPSC approved the settlement in January 2020. A one-time refund was made in February 2020.

In June 2016 the LPSC issued notice of audits of Entergy Louisiana's fuel adjustment clause filings for the period 2014 through 2015 and purchased gas adjustment clause filings for the period 2012 through 2015. In recognition of the business combination that occurred in 2015, the audit notice was issued to Entergy Louisiana and also includes a review of charges to legacy Entergy Gulf States Louisiana customers prior to the business combination. The audits include a review of the reasonableness of charges flowed through Entergy Louisiana's fuel adjustment clause for the period from 2014 through 2015 and charges flowed through Entergy Louisiana's purchased gas adjustment clause for the period from 2012 through 2015. Regarding the fuel adjustment clause filing, the LPSC staff issued a report in January 2021 that did not recommend a disallowance for the period 2014 through 2015 recoveries, but did propose various reporting requirements. Entergy Louisiana is currently reviewing the LPSC staff recommendations regarding reporting requirements. Regarding the purchased gas adjustment clause filings, the LPSC staff issued a report in February 2020 that did not recommend a disallowance for the period 2012 through 2015 recoveries. The LPSC issued an order in September 2020 accepting the LPSC staff's report.

In May 2018 the LPSC staff provided notice of audits of Entergy Louisiana's purchased gas adjustment clause filings. The audit includes a review of the reasonableness of charges flowed through Entergy Louisiana's

purchased gas adjustment clause for the period from 2016 through 2017. In February 2020 the LPSC staff issued an audit report recommending a disallowance of approximately $29 thousand. Entergy Louisiana submitted a letter disputing the basis of the proposed disallowance but indicated that due to the amount at issue it would not oppose the recommended refund. The LPSC staff and Entergy Louisiana submitted a joint report noting each party's position on the substantive issues in the matter and recommending resolution of the matters. The LPSC issued an order in September 2020 resolving the matter and ordering a refund of approximately $29 thousand. In January 2021 the LPSC issued a notice closing the matter.

In March 2020 the LPSC staff provided notice of an audit of Entergy Louisiana's fuel adjustment clause filings. The audit includes a review of the reasonableness of charges flowed through Entergy Louisiana's fuel adjustment clause for the period from 2016 through 2019. Discovery commenced in September 2020 and is ongoing.

Entergy Mississippi

Entergy Mississippi's rate schedules include an energy cost recovery rider that is adjusted annually to reflect accumulated over- or under-recoveries. Entergy Mississippi's fuel cost recoveries are subject to annual audits conducted pursuant to the authority of the MPSC.

In January 2017 the MPSC certified to the Mississippi Legislature the audit reports of its independent auditors for the fuel year ending September 30, 2016. In November 2017 the Mississippi Public Utilities Staff separately engaged a consultant to review the September 2016 outage at the Grand Gulf Nuclear Station and to review ongoing operations at Grand Gulf. This engagement continues, and subsequently, was expanded to include all outages at Grand Gulf that occurred through 2019.

In November 2017, Entergy Mississippi filed its annual redetermination of the annual factor to be applied under the energy cost recovery rider. The calculation of the annual factor included an under-recovery of approximately $61.5 million as of September 30, 2017. In January 2018 the MPSC approved the proposed energy cost factors effective for February 2018 bills.

In November 2018, Entergy Mississippi filed its annual redetermination of the annual factor to be applied under the energy cost recovery rider. The calculation of the annual factor included an under-recovery of approximately $57 million as of September 30, 2018. In January 2019 the MPSC approved the proposed energy cost factor effective for February 2019 bills.

In November 2019, Entergy Mississippi filed its annual redetermination of the annual factor to be applied under the energy cost recovery rider. The calculation included $39.6 million of prior over-recovery flowing back to customers beginning February 2020. Entergy Mississippi's balance in its deferred fuel account did not decrease as expected after implementation of the new factor. In an effort to assist customers during the COVID-19 pandemic, in May 2020, Entergy Mississippi requested an interim adjustment to the energy cost recovery rider to credit approximately $50 million from the over-recovered balance in the deferred fuel account to customers over four consecutive billing months. The MPSC approved this interim adjustment in May 2020 effective for June through September 2020 bills.

In November 2020, Entergy Mississippi filed its annual redetermination of the annual factor to be applied under the energy cost recovery rider. The calculation of the annual factor included an over-recovery of approximately $24.4 million as of September 30, 2020. In January 2021 the MPSC approved the proposed energy cost factor effective for February 2021 bills.

Entergy New Orleans

Entergy New Orleans's electric rate schedules include a fuel adjustment tariff designed to reflect no more than targeted fuel and purchased power costs, adjusted by a surcharge or credit for deferred fuel expense arising from the monthly reconciliation of actual fuel and purchased power costs incurred with fuel cost revenues billed to customers, including carrying charges.

Entergy New Orleans's gas rate schedules include a purchased gas adjustment to reflect estimated gas costs for the billing month, adjusted by a surcharge or credit similar to that included in the electric fuel adjustment clause, including carrying charges.

Entergy Texas

Entergy Texas's rate schedules include a fixed fuel factor to recover fuel and purchased power costs, including interest, not recovered in base rates. Semi-annual revisions of the fixed fuel factor are made in March and September based on the market price of natural gas and changes in fuel mix. The amounts collected under Entergy Texas's fixed fuel factor and any interim surcharge or refund are subject to fuel reconciliation proceedings before the PUCT. A fuel reconciliation is required to be filed at least once every three years and outside of a base rate case filing.

In December 2017, Entergy Texas filed an application for a fuel refund of approximately $30.5 million for the months of May 2017 through October 2017. Also in December 2017, the PUCT's ALJ approved the refund on an interim basis. For most customers, the refunds flowed through bills from January 2018 through March 2018. The fuel refund was approved by the PUCT in March 2018.

In September 2019, Entergy Texas filed an application to reconcile its fuel and purchased power costs for the period from April 2016 through March 2019. During the reconciliation period, Entergy Texas incurred approximately $1.6 billion in Texas jurisdictional eligible fuel and purchased power expenses, net of certain revenues credited to such expenses and other adjustments. Entergy Texas estimated an under-recovery balance of approximately $25.8 million, including interest, which Entergy Texas requested authority to carry over as the beginning balance for the subsequent reconciliation period beginning April 2019. In March 2020 an intervenor filed testimony proposing that the PUCT disallow: (1) $2 million in replacement power costs associated with generation outages during the reconciliation period; and (2) $24.4 million associated with the operation of the Spindletop natural gas storage facility during the reconciliation period. In April 2020, Entergy Texas filed rebuttal testimony refuting all points raised by the intervenor. In June 2020 the parties filed a stipulation and settlement agreement, which included a $1.2 million disallowance not associated with any particular issue raised by any party. The PUCT approved the settlement in August 2020.

In July 2020, Entergy Texas filed an application with the PUCT to implement an interim fuel refund of $25.5 million, including interest. Entergy Texas proposes that the interim fuel refund be implemented beginning with the first August 2020 billing cycle over a three-month period for smaller customers and in a lump sum amount in the billing month of August 2020 for transmission-level customers. The interim fuel refund was approved in July 2020, and Entergy Texas began refunds in August 2020.

In February 2021, Entergy Texas filed an application to implement a fuel refund for a cumulative over-recovery of approximately $75 million that is primarily attributable to settlements received by Entergy Texas from MISO related to Hurricane Laura. Entergy Texas planned to issue the refund over the period of March through August 2021. On February 22, 2021, Entergy Texas filed a motion to abate its fuel refund proceeding to assess how the February 2021 winter storm impacted Entergy Texas's fuel over-recovery position.

Retail Rate Proceedings

Filings with the APSC (Entergy Arkansas)

Retail Rates

2018 Formula Rate Plan Filing

In July 2018, Entergy Arkansas filed with the APSC its 2018 formula rate plan filing to set its formula rate for the 2019 calendar year. The filing showed Entergy Arkansas's projected earned return on common equity for the twelve months ended December 31, 2019 test period to be below the formula rate plan bandwidth. Additionally, the filing included the first netting adjustment under the current formula rate plan for the historical test year 2017, reflecting the change in formula rate plan revenues associated with actual 2017 results when compared to the allowed rate of return on equity. The filing included a projected $73.4 million revenue deficiency for 2019 and a $95.6 million revenue deficiency for the 2017 historical test year, for a total revenue requirement of $169 million for this filing. By operation of the formula rate plan, Entergy Arkansas's recovery of the revenue requirement is subject to a four percent annual revenue constraint. Because Entergy Arkansas's revenue requirement in this filing exceeded the constraint, the resulting increase was limited to four percent of total revenue, which originally was $65.4 million but was increased to $66.7 million based upon the APSC staff's updated calculation of 2018 revenue. In October 2018, Entergy Arkansas and the parties to the proceeding filed joint motions to approve a partial settlement agreement as to certain factual issues and agreed to brief contested legal issues. In November 2018 the APSC held a hearing and was briefed on a contested legal issue. In December 2018 the APSC issued a decision related to the initial legal brief, approved the partial settlement agreement and $66.7 million revenue requirement increase, as well as Entergy Arkansas's formula rate plan, with updated rates going into effect for the first billing cycle of January 2019.

2019 Formula Rate Plan Filing

In July 2019, Entergy Arkansas filed with the APSC its 2019 formula rate plan filing to set its formula rate for the 2020 calendar year. The filing contained an evaluation of Entergy Arkansas's earnings for the projected year 2020 and a netting adjustment for the historical year 2018. The total proposed formula rate plan rider revenue change designed to produce a target rate of return on common equity of 9.75% is $15.3 million, which is based upon a deficiency of approximately $61.9 million for the 2020 projected year, netted with a credit of approximately $46.6 million in the 2018 historical year netting adjustment. During 2018 Entergy Arkansas experienced higher-than expected sales volume, and actual costs were lower than forecasted. These changes, coupled with a reduced income tax rate resulting from the Tax Cuts and Jobs Act, resulted in the credit for the historical year netting adjustment. In the fourth quarter 2018, Entergy Arkansas recorded a provision of $35.1 million that reflected the estimate of the historical year netting adjustment that was expected to be included in the 2019 filing. In 2019, Entergy Arkansas recorded additional provisions totaling $11.5 million to reflect the updated estimate of the historical year netting adjustment included in the 2019 filing. In October 2019 other parties in the proceeding filed their errors and objections requesting certain adjustments to Entergy Arkansas's filing that would reduce or eliminate Entergy Arkansas's proposed revenue change. Entergy Arkansas filed its response addressing the requested adjustments in October 2019. In its response, Entergy Arkansas accepted certain of the adjustments recommended by the General Staff of the APSC that would reduce the proposed formula rate plan rider revenue change to $14 million. Entergy Arkansas disputed the remaining adjustments proposed by the parties. In October 2019, Entergy Arkansas filed a unanimous settlement agreement with the other parties in the proceeding seeking APSC approval of a revised total formula rate plan rider revenue change of $10.1 million. In its July 2019 formula rate plan filing, Entergy Arkansas proposed to recover an $11.2 million regulatory asset, amortized over five years, associated with specific costs related to the potential construction of scrubbers at the White Bluff plant. Although Entergy Arkansas does not concede that the regulatory asset lacks merit, for purposes of reaching a settlement on the total formula rate plan rider amount, Entergy Arkansas agreed not to include the White Bluff scrubber regulatory asset cost in the 2019 formula rate plan filing or future filings. Entergy Arkansas recorded a write-off in 2019 of the $11.2 million White Bluff scrubber regulatory asset. In December 2019 the APSC approved the settlement as being

in the public interest and approved Entergy Arkansas's compliance tariff effective with the first billing cycle of January 2020.

2020 Formula Rate Plan Filing

In July 2020, Entergy Arkansas filed with the APSC its 2020 formula rate plan filing to set its formula rate for the 2021 calendar year. The filing contained an evaluation of Entergy Arkansas's earnings for the projected year 2021, as amended through subsequent filings in the proceeding, and a netting adjustment for the historical year 2019. The filing showed that Entergy Arkansas's earned rate of return on common equity for the 2021 projected year is 8.22% resulting in a revenue deficiency of $64.3 million. The earned rate of return on common equity for the 2019 historical year was 9.07% resulting in a $23.9 million netting adjustment. The total proposed revenue change for the 2021 projected year and 2019 historical year netting adjustment was $88.2 million. By operation of the formula rate plan, Entergy Arkansas's recovery of the revenue requirement is subject to a four percent annual revenue constraint. Because Entergy Arkansas's revenue requirement in this filing exceeded the constraint, the resulting increase was limited to $74.3 million. In October 2020 other parties in the proceeding filed their errors and objections recommending certain adjustments, and Entergy Arkansas filed responsive testimony disputing these adjustments. As part of the formula rate plan tariff the calculation for the revenue constraint was updated based on actual revenues which had the effect of reducing the initially-proposed $74.3 million revenue requirement increase to $72.6 million. In October 2020, Entergy Arkansas filed with the APSC a unanimous settlement agreement reached with the other parties that resolved all but one issue. As a result of the settlement agreement, Entergy Arkansas's requested revenue increase was $68.4 million, including a $44.5 million increase for the projected 2021 year and a $23.9 million netting adjustment. The remaining issue litigated concerned the methodology used to calculate the netting adjustment within the formula rate plan. In December 2020 the APSC issued an order rejecting the netting adjustment method used by Entergy Arkansas. Applying the approach ordered by the APSC changed the netting adjustment for the 2019 historical year from a $23.9 million deficiency to $43.5 million excess. Overall, the decision reduced Entergy Arkansas's revenue adjustment for 2021 to $1 million. In December 2020, Entergy Arkansas filed a petition for rehearing of the APSC's decision, and in January 2021 the APSC granted further consideration of Entergy Arkansas's petition. Based on the progress of the proceeding to date, in December 2020, Entergy Arkansas recorded a regulatory liability of $43.5 million to reflect the netting adjustment for 2019, as included in the APSC's December 2020 order, which would be returned to customers in 2021. Also with the formula rate plan filing, Entergy Arkansas is requesting an extension of the formula rate plan rider for a second five-year term. Decisions by the APSC on the netting adjustment rehearing and the extension are expected in March 2021.

COVID-19 Orders

In April 2020, in light of the COVID-19 pandemic, the APSC issued an order requiring utilities, to the extent they had not already done so, to suspend service disconnections during the remaining pendency of the Arkansas Governor's emergency declaration or until the APSC rescinds the directive. The order also authorizes utilities to establish a regulatory asset to record costs resulting from the suspension of service disconnections, directs that in future proceedings the APSC will consider whether the request for recovery of these regulatory assets is reasonable and necessary, and requires utilities to track and report the costs and any savings directly attributable to suspension of disconnects. In May 2020 the APSC approved Entergy Arkansas expanding deferred payment agreements to assist customers during the COVID-19 pandemic. Quarterly reporting began in August 2020 and the APSC ordered additional reporting in October 2020 regarding utilities' transitional plans for ending the moratorium on service disconnects. In February 2021 the APSC issued an order finding that it is not in the public interest to immediately lift the moratorium on service disconnects, but to announce a target date of May 3, 2021. In March 2021 the APSC will issue an order either confirming the lifting of the moratorium on service disconnects or extending the moratorium. As of December 31, 2020, Entergy Arkansas recorded a regulatory asset of $10.5 million for costs associated with the COVID-19 pandemic.

Internal Restructuring

In November 2017, Entergy Arkansas filed an application with the APSC seeking authorization to undertake a restructuring that would result in the transfer of substantially all of the assets and operations of Entergy Arkansas to a new entity, which would ultimately be owned by an existing Entergy subsidiary holding company. In July 2018, Entergy Arkansas filed a settlement, reached by all parties in the APSC proceeding, resolving all issues. The APSC approved the settlement agreement and restructuring in August 2018. Pursuant to the settlement agreement, Entergy Arkansas will credit retail customers $39.6 million over six years, beginning in 2019. Entergy Arkansas also received the required FERC and NRC approvals.

In November 2018, Entergy Arkansas undertook a multi-step restructuring, including the following:

- Entergy Arkansas, Inc. redeemed its outstanding preferred stock at the aggregate redemption price of approximately $32.7 million.
- Entergy Arkansas, Inc. converted from an Arkansas corporation to a Texas corporation.
- Under the Texas Business Organizations Code (TXBOC), Entergy Arkansas, Inc. allocated substantially all of its assets to a new subsidiary, Entergy Arkansas Power, LLC, a Texas limited liability company (Entergy Arkansas Power), and Entergy Arkansas Power assumed substantially all of the liabilities of Entergy Arkansas, Inc., in a transaction regarded as a merger under the TXBOC. Entergy Arkansas, Inc. remained in existence and held the membership interests in Entergy Arkansas Power.
- Entergy Arkansas, Inc. contributed the membership interests in Entergy Arkansas Power to an affiliate (Entergy Utility Holding Company, LLC, a Texas limited liability company and subsidiary of Entergy Corporation). As a result of the contribution, Entergy Arkansas Power is a wholly-owned subsidiary of Entergy Utility Holding Company, LLC.

In December 2018, Entergy Arkansas, Inc. changed its name to Entergy Utility Property, Inc., and Entergy Arkansas Power then changed its name to Entergy Arkansas, LLC. Entergy Arkansas, LLC holds substantially all of the assets, and assumed substantially all of the liabilities, of Entergy Arkansas, Inc. The transaction was accounted for as a transaction between entities under common control.

Filings with the LPSC (Entergy Louisiana)

Retail Rates - Electric

2017 Formula Rate Plan Filing

In June 2018, Entergy Louisiana filed its formula rate plan evaluation report for its 2017 calendar year operations. The 2017 test year evaluation report produced an earned return on equity of 8.16%, due in large part to revenue-neutral realignments to other recovery mechanisms. Without these realignments, the evaluation report produces an earned return on equity of 9.88% and a resulting base rider formula rate plan revenue increase of $4.8 million. Excluding the Tax Act credits provided for by the tax reform adjustment mechanisms, total formula rate plan revenues were further increased by a total of $98 million as a result of the evaluation report due to adjustments to the additional capacity and MISO cost recovery mechanisms of the formula rate plan, and implementation of the transmission recovery mechanism. In August 2018, Entergy Louisiana filed a supplemental formula rate plan evaluation report to reflect changes from the 2016 test year formula rate plan proceedings, a decrease to the transmission recovery mechanism to reflect lower actual capital additions, and a decrease to evaluation period expenses to reflect the terms of a new power sales agreement. Based on the August 2018 update, Entergy Louisiana recognized a total decrease in formula rate plan revenue of approximately $17.6 million. Results of the updated 2017 evaluation report filing were implemented with the September 2018 billing month subject to refund and review by the LPSC staff and intervenors. In accordance with the terms of the formula rate plan, in September 2018 the LPSC staff and intervenors submitted their responses to Entergy Louisiana’s original formula rate plan evaluation report and supplemental compliance updates. The LPSC staff asserted objections/reservations

regarding 1) Entergy Louisiana's proposed rate adjustments associated with the return of excess accumulated deferred income taxes pursuant to the Tax Act and the treatment of accumulated deferred income taxes related to reductions of rate base; 2) Entergy Louisiana's reservation regarding treatment of a regulatory asset related to certain special orders by the LPSC; and 3) test year expenses billed from Entergy Services to Entergy Louisiana. Intervenors also objected to Entergy Louisiana's treatment of the regulatory asset related to certain special orders by the LPSC. A procedural schedule has not yet been established to resolve these issues.

Entergy Louisiana also included in its filing a presentation of an initial proposal to combine the legacy Entergy Louisiana and legacy Entergy Gulf States Louisiana residential rates, which combination, if approved, would be accomplished on a revenue-neutral basis intended not to affect the rates of other customer classes.

Commercial operation at J. Wayne Leonard Power Station (formerly St. Charles Power Station) commenced in May 2019. In May 2019, Entergy Louisiana filed an update to its 2017 formula rate plan evaluation report to include the estimated first-year revenue requirement of $109.5 million associated with the J. Wayne Leonard Power Station. The resulting interim adjustment to rates became effective with the first billing cycle of June 2019. In June 2020, Entergy Louisiana submitted information to the LPSC to review the prudence of Entergy Louisiana's management of the project. In August 2020 discovery commenced and a procedural schedule was established with a hearing in July 2021.

2018 Formula Rate Plan Filing

In May 2019, Entergy Louisiana filed its formula rate plan evaluation report for its 2018 calendar year operations. The 2018 test year evaluation report produced an earned return on common equity of 10.61% leading to a base rider formula rate plan revenue decrease of $8.9 million. While base rider formula rate plan revenue will decrease as a result of this filing, overall formula rate plan revenues will increase by approximately $118.7 million. This outcome is primarily driven by a reduction to the credits previously flowed through the tax reform adjustment mechanism and an increase in the transmission recovery mechanism, partially offset by reductions in the additional capacity mechanism revenue requirements and extraordinary cost items. The filing is subject to review by the LPSC. Resulting rates were implemented in September 2019, subject to refund.

Entergy Louisiana also included in its filing a presentation of an initial proposal to combine the legacy Entergy Louisiana and legacy Entergy Gulf States Louisiana residential rates, which combination, if approved, would be accomplished on a revenue-neutral basis intended not to affect the rates of other customer classes. Entergy Louisiana contemplates that any combination of residential rates resulting from this request would be implemented with the results of the 2019 test year formula rate plan filing.

Several parties intervened in the proceeding and the LPSC staff filed its report of objections/reservations in accordance with the applicable provisions of the formula rate plan. In its report the LPSC staff re-urged reservations with respect to the outstanding issues from the 2017 test year formula rate plan filing and disputed the inclusion of certain affiliate costs for test years 2017 and 2018. The LPSC staff objected to Entergy Louisiana's proposal to combine residential rates but proposed the setting of a status conference to establish a procedural schedule to more fully address the issue. The LPSC staff also reserved its right to object to the treatment of the sale of Willow Glen reflected in the evaluation report and to the August 2019 compliance update, which was made primarily to update the capital additions reflected in the formula rate plan's transmission recovery mechanism, based on limited time to review it. Additionally, since the completion of certain transmission projects, the LPSC staff issued supplemental data requests addressing the prudence of Entergy Louisiana's expenditures in connection with those projects. Entergy Louisiana has responded to all such requests.

Commercial operation at Lake Charles Power Station commenced in March 2020. In March 2020, Entergy Louisiana filed an update to its 2018 formula rate plan evaluation report to include the estimated first-year revenue requirement of $108 million associated with the Lake Charles Power Station. The resulting interim adjustment to rates became effective with the first billing cycle of April 2020.

In an effort to narrow the remaining issues in formula rate plan test years 2017 and 2018, Entergy Louisiana provided notice to the parties in October 2020 that it was withdrawing its request to combine residential rates. Entergy Louisiana noted that the withdrawal is without prejudice to Entergy Louisiana's right to seek to combine residential rates in a future proceeding.

2019 Formula Rate Plan Filing

In May 2020, Entergy Louisiana filed with the LPSC its formula rate plan evaluation report for its 2019 calendar year operations. The 2019 test year evaluation report produced an earned return on common equity of 9.66%. As such, no change to base rider formula rate plan revenue is required. Although base rider formula rate plan revenue will not change as a result of this filing, overall formula rate plan revenues will increase by approximately $103 million. This outcome is driven by the removal of prior year credits associated with the sale of the Willow Glen Power Station and an increase in the transmission recovery mechanism. Also contributing to the overall change is an increase in legacy formula rate plan revenue requirements driven by legacy Entergy Louisiana capacity cost true-ups and higher annualized legacy Entergy Gulf States Louisiana revenues due to higher billing determinants, offset by reductions in MISO cost recovery mechanism and tax reform adjustment mechanism revenue requirements. In August 2020 the LPSC staff submitted a list of items for which it needs additional information to confirm the accuracy and compliance of the 2019 test year evaluation report. The LPSC staff objected to a proposed revenue neutral adjustment regarding a certain rider as being beyond the scope of permitted formula rate plan adjustments. Rates reflected in the May 2020 filing, with the exception of the revenue neutral rider adjustment, and as updated in an August 2020 filing, were implemented in September 2020, subject to refund. Entergy Louisiana is in the process of providing additional information and details on the May 2020 filing as requested by the LPSC staff.

In November 2020, Entergy Louisiana accepted ownership of the Washington Parish Energy Center and filed an update to its 2019 formula rate plan evaluation report to include the estimated first-year revenue requirement of $35 million associated with the Washington Parish Energy Center. The resulting interim adjustment to rates became effective with the first billing cycle of December 2020. In January 2021, Entergy Louisiana filed an update to its 2019 formula rate plan evaluation report to include the implementation of a scheduled step-up in its nuclear decommissioning revenue requirement and a true-up for under-collections of nuclear decommissioning expenses. The total rate adjustment would increase formula rate plan revenues by approximately $1.2 million. The resulting interim adjustment to rates became effective with the first billing cycle of February 2021.

Request for Extension and Modification of Formula Rate Plan

In May 2020, Entergy Louisiana filed with the LPSC its application for authority to extend its formula rate plan. In its application, Entergy Louisiana seeks to maintain a 9.8% return on equity, with a bandwidth of 60 basis points above and below the midpoint, with a first-year midpoint reset. Entergy Louisiana also seeks to maintain its existing additional capacity mechanism, tax reform adjustment mechanism, transmission recovery mechanism, and the MISO cost recovery mechanism. Entergy Louisiana also seeks to add a distribution cost recovery mechanism which operates in substantially the same manner as the transmission recovery mechanism, seeks to utilize end of period rate base to calculate cost of service, and requests a deferral of certain expenses incurred for outside of right-of-way vegetation programs. Settlement discussions are ongoing.

Investigation of Costs Billed by Entergy Services

In November 2018 the LPSC issued a notice of proceeding initiating an investigation into costs incurred by Entergy Services that are included in the retail rates of Entergy Louisiana. As stated in the notice of proceeding, the LPSC observed an increase in capital construction-related costs incurred by Entergy Services. Discovery was issued and included efforts to seek highly detailed information on a broad range of matters unrelated to the scope of the audit. There has been no further activity in the investigation since May 2019.

COVID-19 Orders

In April 2020 the LPSC issued an order authorizing utilities to record as a regulatory asset expenses incurred from the suspension of disconnections and collection of late fees imposed by LPSC orders associated with the COVID-19 pandemic. In addition, utilities may seek future recovery, subject to LPSC review and approval, of losses and expenses incurred due to compliance with the LPSC's COVID-19 orders. The suspension of late fees and disconnects for non-pay was extended until the first billing cycle after July 16, 2020. In January 2021, Entergy Louisiana resumed disconnections for customers in all customer classes with past-due balances that have not made payment arrangements. Utilities seeking to recover the regulatory asset must formally petition the LPSC to do so, identifying the direct and indirect costs for which recovery is sought. Any such request is subject to LPSC review and approval. As of December 31, 2020, Entergy Louisiana recorded a regulatory asset of $48.8 million for costs associated with the COVID-19 pandemic.

Filings with the MPSC (Entergy Mississippi)

Retail Rates

2018 Formula Rate Plan Filing

In March 2018, Entergy Mississippi submitted its formula rate plan 2018 test year filing and 2017 look-back filing showing Entergy Mississippi's earned return for the historical 2017 calendar year and projected earned return for the 2018 calendar year, in large part as a result of the lower federal corporate income tax rate effective in 2018, to be within the formula rate plan bandwidth, resulting in no change in rates. In June 2018, Entergy Mississippi and the Mississippi Public Utilities Staff entered into a stipulation that confirmed that Entergy Mississippi's earned returns for both the 2017 look-back filing and 2018 test year were within the respective formula rate plan bandwidths. In June 2018 the MPSC approved the stipulation, which resulted in no change in rates. See "Regulatory activity regarding the Tax Cuts and Jobs Act" above for additional discussion regarding the treatment of the effects of the lower federal corporate income tax rate.

Formula Rate Plan Revisions

In October 2018, Entergy Mississippi proposed revisions to its formula rate plan that would provide for a mechanism in the formula rate plan, the interim capacity rate adjustment mechanism, to recover the non-fuel related costs of additional owned capacity acquired by Entergy Mississippi, including the non-fuel annual ownership costs of the Choctaw Generating Station, as well as to allow similar cost recovery treatment for other future capacity acquisitions, such as the Sunflower Solar Facility, that are approved by the MPSC. In December 2019 the MPSC approved Entergy Mississippi's proposed revisions to its formula rate plan to provide for an interim capacity rate adjustment mechanism to recover the $59 million first-year annual revenue requirement associated with the non-fuel ownership costs of the Choctaw Generating Station, which Entergy Mississippi began billing in January 2020. The MPSC must approve recovery through the interim capacity rate adjustment for each new resource. In addition, the MPSC approved revisions to the formula rate plan which allows Entergy Mississippi to begin billing rate adjustments effective April 1 of the filing year on a temporary basis subject to refund or credit to customers, subject to final MPSC order. The MPSC also authorized Entergy Mississippi to remove vegetation management costs from the formula rate plan and recover these costs through the establishment of a vegetation management rider. Effective with the April 2020 billing cycle, Entergy Mississippi implemented a rider to recover $22 million in vegetation management costs.

2019 Formula Rate Plan Filing

In March 2019, Entergy Mississippi submitted its formula rate plan 2019 test year filing and 2018 look-back filing showing Entergy Mississippi's earned return for the historical 2018 calendar year to be above the

formula rate plan bandwidth and projected earned return for the 2019 calendar year to be below the formula rate plan bandwidth. The 2019 test year filing shows a $36.8 million rate increase is necessary to reset Entergy Mississippi's earned return on common equity to the specified point of adjustment of 6.94% return on rate base, within the formula rate plan bandwidth. The 2018 look-back filing compares actual 2018 results to the approved benchmark return on rate base and shows a $10.1 million interim decrease in formula rate plan revenues is necessary. In the fourth quarter 2018, Entergy Mississippi recorded a provision of $9.3 million that reflected the estimate of the difference between the 2018 expected earned rate of return on rate base and an established performance-adjusted benchmark rate of return under the formula rate plan performance-adjusted bandwidth mechanism. In the first quarter 2019, Entergy Mississippi recorded a $0.8 million increase in the provision to reflect the amount shown in the look-back filing. In June 2019, Entergy Mississippi and the Mississippi Public Utilities Staff entered into a joint stipulation that confirmed that the 2019 test year filing showed that a $32.8 million rate increase is necessary to reset Entergy Mississippi's earned return on common equity to the specified point of adjustment of 6.93% return on rate base, within the formula rate plan bandwidth. Additionally, pursuant to the joint stipulation, Entergy Mississippi's 2018 look-back filing reflected an earned return on rate base of 7.81% in calendar year 2018 which is above the look-back benchmark return on rate base of 7.13%, resulting in an $11 million decrease in formula rate plan revenues on an interim basis through May 2020. In the second quarter 2019, Entergy Mississippi recorded an additional $0.9 million increase in the provision to reflect the $11 million shown in the look-back filing. In June 2019 the MPSC approved the joint stipulation with rates effective for the first billing cycle of July 2019.

2020 Formula Rate Plan Filing

In March 2020, Entergy Mississippi submitted its formula rate plan 2020 test year filing and 2019 look-back filing showing Entergy Mississippi's earned return for the historical 2019 calendar year to be below the formula rate plan bandwidth and projected earned return for the 2020 calendar year to be below the formula rate plan bandwidth. The 2020 test year filing shows a $24.6 million rate increase is necessary to reset Entergy Mississippi's earned return on common equity to the specified point of adjustment of 6.51% return on rate base, within the formula rate plan bandwidth. The 2019 look-back filing compares actual 2019 results to the approved benchmark return on rate base and reflects the need for a $7.3 million interim increase in formula rate plan revenues. In accordance with the MPSC-approved revisions to the formula rate plan, Entergy Mississippi implemented a $24.3 million interim rate increase, reflecting a cap equal to 2% of 2019 retail revenues, effective with the April 2020 billing cycle, subject to refund. In June 2020, Entergy Mississippi and the Mississippi Public Utilities Staff entered into a joint stipulation that confirmed that the 2020 test year filing showed that a $23.8 million rate increase is necessary to reset Entergy Mississippi's earned return on common equity to the specified point of adjustment of 6.51% return on rate base, within the formula rate plan bandwidth. Pursuant to the joint stipulation, Entergy Mississippi's 2019 look-back filing reflected an earned return on rate base of 6.75% in calendar year 2019, which is within the look-back bandwidth. As a result, there is no change in formula rate plan revenues in the 2019 look-back filing. In June 2020 the MPSC approved the joint stipulation with rates effective for the first billing cycle of July 2020. In the June 2020 order the MPSC directed Entergy Mississippi to submit revisions to its formula rate plan to realign recovery of costs from its energy efficiency cost recovery rider to its formula rate plan. In November 2020 the MPSC approved Entergy Mississippi's revisions to its formula rate plan providing for the realignment of energy efficiency costs to its formula rate plan, the deferral of energy efficiency expenditures into a regulatory asset, and the elimination of its energy efficiency cost recovery rider effective with the January 2022 billing cycle.

COVID-19 Orders

In March 2020 the MPSC issued an order suspending disconnections for a period of sixty days. The MPSC extended the order on disconnections through May 26, 2020. In April 2020 the MPSC issued an order authorizing utilities to defer incremental costs and expenses associated with COVID-19 compliance and to seek future recovery through rates of the prudently incurred incremental costs and expenses. In December 2020, Entergy Mississippi resumed disconnections to commercial, industrial, and governmental customers with past-due balances that have not made payment arrangements. In January 2021, Entergy Mississippi resumed disconnecting service for residential

customers with past-due balances that have not made arrangements with the company. As of December 31, 2020, Entergy Mississippi recorded a regulatory asset of $19.2 million for costs associated with the COVID-19 pandemic.

Internal Restructuring

In March 2018, Entergy Mississippi filed an application with the MPSC seeking authorization to undertake a restructuring that would result in the transfer of substantially all of the assets and operations of Entergy Mississippi to a new entity, which would ultimately be held by an existing Entergy subsidiary holding company. In September 2018, Entergy Mississippi and the Mississippi Public Utilities Staff entered into and filed a joint stipulation regarding the restructuring filing. In September 2018 the MPSC issued an order accepting the stipulation in its entirety and approving the restructuring and credits of $27 million to retail customers over six years, consisting of annual payments of $4.5 million for the years 2019-2024. Entergy Mississippi also received the required FERC approval.

In November 2018, Entergy Mississippi undertook a multi-step restructuring, including the following:

- Entergy Mississippi, Inc. redeemed its outstanding preferred stock, at the aggregate redemption price of approximately $21.2 million.
- Entergy Mississippi, Inc. converted from a Mississippi corporation to a Texas corporation.
- Under the Texas Business Organizations Code (TXBOC), Entergy Mississippi, Inc. allocated substantially all of its assets to a new subsidiary, Entergy Mississippi Power and Light, LLC, a Texas limited liability company (Entergy Mississippi Power and Light), and Entergy Mississippi Power and Light assumed substantially all of the liabilities of Entergy Mississippi, Inc., in a transaction regarded as a merger under the TXBOC. Entergy Mississippi, Inc. remained in existence and held the membership interests in Entergy Mississippi Power and Light.
- Entergy Mississippi, Inc. contributed the membership interests in Entergy Mississippi Power and Light to an affiliate (Entergy Utility Holding Company, LLC, a Texas limited liability company and subsidiary of Entergy Corporation). As a result of the contribution, Entergy Mississippi Power and Light is a wholly-owned subsidiary of Entergy Utility Holding Company, LLC.

In December 2018, Entergy Mississippi, Inc. changed its name to Entergy Utility Enterprises, Inc., and Entergy Mississippi Power and Light then changed its name to Entergy Mississippi, LLC. Entergy Mississippi, LLC holds substantially all of the assets, and assumed substantially all of the liabilities, of Entergy Mississippi, Inc. The restructuring was accounted for as a transaction between entities under common control.

In December 2018, Entergy Mississippi filed its notice of intent to implement the restructuring credit rider to allow Entergy Mississippi to return credits of $27 million to retail customers over six years. In January 2019 the MPSC approved the proposed restructuring credit adjustment factor, which is effective for bills rendered beginning February 2019.

Filings with the City Council (Entergy New Orleans)

Retail Rates

Energy Efficiency

In December 2019, Entergy New Orleans filed an application with the City Council seeking approval of an implementation plan for the Energy Smart program from April 2020 through December 2022. Entergy New Orleans proposed to recover the costs of the program through mechanisms previously approved by the City Council or through the energy efficiency cost recovery rider, which was approved in the 2018 combined rate case resolution. In January 2020 the City Council's advisors recommended that, beginning with Program Year 10, the City Council allow Entergy New Orleans to earn a utility performance incentive of 7% of Energy Smart costs for each year in

which Entergy New Orleans achieves 100% of the City Council's savings targets for Energy Smart. In February 2020 the City Council approved Entergy New Orleans's application.

2018 Base Rate Case

In September 2018, Entergy New Orleans filed an electric and gas base rate case with the City Council. The filing requested a 10.5% return on equity for electric operations with opportunity to earn a 10.75% return on equity through a performance adder provision of the electric formula rate plan in subsequent years under a formula rate plan and requested a 10.75% return on equity for gas operations. The proposed electric rates in the revised filing reflect a net reduction of $20.3 million. The reduction in electric rates includes a base rate increase of $135.2 million, of which $131.5 million is associated with moving costs currently collected through fuel and other riders into base rates, plus a request for an advanced metering surcharge to recover $7.1 million associated with advanced metering infrastructure, offset by a net decrease of $31.1 million related to fuel and other riders. The filing also included a proposed gas rate decrease of $142 thousand. Entergy New Orleans's rates reflected the inclusion of federal income tax reductions due to the Tax Act and the provisions of a previously-approved agreement in principle determining how the benefits of the Tax Act would flow. Entergy New Orleans included cost of service studies for electric and gas operations for the twelve months ended December 31, 2017 and the projected twelve months ending December 31, 2018. In addition, Entergy New Orleans included capital additions expected to be placed into service for the period through December 31, 2019. Entergy New Orleans based its request for a change in rates on the projected twelve months ending December 31, 2018.

The filing's major provisions included: (1) a new electric rate structure, which realigns the revenue requirement associated with capacity and long-term service agreement expense from certain existing riders to base revenue, provides for the recovery of the cost of advanced metering infrastructure, and partially blends rates for Entergy New Orleans's customers residing in Algiers with customers residing in the remainder of Orleans Parish through a three-year phase-in; (2) contemporaneous cost recovery riders for investments in energy efficiency/demand response, incremental changes in capacity/long-term service agreement costs, grid modernization investment, and gas infrastructure replacement investment; and (3) formula rate plans for both electric and gas operations. In February 2019 the City Council's advisors and several intervenors filed testimony in response to Entergy New Orleans's application. The City Council's advisors recommended, among other things, overall rate reductions of approximately $33 million in electric rates and $3.8 million in gas rates. Certain intervenors recommended overall rate reductions of up to approximately $49 million in electric rates and $5 million in gas rates. An evidentiary hearing was held in June 2019, and the record and post-hearing briefs were submitted in July 2019.

In October 2019 the City Council's Utility Committee approved a resolution for a change in electric and gas rates for consideration by the full City Council that included a 9.35% return on common equity, an equity ratio of the lesser of 50% or Entergy New Orleans's actual equity ratio, and a total reduction in revenues that Entergy New Orleans initially estimated to be approximately $39 million ($36 million electric; $3 million gas). At its November 7, 2019 meeting, the full City Council approved the resolution that had previously been approved by the City Council's Utility Committee. Based on the approved resolution, in the fourth quarter 2019 Entergy New Orleans recorded an accrual of $10 million that reflects the estimate of the revenue billed in 2019 to be refunded to customers in 2020 based on an August 2019 effective date for the rate decrease. Entergy New Orleans also recorded a total of $12 million in regulatory assets for rate case costs and information technology costs associated with integrating Algiers customers with Entergy New Orleans's legacy system and records. Entergy New Orleans will also be allowed to recover $10 million of retired general plant costs over a 20-year period.

The resolution directed Entergy New Orleans to submit a compliance filing within 30 days of the date of the resolution to facilitate the eventual implementation of rates, including all necessary calculations and conforming rate schedules and riders. The electric formula rate plan rider includes, among other things, 1) a provision for forward-looking adjustments to include known and measurable changes realized up to 12 months after the evaluation period; 2) a decoupling mechanism; and 3) recognition that Entergy New Orleans is authorized to make an in-service adjustment to the formula rate plan to include the non-fuel cost of the New Orleans Power Station in

rates, unless the two pending appeals in the New Orleans Power Station proceeding have not concluded. Under this circumstance, Entergy New Orleans shall be permitted to defer the New Orleans Power Station non-fuel costs, including the cost of capital, until Entergy New Orleans commences non-fuel cost recovery. After taking into account the requirements for submission of the compliance filing, the total annual revenue requirement reduction required by the resolution was refined to approximately $45 million ($42 million electric, including $29 million in rider reductions; $3 million gas). In January 2020 the City Council's advisors found that the rates calculated by Entergy New Orleans and reflected in the December 2019 compliance filing should be implemented, except with respect to the City Council-approved energy efficiency cost recovery rider, which rider calculation should take into account events to be determined by the City Council in the future. Also in response to the resolution, Entergy New Orleans filed timely a petition for appeal and judicial review and for stay of or injunctive relief alleging that the resolution is unlawful in failing to produce just and reasonable rates. A hearing on the requested injunction was scheduled in Civil District Court for February 2020, but by joint motion of the City Council and Entergy New Orleans, the Civil District Court issued an order for a limited remand to the City Council to consider a potential agreement in principle/stipulation at its February 20, 2020 meeting. On February 17, 2020, Entergy New Orleans filed with the City Council an agreement in principle between Entergy New Orleans and the City Council's advisors. On February 20, 2020, the City Council voted to approve the proposed agreement in principle and issued a resolution modifying the required treatment of certain accumulated deferred income taxes. As a result of the agreement in principle, the total annual revenue requirement reduction will be approximately $45 million ($42 million electric, including $29 million in rider reductions; and $3 million gas). Entergy New Orleans fully implemented the new rates in April 2020. In January 2021, pursuant to the agreement in principle approved by the City Council in October 2020, Entergy New Orleans filed with Civil District Court a motion seeking to dismiss its petition for judicial review of the City Council's resolution in the 2018 combined rate case.

Commercial operation of the New Orleans Power Station commenced in May 2020. In accordance with the City Council resolution issued in the 2018 base rate case proceeding, Entergy New Orleans had been deferring the New Orleans Power Station non-fuel costs pending the conclusion of the appellate proceedings. In October 2020 the Louisiana Supreme Court denied all writ applications relating to the New Orleans Power Station. With those denials, Entergy New Orleans began recovering New Orleans Power Station costs in rates in November 2020. As of December 31, 2020 the regulatory asset for the deferral of New Orleans Power Station non-fuel costs was $5 million. Entergy New Orleans is recovering the costs over a five-year period that began in November 2020. In December 2020 the Alliance for Affordable Energy and Sierra Club filed a joint motion with the City Council to institute a prudence review to investigate the costs of the New Orleans Power Station. On January 28, 2021, the City Council passed a resolution giving parties 30 days to respond to the motion. Entergy New Orleans plans to respond to the motion.

2020 Formula Rate Plan Filing

Entergy New Orleans's first annual filing under the three-year formula rate plan approved by the City Council in November 2019 was originally due to be filed in April 2020. The authorized return on equity under the approved three-year formula rate plan is 9.35% for both electric and gas operations. The City Council approved several extensions of the deadline to allow additional time to assess the effects of the COVID-19 pandemic on the New Orleans community, Entergy New Orleans customers, and Entergy New Orleans itself. In October 2020 the City Council approved an agreement in principle filed by Entergy New Orleans that results in Entergy New Orleans foregoing its 2020 formula rate plan filing and shifting the three-year formula rate plan to filings in 2021, 2022, and 2023. Key provisions of the agreement in principle include: changing the lower of actual equity ratio or 50% equity ratio approved in the rate case to a hypothetical capital structure of 51% equity and 49% debt for the duration of the three-year formula rate plan; changing the 2% depreciation rate for the New Orleans Power Station approved in the rate case to 3%; retention of over-recovery of $2.2 million in rider revenues; recovery of $1.4 million of certain rate case expenses outside of the earnings band; recovery of the New Orleans Solar Station costs upon commercial operation; and Entergy New Orleans's dismissal of its 2018 rate case appeal.

COVID-19 Orders

In March 2020, Entergy New Orleans voluntarily suspended customer disconnections for non-payment of utility bills through May 2020. Subsequently, the City Council ordered that the moratorium be extended to August 1, 2020. In May 2020 the City Council issued an accounting order authorizing Entergy New Orleans to establish a regulatory asset for incremental COVID-19-related expenses. In January 2021, Entergy New Orleans resumed disconnecting service to commercial and small business customers with past-due balances that have not made payment arrangements. In February 2021 the City Council adopted a resolution suspending residential customer disconnections for non-payment of utility bills and suspending the assessment and accumulation of late fees on residential customers with past-due balances through May 15, 2021. As of December 31, 2020, Entergy New Orleans recorded a regulatory asset of $14.3 million for costs associated with the COVID-19 pandemic.

In June 2020 the City Council established the City Council Cares Program and directed Entergy New Orleans to use the approximately $7 million refund received from the Entergy Arkansas opportunity sales FERC proceeding, currently being held in escrow, and approximately $15 million of non-securitized storm reserves to fund this program, which is intended to provide temporary bill relief to customers who become unemployed during the COVID-19 pandemic. The program became effective July 1, 2020, and offers qualifying residential customers bill credits of $100 per month for up to four months, for a maximum of $400 in residential customer bill credits. As of December 31, 2020, credits of $3.4 million have been applied to customer bills under the City Council Cares Program.

Filings with the PUCT and Texas Cities (Entergy Texas)

Retail Rates

2018 Base Rate Case

In May 2018, Entergy Texas filed a base rate case with the PUCT seeking an increase in base rates and rider rates of approximately $166 million, of which $48 million is associated with moving costs currently being collected through riders into base rates such that the total incremental revenue requirement increase is approximately $118 million. The base rate case was based on a 12-month test year ending December 31, 2017. In addition, Entergy Texas included capital additions placed into service for the period of April 1, 2013 through December 31, 2017, as well as a post-test year adjustment to include capital additions placed in service by June 30, 2018.

In October 2018 the parties filed an unopposed settlement resolving all issues in the proceeding and a motion for interim rates effective for usage on and after October 17, 2018. The unopposed settlement reflects the following terms: a base rate increase of $53.2 million (net of costs realigned from riders and including updated depreciation rates), a $25 million refund to reflect the lower federal income tax rate applicable to Entergy Texas from January 25, 2018 through the date new rates are implemented, $6 million of capitalized skylining tree hazard costs will not be recovered from customers, $242.5 million of protected excess accumulated deferred income taxes, which includes a tax gross-up, will be returned to customers through base rates under the average rate assumption method over the lives of the associated assets, and $185.2 million of unprotected excess accumulated deferred income taxes, which includes a tax gross-up, will be returned to customers through a rider. The unprotected excess accumulated deferred income taxes rider will include carrying charges and will be in effect over a period of 12 months for large customers and over a period of four years for other customers. The settlement also provides for the deferral of $24.5 million of costs associated with the remaining book value of the Neches and Sabine 2 plants, previously taken out of service, to be recovered over a ten-year period and the deferral of $20.5 million of costs associated with Hurricane Harvey to be recovered over a 12-year period, each beginning in October 2018. The settlement provides final resolution of all issues in the matter, including those related to the Tax Act. In October 2018 the ALJ granted the unopposed motion for interim rates to be effective for service rendered on or after October 17, 2018. In December 2018 the PUCT issued an order approving the unopposed settlement.

Distribution Cost Recovery Factor (DCRF) Rider

In March 2019, Entergy Texas filed with the PUCT a request to set a new DCRF rider. The proposed new DCRF rider is designed to collect approximately $3.2 million annually from Entergy Texas's retail customers based on its capital invested in distribution between January 1, 2018 and December 31, 2018. In September 2019 the PUCT issued an order approving rates, which had been effective on an interim basis since June 2019, at the level proposed in Entergy Texas's application.

In March 2020, Entergy Texas filed with the PUCT a request to amend its DCRF rider. The proposed rider is designed to collect from Entergy Texas's retail customers approximately $23.6 million annually, or $20.4 million in incremental annual DCRF revenue beyond Entergy Texas's then-effective DCRF rider, based on its capital invested in distribution between January 1, 2019 and December 31, 2019. In May and June 2020 intervenors filed testimony recommending reductions in Entergy Texas's annual revenue requirement of approximately $0.3 million and $4.1 million. The parties briefed the contested issues in this matter and a proposal for decision was issued in September 2020 recommending a $4.1 million revenue reduction related to non-Advanced Metering System meters included in the DCRF calculation. The parties filed exceptions to the proposal for decision and replies to those exceptions in September 2020. In October 2020 the PUCT issued a final order approving a $16.3 million incremental annual DCRF revenue increase.

In October 2020, Entergy Texas filed with the PUCT a request to amend its DCRF rider. The proposed rider is designed to collect from Entergy Texas's retail customers approximately $26.3 million annually, or $6.8 million in incremental annual revenues beyond Entergy Texas's currently effective DCRF rider based on its capital invested in distribution between January 1, 2020 and August 31, 2020. In February 2021 the administrative law judge with the State Office of Administrative Hearings approved Entergy Texas's agreed motion for interim rates, which will go into effect in March 2021. The administrative law judge also adopted a procedural schedule setting a hearing on the merits, if necessary, in April 2021.

Transmission Cost Recovery Factor (TCRF) Rider

In December 2018, Entergy Texas filed with the PUCT a request to set a new TCRF rider. The proposed new TCRF rider is designed to collect approximately $2.7 million annually from Entergy Texas's retail customers based on its capital invested in transmission between January 1, 2018 and September 30, 2018. In April 2019 parties filed testimony proposing a load growth adjustment, which would fully offset Entergy Texas's proposed TCRF revenue requirement. In July 2019 the PUCT granted Entergy Texas's application as filed to begin recovery of the requested $2.7 million annual revenue requirement, rejecting opposing parties' proposed adjustment; however, the PUCT found that the question of prudence of the actual investment costs should be determined in Entergy Texas's next rate case similar to the procedure used for the costs recovered through the DCRF rider. In October 2019 the PUCT issued an order on a motion for rehearing, clarifying and affirming its prior order granting Entergy Texas's application as filed. Also in October 2019 a second motion for rehearing was filed, and Entergy Texas filed a response in opposition to the motion. The second motion for rehearing was overruled by operation of law. In December 2019, Texas Industrial Energy Consumers filed an appeal to the PUCT order in district court alleging that the PUCT erred in declining to apply a load growth adjustment.

In August 2019, Entergy Texas filed with the PUCT a request to amend its TCRF rider. The amended TCRF rider is designed to collect approximately $19.4 million annually from Entergy Texas's retail customers based on its capital invested in transmission between January 1, 2018 and June 30, 2019, which is $16.7 million in incremental annual revenue above the $2.7 million approved in the prior pending TCRF proceeding. In January 2020 the PUCT issued an order approving an unopposed settlement providing for recovery of the requested revenue requirement. Entergy Texas implemented the amended rider beginning with bills covering usage on and after January 23, 2020.

In October 2020, Entergy Texas filed with the PUCT a request to amend its TCRF rider. The proposed rider is designed to collect from Entergy Texas's retail customers approximately $51 million annually, or $31.6 million in incremental annual revenues beyond Entergy Texas's currently effective TCRF rider based on its capital invested in transmission between July 1, 2019 and August 31, 2020. A procedural schedule was established with a hearing scheduled in March 2021. In February 2021, Entergy Texas filed an agreed motion to abate the procedural schedule, noting that the parties had reached a settlement in principle, and the administrative law judge granted the motion to abate.

COVID-19 Orders

In March 2020 the PUCT authorized electric utilities to record as a regulatory asset expenses resulting from the effects of COVID-19. In future proceedings the PUCT will consider whether each utility's request for recovery of these regulatory assets is reasonable and necessary, the appropriate period of recovery, and any amount of carrying costs thereon. In March 2020 the PUCT ordered a moratorium on disconnections for nonpayment for all customer classes, but, in April 2020, revised the disconnect moratorium to apply only to residential customers. The PUCT allowed the moratorium to expire on June 13, 2020, but on July 17, 2020, the PUCT re-established the disconnect moratorium for residential customers until August 31, 2020. In January 2021, Entergy Texas resumed disconnections for customers with past-due balances that have not made payment arrangements. As of December 31, 2020, Entergy Texas recorded a regulatory asset of $12.9 million for costs associated with the COVID-19 pandemic.

Generation Cost Recovery Rider

In October 2020, Entergy Texas filed an application to establish a generation cost recovery rider with an initial annual revenue requirement of approximately $91 million to begin recovering a return of and on its capital investment in the Montgomery County Power Station through August 31, 2020. In December 2020, Entergy Texas filed an unopposed settlement supporting a generation cost recovery rider with an annual revenue requirement of approximately $86 million. The settlement revenue requirement is based on a depreciation rate intended to fully depreciate Montgomery County Power Station over 38 years and the removal of certain costs from Entergy Texas's request. Under the settlement, Entergy Texas retains the right to propose a different depreciation rate and seek recovery of a majority of the costs removed from its request in its next base rate proceeding. On January 14, 2021, the PUCT approved the generation cost recovery rider settlement rates on an interim basis and abated the proceeding. Within 60 days of Montgomery County Power Station being placed in service on January 1, 2021, Entergy Texas will file to update its generation cost recovery rider to include investment in Montgomery County Power Station after August 31, 2020. The current estimated cost of Montgomery County Power Station, including transmission interconnection and network upgrades, is approximately $921 million. Of this investment, approximately $765 million is eligible to begin being recovered through the generation cost recovery rider. Entergy Texas will address recovery of the remainder of its Montgomery County Power Station investment through other rate mechanisms.

In December 2020, Entergy Texas filed an application to amend its generation cost recovery rider to reflect its acquisition of the Hardin County Peaking Facility, which is expected to close in April 2021. The initial generation cost recovery rider rates proposed in the application represent no change from the generation cost recovery rider rates to be established in Entergy Texas' previous generation cost recovery rider proceeding. Once Entergy Texas has acquired the Hardin County Peaking Facility, its investment in the facility will be reflected in the updated filing to Entergy Texas' application, which will be made within 60 days of the acquisition's closing.

Entergy Arkansas Opportunity Sales Proceeding

In June 2009 the LPSC filed a complaint requesting that the FERC determine that certain of Entergy Arkansas's sales of electric energy to third parties: (a) violated the provisions of the System Agreement that allocated the energy generated by Entergy System resources; (b) imprudently denied the Entergy System and its ultimate consumers the benefits of low-cost Entergy System generating capacity; and (c) violated the provision of the System Agreement that prohibited sales to third parties by individual companies absent an offer of a right-of-first-refusal to other Utility operating companies. The LPSC's complaint challenged sales made beginning in 2002 and requested refunds. In July 2009 the Utility operating companies filed a response to the complaint arguing among other things that the System Agreement contemplates that the Utility operating companies may make sales to third parties for their own account, subject to the requirement that those sales be included in the load (or load shape) for the applicable Utility operating company. The FERC subsequently ordered a hearing in the proceeding.

After a hearing, the ALJ issued an initial decision in December 2010. The ALJ found that the System Agreement allowed for Entergy Arkansas to make the sales to third parties but concluded that the sales should be accounted for in the same manner as joint account sales. The ALJ concluded that "shareholders" should make refunds of the damages to the Utility operating companies, along with interest. Entergy disagreed with several aspects of the ALJ's initial decision and in January 2011 filed with the FERC exceptions to the decision.

The FERC issued a decision in June 2012 and held that, while the System Agreement is ambiguous, it does provide authority for individual Utility operating companies to make opportunity sales for their own account and Entergy Arkansas made and priced these sales in good faith. The FERC found, however, that the System Agreement does not provide authority for an individual Utility operating company to allocate the energy associated with such opportunity sales as part of its load but provides a different allocation authority. The FERC further found that the after-the-fact accounting methodology used to allocate the energy used to supply the sales was inconsistent with the System Agreement. The FERC in its decision established further hearing procedures to quantify the effect of repricing the opportunity sales in accordance with the FERC's June 2012 decision. The hearing was held in May 2013 and the ALJ issued an initial decision in August 2013. The LPSC, the APSC, the City Council, and FERC staff filed briefs on exceptions and/or briefs opposing exceptions. Entergy filed a brief on exceptions requesting that the FERC reverse the initial decision and a brief opposing certain exceptions taken by the LPSC and FERC staff.

In April 2016 the FERC issued orders addressing requests for rehearing filed in July 2012 and the ALJ's August 2013 initial decision. The first order denied Entergy's request for rehearing and affirmed the FERC's earlier rulings that Entergy's original methodology for allocating energy costs to the opportunity sales was incorrect and, as a result, Entergy Arkansas must make payments to the other Utility operating companies to put them in the same position that they would have been in absent the incorrect allocation. The FERC clarified that interest should be included with the payments. The second order affirmed in part, and reversed in part, the rulings in the ALJ's August 2013 initial decision regarding the methodology that should be used to calculate the payments Entergy Arkansas is to make to the other Utility operating companies. The FERC affirmed the ALJ's ruling that a full re-run of intra-system bills should be performed but required that methodology be modified so that the sales have the same priority for purposes of energy allocation as joint account sales. The FERC reversed the ALJ's decision that any payments by Entergy Arkansas should be reduced by 20%. The FERC also reversed the ALJ's decision that adjustments to other System Agreement service schedules and excess bandwidth payments should not be taken into account when calculating the payments to be made by Entergy Arkansas. The FERC held that such adjustments and excess bandwidth payments should be taken into account but ordered further proceedings before an ALJ to address whether a cap on any reduction due to bandwidth payments was necessary and to implement the other adjustments to the calculation methodology.

In May 2016, Entergy Services filed a request for rehearing of the FERC's April 2016 order arguing that payments made by Entergy Arkansas should be reduced as a result of the timing of the LPSC's approval of certain contracts. Entergy Services also filed a request for clarification and/or rehearing of the FERC's April 2016 order

addressing the ALJ's August 2013 initial decision. The APSC and the LPSC also filed requests for rehearing of the FERC's April 2016 order. In September 2017 the FERC issued an order denying the request for rehearing on the issue of whether any payments by Entergy Arkansas to the other Utility operating companies should be reduced due to the timing of the LPSC's approval of Entergy Arkansas's wholesale baseload contract with Entergy Louisiana. In November 2017 the FERC issued an order denying all of the remaining requests for rehearing of the April 2016 order. In November 2017, Entergy Services filed a petition for review in the D.C. Circuit of the FERC's orders in the first two phases of the opportunity sales case. In December 2017 the D.C. Circuit granted Entergy Services' request to hold the appeal in abeyance pending final resolution of the related proceeding before the FERC. In January 2018 the APSC and the LPSC filed separate petitions for review in the D.C. Circuit, and the D.C. Circuit consolidated the appeals with Entergy Services' appeal.

The hearing required by the FERC's April 2016 order was held in May 2017. In July 2017 the ALJ issued an initial decision addressing whether a cap on any reduction due to bandwidth payments was necessary and whether to implement the other adjustments to the calculation methodology. In August 2017 the Utility operating companies, the LPSC, the APSC, and FERC staff filed individual briefs on exceptions challenging various aspects of the initial decision. In September 2017 the Utility operating companies, the LPSC, the APSC, the MPSC, the City Council, and FERC staff filed separate briefs opposing exceptions taken by various parties.

Based on testimony previously submitted in the case and its assessment of the April 2016 FERC orders, in the first quarter 2016, Entergy Arkansas recorded a liability of $87 million, which included interest, for its estimated increased costs and payment to the other Utility operating companies, and a deferred fuel regulatory asset of $75 million. Following its assessment of the course of the proceedings, including the FERC's denial of rehearing in November 2017 described above, in the fourth quarter 2017, Entergy Arkansas recorded an additional liability of $35 million and a regulatory asset of $31 million.

In October 2018 the FERC issued an order addressing the ALJ's July 2017 initial decision. The FERC reversed the ALJ's decision to cap the reduction in Entergy Arkansas's payment to account for the increased bandwidth payments that Entergy Arkansas made to the other operating companies. The FERC also reversed the ALJ's decision that Grand Gulf sales from January through September 2000 should be included in the calculation of Entergy Arkansas's payment. The FERC affirmed on other grounds the ALJ's rejection of the LPSC's claim that certain joint account sales should be accounted for as part of the calculation of Entergy Arkansas's payment. In November 2018 the LPSC requested rehearing of the FERC's October 2018 decision. In December 2019 the FERC denied the LPSC's request for rehearing. In January 2020 the LPSC appealed the December 2019 decision to the D.C. Circuit.

In December 2018, Entergy made a compliance filing in response to the FERC's October 2018 order. The compliance filing provided a final calculation of Entergy Arkansas's payments to the other Utility operating companies, including interest. No protests were filed in response to the December 2018 compliance filing. The December 2018 compliance filing is pending FERC action. Refunds and interest in the following amounts were paid by Entergy Arkansas to the other operating companies in December 2018:

	Total refunds including interest Payment/(Receipt)		
	(In Millions)		
	Principal	Interest	Total
Entergy Arkansas	$68	$67	$135
Entergy Louisiana	($30)	($29)	($59)
Entergy Mississippi	($18)	($18)	($36)
Entergy New Orleans	($3)	($4)	($7)
Entergy Texas	($17)	($16)	($33)

Entergy Arkansas previously recognized a regulatory asset with a balance of $116 million as of December 31, 2018 for a portion of the payments due as a result of this proceeding.

As described above, the FERC's opportunity sales orders have been appealed to the D.C. Circuit. In February 2020 all of the appeals were consolidated and in April 2020 the D.C. Circuit established a briefing schedule. Briefing was completed in September 2020 and oral argument was heard in December 2020.

In February 2019 the LPSC filed a new complaint relating to two issues that were raised in the opportunity sales proceeding, but that, in its October 2018 order, the FERC held were outside the scope of the proceeding. In March 2019, Entergy Services filed an answer and motion to dismiss the new complaint. In November 2019 the FERC issued an order denying the LPSC's complaint. The order concluded that the settlement agreement approved by the FERC in December 2015 terminating the System Agreement barred the LPSC's new complaint. In December 2019 the LPSC requested rehearing of the FERC's November 2019 order, and in July 2020 the FERC issued an order dismissing the LPSC's request for rehearing. In September 2020 the LPSC appealed to the D.C. Circuit the FERC's orders dismissing the new opportunity sales complaint. In November 2020 the D.C. Circuit issued an order establishing that briefing will occur in January 2021 through April 2021.

In May 2019, Entergy Arkansas filed an application and supporting testimony with the APSC requesting approval of a special rider tariff to recover the costs of these payments from its retail customers over a 24-month period. The application requested that the APSC approve the rider to take effect within 30 days or, if suspended by the APSC as allowed by commission rule, approve the rider to take effect in the first billing cycle of the first month occurring 30 days after issuance of the APSC's order approving the rider. In June 2019 the APSC suspended Entergy Arkansas's tariff and granted Entergy Arkansas's motion asking the APSC to establish the proceeding as the single designated proceeding in which interested parties may assert claims related to the appropriate retail rate treatment of the FERC's October 2018 order and related FERC orders in the opportunity sales proceeding. In January 2020 the APSC adopted a procedural schedule with a hearing in April 2020. In January 2020 the Attorney General and Arkansas Electric Energy Consumers, Inc. filed a joint motion seeking to dismiss Entergy Arkansas's application alleging that the APSC, in a prior proceeding, ruled on the issues addressed in the application and determined that Entergy Arkansas's requested relief violates the filed rate doctrine and the prohibition against retroactive ratemaking. Entergy Arkansas responded to the joint motion in February 2020 rebutting these arguments, including demonstrating that the claims in this proceeding differ substantially from those the APSC addressed previously and that the payment resulting from a FERC tariff violation for which Entergy Arkansas seeks retail cost recovery in this proceeding differs materially from the refunds resulting from a FERC tariff amendment that the APSC previously rejected on filed rate doctrine and the retroactive ratemaking grounds. In addition, in January 2020 the Attorney General and Arkansas Electric Energy Consumers, Inc. filed testimony opposing the recovery by Entergy Arkansas of the opportunity sales payment but also claiming that certain components of the payment should be segregated and refunded to customers. In March 2020, Entergy Arkansas filed rebuttal testimony.

In July 2020 the APSC issued a decision finding that Entergy Arkansas's application is not in the public interest. The order also directed Entergy Arkansas to refund to its retail customers within 30 days of the order the FERC-determined over-collection of $13.7 million, plus interest, associated with a recalculated bandwidth remedy. In addition to these primary findings, the order also denied the Attorney General's request for Entergy Arkansas to prepare a compliance filing detailing all of the retail impacts from the opportunity sales and denied a request by the Arkansas Electric Energy Consumers to recalculate all costs using the revised responsibility ratio. Entergy Arkansas filed a motion for temporary stay of the 30-day requirement to allow Entergy Arkansas a reasonable opportunity to seek rehearing of the APSC order, but in July 2020 the APSC denied Entergy Arkansas's request for a stay and directed Entergy Arkansas to refund to its retail customers the component of the total FERC-determined opportunity sales payment that was associated with increased bandwidth remedy payments of $13.7 million, plus interest. The refunds were issued in the August 2020 billing cycle. While the APSC denied Entergy Arkansas's stay request, Entergy Arkansas believes its actions were prudent and, therefore, the costs, including the $13.7 million, plus interest, are recoverable. In July 2020, Entergy Arkansas requested rehearing of the APSC

order, which rehearing was denied by the APSC in August 2020. In September 2020, Entergy Arkansas filed a complaint in the U. S. District Court for the Eastern District of Arkansas challenging the APSC's order denying Entergy Arkansas's request to recover the costs of these payments. In October 2020 the APSC filed a motion to dismiss Entergy Arkansas's complaint, to which Entergy Arkansas responded. Also in December 2020, Entergy Arkansas and the APSC held a pre-trial conference, and filed a report with the court in January 2021. The court scheduled a hearing for February 26, 2021 regarding issues addressed in the pre-trial conference report.

Complaints Against System Energy

Return on Equity and Capital Structure Complaints

In January 2017 the APSC and MPSC filed a complaint with the FERC against System Energy. The complaint seeks a reduction in the return on equity component of the Unit Power Sales Agreement pursuant to which System Energy sells its Grand Gulf capacity and energy to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans. Entergy Arkansas also sells some of its Grand Gulf capacity and energy to Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans under separate agreements. The current return on equity under the Unit Power Sales Agreement is 10.94%, which was established in a rate proceeding that became final in July 2001.

The APSC and MPSC complaint alleges that the return on equity is unjust and unreasonable because capital market and other considerations indicate that it is excessive. The complaint requests proceedings to investigate the return on equity and establish a lower return on equity, and also requests that the FERC establish January 23, 2017 as a refund effective date. The complaint includes return on equity analysis that purports to establish that the range of reasonable return on equity for System Energy is between 8.37% and 8.67%. System Energy answered the complaint in February 2017 and disputes that a return on equity of 8.37% to 8.67% is just and reasonable. The LPSC and the City Council intervened in the proceeding expressing support for the complaint. In September 2017 the FERC established a refund effective date of January 23, 2017 and directed the parties to engage in settlement proceedings before an ALJ. The parties have been unable to settle the return on equity issue and a FERC hearing judge was assigned in July 2018. The 15-month refund period in connection with the APSC/MPSC complaint expired on April 23, 2018.

In April 2018 the LPSC filed a complaint with the FERC against System Energy seeking an additional 15-month refund period. The LPSC complaint requests similar relief from the FERC with respect to System Energy's return on equity and also requests the FERC to investigate System Energy's capital structure. The APSC, MPSC, and City Council intervened in the proceeding, filed an answer expressing support for the complaint, and asked the FERC to consolidate this proceeding with the proceeding initiated by the complaint of the APSC and MPSC in January 2017. System Energy answered the LPSC complaint in May 2018 and also filed a motion to dismiss the complaint. In August 2018 the FERC issued an order dismissing the LPSC's request to investigate System Energy's capital structure and setting for hearing the return on equity complaint, with a refund effective date of April 27, 2018. The 15-month refund period in connection with the LPSC return on equity complaint expired on July 26, 2019.

The portion of the LPSC's complaint dealing with return on equity was subsequently consolidated with the APSC and MPSC complaint for hearing. The parties addressed an order (issued in a separate proceeding involving New England transmission owners) that proposed modifying the FERC's standard methodology for determining return on equity. In September 2018, System Energy filed a request for rehearing and the LPSC filed a request for rehearing or reconsideration of the FERC's August 2018 order. The LPSC's request referenced an amended complaint that it filed on the same day raising the same capital structure claim the FERC had earlier dismissed. The FERC initiated a new proceeding for the amended capital structure complaint, and System Energy submitted a response in October 2018. In January 2019 the FERC set the amended complaint for settlement and hearing proceedings. Settlement proceedings in the capital structure proceeding commenced in February 2019. As noted below, in June 2019 settlement discussions were terminated and the amended capital structure complaint was

consolidated with the ongoing return on equity proceeding. The 15-month refund period in connection with the capital structure complaint was from September 24, 2018 to December 23, 2019.

In January 2019 the LPSC and the APSC and MPSC filed direct testimony in the return on equity proceeding. For the refund period January 23, 2017 through April 23, 2018, the LPSC argues for an authorized return on equity for System Energy of 7.81% and the APSC and MPSC argue for an authorized return on equity for System Energy of 8.24%. For the refund period April 27, 2018 through July 27, 2019, and for application on a prospective basis, the LPSC argues for an authorized return on equity for System Energy of 7.97% and the APSC and MPSC argue for an authorized return on equity for System Energy of 8.41%. In March 2019, System Energy submitted answering testimony. For the first refund period, System Energy's testimony argues for a return on equity of 10.10% (median) or 10.70% (midpoint). For the second refund period, System Energy's testimony shows that the calculated returns on equity for the first period fall within the range of presumptively just and reasonable returns on equity, and thus the second complaint should be dismissed (and the first period return on equity used going forward). If the FERC nonetheless were to set a new return on equity for the second period (and going forward), System Energy argues the return on equity should be either 10.32% (median) or 10.69% (midpoint).

In May 2019 the FERC trial staff filed its direct and answering testimony in the return on equity proceeding. For the first refund period, the FERC trial staff calculates an authorized return on equity for System Energy of 9.89% based on the application of FERC's proposed methodology. The FERC trial staff's direct and answering testimony noted that an authorized return on equity of 9.89% for the first refund period was within the range of presumptively just and reasonable returns on equity for the second refund period, as calculated using a study period ending January 31, 2019 for the second refund period.

In June 2019, System Entergy filed testimony responding to the testimony filed by the FERC trial staff. Among other things, System Energy's testimony rebutted arguments raised by the FERC trial staff and provided updated calculations for the second refund period based on the study period ending May 31, 2019. For that refund period, System Energy's testimony shows that strict application of the return on equity methodology proposed by the FERC staff indicates that the second complaint would not be dismissed, and the new return on equity would be set at 9.65% (median) or 9.74% (midpoint). System Energy's testimony argues that these results are insufficient in light of benchmarks such as state returns on equity and treasury bond yields, and instead proposes that the calculated returns on equity for the second period should be either 9.91% (median) or 10.3% (midpoint). System Energy's testimony also argues that, under application of its proposed modified methodology, the 10.10% return on equity calculated for the first refund period would fall within the range of presumptively just and reasonable returns on equity for the second refund period.

Also in June 2019, the FERC's Chief ALJ issued an order terminating settlement discussions in the amended complaint addressing System Energy's capital structure. The ALJ consolidated the amended capital structure complaint with the ongoing return on equity proceeding and set new procedural deadlines for the consolidated hearing.

In August 2019 the LPSC and the APSC and MPSC filed rebuttal testimony in the return on equity proceeding and direct and answering testimony relating to System Energy's capital structure. The LPSC re-argues for an authorized return on equity for System Energy of 7.81% for the first refund period and 7.97% for the second refund period. The APSC and MPSC argue for an authorized return on equity for System Energy of 8.26% for the first refund period and 8.32% for the second refund period. With respect to capital structure, the LPSC proposes that the FERC establish a hypothetical capital structure for System Energy for ratemaking purposes. Specifically, the LPSC proposes that System Energy's common equity ratio be set to Entergy Corporation's equity ratio of 37% equity and 63% debt. In the alternative, the LPSC argues that the equity ratio should be no higher than 49%, the composite equity ratio of System Energy and the other Entergy operating companies who purchase under the Unit Power Sales Agreement. The APSC and MPSC recommend that 35.98% be set as the common equity ratio for System Energy. As an alternative, the APSC and MPSC propose that System Energy's common equity be set at 46.75% based on the median equity ratio of the proxy group for setting the return on equity.

In September 2019 the FERC trial staff filed its rebuttal testimony in the return on equity proceeding. For the first refund period, the FERC trial staff calculates an authorized return on equity for System Energy of 9.40% based on the application of the FERC's proposed methodology and an updated proxy group. For the second refund period, based on the study period ending May 31, 2019, the FERC trial staff rebuttal testimony argues for a return on equity of 9.63%. In September 2019 the FERC trial staff also filed direct and answering testimony relating to System Energy's capital structure. The FERC trial staff argues that the average capital structure of the proxy group used to develop System Energy's return on equity should be used to establish the capital structure. Using this approach, the FERC trial staff calculates the average capital structure for its proposed proxy group of 46.74% common equity, and 53.26% debt.

In October 2019, System Energy filed answering testimony disputing the FERC trial staff's, the LPSC's, and the APSC's and MPSC's arguments for the use of a hypothetical capital structure and arguing that the use of System Energy's actual capital structure is just and reasonable.

In November 2019, in a proceeding that did not involve System Energy, the FERC issued an order addressing the methodology for determining the return on equity applicable to transmission owners in MISO. Thereafter, the procedural schedule in the System Energy proceeding was amended to allow the participants to file supplemental testimony addressing the order in the MISO transmission owner proceeding (Opinion No. 569).

In February 2020 the LPSC, the MPSC and APSC, and the FERC trial staff filed supplemental testimony addressing Opinion No. 569 and how it would affect the return on equity evaluation for the two complaint periods concerning System Energy. For the first refund period, based on their respective interpretations and applications of the Opinion No. 569 methodology, the LPSC argues for an authorized return on equity for System Energy of 8.44%; the MPSC and APSC argue for an authorized return on equity of 8.41%; and the FERC trial staff argues for an authorized return on equity of 9.22%. For the second refund period and on a prospective basis, based on their respective interpretations and applications of the Opinion No. 569 methodology, the LPSC argues for an authorized return on equity for System Energy of 7.89%; the MPSC and APSC argue that an authorized return on equity of 8.01% may be appropriate; and the FERC trial staff argues for an authorized return on equity of 8.66%.

In April 2020, System Energy filed supplemental answering testimony addressing Opinion No. 569. System Energy argues that the Opinion No. 569 methodology is conceptually and analytically defective for purposes of establishing just and reasonable authorized return on equity determinations and proposes an alternative approach. As its primary recommendation, System Energy continues to support the return on equity determinations in its March 2019 testimony for the first refund period and its June 2019 testimony for the second refund period. Under the Opinion No. 569 methodology, System Energy calculates a "presumptively just and reasonable range" for the authorized return on equity for the first refund period of 8.57% to 9.52%, and for the second refund period of 8.28% to 9.11%. System Energy argues that these ranges are not just and reasonable results. Under its proposed alternative methodology, System Energy calculates an authorized return on equity of 10.26% for the first refund period, which also falls within the presumptively just and reasonable range calculated for the second refund period and prospectively.

In May 2020 the FERC issued an order on rehearing of Opinion No. 569 (Opinion No. 569-A). In June 2020 the procedural schedule in the System Energy proceeding was further revised in order to allow parties to address the Opinion No. 569-A methodology. Pursuant to the revised schedule, in June 2020, the LPSC, MPSC and APSC, and the FERC trial staff filed supplemental testimony addressing Opinion No. 569-A and how it would affect the return on equity evaluation for the two complaint periods concerning System Energy. For the first refund period, based on their respective interpretations and applications of the Opinion No. 569-A methodology, the LPSC argues for an authorized return on equity for System Energy of 7.97%; the MPSC and APSC argue for an authorized return on equity of 9.24%; and the FERC trial staff argues for an authorized return on equity of 9.49%. For the second refund period and on a prospective basis, based on their respective interpretations and applications of the

Opinion No. 569-A methodology, the LPSC argues for an authorized return on equity for System Energy of 7.78%; the MPSC and APSC argue that an authorized return on equity of 9.15% may be appropriate if the second complaint is not dismissed; and the FERC trial staff argues for an authorized return on equity of 9.09% if the second complaint is not dismissed.

Pursuant to the revised procedural schedule, in July 2020, System Energy filed supplemental testimony addressing Opinion No. 569-A. System Energy argues that strict application of the Opinion No. 569-A methodology produces results inconsistent with investor requirements and does not provide a sound basis on which to evaluate System Energy's authorized return on equity. As its primary recommendation, System Energy argues for the use of a methodology that incorporates four separate financial models, including the constant growth form of the discounted cash flow model and the empirical capital asset pricing model. Based on application of its recommended methodology, System Energy argues for an authorized return on equity of 10.12% for the first refund period, which also falls within the presumptively just and reasonable range calculated for the second refund period and prospectively. Under the Opinion No. 569-A methodology, System Energy calculates an authorized return on equity of 9.44% for the first refund period, which also falls within the presumptively just and reasonable range calculated for the second refund period and prospectively.

The parties and FERC trial staff filed final rounds of testimony in August 2020. The hearing before a FERC ALJ occurred in late-September through early-October 2020, post-hearing briefing took place in November and December 2020, and the initial decision is due in March 2021. System Energy recorded a provision against revenue for the potential outcome of this proceeding.

Grand Gulf Sale-leaseback Renewal Complaint and Uncertain Tax Position Rate Base Issue

In May 2018 the LPSC filed a complaint against System Energy and Entergy Services related to System Energy's renewal of a sale-leaseback transaction originally entered into in December 1988 for an 11.5% undivided interest in Grand Gulf Unit 1. The complaint alleges that System Energy violated the filed rate and the FERC's ratemaking and accounting requirements when it included in Unit Power Sales Agreement billings the cost of capital additions associated with the sale-leaseback interest, and that System Energy is double-recovering costs by including both the lease payments and the capital additions in Unit Power Sales Agreement billings. The complaint also claims that System Energy was imprudent in entering into the sale-leaseback renewal because the Utility operating companies that purchase Grand Gulf's output from System Energy could have obtained cheaper capacity and energy in the MISO markets. The complaint further alleges that System Energy violated various other reporting and accounting requirements and should have sought prior FERC approval of the lease renewal. The complaint seeks various forms of relief from the FERC. The complaint seeks refunds for capital addition costs for all years in which they were recorded in allegedly non-formula accounts or, alternatively, the disallowance of the return on equity for the capital additions in those years plus interest. The complaint also asks that the FERC disallow and refund the lease costs of the sale-leaseback renewal on grounds of imprudence, investigate System Energy's treatment of a DOE litigation payment, and impose certain forward-looking procedural protections, including audit rights for retail regulators of the Unit Power Sales Agreement formula rates. The APSC, MPSC, and City Council intervened in the proceeding.

In June 2018, System Energy and Entergy Services filed a motion to dismiss and an answer to the LPSC complaint denying that System Energy's treatment of the sale-leaseback renewal and capital additions violated the terms of the filed rate or any other FERC ratemaking, accounting, or legal requirements or otherwise constituted double recovery. The response also argued that the complaint is inconsistent with a FERC-approved settlement to which the LPSC is a party and that explicitly authorizes System Energy to recover its lease payments. Finally, the response argued that both the capital additions and the sale-leaseback renewal were prudent investments and the LPSC complaint fails to justify any disallowance or refunds. The response also offered to submit formula rate protocols for the Unit Power Sales Agreement similar to the procedures used for reviewing transmission rates under the MISO tariff. In September 2018 the FERC issued an order setting the complaint for hearing and settlement proceedings. The FERC established a refund effective date of May 18, 2018.

In February 2019 the presiding ALJ ruled that the hearing ordered by the FERC includes the issue of whether specific subcategories of accumulated deferred income tax should be included in, or excluded from, System Energy's formula rate. In March 2019 the LPSC, MPSC, APSC and City Council filed direct testimony. The LPSC testimony sought refunds that include the renewal lease payments (approximately $17.2 million per year since July 2015), rate base reductions for accumulated deferred income tax associated with uncertain tax positions, and the cost of capital additions associated with the sale-leaseback interest, as well as interest on those amounts.

In June 2019 System Energy filed answering testimony arguing that the FERC should reject all claims for refunds. Among other things, System Energy argued that claims for refunds of the costs of lease renewal payments and capital additions should be rejected because those costs were recovered consistent with the Unit Power Sales Agreement formula rate, System Energy was not over or double recovering any costs, and ratepayers will save costs over the initial and renewal terms of the leases. System Energy argued that claims for refunds associated with liabilities arising from uncertain tax positions should be rejected because the liabilities do not provide cost-free capital, the repayment timing of the liabilities is uncertain, and the outcome of the underlying tax positions is uncertain. System Energy's testimony also challenged the refund calculations supplied by the other parties.

In August 2019 the FERC trial staff filed direct and answering testimony seeking refunds for rate base reductions for liabilities associated with uncertain tax positions. The FERC trial staff also argued that System Energy recovered $32 million more than it should have in depreciation expense for capital additions. In September 2019, System Energy filed cross-answering testimony disputing the FERC trial staff's arguments for refunds, stating that the FERC trial staff's position regarding depreciation rates for capital additions is not unreasonable, but explaining that any change in depreciation expense is only one element of a Unit Power Sales Agreement re-billing calculation. Adjustments to depreciation expense in any re-billing under the Unit Power Sales Agreement formula rate will also involve changes to accumulated depreciation, accumulated deferred income taxes, and other formula elements as needed. In October 2019 the LPSC filed rebuttal testimony increasing the amount of refunds sought for liabilities associated with uncertain tax positions. The LPSC seeks approximately $512 million plus interest, which is approximately $191 million through December 31, 2020. The FERC trial staff also filed rebuttal testimony in which it seeks refunds of a similar amount as the LPSC for the liabilities associated with uncertain tax positions. The LPSC testimony also argued that adjustments to depreciation rates should affect rate base on a prospective basis only.

A hearing was held before a FERC ALJ in November 2019. In April 2020 the ALJ issued an initial decision. Among other things, the ALJ determined that refunds were due on three main issues. First, with regard to the lease renewal payments, the ALJ determined that System Energy is recovering an unjust acquisition premium through the lease renewal payments, and that System Energy's recovery from customers through rates should be limited to the cost of service based on the remaining net book value of the leased assets, which is approximately $70 million. The ALJ found that the remedy for this issue should be the refund of lease payments (approximately $17.2 million per year since July 2015) with interest determined at the FERC quarterly interest rate, which would be offset by the addition of the net book value of the leased assets in the cost of service. The ALJ did not calculate a value for the refund expected as a result of this remedy. In addition, System Energy would no longer recover the lease payments in rates prospectively. Second, with regard to the liabilities associated with uncertain tax positions, the ALJ determined that the liabilities are accumulated deferred income taxes and System Energy's rate base should have been reduced for those liabilities. If the ALJ's initial decision is upheld, the estimated refund for this issue through December 31, 2020, is approximately $422 million, plus interest, which is approximately $110 million through December 31, 2020. The ALJ also found that System Energy should include liabilities associated with uncertain tax positions as a rate base reduction going forward. Third, with regard to the depreciation expense adjustments, the ALJ found that System Energy should correct for the error in re-billings retroactively and prospectively, but that System Energy should not be permitted to recover interest on any retroactive return on enhanced rate base resulting from such corrections. If the initial decision is affirmed on this issue, System Energy estimates refunds of approximately $19 million, which includes interest through December 31, 2020.

The ALJ initial decision is an interim step in the FERC litigation process, and an ALJ's determinations made in an initial decision are not controlling on the FERC. The ALJ in the initial decision acknowledges that these are issues of first impression before the FERC. In June 2020, System Energy, the LPSC, and the FERC trial staff filed briefs on exceptions, challenging several of the initial decision's findings. System Energy's brief on exceptions challenged the initial decision's limitations on recovery of the lease renewal payments, its proposed rate base refund for the liabilities associated with uncertain tax positions, and its proposal to asymmetrically treat interest on bill corrections for depreciation expense adjustments. The LPSC's and the FERC trial staff's briefs on exceptions each challenged the initial decision's allowance for recovery of the cost of service associated with the lease renewal based on the remaining net book value of the leased assets, its calculation of the remaining net book value of the leased assets, and the amount of the initial decision's proposed rate base refund for the liabilities associated with uncertain tax positions. The LPSC's brief on exceptions also challenged the initial decision's proposal that depreciation expense adjustments include retroactive adjustments to rate base and its finding that section 203 of the Federal Power Act did not apply to the lease renewal. The FERC trial staff's brief on exceptions also challenged the initial decision's finding that the FERC need not institute a formal investigation into System Energy's tariff. In October 2020, System Energy, the LPSC, the MPSC, the APSC, and the City Council filed briefs opposing exceptions. System Energy opposed the exceptions filed by the LPSC and the FERC trial staff. The LPSC, MPSC, APSC, City Council, and the FERC trial staff opposed the exceptions filed by System Energy. Also in October 2020 the MPSC, APSC, and the City Council filed briefs adopting the exceptions of the LPSC and the FERC trial staff. The case is pending before the FERC, which will review the case and issue an order on the proceeding, and the FERC may accept, reject, or modify the ALJ's initial decision in whole or in part. Refunds, if any, that might be required will only become due after the FERC issues its order reviewing the initial decision.

In addition, in September 2020, the IRS issued a Notice of Proposed Adjustment (NOPA) and Entergy executed it. The NOPA memorializes the IRS's decision to adjust the 2015 consolidated federal income tax return of Entergy Corporation and certain of its subsidiaries, including System Energy, with regard to the uncertain decommissioning tax position. Pursuant to the audit resolution documented in the NOPA, the IRS allowed System Energy's inclusion of $102 million of future nuclear decommissioning costs in System Energy's cost of goods sold for the 2015 tax year, roughly 10% of the requested deduction, but disallowed the balance of the position. In September 2020, System Energy filed a motion to lodge the NOPA into the record in the FERC proceeding. In October 2020 the LPSC, the APSC, the MPSC, the City Council, and the FERC trial staff filed oppositions to System Energy's motion. As a result of the NOPA issued by the IRS in September 2020, System Energy filed, in October 2020, a new Federal Power Act section 205 filing at FERC to establish an ongoing rate base credit for the accumulated deferred income taxes resulting from the decommissioning uncertain tax position. On a prospective basis beginning with the October 2020 bill, System Energy proposes to include the accumulated deferred income taxes arising from the successful portion of the decommissioning uncertain tax position as a credit to rate base under the Unit Power Sales Agreement. In November 2020 the LPSC, APSC, MPSC, and City Council filed a protest to the filing, and System Energy responded.

In November 2020 the IRS issued a Revenue Agent's Report (RAR) for the 2014/2015 tax year and in December 2020 Entergy executed it. The RAR contained the same adjustment to the uncertain nuclear decommissioning tax position as that which the IRS had announced in the NOPA. In December 2020, System Energy filed a motion to lodge the RAR into the record in the FERC proceeding addressing the uncertain tax position rate base issue. In January 2021 the LPSC, APSC, MPSC, and City Council filed a protest to the motion.

As a result of the RAR, in December 2020, System Energy filed amendments to its new Federal Power Act section 205 filings to establish an ongoing rate base credit for the accumulated deferred income taxes resulting from the decommissioning uncertain tax position and to credit excess accumulated deferred income taxes arising from the successful portion of the decommissioning uncertain tax position. The amendments both propose the inclusion of the RAR as support for the filings. In December 2020 the LPSC, APSC, and City Council filed a protest in response to the amendments, reiterating their prior objections to the filings. In February 2021 the FERC issued an

order accepting System Energy's Federal Power Act section 205 filings subject to refund, setting them for hearing, and holding the hearing in abeyance.

In December 2020, System Energy filed a new Federal Power Act section 205 filing to provide a one-time, historical credit of $25.2 million for the accumulated deferred income taxes that would have been created by the decommissioning uncertain tax position if the IRS's decision had been known in 2016. In January 2021 the LPSC, APSC, MPSC, and City Council filed a protest to the filing.

LPSC Authorization of Additional Complaints

In May 2020 the LPSC authorized its staff to file additional complaints at the FERC related to the rates charged by System Energy for Grand Gulf energy and capacity supplied to Entergy Louisiana under the Unit Power Sales Agreement. The LPSC directive notes that the initial decision issued by the presiding ALJ in the Grand Gulf sale-leaseback complaint proceeding did not address, for procedural reasons, certain rate issues raised by the LPSC and declined to order further investigation of rates charged by System Energy. The LPSC directive authorizes its staff to file complaints at the FERC "necessary to address these rate issues, to request a full investigation into the rates charged by System Energy for Grand Gulf power, and to seek rate refund, rate reduction, and such other remedies as may be necessary and appropriate to protect Louisiana ratepayers." The LPSC directive further stated that the LPSC has seen "information suggesting that the Grand Gulf plant has been significantly underperforming compared to other nuclear plants in the United States, has had several extended and unexplained outages, and has been plagued with serious safety concerns." The LPSC expressed concern that the costs paid by Entergy Louisiana's retail customers may have been detrimentally impacted, and authorized "the filing of a FERC complaint to address these performance issues and to seek appropriate refund, rate reduction, and other remedies as may be appropriate."

The first of the additional complaints was filed at the FERC by the LPSC, the APSC, the MPSC, and the City Council in September 2020. The new complaint raises two sets of rate allegations: violations of the filed rate and a corresponding request for refunds for prior periods; and elements of the Unit Power Sales Agreement are unjust and unreasonable and a corresponding request for refunds for the 15-month refund period and changes to the Unit Power Sales Agreement prospectively. Several of the filed rate allegations overlap with the previous complaints. The filed rate allegations not previously raised are that System Energy: failed to provide a rate base credit to customers for the "time value" of sale-leaseback lease payments collected from customers in advance of the time those payments were due to the owner-lessors; improperly included certain lease refinancing costs in rate base as prepayments; improperly included nuclear decommissioning outage costs in rate base; failed to include categories of accumulated deferred income taxes as a reduction to rate base; charged customers based on a higher equity ratio than would be appropriate due to excessive retained earnings; and did not correctly reflect money pool investments and imprudently invested cash into the money pool. The elements of the Unit Power Sales Agreement that the complaint alleges are unjust and unreasonable include: incentive and executive compensation, lack of an equity re-opener, lobbying, and private airplane travel. The new complaint also requests a rate investigation into the Unit Power Sales Agreement and System Energy's billing practices pursuant to section 206 of the Federal Power Act, including any issue relevant to the Unit Power Sales Agreement and its inputs. System Energy filed its answer opposing the new complaint in November 2020. In its answer, System Energy argued that all of the claims raised in the complaint should be dismissed and agreed that bill adjustment with respect to two discrete issues were justified. System Energy argued that dismissal is warranted because all claims fall into one or more of the following categories: the claims have been raised and are being litigated in another proceeding; the claims do not present a *prima facie* case and do not satisfy the threshold burden to establish a complaint proceeding; the claims are premised on a theory or request relief that is incompatible with federal law or FERC policy; the claims request relief that is inconsistent with the filed rate; the claims are barred or waived by the legal doctrine of laches; and/or the claims have been fully addressed and do not warrant further litigation. In December 2020, System Energy filed a bill adjustment report indicating that $3.4 million had been credited to customers in connection with the two discrete issues concerning the inclusion of certain accumulated deferred income taxes balances in rates. In January 2021 the

complainants filed a response to System Energy's November 2020 answer, and in February 2021, System Energy filed a response to the complainant's response.

The operational prudence-related complaint has not been filed as of this date, and the LPSC directive did not set a date for the filing.

Unit Power Sales Agreement

In August 2017, System Energy submitted to the FERC proposed amendments to the Unit Power Sales Agreement pursuant to which System Energy sells its Grand Gulf capacity and energy to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans. The filing proposes limited amendments to the Unit Power Sales Agreement to adopt (1) updated rates for use in calculating Grand Gulf plant depreciation and amortization expenses and (2) updated nuclear decommissioning cost annual revenue requirements, both of which are recovered through the Unit Power Sales Agreement rate formula. The amendments result in lower charges to the Utility operating companies that buy capacity and energy from System Energy under the Unit Power Sales Agreement. The changes were based on updated depreciation and nuclear decommissioning studies that take into account the renewal of Grand Gulf's operating license for a term through November 1, 2044.

In September 2017 the FERC accepted System Energy's proposed Unit Power Sales Agreement amendments, subject to further proceedings to consider the justness and reasonableness of the amendments. Because the amendments proposed a rate decrease, the FERC also initiated an investigation under section 206 of the Federal Power Act to determine if the rate decrease should be lower than proposed. The FERC accepted the proposed amendments effective October 1, 2017, subject to refund pending the outcome of the further settlement and/or hearing proceedings, and established a refund effective date of October 11, 2017 with respect to the rate decrease. In June 2018, System Energy filed with the FERC an uncontested settlement relating to the updated depreciation rates and nuclear decommissioning cost annual revenue requirements. In August 2018 the FERC issued an order accepting the settlement. In the third quarter 2018, System Energy recorded a reduction in depreciation expense of approximately $26 million, representing the cumulative difference in depreciation expense resulting from the depreciation rates used from October 11, 2017 through September 30, 2018 and the depreciation rates included in the settlement filing accepted by the FERC.

Storm Cost Recovery Filings with Retail Regulators

Entergy Louisiana

Hurricane Isaac

In August 2012, Hurricane Isaac caused extensive damage to Entergy Louisiana's service area. In June 2014 the LPSC authorized Entergy Louisiana to utilize Louisiana Act 55 financing for Hurricane Isaac system restoration costs. Entergy Louisiana committed to pass on to customers a minimum of $30.8 million of customer benefits through annual customer credits of approximately $6.2 million for five years. Approvals for the Act 55 financings were obtained from the Louisiana Utilities Restoration Corporation (LURC) and the Louisiana State Bond Commission.

In August 2014 the Louisiana Local Government Environmental Facilities and Community Development Authority (LCDA) issued $314.85 million in bonds under Louisiana Act 55. From the $309 million of bond proceeds loaned by the LCDA to the LURC, the LURC deposited $16 million in a restricted escrow account as a storm damage reserve for Entergy Louisiana and transferred $293 million directly to Entergy Louisiana. Entergy Louisiana used the $293 million received from the LURC to acquire 2,935,152.69 Class C preferred, non-voting, membership interest units of Entergy Holdings Company LLC, a company wholly-owned and consolidated by Entergy, that carry a 7.5% annual distribution rate. Distributions are payable quarterly commencing on September 15, 2014, and the membership interests have a liquidation price of $100 per unit. The preferred membership

interests are callable at the option of Entergy Holdings Company LLC after ten years under the terms of the LLC agreement. The terms of the membership interests include certain financial covenants to which Entergy Holdings Company LLC is subject, including the requirement to maintain a net worth of at least $1.75 billion.

Entergy and Entergy Louisiana do not report the bonds issued by the LCDA on their balance sheets because the bonds are the obligation of the LCDA and there is no recourse against Entergy or Entergy Louisiana in the event of a bond default. To service the bonds, Entergy Louisiana collects a system restoration charge on behalf of the LURC and remits the collections to the bond indenture trustee. Entergy and Entergy Louisiana do not report the collections as revenue because Entergy Louisiana is merely acting as the billing and collection agent for the state.

In the first quarter 2020, Entergy and the IRS agreed upon and settled on the treatment of funds received by Entergy Louisiana in conjunction with the Act 55 financing of Hurricane Isaac storm costs, which resulted in a net reduction of income tax expense of approximately $32 million. As a result of the settlement, the position was partially sustained and Entergy Louisiana recorded a reduction of income tax expense of approximately $58 million primarily due to the reversal of liabilities for uncertain tax positions in excess of the agreed-upon settlement. Entergy recorded an increase to income tax expense of $26 million primarily resulting from the reduction of the deferred tax asset, associated with utilization of the net operating loss as a result of the settlement. This adjustment recorded by Entergy also accounted for the tax rate change of the Tax Cuts and Jobs Act. As a result of the IRS settlement, Entergy Louisiana recorded a $29 million ($21 million net-of-tax) regulatory charge and a corresponding regulatory liability to reflect its obligation to customers pursuant to the LPSC Hurricane Isaac Act 55 financing order.

Hurricane Gustav and Hurricane Ike

In September 2008, Hurricane Gustav and Hurricane Ike caused catastrophic damage to Entergy Louisiana's service territory. In December 2009, Entergy Louisiana entered into a stipulation agreement with the LPSC staff regarding its storm costs. In March and April 2010, Entergy Louisiana and other parties to the proceeding filed with the LPSC an uncontested stipulated settlement that included Entergy Louisiana's proposal to utilize Act 55 financing, which included a commitment to pass on to customers a minimum of $43.3 million of customer benefits through a prospective annual rate reduction of $8.7 million for five years. In April 2010 the LPSC approved the settlement and subsequently issued financing orders and a ratemaking order intended to facilitate the implementation of the Act 55 financings. In June 2010 the Louisiana State Bond Commission approved the Act 55 financing. The settlement agreement allowed for an adjustment to the credits if there was a change in the applicable federal or state income tax rate. As a result of the enactment of the Tax Cuts and Jobs Act, in December 2017, and the lowering of the federal corporate income tax rate from 35% to 21%, the Louisiana Act 55 financing savings obligation regulatory liability related to Hurricane Gustav and Hurricane Ike was reduced by $2.7 million, with a corresponding increase to Other regulatory credits on the income statement. The effects of the Tax Cuts and Jobs Act are discussed further in Note 3 to the financial statements.

In July 2010, the LCDA issued two series of bonds totaling $713.0 million under Act 55. From the $702.7 million of bond proceeds loaned by the LCDA to the LURC, the LURC deposited $290 million in a restricted escrow account as a storm damage reserve for Entergy Louisiana and transferred $412.7 million directly to Entergy Louisiana. From the bond proceeds received by Entergy Louisiana from the LURC, Entergy Louisiana used $412.7 million to acquire 4,126,940.15 Class B preferred, non-voting, membership interest units of Entergy Holdings Company LLC, a company wholly-owned and consolidated by Entergy, that carry a 9% annual distribution rate. Distributions are payable quarterly commencing on September 15, 2010, and the membership interests have a liquidation price of $100 per unit. The preferred membership interests are callable at the option of Entergy Holdings Company LLC after ten years under the terms of the LLC agreement. The terms of the membership interests include certain financial covenants to which Entergy Holdings Company LLC is subject, including the requirement to maintain a net worth of at least $1 billion.

Entergy and Entergy Louisiana do not report the bonds issued by the LCDA on their balance sheets because the bonds are the obligation of the LCDA, and there is no recourse against Entergy or Entergy Louisiana in the event of a bond default. To service the bonds, Entergy Louisiana collects a system restoration charge on behalf of the LURC and remits the collections to the bond indenture trustee. Entergy and Entergy Louisiana do not report the collections as revenue because Entergy Louisiana is merely acting as the billing and collection agent for the state.

Hurricane Katrina and Hurricane Rita

In August and September 2005, Hurricanes Katrina and Rita caused catastrophic damage to Entergy Louisiana's service territory. In March 2008, Entergy Louisiana and the LURC filed at the LPSC an application requesting that the LPSC grant a financing order authorizing the financing of Entergy Louisiana storm costs, storm reserves, and issuance costs pursuant to Louisiana Act 55. Entergy Louisiana also filed an application requesting LPSC approval for ancillary issues including the mechanism to flow charges and savings to customers via a storm cost offset rider. In April 2008 the Louisiana Public Facilities Authority (LPFA), which is the issuer of the bonds pursuant to the Act 55 financing, approved requests for the Act 55 financing. Also in April 2008, Entergy Louisiana and the LPSC staff filed with the LPSC an uncontested stipulated settlement that included Entergy Louisiana's proposal under the Act 55 financing, which included a commitment to pass on to customers a minimum of $40 million of customer benefits through a prospective annual rate reduction of $8 million for five years. The LPSC subsequently approved the settlement and issued two financing orders and one ratemaking order intended to facilitate implementation of the Act 55 financing. In May 2008 the Louisiana State Bond Commission granted final approval of the Act 55 financing. The settlement agreement allowed for an adjustment to the credits if there was a change in the applicable federal or state income tax rate. As a result of the enactment of the Tax Cuts and Jobs Act, in December 2017, and the lowering of the federal corporate income tax rate from 35% to 21%, the Louisiana Act 55 financing savings obligation regulatory liability related to Hurricanes Katrina and Rita was reduced by $22.3 million, with a corresponding increase to Other regulatory credits on the income statement. The effects of the Tax Cuts and Jobs Act are discussed further in Note 3 to the financial statements.

In July 2008 the LPFA issued $687.7 million in bonds under the aforementioned Act 55. From the $679 million of bond proceeds loaned by the LPFA to the LURC, the LURC deposited $152 million in a restricted escrow account as a storm damage reserve for Entergy Louisiana and transferred $527 million directly to Entergy Louisiana. From the bond proceeds received by Entergy Louisiana from the LURC, Entergy Louisiana invested $545 million, including $17.8 million that was withdrawn from the restricted escrow account as approved by the April 16, 2008 LPSC orders, in exchange for 5,449,861.85 Class A preferred, non-voting, membership interest units of Entergy Holdings Company LLC, a company wholly-owned and consolidated by Entergy, that carry a 10% annual distribution rate. In August 2008, the LPFA issued $278.4 million in bonds under the aforementioned Act 55. From the $274.7 million of bond proceeds loaned by the LPFA to the LURC, the LURC deposited $87 million in a restricted escrow account as a storm damage reserve for Entergy Louisiana and transferred $187.7 million directly to Entergy Louisiana. From the bond proceeds received by Entergy Louisiana from the LURC, Entergy Louisiana invested $189.4 million, including $1.7 million that was withdrawn from the restricted escrow account as approved by the April 16, 2008 LPSC orders, in exchange for 1,893,918.39 Class A preferred, non-voting, membership interest units of Entergy Holdings Company LLC that carry a 10% annual distribution rate. Distributions are payable quarterly commencing on September 15, 2008 and have a liquidation price of $100 per unit. The preferred membership interests are callable at the option of Entergy Holdings Company LLC after ten years under the terms of the LLC agreement. The terms of the membership interests include certain financial covenants to which Entergy Holdings Company LLC is subject, including the requirement to maintain a net worth of at least $1 billion.

The bonds were repaid in 2018. Entergy and Entergy Louisiana did not report the bonds issued by the LPFA on their balance sheets because the bonds are the obligation of the LPFA, and there was no recourse against Entergy or Entergy Louisiana in the event of a bond default. To service the bonds, Entergy Louisiana collected a system restoration charge on behalf of the LURC and remitted the collections to the bond indenture trustee. Entergy

and Entergy Louisiana did not report the collections as revenue because Entergy Louisiana was merely acting as the billing and collection agent for the state.

Entergy Mississippi

Entergy Mississippi has approval from the MPSC to collect a storm damage provision of $1.75 million per month. If Entergy Mississippi's accumulated storm damage provision balance exceeds $15 million, the collection of the storm damage provision ceases until such time that the accumulated storm damage provision becomes less than $10 million. Entergy Mississippi's storm damage provision balance has been less than $10 million since May 2019, and Entergy Mississippi has been billing the monthly storm damage provision since July 2019.

NOTE 3. INCOME TAXES (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Income taxes for 2020, 2019, and 2018 for Entergy Corporation and Subsidiaries consist of the following:

	2020	2019	2018
	(In Thousands)		
Current:			
Federal	$5,807	($14,416)	$36,848
State	57,939	6,535	7,274
Total	63,746	(7,881)	44,122
Deferred and non-current - net	(190,635)	(155,956)	(1,074,416)
Investment tax credit adjustments - net	5,383	(5,988)	(6,532)
Income taxes	($121,506)	($169,825)	($1,036,826)

Income taxes for 2020, 2019, and 2018 for Entergy's Registrant Subsidiaries consist of the following:

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Current:						
Federal	($44,627)	$62,728	($14,580)	$293	($5,603)	$372,206
State	(2,563)	4,457	(1,316)	(303)	2,658	55,551
Total	(47,190)	67,185	(15,896)	(10)	(2,945)	427,757
Deferred and non-current - net	96,195	(444,647)	43,640	(18,153)	6,619	(405,928)
Investment tax credit adjustments - net	(1,228)	(4,862)	(554)	13,956	(632)	(1,286)
Income taxes	$47,777	($382,324)	$27,190	($4,207)	$3,042	$20,543

2019	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Current:						
Federal	($14,549)	($20,173)	($8,939)	($5,822)	$16,035	$16,256
State	(714)	(735)	5,823	1,856	663	(2,831)
Total	(15,263)	(20,908)	(3,116)	(3,966)	16,698	13,425
Deferred and non-current - net	(30,278)	147,453	34,579	4,248	(69,963)	422
Investment tax credit adjustments - net	(1,228)	(4,922)	(597)	(96)	(631)	1,502
Income taxes	($46,769)	$121,623	$30,866	$186	($53,896)	$15,349

2018	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Current:						
Federal	($23,638)	($15,841)	($11,275)	($10,813)	$16,190	($9,786)
State	(1,617)	(1,122)	(1,066)	545	3,205	(1,821)
Total	(25,255)	(16,963)	(12,341)	(10,268)	19,395	(11,607)
Deferred and non-current - net	(270,586)	(32,725)	(114,738)	7,943	(44,817)	(35,329)
Investment tax credit adjustments - net	(1,226)	(4,923)	1,306	(111)	(821)	(739)
Income taxes	($297,067)	($54,611)	($125,773)	($2,436)	($26,243)	($47,675)

Total income taxes for Entergy Corporation and Subsidiaries differ from the amounts computed by applying the statutory income tax rate to income before income taxes. The reasons for the differences for the years 2020, 2019, and 2018 are:

	2020	2019	2018
		(In Thousands)	
Net income attributable to Entergy Corporation	$1,388,334	$1,241,226	$848,661
Preferred dividend requirements of subsidiaries	18,319	17,018	13,894
Consolidated net income	1,406,653	1,258,244	862,555
Income taxes	(121,506)	(169,825)	(1,036,826)
Income (loss) before income taxes	$1,285,147	$1,088,419	($174,271)
Computed at statutory rate (21%)	$269,881	$228,568	($36,597)
Increases (reductions) in tax resulting from:			
State income taxes net of federal income tax effect	60,087	61,791	21,398
Regulatory differences - utility plant items	(53,229)	(45,336)	(37,507)
Equity component of AFUDC	(25,080)	(30,444)	(27,216)
Amortization of investment tax credits	(8,386)	(8,093)	(8,304)
Flow-through / permanent differences	11,099	(2,059)	439
Amortization of excess ADIT (a)	(59,629)	(205,614)	(577,082)
Revisions of the 2017 tax legislation enactment regulatory liability accrual, including the effect of the Entergy Texas 2018 base rate proceeding	—	—	(40,494)
Utility restructuring (b)	—	—	(169,918)
Settlement on treatment of regulatory obligations (c)	—	—	(52,320)
State income tax audit conclusion	—	—	(23,425)
IRS audit adjustment (e)	(301,041)	—	(8,404)
Entergy Wholesale Commodities nuclear decommissioning trust restructuring (d)	—	—	(106,833)
Entergy Wholesale Commodities restructuring (d)	(9,223)	(173,725)	—
Stock compensation (f)	(25,591)	—	—
Charitable contribution (d)	—	(19,101)	—
Net operating loss recognition	—	(41,427)	—
Provision for uncertain tax positions	15,208	7,332	24,569
Valuation allowance	—	59,345	2,211
Other - net	4,398	(1,062)	2,657
Total income taxes as reported	($121,506)	($169,825)	($1,036,826)
Effective Income Tax Rate	(9.5 %)	(15.6)%	595.0 %

(a) See "**Other Tax Matters - Tax Cuts and Jobs Act**" below for discussion of the amortization of excess accumulated deferred income taxes (ADIT) in 2018, 2019, and 2020 and the tax legislation enactment in 2017.

(b) See "**Other Tax Matters - Entergy Arkansas and Entergy Mississippi Internal Restructuring**" below for discussion of the Utility restructuring.

(c) See "**Income Tax Audits - 2012-2013 IRS Audit**" below for discussion of the resolution of the audit.

(d) See **"Other Tax Matters - Entergy Wholesale Commodities Restructuring"** below for discussion of the Entergy Wholesale Commodities nuclear decommissioning trust restructuring in 2018, the Entergy Wholesale Commodities restructurings in 2017 and 2019, the ownership of Palisades restructuring in 2020, and the charitable contribution in 2019.

(e) See "**Income Tax Audits - 2014-2015 IRS Audit"** below for discussion of the resolution of the audit in 2020.

(f) See "**Other Tax Matters - Stock Compensation**" below for discussion of excess tax deductions

Total income taxes for the Registrant Subsidiaries differ from the amounts computed by applying the statutory income tax rate to income before taxes. The reasons for the differences for the years 2020, 2019, and 2018 are:

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Net income	$245,232	$1,082,352	$140,583	$49,338	$215,073	$99,131
Income taxes	47,777	(382,324)	27,190	(4,207)	3,042	20,543
Pretax income	$293,009	$700,028	$167,773	$45,131	$218,115	$119,674
Computed at statutory rate (21%)	$61,532	$147,006	$35,232	$9,478	$45,804	$25,132
Increases (reductions) in tax resulting from:						
State income taxes net of federal income tax effect	16,256	38,182	6,917	2,606	1,460	5,524
Regulatory differences - utility plant items	(8,034)	(23,819)	(7,441)	(3,442)	(7,673)	(2,821)
Equity component of AFUDC	(3,154)	(8,012)	(1,412)	(1,331)	(9,255)	(1,916)
Amortization of investment tax credits	(1,201)	(4,811)	(540)	(61)	(617)	(1,155)
Flow-through / permanent differences	(2,219)	1,404	(102)	498	766	(421)
Amortization of excess ADIT (b)	(6,011)	(26,293)	18	(4,564)	(22,780)	—
Stock compensation (e)	(4,952)	(9,004)	(2,763)	(1,526)	(2,842)	(1,300)
IRS audit adjustment (d)	(6,351)	(471,702)	(3,768)	(6,819)	(2,091)	(2,925)
Non-taxable dividend income	—	(26,795)	—	—	—	—
Provision for uncertain tax positions	1,200	300	800	800	—	300
Other - net	711	1,220	249	154	270	125
Total income taxes as reported	$47,777	($382,324)	$27,190	($4,207)	$3,042	$20,543
Effective Income Tax Rate	16.3 %	(54.6)%	16.2 %	(9.3)%	1.4 %	17.2 %

2019	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Net income	$262,964	$691,537	$119,925	$52,629	$159,397	$99,120
Income taxes	(46,769)	121,623	30,866	186	(53,896)	15,349
Pretax income	$216,195	$813,160	$150,791	$52,815	$105,501	$114,469
Computed at statutory rate (21%)	$45,401	$170,764	$31,666	$11,091	$22,155	$24,039
Increases (reductions) in tax resulting from:						
State income taxes net of federal income tax effect	15,954	42,854	5,563	3,443	360	5,134
Regulatory differences - utility plant items	(10,627)	(19,421)	(5,556)	(1,532)	(1,987)	(6,213)
Equity component of AFUDC	(3,255)	(15,545)	(1,755)	(2,088)	(5,973)	(1,829)
Amortization of investment tax credits	(1,201)	(4,871)	(160)	(88)	(617)	(1,155)
Flow-through / permanent differences	696	439	160	(741)	560	(500)
Amortization of excess ADIT (b)	(90,921)	(28,531)	203	(11,724)	(69,091)	(5,550)
Non-taxable dividend income	—	(26,795)	—	—	—	—
Provision for uncertain tax positions	(3,517)	1,519	500	1,672	430	1,300
Other - net	701	1,210	245	153	267	123
Total income taxes as reported	($46,769)	$121,623	$30,866	$186	($53,896)	$15,349
Effective Income Tax Rate	(21.6 %)	15.0 %	20.5 %	0.4 %	(51.1 %)	13.4 %

2018	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Net income	$252,707	$675,614	$126,078	$53,152	$162,235	$94,109
Income taxes	(297,067)	(54,611)	(125,773)	(2,436)	(26,243)	(47,675)
Pretax income	($44,360)	$621,003	$305	$50,716	$135,992	$46,434
Computed at statutory rate (21%)	($9,316)	$130,411	$64	$10,650	$28,558	$9,751
Increases (reductions) in tax resulting from:						
State income taxes net of federal income tax effect	(794)	26,031	(1,747)	2,322	2,576	2,812
Regulatory differences - utility plant items	(14,916)	(12,604)	(4,103)	(1,502)	(1,872)	(2,510)
Equity component of AFUDC	(3,477)	(16,784)	(1,829)	(1,248)	(2,042)	(1,837)
Amortization of investment tax credits	(1,201)	(4,871)	(160)	(109)	(808)	(1,155)
Flow-through / permanent differences	570	3,203	1,893	(4,222)	1,038	2,815
Revisions of the 2017 tax legislation enactment regulatory liability accrual, including the effect of the Entergy Texas 2018 base rate proceeding (a)	933	(2,810)	(556)	884	(43,799)	(3,565)
Amortization of excess ADIT (b)	(271,570)	(104,313)	(120,831)	(9,878)	(11,519)	(58,971)
Settlement on treatment of regulatory obligations (c)	—	(52,320)	—	—	—	—
IRS audit adjustment	1,290	1,097	1,018	(96)	524	(12)
Non-taxable dividend income	—	(26,795)	—	—	—	—
Provision for uncertain tax positions	724	3,949	240	613	839	4,876
Other - net	690	1,195	238	150	262	121
Total income taxes as reported	($297,067)	($54,611)	($125,773)	($2,436)	($26,243)	($47,675)
Effective Income Tax Rate	669.7 %	(8.8 %)	(41,237.0 %)	(4.8 %)	(19.3 %)	(102.7 %)

(a) See Note 2 to the financial statements for discussion of the Entergy Texas rate case settlement.
(b) See "**Other Tax Matters - Tax Cuts and Jobs Act**" below for discussion of the amortization of excess accumulated deferred income taxes (ADIT) in 2018, 2019, and 2020 and the tax legislation enactment in 2017.
(c) See "**Income Tax Audits - 2012-2013 IRS Audit**" below for discussion of the resolution of the audit for Entergy Louisiana.
(d) See "**Income Tax Audits - 2014-2015 IRS Audit"** below for discussion of the resolution of the audit in 2020.
(e) See "**Other Tax Matters - Stock Compensation"** below for discussion of excess tax deductions

Significant components of accumulated deferred income taxes and taxes accrued for Entergy Corporation and Subsidiaries as of December 31, 2020 and 2019 are as follows:

	2020	2019
	(In Thousands)	
Deferred tax liabilities:		
Plant basis differences - net	($4,795,422)	($4,111,761)
Regulatory assets	(429,996)	(389,573)
Nuclear decommissioning trusts/receivables	(1,188,235)	(1,015,542)
Pension, net funding	(327,445)	(348,260)
Combined unitary state taxes	(7,723)	(11,519)
Unbilled/deferred revenues	(9,152)	(10,218)
Deferred fuel	(7,667)	(8,360)
Other	(549,355)	(445,378)
Total	(7,314,995)	(6,340,611)
Deferred tax assets:		
Nuclear decommissioning liabilities	968,464	929,251
Regulatory liabilities	791,927	806,777
Pension and other post-employment benefits	278,486	297,272
Sale and leaseback	102,477	102,420
Compensation	89,279	87,355
Accumulated deferred investment tax credit	57,379	56,013
Provision for allowances and contingencies	71,598	126,886
Power purchase agreements	352,019	231,502
Net operating loss carryforwards	1,580,109	1,133,197
Capital losses and miscellaneous tax credits	21,291	22,597
Valuation allowance	(328,581)	(303,307)
Other	230,291	289,557
Total	4,214,739	3,779,520
Non-current accrued taxes (including unrecognized tax benefits)	(1,185,227)	(1,775,638)
Accumulated deferred income taxes and taxes accrued	($4,285,483)	($4,336,729)

Entergy's estimated tax attributes carryovers and their expiration dates as of December 31, 2020 are as follows:

Carryover Description	Carryover Amount	Year(s) of expiration
Federal net operating losses before 1/1/2018	$6.1 billion	2023-2037
Federal net operating losses - 1/1/2018 forward	$14.6 billion	N/A
State net operating losses	$19.7 billion	2021-2040
Federal and state charitable contributions	$449 million	2021-2025
Miscellaneous federal and state credits	$77.5 million	2021-2040

As a result of the accounting for uncertain tax positions, the amount of the deferred tax assets reflected in the financial statements is less than the amount of the tax effect of the federal and state net operating loss carryovers, tax credit carryovers, and other tax attributes reflected on income tax returns. Entergy evaluates the available positive and negative evidence to estimate whether sufficient future taxable income of the appropriate character will be generated to realize the benefits of existing deferred tax assets. When the evaluation indicates that Entergy will not be able to realize the existing benefits, a valuation allowance is recorded to reduce deferred tax assets to the realizable amount.

Because it is more likely than not that the benefits from certain state net operating loss and other deferred tax assets will not be utilized, valuation allowances totaling $329 million as of December 31, 2020 and $303 million as of December 31, 2019 have been provided on the deferred tax assets related to federal and state jurisdictions in which Entergy does not currently expect to be able to utilize certain separate company tax return attributes, preventing realization of such deferred tax assets.

Significant components of accumulated deferred income taxes and taxes accrued for the Registrant Subsidiaries as of December 31, 2020 and 2019 are as follows:

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Deferred tax liabilities:						
Plant basis differences - net	($1,117,948)	($2,481,976)	($623,796)	($83,457)	($620,669)	($407,125)
Regulatory assets	(188,284)	(95,135)	(22,381)	(20,276)	(47,684)	(56,496)
Nuclear decommissioning trusts/receivables	(156,123)	(148,040)	—	—	—	(131,985)
Pension, net funding	(93,486)	(95,854)	(24,922)	(11,564)	(19,481)	(20,330)
Deferred fuel	—	(4,210)	(1,706)	(1,393)	—	(314)
Other	(54,753)	(76,735)	(27,565)	(26,334)	(141)	(12,521)
Total	(1,610,594)	(2,901,950)	(700,370)	(143,024)	(687,975)	(628,771)
Deferred tax assets:						
Regulatory liabilities	273,774	218,278	56,022	31,248	47,991	163,534
Nuclear decommissioning liabilities	123,319	7,767	—	(419)	121	29,916
Pension and other post-employment benefits	(24,747)	72,724	(6,763)	(13,997)	(17,132)	(1,344)
Sale and leaseback	—	—	—	—	—	102,477
Accumulated deferred investment tax credit	7,971	31,155	2,261	4,197	2,088	9,706
Provision for allowances and contingencies	22,179	7,071	16,799	24,529	(4,094)	—
Power purchase agreements	9,662	3,381	1,140	(5,324)	(30,932)	—
Unbilled/deferred revenues	4,242	(23,382)	2,989	877	5,909	—
Compensation	2,264	3,240	1,670	761	1,308	48
Net operating loss carryforwards	119,555	363,806	54,262	26,564	53,052	—
Capital losses and miscellaneous tax credits	—	9,309	—	12,317	—	7,014
Other	16,036	6,958	3,507	8,128	2,232	2
Total	554,255	700,307	131,887	88,881	60,543	311,353
Non-current accrued taxes (including unrecognized tax benefits)	(229,784)	63,121	(78,191)	(284,571)	(11,990)	(42,417)
Accumulated deferred income taxes and taxes accrued	($1,286,123)	($2,138,522)	($646,674)	($338,714)	($639,422)	($359,835)

2019	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Deferred tax liabilities:						
Plant basis differences - net	($979,033)	($1,987,025)	($565,202)	($133,073)	($551,365)	($380,594)
Regulatory assets	(170,949)	(79,117)	(10,528)	(16,867)	(59,745)	(52,662)
Nuclear decommissioning trusts/receivables	(120,306)	(113,830)	—	—	—	(100,621)
Pension, net funding	(102,685)	(98,743)	(27,325)	(11,859)	(19,961)	(21,609)
Deferred fuel	—	(2,637)	(609)	(666)	(4,380)	(55)
Other	(82,682)	(94,139)	(27,905)	(25,909)	2,059	(7,350)
Total	(1,455,655)	(2,375,491)	(631,569)	(188,374)	(633,392)	(562,891)
Deferred tax assets:						
Regulatory liabilities	250,410	283,507	53,421	33,258	65,602	121,011
Nuclear decommissioning liabilities	111,078	56,300	—	—	—	52,633
Pension and other post-employment benefits	(21,828)	74,881	(5,844)	(12,666)	(15,406)	(898)
Sale and leaseback	—	—	—	—	—	102,480
Accumulated deferred investment tax credit	8,285	32,534	2,396	556	2,217	10,025
Provision for allowances and contingencies	5,365	77,298	12,963	24,022	4,024	—
Power purchase agreements	(15,087)	18,004	1,147	7,961	26	—
Unbilled/deferred revenues	5,897	(28,081)	4,715	1,428	5,544	—
Compensation	2,550	3,670	1,625	496	1,282	75
Net operating loss carryforwards	112,658	65,178	21,492	5,056	—	—
Capital losses and miscellaneous tax credits	—	—	45	—	—	7,857
Other	12,541	35,401	999	9,027	2,004	3
Total	471,869	618,692	92,959	69,138	65,293	293,186
Non-current accrued taxes (including unrecognized tax benefits)	(199,340)	(707,714)	(56,222)	(235,300)	(17,314)	(544,235)
Accumulated deferred income taxes and taxes accrued	($1,183,126)	($2,464,513)	($594,832)	($354,536)	($585,413)	($813,940)

The Registrant Subsidiaries' estimated tax attributes carryovers and their expiration dates as of December 31, 2020 are as follows:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
Federal net operating losses before 1/1/2018	$— billion	$1.7 billion	$— billion	$0.9 billion	$— billion	$— billion
Year(s) of expiration	N/A	2035-2037	N/A	2037	N/A	N/A
Federal net operating losses - 1/1/2018 forward	$4.4 billion	$1.4 billion	$1.9 billion	$0.3 billion	$2.7 billion	$— billion
Year(s) of expiration	N/A	N/A	N/A	N/A	N/A	N/A
State net operating losses	$4.5 billion	$4 billion	$2 billion	$1.3 billion	$— million	$— million
Year(s) of expiration	2023-2025	2035-2040	2038-2040	2037-2040	N/A	N/A
Misc. federal credits	$2.9 million	$9.3 million	$1.2 million	$14.8 million	$2.6 million	$1.3 million
Year(s) of expiration	2038-2040	2035-2040	2038-2040	2037-2040	2029-2040	2029-2040
State credits	$— million	$— million	$— million	$—million	$2.9 million	$13.1 million
Year(s) of expiration	N/A	N/A	N/A	N/A	2026	2021-2023

As a result of the accounting for uncertain tax positions, the amount of the deferred tax assets reflected in the financial statements is less than the amount of the tax effect of the federal and state net operating loss carryovers and tax credit carryovers.

Unrecognized tax benefits

Accounting standards establish a "more-likely-than-not" recognition threshold that must be met before a tax benefit can be recognized in the financial statements. If a tax deduction is taken on a tax return but does not meet the more-likely-than-not recognition threshold, an increase in income tax liability, above what is payable on the tax return, is required to be recorded. A reconciliation of Entergy's beginning and ending amount of unrecognized tax benefits is as follows:

	2020	2019	2018
		(In Thousands)	
Gross balance at January 1	$7,383,154	$7,181,482	$4,871,846
Additions based on tax positions related to the current year	669,207	731,276	2,276,614
Additions for tax positions of prior years	98,591	151,628	506,142
Reductions for tax positions of prior years	(935,735)	(681,232)	(274,600)
Settlements	(1,515,878)	—	(198,520)
Gross balance at December 31	5,699,339	7,383,154	7,181,482
Offsets to gross unrecognized tax benefits:			
Carryovers and refund claims	(4,710,214)	(5,831,587)	(5,957,992)
Cash paid to taxing authorities	(10,000)	(10,000)	(10,000)
Unrecognized tax benefits net of unused tax attributes, refund claims and payments (a)	$979,125	$1,541,567	$1,213,490

(a) Potential tax liability above what is payable on tax returns

The balances of unrecognized tax benefits include $2,208 million, $2,421 million, and $2,161 million as of December 31, 2020, 2019, and 2018, respectively, which, if recognized, would lower the effective income tax rates. Because of the effect of deferred tax accounting, the remaining balances of unrecognized tax benefits of $3,491 million, $4,962 million, and $5,020 million as of December 31, 2020, 2019, and 2018, respectively, if disallowed, would not affect the annual effective income tax rate but would accelerate the payment of cash to the taxing authority to an earlier period.

Entergy accrues interest expense, if any, related to unrecognized tax benefits in income tax expense. Entergy's December 31, 2020, 2019, and 2018 accrued balance for the possible payment of interest is approximately $44 million, $48 million, and $44 million, respectively. Interest (net-of-tax) of $(4) million, $4 million, and $7 million was recorded in 2020, 2019, and 2018, respectively.

A reconciliation of the Registrant Subsidiaries' beginning and ending amount of unrecognized tax benefits for 2020, 2019, and 2018 is as follows:

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Gross balance at January 1, 2020	$1,341,242	$2,381,653	$566,287	$716,773	$21,406	$473,331
Additions based on tax positions related to the current year	9,403	35,681	5,619	2,430	504,362	4,013
Additions for tax positions of prior years	13,400	10,508	1,156	294	799	4,606
Reductions for tax positions of prior years	(11,346)	(679,601)	(24,173)	(80,267)	(5,559)	(41,466)
Settlements	11,936	(1,107,946)	828	316	924	(418,832)
Gross balance at December 31, 2020	1,364,635	640,295	549,717	639,546	521,932	21,652
Offsets to gross unrecognized tax benefits:						
Loss carryovers	(1,112,628)	(640,295)	(465,679)	(451,922)	(507,720)	(7,413)
Unrecognized tax benefits net of unused tax attributes and payments	$252,007	$—	$84,038	$187,624	$14,212	$14,239

2019	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Gross balance at January 1, 2019	$1,298,662	$2,400,171	$508,765	$686,687	$17,802	$467,487
Additions based on tax positions related to the current year (a)	84,335	28,705	68,594	40,676	2,312	5,496
Additions for tax positions of prior years	20,399	25,090	1,651	489	1,299	2,186
Reductions for tax positions of prior years	(62,154)	(72,313)	(12,723)	(11,079)	(7)	(1,838)
Gross balance at December 31, 2019	1,341,242	2,381,653	566,287	716,773	21,406	473,331
Offsets to gross unrecognized tax benefits:						
Loss carryovers	(1,134,187)	(1,573,257)	(506,976)	(445,430)	(3,944)	(8,392)
Unrecognized tax benefits net of unused tax attributes and payments	$207,055	$808,396	$59,311	$271,343	$17,462	$464,939

2018	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Gross balance at January 1, 2018	($117,716)	$2,518,457	$15,122	$679,544	$16,399	$445,511
Additions based on tax positions related to the current year (a)	1,430,828	30,577	493,039	2,261	1,978	18,271
Additions for tax positions of prior years	31,612	77,372	3,878	12,972	1,722	7,255
Reductions for tax positions of prior years	(21,619)	(158,510)	(3,253)	(8,081)	(2,262)	(3,253)
Settlements	(24,443)	(67,725)	(21)	(9)	(35)	(297)
Gross balance at December 31, 2018	1,298,662	2,400,171	508,765	686,687	17,802	467,487
Offsets to gross unrecognized tax benefits:						
Loss carryovers	(1,173,839)	(1,597,826)	(478,268)	(420,813)	(3,199)	(42,228)
Unrecognized tax benefits net of unused tax attributes and payments	$124,823	$802,345	$30,497	$265,874	$14,603	$425,259

(a) The primary additions for Entergy Texas in 2020 and Entergy Mississippi in 2018 are related to the mark-to-market treatment discussed in "**Other Tax Matters** - **Tax Accounting Methods**" below. The primary additions for Entergy Arkansas in 2018 are related to the nuclear decommissioning costs treatment and the mark-to-market treatment discussed in "**Other Tax Matters** - **Tax Accounting Methods**" below.

The Registrant Subsidiaries' balances of unrecognized tax benefits included amounts which, if recognized, would have reduced income tax expense as follows:

	December 31,		
	2020	2019	2018
	(In Millions)		
Entergy Arkansas	$259.3	$203.3	$85.4
Entergy Louisiana	$63.8	$556.3	$594.0
Entergy Mississippi	$50.7	$1.9	$1.5
Entergy New Orleans	$203.5	$242.7	$246.2
Entergy Texas	$6.1	$5.7	$5.1
System Energy	$0.5	$—	$—

Accrued balances for the possible payment of interest related to unrecognized tax benefits are as follows:

	December 31,		
	2020	2019	2018
	(In Millions)		
Entergy Arkansas	$2.3	$3.1	$1.7
Entergy Louisiana	$3.4	$14.2	$17.9
Entergy Mississippi	$1.9	$1.7	$1.2
Entergy New Orleans	$3.9	$4.7	$2.7
Entergy Texas	$0.9	$1.1	$0.9
System Energy	$11.9	$14.5	$13.2

The Registrant Subsidiaries record interest and penalties related to unrecognized tax benefits in income tax expense. No penalties were recorded in 2020, 2019, and 2018. Interest (net-of-tax) was recorded as follows:

	2020	2019	2018
		(In Millions)	
Entergy Arkansas	($0.8)	$1.4	$0.2
Entergy Louisiana	($10.8)	($3.7)	$3.8
Entergy Mississippi	$0.2	$0.5	$0.2
Entergy New Orleans	($0.8)	$2.0	$0.6
Entergy Texas	($0.2)	$0.2	$0.5
System Energy	($2.6)	$1.3	$4.7

Income Tax Audits

Entergy and its subsidiaries file U.S. federal and various state income tax returns. IRS examinations are complete for years before 2016. All state taxing authorities' examinations are complete for years before 2015. Entergy regularly defends its positions and works with the IRS to resolve audits. The resolution of audit issues could result in significant changes to the amounts of unrecognized tax benefits in the next twelve months.

2012-2013 IRS Audit

The IRS completed its examination of the 2012 and 2013 tax years and issued its 2012-2013 Revenue Agent Report (RAR) in June 2018. Entergy agreed to all proposed adjustments contained in the RAR. Entergy and the Registrant Subsidiaries recorded the effects of these adjustments in June 2018.

As a result of the issuance of the RAR, Entergy Louisiana was able to recognize previously unrecognized tax benefits of $52 million related to the Hurricane Katrina and Hurricane Rita contingent sharing obligation associated with the Louisiana Act 55 financing.

2014-2015 IRS Audit

The IRS completed its examination of the 2014 and 2015 tax years and issued its 2014-2015 RAR in November 2020. Entergy agreed to all proposed adjustments contained in the RAR. Entergy and the Registrant Subsidiaries recorded the effects of the adjustments associated with the audit in 2020.

In October 2015 two of Entergy's Louisiana utilities, Entergy Gulf States Louisiana and Entergy Louisiana, combined their businesses into a legal entity which is identified as Entergy Louisiana herein. The structure of the business combination required Entergy to recognize a gain for income tax purposes which resulted in an increase in the tax basis of the assets for Entergy Louisiana. This resulted in recognition in 2015 of a $334 million permanent difference and income tax benefit, net of the uncertain tax position recorded on the transaction.

Primarily related to resolution of the business combination issues, completion of the 2014-2015 IRS audit in 2020 resulted in a $230 million reduction to deferred income tax expense for Entergy. This reduction to deferred income tax expense includes: Entergy Louisiana reversing its provision for uncertain tax position with respect to the business combination, which resulted in a reduction to deferred income tax expense of $383 million; Entergy Corporation recording an increase to deferred tax expense of $61 million and Entergy Wholesale Commodities recording an increase to deferred tax expense of $105 million from the re-measurement of deferred tax assets associated with the resolved uncertain tax position; and miscellaneous other individually insignificant benefits totaling $13 million.

The completion of the 2014-2015 tax audit also resulted in a $31 million reduction to income tax expense associated with Entergy Louisiana's method of accounting related to the adoption of tangible property regulations.

As a result of the settlement of the tangible property regulation tax position, Entergy Louisiana was required to record a $33 million ($24 million net-of-tax) regulatory charge and a corresponding regulatory liability to reflect its obligation to customers pursuant to a prior regulatory settlement.

Finally, upon completion of the 2014-2015 tax audit, Entergy New Orleans recorded a reduction to income tax expense of $8 million associated with claims for mark-to-market deductions.

In the first quarter 2020, Entergy and the IRS agreed on the treatment of funds received by Entergy Louisiana in conjunction with the Act 55 financing of Hurricane Isaac storm costs, which resulted in a net reduction of income tax expense of approximately $32 million. As a result of the settlement, the position was partially sustained, and Entergy Louisiana recorded a reduction of income tax expense of approximately $58 million primarily due to the reversal of a provision for uncertain tax positions in excess of the agreed-upon settlement. As a result of the IRS settlement, Entergy Louisiana recorded a $29 million ($21 million net-of-tax) regulatory charge and a corresponding regulatory liability to reflect its obligation to customers pursuant to the LPSC Hurricane Isaac Act 55 financing order.

Additional effects of the completion of the 2014-2015 IRS tax audit are discussed below within Tax Accounting Methods.

Other Tax Matters

Tax Cuts and Jobs Act (TCJA)

Deferred tax liabilities and assets have been adjusted for the effect of the enactment of the TCJA, signed by President Trump on December 22, 2017. The most significant effect of the TCJA for Entergy and the Registrant Subsidiaries was the change in the federal corporate income tax rate from 35% to 21%, effective January 1, 2018. Other significant provisions and their effect on Entergy and the Registrant Subsidiaries are summarized below.

The TCJA limited the deduction for net business interest expense to 30 percent of adjusted taxable income, which is similar to earnings before interest, taxes, depreciation, and amortization. The limitation does not apply to interest expense that is properly allocable to a trade or business classified as a regulated public utility. This was further modified by a temporary provision of the CARES Act resulting in an increase of the adjusted taxable income limitation from 30% to 50% for tax years that begin in 2019 or 2020.

The IRS issued proposed regulations relating to this limitation in November 2018 and July 2020. The IRS issued certain final regulations in July 2020 and January 2021, which were published in the Federal Register in September 2020 and January 2021, respectively. The proposed regulations are generally to be effective for taxable years ending after the date Treasury adopted the regulations as final. The final regulations will be effective for Entergy beginning with the 2021 tax year. Taxpayers may apply the rules of the proposed regulations to a taxable year beginning after December 31, 2017, as long as taxpayers consistently apply the rules of the proposed regulations. The proposed and final regulations provide that if 90% of a tax group’s consolidated assets consist of regulated utility property, the entire consolidated tax group will be treated as a regulated public utility and all of the consolidated group’s interest expense will be currently tax deductible.

As a result of the limitation under TCJA, Entergy recorded limitations in 2018 and 2019 and recorded a deferred tax asset on the nondeductible portion, as it has an unlimited carryover period. Entergy recorded a valuation allowance of $24 million due to a lack of earnings from sources other than the Utility. No limitation was recorded in 2020.

The TCJA limited the net operating loss (NOL) deduction for a given year to 80% of taxable income, effective with respect to losses arising in tax years beginning after December 31, 2017. Only NOLs generated after December 31, 2017 are subject to the 80% limitation. A temporary provision of the CARES Act (discussed below) removes this limitation and allows corporate taxpayers to fully offset taxable income with NOLs carried to tax years

beginning before 2021. Prior law generally provided a two-year carryback and 20-year carryforward for NOLs. The TCJA does not allow a carryback period but does provide for the indefinite carryforward of NOLs arising in tax years ending after December 31, 2017. However, with the enactment of the CARES Act, a temporary provision allows for a five-year carryback of 2018-2020 NOLs. Because of the indefinite carryforward, the new limitations on NOL utilization are not expected to have a material effect on Entergy or the Registrant Subsidiaries.

The TCJA also modified Internal Revenue Code section 162(m), which limits the deduction for compensation with respect to certain covered employees to no more than $1 million per year. The IRS issued proposed regulations relating to this limitation in December 2019 and final regulations in December 2020. The significant provisions of the TCJA and associated proposed and final regulations require inclusion of performance-based compensation and an expanded definition of "covered employees" in the annual computation of the section 162 limitation. The TCJA amendments and associated proposed regulations resulted in an increase in disallowed compensation expense, but this limitation does not have a material effect on Entergy or the Registrant Subsidiaries.

With respect to the federal corporate income tax rate change from 35% to 21% in 2017, Entergy and the Registrant Subsidiaries recorded a regulatory liability associated with the decrease in the net accumulated deferred income tax liability, which is often referred to as "excess ADIT," a significant portion of which has been paid to customers in 2019 and 2020 in the form of lower rates. Entergy's December 31, 2020 and December 31, 2019 balance sheets reflect a regulatory liability of $1.6 billion and $1.7 billion, respectively, as a result of the re-measurement of deferred tax assets and liabilities from the income tax rate change, amortization of excess ADIT, and payments to customers during 2019 and 2020. Entergy's regulatory liability for income taxes includes a gross-up at the applicable tax rate because of the effect that excess ADIT has on the ratemaking formula. The regulatory liability for income taxes includes the effect of a) the reduction of the net deferred tax liability resulting in excess ADIT, b) the tax gross-up of excess ADIT, and c) the effect of the new tax rate on the previous net regulatory asset for income taxes. For the same reasons, the Registrant Subsidiaries' December 31, 2020 and December 31, 2019 balance sheets reflect net regulatory liabilities for income taxes as follows:

	2020	2019
	(In Millions)	
Entergy Arkansas	$467	$487
Entergy Louisiana	$479	$531
Entergy Mississippi	$224	$237
Entergy New Orleans	$59	$59
Entergy Texas	$205	$253
System Energy	$152	$143

Excess ADIT is generally classified into two categories: 1) the portion that is subject to the normalization requirements of the TCJA, i.e., "protected", and 2) the portion that is not subject to such normalization provisions, referred to as "unprotected". The TCJA provides that the normalization method of accounting for income taxes is required for excess ADIT associated with public utility property. The TCJA provides for the use of the average rate assumption method (ARAM) for the determination of the timing of the return of excess ADIT associated with such property. Under ARAM, the excess ADIT is reduced over the remaining life of the asset. Remaining asset lives vary for each Registrant Subsidiary, but the average life of public utility property is typically 30 years or longer. Entergy will amortize the protected portion of the excess ADIT in conformity with the normalization requirements. The Registrant Subsidiaries' net regulatory liability for income taxes as of December 31, 2020 and December 31, 2019, includes protected excess ADIT as follows:

	2020	2019
	(In Millions)	
Entergy Arkansas	$490	$490
Entergy Louisiana	$721	$797
Entergy Mississippi	$248	$261
Entergy New Orleans	$61	$62
Entergy Texas	$215	$228
System Energy	$173	$186

During the second quarter of 2018, the Registrant Subsidiaries began paying unprotected excess accumulated deferred income taxes, associated with the effects of the Act, to their customers through rate riders and other means approved by their respective regulatory commissions. Payment of the unprotected excess accumulated deferred income taxes results in a reduction in the regulatory liability for income taxes and a corresponding reduction in income tax expense. This has a significant effect on the effective tax rate for the period as compared to the statutory tax rate. The Registrant Subsidiaries' net regulatory liability for income taxes as of December 31, 2020 and December 31, 2019, includes unprotected excess ADIT as follows:

	2020	2019
	(In Millions)	
Entergy Arkansas	$11	$9
Entergy Louisiana	$223	$242
Entergy New Orleans	$3	$9
Entergy Texas	$54	$83
System Energy	$16	$—

The return of unprotected excess accumulated deferred income taxes reduced Entergy's and the Registrant Subsidiaries' regulatory liability for income taxes as follows for 2020 and 2019:

	2020	2019
	(In Millions)	
Entergy	$74	$273
Entergy Arkansas	$8	$126
Entergy Louisiana	$31	$39
Entergy New Orleans	$6	$14
Entergy Texas	$29	$87
System Energy	$—	$7

In addition to the protected and unprotected excess ADIT amounts, the net regulatory liability for income taxes includes other regulatory assets and liabilities for income taxes associated with AFUDC, which is described in Note 1 to the financial statements.

For a discussion of the proceedings commenced or other responses by Entergy's regulators to the Act, see Note 2 to the financial statements.

Included in the effect of the computation of the changes in deferred tax assets and liabilities is the recognition threshold and measurement of uncertain tax positions resulting in unrecognized tax benefits. The final economic outcome of such unrecognized tax benefits is generally the result of a negotiated settlement with the IRS that often differs from the amount that is recorded as realizable under GAAP. The intrinsic uncertainty with respect to all such tax positions means that the difference between current estimates of such amounts likely to be realized

and actual amounts realized upon settlement may have an effect on income tax expense and the regulatory liability for income taxes in future periods.

Entergy anticipates that the TCJA, including the federal corporate income tax rate change, may continue to have ramifications that require adjustments in the future as certain events occur. These events include: 1) the evaluation by regulators in all of Entergy's jurisdictions regarding the ratemaking treatment of TCJA and excess ADIT; 2) IRS audit adjustments to or amendments of federal and state income tax returns that include modifications to the computation of taxable income resulting from TCJA; and 3) additional guidance, interpretations, or rulings by the U.S. Department of the Treasury or the IRS. The potential exists for these types of events to result in future tax expense adjustments because of the difference in the federal corporate income tax rate between past and future periods and the effect of the tax rate change on ratemaking. In turn, these items also could potentially affect the regulatory liability for income taxes.

Coronavirus Aid, Relief, and Economic Security Act

In response to the economic impacts of the COVID-19 pandemic, President Trump signed the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) into law on March 27, 2020. The CARES Act provisions that result in the most significant opportunities for tax relief to Entergy and the Registrant Subsidiaries are (i) permitting a five-year carryback of 2018-2020 NOLs, (ii) removing the 80 percent limitation on NOLs carried to tax years beginning before 2021, (iii) increasing the limitation on interest expense deductibility for 2019 and 2020, (iv) accelerating available refunds for minimum tax credit carryforwards, modifying limitations on charitable contributions during 2020, and (v) delaying the payment of employer payroll taxes. Entergy deferred approximately $64 million of 2020 payroll tax payments, which will be payable in two installments of $32 million on December 31, 2021 and December 31, 2022.

Entergy Wholesale Commodities Restructuring

In the third quarter 2018, Entergy completed a restructuring of the investment holdings in one of the Entergy Wholesale Commodities nuclear plant decommissioning trusts that resulted in an adjustment to tax basis for the trust. The accounting standards provide that a taxable temporary difference does not exist if the tax law provides a means by which an amount can be recovered without incurrence of tax. The restructuring allows Entergy to recover assets from the trust without incurring tax. As such, the tax basis recognized resulted in the reversal of a deferred tax liability and reduction of income tax expense of approximately $107 million.

In the fourth quarter 2019, two separate events occurred resulting in a reduction of tax expense of $174 million. In November 2019 an Entergy Wholesale Commodities subsidiary recognized a reduction in income tax expense of $18 million in connection with the accounting method on power contracts associated with the Palisades nuclear power station. Additionally, Entergy's ownership of Indian Point 2 and Indian Point 3 was restructured. The restructuring required Entergy to recognize Indian Point 2 and Indian Point 3 nuclear decommissioning liabilities for income tax purposes resulting in a tax accounting permanent difference that reduced income tax expense, net of unrecognized tax benefits, by $156 million. The accrual of the nuclear decommissioning liabilities also required Entergy to recognize a gain for income tax purposes, a portion of which resulted in an increase in the tax basis of the assets. Recognition of the gain and the increase in the tax basis of the assets represents a tax accounting temporary difference.

Immediately prior to the restructuring, through its ownership of Indian Point 2 and Indian Point 3, Entergy donated property to Stony Brook University and recognized an associated tax deduction resulting in a decrease to tax expense of $19 million.

In the fourth quarter 2020, Entergy's ownership of Palisades was restructured. The restructuring required Entergy to recognize Palisades' nuclear decommissioning liability for income tax purposes resulting in a tax accounting permanent difference that reduced income tax expense, net of unrecognized tax benefits, by

$9.2 million. The accrual of the nuclear decommissioning liability also required Entergy to recognize a gain for income tax purposes, a portion of which resulted in an increase in the tax basis of the assets. Recognition of the gain and the increase in the tax basis of the assets represents a tax accounting temporary difference.

Entergy Wholesale Commodities Tax Audit

A state income tax audit involving Entergy Wholesale Commodities was concluded during the third quarter 2018. Upon conclusion of the audit, subsidiaries within Entergy Wholesale Commodities reversed a portion of the provision for uncertain tax positions totaling approximately $23 million, net of tax and interest paid.

Tax Accounting Methods

In the fourth quarter 2015, System Energy and Entergy Louisiana adopted a new method of accounting for income tax return purposes in which their nuclear decommissioning costs will be treated as production costs of electricity includable in cost of goods sold. The new method resulted in a reduction of taxable income of $1.2 billion for System Energy and $2.2 billion for Energy Louisiana.

In conjunction with the 2014-2015 IRS audit discussed above, the IRS issued proposed adjustments concerning the nuclear decommissioning tax position allowing System Energy to include $102 million of its decommissioning liability in cost of goods sold, and Entergy Louisiana to include $221 million of its decommissioning liability in cost of goods sold. Entergy, System Energy, and Entergy Louisiana agreed to the proposed adjustments included in the RAR.

As a result of System Energy being allowed to include part of its decommissioning liability in cost of goods sold, System Energy and Entergy recorded a deferred tax liability of $26 million. System Energy also recorded federal and state taxes payable of $402 million. However, on a consolidated basis, Entergy utilized tax loss carryovers to offset the federal taxable income adjustment and did not record federal taxes payable as a result of the outcome of this uncertain tax position.

As a result of Entergy Louisiana being allowed to include part of its decommissioning liability in cost of goods sold, Entergy Louisiana and Entergy recorded a deferred tax liability of $60 million. Both Entergy Louisiana and Entergy utilized tax loss carryovers to offset the taxable income adjustment and accordingly did not record taxes payable as a result of the outcome of this uncertain tax position.

The partial disallowance of this uncertain tax position to include the decommissioning liability in cost of goods sold resulted in a $1.5 billion decrease in the balance of unrecognized tax benefits related to federal and state taxes for Entergy. Additionally, both System Energy and Entergy Louisiana recorded a reduction to their balances of unrecognized tax benefits for federal and state taxes of $461 million and $1.1 billion, respectively.

Entergy Arkansas adopted the same method of accounting for its nuclear decommissioning costs which resulted in a $1.8 billion reduction in taxable income on its 2018 tax return.

The tax treatment of Entergy Louisiana’s accrued regulatory liabilities associated with the Vidalia purchased power agreement and business combination guaranteed customer credits, which are discussed further in Note 2, has been resolved with the IRS in a manner that results in a $190 million increase to previously reported taxable income. Entergy Louisiana and Entergy utilized tax loss carryovers to offset the taxable income adjustment, however, which allowed both Entergy Louisiana and Entergy to reduce their balances of federal and state unrecognized tax benefits by $74 million.

In 2016, Entergy Louisiana elected mark-to-market income tax treatment for various wholesale electric power purchase and sale agreements, including Entergy Louisiana’s contract to purchase electricity from the Vidalia hydroelectric facility and from System Energy under the Unit Power Sales Agreement. The election resulted in a

$2.2 billion deductible temporary difference. In 2017, Entergy New Orleans also elected mark-to-market income tax treatment for wholesale electric contracts which resulted in a $1.1 billion deductible temporary difference. In 2018, Entergy Arkansas and Entergy Mississippi accrued deductible temporary differences related to mark-to-market tax accounting for wholesale electric contracts of $2.1 billion and $1.9 billion, respectively. Additionally, in 2020, Entergy Texas elected mark-to-market income tax treatment for wholesale electric power purchase and sale agreements which resulted in a $2.5 billion deductible temporary difference.

Entergy Arkansas and Entergy Mississippi Internal Restructuring

In the fourth quarter 2018, Entergy Arkansas and Entergy Mississippi became wholly-owned subsidiaries of Entergy Utility Holding Company, LLC. The change in ownership required Entergy to recognize Entergy Arkansas's nuclear decommissioning liabilities for income tax purposes resulting in a tax accounting permanent difference that reduced income tax expense, net of unrecognized tax benefits, by $165 million. The accrual of the nuclear decommissioning liabilities also required Entergy to recognize a gain for income tax purposes, a portion of which resulted in an increase in the tax basis of the assets. Recognition of the gain and the increase in the tax basis of the assets represents a tax accounting temporary difference. Additionally, Entergy recorded a $5 million reduction of income tax expense associated with state income tax effects resulting in a total reduction of income tax expense of $170 million from the restructuring. Entergy recorded a regulatory liability of $40 million ($30 million net-of-tax) which partially offsets the reduction of income tax expense. Entergy Arkansas's member's equity increased by $94 million as a result of the restructuring. See Note 2 to the financial statements for further discussion of the internal restructuring.

Arkansas Corporate Income Tax Rate Reduction

In April 2019 the State of Arkansas enacted corporate income tax law changes that phase in an Arkansas tax rate reduction from the current rate of 6.5% to 6.2% in 2021 and 5.9% in 2022. The rate reduction will eventually reduce Entergy Arkansas's combined federal and state applicable tax rate by less than 0.5% once fully adopted. As a result of the rate reduction, Entergy Arkansas computed a final regulatory liability for income taxes of approximately $21 million, which includes a tax gross-up related to the treatment of income taxes in the retail and wholesale ratemaking formulas. During the first quarter of 2021, Entergy Arkansas refunded $7.5 million to Arkansas retail customers which represents the retail portion of the $21 million referenced above offset by the effect of adjustments to the regulatory liability for TCJA excess accumulated deferred income taxes. The Arkansas tax law enactment also phases in an increase to the net operating loss carryover period from five to ten years.

Consolidated Income Tax Return of Entergy Corporation

In September 2019, Entergy Utility Holding Company, LLC and its regulated, wholly-owned subsidiaries including Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans, became eligible to and joined the Entergy Corporation consolidated federal income tax group. As a result of these four Utility operating companies re-joining the Entergy Corporation consolidated tax return group, Entergy was able to recognize a $41 million deferred tax asset associated with a previously unrecognized Arkansas net operating loss carryover.

Additionally, in September 2019, Entergy Texas issued $35 million of 5.375% Series A preferred stock with a liquidation value of $25 per share resulting in the disaffiliation and de-consolidation of Entergy Texas from the consolidated federal income tax return of Entergy Corporation. These changes will not affect the accrual or allocation of income taxes for the Registrant Subsidiaries. See Note 6 to the financial statements for discussion of the preferred stock issuance.

Vermont Yankee

The Vermont Yankee transaction resulted in Entergy generating a net deferred tax asset in January 2019. The deferred tax asset could not be fully realized by Entergy in the first quarter 2019; accordingly, Entergy accrued a net tax expense of $29 million on the disposition of Vermont Yankee. See Note 14 to the financial statements for discussion of the Vermont Yankee transaction.

Stock Compensation

In accordance with stock compensation accounting rules, Entergy and the Registrant Subsidiaries recognized excess tax deductions as a reduction of income tax expense in the first quarter 2020. Due to the vesting and exercise of certain Entergy stock-based awards, Entergy recorded a permanent tax reduction of approximately $24.7 million, including $4.8 million for Entergy Arkansas, $8.6 million for Entergy Louisiana, $2.7 million for Entergy Mississippi, $1.5 million for Entergy New Orleans, $2.7 million for Entergy Texas, and $1.3 million for System Energy.

NOTE 4. REVOLVING CREDIT FACILITIES, LINES OF CREDIT, AND SHORT-TERM BORROWINGS (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Entergy Corporation has in place a credit facility that has a borrowing capacity of $3.5 billion and expires in September 2024. The facility includes fronting commitments for the issuance of letters of credit against $20 million of the total borrowing capacity of the credit facility. The commitment fee is currently 0.225% of the undrawn commitment amount. Commitment fees and interest rates on loans under the credit facility can fluctuate depending on the senior unsecured debt ratings of Entergy Corporation. The weighted average interest rate for the year ended December 31, 2020 was 2.35% on the drawn portion of the facility. Following is a summary of the borrowings outstanding and capacity available under the facility as of December 31, 2020.

Capacity	Borrowings	Letters of Credit	Capacity Available
	(In Millions)		
$3,500	$165	$6	$3,329

Entergy Corporation's credit facility requires Entergy to maintain a consolidated debt ratio, as defined, of 65% or less of its total capitalization. Entergy is in compliance with this covenant. If Entergy fails to meet this ratio, or if Entergy Corporation or one of the Utility operating companies (except Entergy New Orleans) defaults on other indebtedness or is in bankruptcy or insolvency proceedings, an acceleration of the facility maturity date may occur.

Entergy Corporation has a commercial paper program with a Board-approved program limit of up to $2 billion. As of December 31, 2020, Entergy Corporation had $1.627 billion of commercial paper outstanding. The weighted-average interest rate for the year ended December 31, 2020 was 1.39%.

Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas each had credit facilities available as of December 31, 2020 as follows:

Company	Expiration Date	Amount of Facility	Interest Rate (a)	Amount Drawn as of December 31, 2020	Letters of Credit Outstanding as of December 31, 2020
Entergy Arkansas	April 2021	$25 million (b)	1.27%	—	—
Entergy Arkansas	September 2024	$150 million (c)	1.27%	—	—
Entergy Louisiana	September 2024	$350 million (c)	1.27%	—	—
Entergy Mississippi	April 2021	$10 million (d)	1.65%	—	—
Entergy Mississippi	April 2021	$35 million (d)	1.65%	—	—
Entergy Mississippi	April 2021	$37.5 million (d)	1.65%	—	—
Entergy New Orleans	November 2021	$25 million (c)	1.42%	—	$0.8 million
Entergy Texas	September 2024	$150 million (c)	1.65%	—	$1.3 million

(a) The interest rate is the estimated interest rate as of December 31, 2020 that would have been applied to outstanding borrowings under the facility.

(b) Borrowings under this Entergy Arkansas credit facility may be secured by a security interest in its accounts receivable at Entergy Arkansas's option.

(c) The credit facility includes fronting commitments for the issuance of letters of credit against a portion of the borrowing capacity of the facility as follows: $5 million for Entergy Arkansas; $15 million for Entergy Louisiana; $10 million for Entergy New Orleans; and $30 million for Entergy Texas.

(d) Borrowings under the Entergy Mississippi credit facilities may be secured by a security interest in its accounts receivable at Entergy Mississippi's option.

The commitment fees on the credit facilities range from 0.075% to 0.275% of the undrawn commitment amount. Each of the credit facilities requires the Registrant Subsidiary borrower to maintain a debt ratio, as defined, of 65% or less of its total capitalization. Each Registrant Subsidiary is in compliance with this covenant.

In addition, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas each entered into one or more uncommitted standby letter of credit facilities as a means to post collateral to support its obligations to MISO. Following is a summary of the uncommitted standby letter of credit facilities as of December 31, 2020:

Company	Amount of Uncommitted Facility	Letter of Credit Fee	Letters of Credit Issued as of December 31, 2020 (a) (b)
Entergy Arkansas	$25 million	0.78%	$1 million
Entergy Louisiana	$125 million	0.78%	$2.2 million
Entergy Mississippi	$65 million	0.78%	$1 million
Entergy New Orleans	$15 million	1.00%	$1 million
Entergy Texas	$50 million	0.70%	$6.2 million

(a) As of December 31, 2020, letters of credit posted with MISO covered financial transmission right exposure of $0.3 million for Entergy Louisiana, $0.2 million for Entergy Mississippi, $0.2 million for Entergy New Orleans, and $0.5 million for Entergy Texas. See Note 15 to the financial statements for discussion of financial transmission rights.

(b) As of December 31, 2020, in addition to the $1 million MISO letter of credit, Entergy Mississippi has $1 million of non-MISO letters of credit outstanding under this facility.

The short-term borrowings of the Registrant Subsidiaries are limited to amounts authorized by the FERC. The current FERC-authorized limits for Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy are effective through July 14, 2022. In addition to borrowings from commercial banks, these companies may also borrow from the Entergy System money pool and from other internal short-term borrowing arrangements. The money pool and the other internal borrowing arrangements are inter-company borrowing arrangements designed to reduce the Utility subsidiaries' dependence on external short-term borrowings. Borrowings from internal and external short-term borrowings combined may not exceed the FERC-authorized limits. The following are the FERC-authorized limits for short-term borrowings and the outstanding short-term borrowings as of December 31, 2020 (aggregating both internal and external short-term borrowings) for the Registrant Subsidiaries:

	Authorized	Borrowings
	(In Millions)	
Entergy Arkansas	$250	$—
Entergy Louisiana	$450	$—
Entergy Mississippi	$175	$17
Entergy New Orleans	$150	$10
Entergy Texas	$200	$—
System Energy	$200	$—

Vermont Yankee Credit Facility (Entergy Corporation)

In January 2019, Entergy Nuclear Vermont Yankee was transferred to NorthStar and its credit facility was assumed by Entergy Assets Management Operations, LLC (formerly Vermont Yankee Asset Retirement, LLC), Entergy Nuclear Vermont Yankee's parent company that remains an Entergy subsidiary after the transfer. The credit facility has a borrowing capacity of $139 million and expires in December 2021. The commitment fee is currently 0.20% of the undrawn commitment amount. As of December 31, 2020, $139 million in cash borrowings were outstanding under the credit facility. The weighted average interest rate for the year ended December 31, 2020 was 2.46% on the drawn portion of the facility. See Note 14 to the financial statements for discussion of the transfer of Entergy Nuclear Vermont Yankee to NorthStar.

Variable Interest Entities (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, and System Energy)

See Note 17 to the financial statements for a discussion of the consolidation of the nuclear fuel company variable interest entities (VIE). To finance the acquisition and ownership of nuclear fuel, the nuclear fuel company VIEs have credit facilities and three of the four VIEs also issue commercial paper, details of which follow as of December 31, 2020:

Company	Expiration Date	Amount of Facility	Weighted Average Interest Rate on Borrowings (a)	Amount Outstanding as of December 31, 2020
		(Dollars in Millions)		
Entergy Arkansas VIE	September 2022	$80	1.94%	$12.2
Entergy Louisiana River Bend VIE	September 2022	$105	1.95%	$18.9
Entergy Louisiana Waterford VIE	September 2022	$105	1.72%	$39.3
System Energy VIE	September 2022	$120	1.63%	$—

(a) Includes letter of credit fees and bank fronting fees on commercial paper issuances by the nuclear fuel company variable interest entities for Entergy Arkansas, Entergy Louisiana, and System Energy. The

nuclear fuel company variable interest entity for Entergy Louisiana River Bend does not issue commercial paper, but borrows directly on its bank credit facility.

The commitment fees on the credit facilities are 0.125% of the undrawn commitment amount for the Entergy Arkansas, Entergy Louisiana, and System Energy VIEs. Each credit facility requires the respective lessee of nuclear fuel (Entergy Arkansas, Entergy Louisiana, or Entergy Corporation as guarantor for System Energy) to maintain a consolidated debt ratio, as defined, of 70% or less of its total capitalization. Each lessee is in compliance with this covenant.

The nuclear fuel company variable interest entities had notes payable that are included in debt on the respective balance sheets as of December 31, 2020 as follows:

Company	Description	Amount
Entergy Arkansas VIE	3.65% Series L due July 2021	$90 million
Entergy Arkansas VIE	3.17% Series M due December 2023	$40 million
Entergy Louisiana River Bend VIE	2.51% Series V due June 2027	$70 million
Entergy Louisiana Waterford VIE	3.92% Series H due February 2021 (a)	$40 million
Entergy Louisiana Waterford VIE	3.22% Series I due December 2023	$20 million
System Energy VIE	3.42% Series J due April 2021 (a)	$100 million
System Energy VIE	2.05% Series K due September 2027	$90 million

(a) Redeemed in February 2021.

In accordance with regulatory treatment, interest on the nuclear fuel company variable interest entities' credit facilities, commercial paper, and long-term notes payable is reported in fuel expense.

Entergy Arkansas, Entergy Louisiana, and System Energy each have obtained financing authorizations from the FERC that extend through July 14, 2022 for issuances by its nuclear fuel company variable interest entities.

NOTE 5. LONG - TERM DEBT (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Long-term debt for Entergy Corporation and subsidiaries as of December 31, 2020 and 2019 consisted of:

Type of Debt and Maturity	Weighted Average Interest Rate December 31, 2020	Interest Rate Ranges at December 31,		Outstanding at December 31,	
		2020	2019	2020	2019
				(In Thousands)	
Mortgage Bonds					
2020-2024	3.23%	0.62% - 5.59%	2.55% - 5.59%	$4,400,000	$3,575,000
2025-2029	3.35%	2.14% - 4.44%	2.4% - 4.44%	4,113,000	3,735,000
2030-2040	3.38%	1.6% - 4.52%	3.05% - 4.52%	2,552,000	1,590,000
2044-2066	4.12%	2.65% - 5.5%	3.55% - 5.625%	6,380,000	5,170,000
Governmental Bonds (a)					
2021-2022	2.50%	2.375% - 2.5%	2.375% - 2.5%	179,000	179,000
2028-2030	3.45%	3.375% - 3.5%	3.375% - 3.5%	198,680	198,680
Securitization Bonds					
2022-2027	3.59%	2.04% - 5.93%	2.04% - 5.93%	177,522	302,145
Variable Interest Entities Notes Payable (Note 4)					
2021-2027	2.45%	2.05% - 3.92%	3.17% - 3.92%	450,000	360,000
Entergy Corporation Notes					
due September 2020	n/a	—%	5.125%	—	450,000
due July 2022	n/a	4.00%	4.00%	650,000	650,000
due September 2025	n/a	0.9%	—	800,000	—
due September 2026	n/a	2.95%	2.95%	750,000	750,000
due June 2030	n/a	2.80%	—	600,000	—
due June 2050	n/a	3.75%	—	600,000	—
Entergy New Orleans Unsecured Term Loan due May 2022	n/a	3.00%	3.00%	70,000	70,000
5 Year Credit Facility (Note 4)	n/a	2.35%	3.77%	165,000	440,000
Entergy New Orleans Credit Facility (Note 4)	n/a	—	2.92%	—	20,000
Vermont Yankee Credit Facility (Note 4)	n/a	2.46%	3.93%	139,000	139,000
Entergy Arkansas VIE Credit Facility (Note 4)	n/a	1.94%	3.33%	12,200	15,100
Entergy Louisiana River Bend VIE Credit Facility (Note 4)	n/a	1.95%	3.23%	18,900	70,300
Entergy Louisiana Waterford VIE Credit Facility (Note 4)	n/a	1.72%	3.30%	39,300	49,900
System Energy VIE Credit Facility (Note 4)	n/a	1.63%	3.34%	—	31,600
Long-term DOE Obligation (b)	—	—	—	192,018	191,114
Grand Gulf Sale-Leaseback Obligation	n/a	—	—	34,336	34,346
Unamortized Premium and Discount - Net				3,665	(16,124)
Unamortized Debt Issuance Costs				(160,420)	(143,502)
Other				5,575	12,096
Total Long-Term Debt				22,369,776	17,873,655
Less Amount Due Within One Year				1,164,015	795,012
Long-Term Debt Excluding Amount Due Within One Year				$21,205,761	$17,078,643
Fair Value of Long-Term Debt				$24,813,818	$19,059,950

(a) Consists of pollution control revenue bonds and environmental revenue bonds, some of which are secured by collateral mortgage bonds.

(b) Pursuant to the Nuclear Waste Policy Act of 1982, Entergy's nuclear owner/licensee subsidiaries have contracts with the DOE for spent nuclear fuel disposal service. The contracts include a one-time fee for generation prior to April 7, 1983. Entergy Arkansas is the only Entergy company that generated electric power with nuclear fuel prior to that date and includes the one-time fee, plus accrued interest, in long-term debt.

The annual long-term debt maturities (excluding lease obligations and long-term DOE obligations) for debt outstanding as of December 31, 2020, for the next five years are as follows:

	Amount
	(In Thousands)
2021	$1,164,000
2022	$1,141,878
2023	$2,452,194
2024	$1,340,000
2025	$1,378,000

Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy have obtained long-term financing authorizations from the FERC that extend through July 2022. Entergy New Orleans has obtained long-term financing authorization from the City Council that extends through July 2022. Entergy Arkansas has also obtained first mortgage bond/secured financing authorization from the APSC that extends through December 2022.

Long-term debt for the Registrant Subsidiaries as of December 31, 2020 and 2019 consisted of:

	2020	2019
	(In Thousands)	
Entergy Arkansas		
Mortgage Bonds:		
3.75% Series due February 2021	$350,000	$350,000
3.05% Series due June 2023	250,000	250,000
3.7% Series due June 2024	375,000	375,000
3.5% Series due April 2026	600,000	600,000
4.0% Series due June 2028	350,000	250,000
4.95% Series due December 2044	250,000	250,000
4.20% Series due April 2049	350,000	350,000
2.65% Series due June 2051	675,000	—
4.90% Series due December 2052	—	200,000
4.75% Series due June 2063	—	125,000
4.875% Series due September 2066	410,000	410,000
Total mortgage bonds	3,610,000	3,160,000
Governmental Bonds (a):		
2.375% Series due 2021, Independence County (c)	45,000	45,000
Total governmental bonds	45,000	45,000
Variable Interest Entity Notes Payable and Credit Facility (Note 4):		
3.65% Series L due July 2021	90,000	90,000
3.17% Series M due December 2023	40,000	40,000
Credit Facility due September 2022, weighted avg rate 1.94%	12,200	15,100
Total variable interest entity notes payable and credit facility	142,200	145,100
Securitization Bonds:		
2.30% Series Senior Secured due August 2021	—	7,259
Total securitization bonds	—	7,259
Other:		
Long-term DOE Obligation (b)	192,018	191,114
Unamortized Premium and Discount – Net	6,938	1,664
Unamortized Debt Issuance Costs	(30,638)	(34,936)
Other	1,989	2,007
Total Long-Term Debt	3,967,507	3,517,208
Less Amount Due Within One Year	485,000	—
Long-Term Debt Excluding Amount Due Within One Year	$3,482,507	$3,517,208
Fair Value of Long-Term Debt	$4,355,632	$3,747,914

	2020	2019
	(In Thousands)	
Entergy Louisiana		
Mortgage Bonds:		
3.95% Series due October 2020	$—	$250,000
4.8% Series due May 2021	200,000	200,000
3.3% Series due December 2022	200,000	200,000
4.05% Series due September 2023	325,000	325,000
0.62% Series due November 2023	1,100,000	—
5.59% Series due October 2024	300,000	300,000
5.40% Series due November 2024	400,000	400,000
3.78% Series due April 2025	110,000	110,000
3.78% Series due April 2025	190,000	190,000
4.44% Series due January 2026	250,000	250,000
2.40% Series due October 2026	400,000	400,000
3.12% Series due September 2027	450,000	450,000
3.25% Series due April 2028	425,000	425,000
1.60% Series due December 2030	300,000	—
3.05% Series due June 2031	325,000	325,000
4.0% Series due March 2033	750,000	750,000
5.0% Series due July 2044	170,000	170,000
4.95% Series due January 2045	450,000	450,000
4.20% Series due September 2048	900,000	600,000
4.20% Series due April 2050	525,000	525,000
2.90% Series due March 2051	650,000	—
5.25% Series due July 2052	—	200,000
4.70% Series due June 2063	—	100,000
4.875% Series due September 2066	270,000	270,000
Total mortgage bonds	8,690,000	6,890,000
Governmental Bonds (a):		
3.375% Series due 2028, Louisiana Public Facilities Authority (c)	83,680	83,680
3.50% Series due 2030, Louisiana Public Facilities Authority (c)	115,000	115,000
Total governmental bonds	198,680	198,680
Variable Interest Entity Notes Payable and Credit Facilities (Note 4):		
3.38% Series R due August 2020	—	70,000
3.92% Series H due February 2021	40,000	40,000
3.22% Series I due December 2023	20,000	20,000
2.51% Series V due June 2027	70,000	—
Credit Facility due September 2022, weighted avg rate 1.95%	18,900	70,300
Credit Facility due September 2022, weighted avg rate 1.72%	39,300	49,900
Total variable interest entity notes payable and credit facilities	188,200	250,200
Securitization Bonds:		
2.04% Series Senior Secured due September 2023	10,980	34,185
Total securitization bonds	10,980	34,185
Other:		
Unamortized Premium and Discount - Net	(2,863)	(17,372)
Unamortized Debt Issuance Costs	(61,132)	(58,089)
Other	3,586	6,065
Total Long-Term Debt	9,027,451	7,303,669
Less Amount Due Within One Year	240,000	320,002
Long-Term Debt Excluding Amount Due Within One Year	$8,787,451	$6,983,667
Fair Value of Long-Term Debt	$10,258,294	$7,961,168

	2020	2019
	(In Thousands)	
Entergy Mississippi		
Mortgage Bonds:		
3.1% Series due July 2023	$250,000	$250,000
3.75% Series due July 2024	100,000	100,000
3.25% Series due December 2027	150,000	150,000
2.85% Series due June 2028	375,000	375,000
4.52% Series due December 2038	55,000	55,000
3.85% Series due June 2049	435,000	435,000
3.50% Series due June 2051	170,000	—
4.90% Series due October 2066	260,000	260,000
Total mortgage bonds	1,795,000	1,625,000
Other:		
Unamortized Premium and Discount – Net	3,685	6,127
Unamortized Debt Issuance Costs	(18,108)	(16,998)
Total Long-Term Debt	1,780,577	1,614,129
Less Amount Due Within One Year	—	—
Long-Term Debt Excluding Amount Due Within One Year	$1,780,577	$1,614,129
Fair Value of Long-Term Debt	$2,021,432	$1,709,505

	2020	2019
	(In Thousands)	
Entergy New Orleans		
Mortgage Bonds:		
5.10% Series due December 2020	$—	$25,000
3.9% Series due July 2023	100,000	100,000
3.0% Series due March 2025	78,000	—
4.0% Series due June 2026	85,000	85,000
4.51% Series due September 2033	60,000	60,000
3.75% Series due March 2040	62,000	—
5.0% Series due December 2052	30,000	30,000
5.50% Series due April 2066	110,000	110,000
Total mortgage bonds	525,000	410,000
Securitization Bonds:		
2.67% Series Senior Secured due June 2027	42,850	54,443
Total securitization bonds	42,850	54,443
Other:		
3.0% Unsecured Term Loan due May 2022	70,000	70,000
Credit Facility due November 2021, weighted avg rate 2.92%	—	20,000
Payable to associated company due November 2035	12,529	14,367
Unamortized Premium and Discount – Net	(91)	(129)
Unamortized Debt Issuance Costs	(8,055)	(7,775)
Total Long-Term Debt	642,233	560,906
Less Amount Due Within One Year	1,618	26,838
Long-Term Debt Excluding Amount Due Within One Year	$640,615	$534,068
Fair Value of Long-Term Debt	$620,634	$523,846

	2020	2019
	(In Thousands)	
Entergy Texas		
Mortgage Bonds:		
2.55% Series due June 2021	$125,000	$125,000
4.1% Series due September 2021	75,000	75,000
3.45% Series due December 2027	150,000	150,000
4.0% Series due March 2029	300,000	300,000
1.75% Series due March 2031	600,000	—
4.5% Series due March 2039	400,000	400,000
5.15% Series due June 2045	250,000	250,000
3.55% Series due September 2049	475,000	300,000
5.625% Series due June 2064	—	135,000
Total mortgage bonds	2,375,000	1,735,000
Securitization Bonds:		
5.93% Series Senior Secured, Series A due June 2022	17,478	50,289
4.38% Series Senior Secured, Series A due November 2023	106,214	155,969
Total securitization bonds	123,692	206,258
Other:		
Unamortized Premium and Discount - Net	14,064	(4,814)
Unamortized Debt Issuance Costs	(19,048)	(17,510)
Other	—	4,022
Total Long-Term Debt	2,493,708	1,922,956
Less Amount Due Within One Year	200,000	—
Long-Term Debt Excluding Amount Due Within One Year	$2,293,708	$1,922,956
Fair Value of Long-Term Debt	$2,765,193	$2,090,215

	2020	2019
	(In Thousands)	
System Energy		
Mortgage Bonds:		
4.1% Series due April 2023	$250,000	$250,000
2.14% Series due December 2025	200,000	—
Total mortgage bonds	450,000	250,000
Governmental Bonds (a):		
2.5% Series due 2022, Mississippi Business Finance Corp.	134,000	134,000
Total governmental bonds	134,000	134,000
Variable Interest Entity Notes Payable and Credit Facility (Note 4):		
3.42% Series J due April 2021	100,000	100,000
2.05% Series K due September 2027	90,000	—
Credit Facility due September 2022, weighted avg rate 1.63%	—	31,600
Total variable interest entity notes payable and credit facility	190,000	131,600
Other:		
Grand Gulf Sale-Leaseback Obligation	34,336	34,346
Unamortized Premium and Discount – Net	(165)	(144)
Unamortized Debt Issuance Costs	(2,897)	(1,697)
Other	—	2
Total Long-Term Debt	805,274	548,107
Less Amount Due Within One Year	100,015	10
Long-Term Debt Excluding Amount Due Within One Year	$705,259	$548,097
Fair Value of Long-Term Debt	$840,540	$565,209

(a) Consists of pollution control revenue bonds and environmental revenue bonds.

(b) Pursuant to the Nuclear Waste Policy Act of 1982, Entergy's nuclear owner/licensee subsidiaries have contracts with the DOE for spent nuclear fuel disposal service. The contracts include a one-time fee for generation prior to April 7, 1983. Entergy Arkansas is the only Entergy company that generated electric power with nuclear fuel prior to that date and includes the one-time fee, plus accrued interest, in long-term debt.

(c) The bonds are secured by a series of collateral mortgage bonds.

The annual long-term debt maturities (excluding lease obligations and long-term DOE obligations) for debt outstanding as of December 31, 2020, for the next five years are as follows:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
	(In Thousands)					
2021	$485,000	$240,000	$—	$1,618	$200,000	$100,000
2022	$12,200	$258,200	$—	$71,326	$17,478	$134,000
2023	$290,000	$1,455,980	$250,000	$101,306	$106,214	$250,000
2024	$375,000	$700,000	$100,000	$1,275	$—	$—
2025	$—	$300,000	$—	$79,140	$—	$200,000

Securitization Bonds

Entergy Arkansas Securitization Bonds

In June 2010 the APSC issued a financing order authorizing the issuance of bonds to recover Entergy Arkansas's January 2009 ice storm damage restoration costs, including carrying costs of $11.5 million and $4.6 million of up-front financing costs. In August 2010, Entergy Arkansas Restoration Funding, LLC, a company wholly-owned and consolidated by Entergy Arkansas, issued $124.1 million of storm cost recovery bonds, with a coupon of 2.30%. Although the principal amount was not due until August 2021, Entergy Arkansas Restoration Funding made principal payments on the bonds in the amount of $7.3 million in 2020, after which the bonds were fully repaid.

Entergy Louisiana Securitization Bonds – Little Gypsy

In August 2011 the LPSC issued a financing order authorizing the issuance of bonds to recover Entergy Louisiana's investment recovery costs associated with the canceled Little Gypsy repowering project. In September 2011, Entergy Louisiana Investment Recovery Funding I, L.L.C., a company wholly-owned and consolidated by Entergy Louisiana, issued $207.2 million of senior secured investment recovery bonds. The bonds have an interest rate of 2.04%. Although the principal amount is not due until September 2023, Entergy Louisiana Investment Recovery Funding expects to make principal payments on the bonds in the amount of $11 million for 2021, after which the bonds will be fully repaid. With the proceeds, Entergy Louisiana Investment Recovery Funding purchased from Entergy Louisiana the investment recovery property, which is the right to recover from customers through an investment recovery charge amounts sufficient to service the bonds. In accordance with the financing order, Entergy Louisiana will apply the proceeds it received from the sale of the investment recovery property as a reimbursement for previously-incurred investment recovery costs. The investment recovery property is reflected as a regulatory asset on the consolidated Entergy Louisiana balance sheet. The creditors of Entergy Louisiana do not have recourse to the assets or revenues of Entergy Louisiana Investment Recovery Funding, including the investment recovery property, and the creditors of Entergy Louisiana Investment Recovery Funding do not have recourse to the assets or revenues of Entergy Louisiana. Entergy Louisiana has no payment obligations to Entergy Louisiana Investment Recovery Funding except to remit investment recovery charge collections.

Entergy New Orleans Securitization Bonds - Hurricane Isaac

In May 2015 the City Council issued a financing order authorizing the issuance of securitization bonds to recover Entergy New Orleans's Hurricane Isaac storm restoration costs of $31.8 million, including carrying costs, the costs of funding and replenishing the storm recovery reserve in the amount of $63.9 million, and approximately $3 million of up-front financing costs associated with the securitization. In July 2015, Entergy New Orleans Storm Recovery Funding I, L.L.C., a company wholly owned and consolidated by Entergy New Orleans, issued $98.7 million of storm cost recovery bonds. The bonds have a coupon of 2.67%. Although the principal amount is not due until June 2027, Entergy New Orleans Storm Recovery Funding expects to make principal payments on the bonds over the next four years in the amounts of $11.9 million for 2021, $12.2 million for 2022, $12.5 million for 2023, and $6.2 million for 2024. With the proceeds, Entergy New Orleans Storm Recovery Funding purchased from Entergy New Orleans the storm recovery property, which is the right to recover from customers through a storm recovery charge amounts sufficient to service the securitization bonds. The storm recovery property is reflected as a regulatory asset on the consolidated Entergy New Orleans balance sheet. The creditors of Entergy New Orleans do not have recourse to the assets or revenues of Entergy New Orleans Storm Recovery Funding, including the storm recovery property, and the creditors of Entergy New Orleans Storm Recovery Funding do not have recourse to the assets or revenues of Entergy New Orleans. Entergy New Orleans has no payment obligations to Entergy New Orleans Storm Recovery Funding except to remit storm recovery charge collections.

Entergy Texas Securitization Bonds - Hurricane Rita

In April 2007 the PUCT issued a financing order authorizing the issuance of securitization bonds to recover $353 million of Entergy Texas's Hurricane Rita reconstruction costs and up to $6 million of transaction costs, offset by $32 million of related deferred income tax benefits. In June 2007, Entergy Gulf States Reconstruction Funding I, LLC, a company that is now wholly-owned and consolidated by Entergy Texas, issued $329.5 million of senior secured transition bonds (securitization bonds). As of December 31, 2020, $17.5 million at 5.93% remain outstanding. Entergy Gulf States Reconstruction Funding expects to make principal payments on the bonds in the amount of $17.5 million for 2021.

With the proceeds, Entergy Gulf States Reconstruction Funding purchased from Entergy Texas the transition property, which is the right to recover from customers through a transition charge amounts sufficient to service the securitization bonds. The transition property is reflected as a regulatory asset on the consolidated Entergy Texas balance sheet. The creditors of Entergy Texas do not have recourse to the assets or revenues of Entergy Gulf States Reconstruction Funding, including the transition property, and the creditors of Entergy Gulf States Reconstruction Funding do not have recourse to the assets or revenues of Entergy Texas. Entergy Texas has no payment obligations to Entergy Gulf States Reconstruction Funding except to remit transition charge collections.

Entergy Texas Securitization Bonds - Hurricane Ike and Hurricane Gustav

In September 2009 the PUCT authorized the issuance of securitization bonds to recover $566.4 million of Entergy Texas's Hurricane Ike and Hurricane Gustav restoration costs, plus carrying costs and transaction costs, offset by insurance proceeds. In November 2009, Entergy Texas Restoration Funding, LLC (Entergy Texas Restoration Funding), a company wholly-owned and consolidated by Entergy Texas, issued $545.9 million of senior secured transition bonds (securitization bonds). As of December 31, 2020, $106.2 million at 4.38% remain outstanding. Entergy Texas Restoration Funding expects to make principal payments on the bonds over the next two years in the amount of $52 million for 2021 and $54.3 million for 2022.

With the proceeds, Entergy Texas Restoration Funding purchased from Entergy Texas the transition property, which is the right to recover from customers through a transition charge amounts sufficient to service the securitization bonds. The transition property is reflected as a regulatory asset on the consolidated Entergy Texas balance sheet. The creditors of Entergy Texas do not have recourse to the assets or revenues of Entergy Texas Restoration Funding, including the transition property, and the creditors of Entergy Texas Restoration Funding do not have recourse to the assets or revenues of Entergy Texas. Entergy Texas has no payment obligations to Entergy Texas Restoration Funding except to remit transition charge collections.

Grand Gulf Sale-Leaseback Transactions

In 1988, in two separate but substantially identical transactions, System Energy sold and leased back undivided ownership interests in Grand Gulf for the aggregate sum of $500 million. The initial term of the leases expired in July 2015. System Energy renewed the leases for fair market value with renewal terms expiring in July 2036. At the end of the new lease renewal terms, System Energy has the option to repurchase the leased interests in Grand Gulf or renew the leases at fair market value. In the event that System Energy does not renew or purchase the interests, System Energy would surrender such interests and their associated entitlement of Grand Gulf's capacity and energy.

System Energy is required to report the sale-leaseback as a financing transaction in its financial statements. As such, it has recognized debt for the lease obligation and retained the portion of the plant subject to the sale-leaseback on its balance sheet. For financial reporting purposes, System Energy has recognized interest expense on the debt balance and depreciation on the applicable plant balance. The lease payments are recognized as principal and interest payments on the debt balance. However, operating revenues include the recovery of the lease payments because the transactions are accounted for as a sale and leaseback for ratemaking purposes. Consistent

with a recommendation contained in a FERC audit report, System Energy initially recorded as a net regulatory asset the difference between the recovery of the lease payments and the amounts expensed for interest and depreciation and continues to record this difference as a regulatory asset or liability on an ongoing basis, resulting in a zero net balance for the regulatory asset at the end of the lease term. The amount was a net regulatory liability of $55.6 million as of December 31, 2020 and 2019.

As of December 31, 2020, System Energy, in connection with the Grand Gulf sale and leaseback transactions, had future minimum lease payments that are recorded as long-term debt, as follows, which reflects the effect of the December 2013 renewal:

	Amount (In Thousands)
2021	$17,188
2022	17,188
2023	17,188
2024	17,188
2025	17,188
Years thereafter	189,063
Total	275,003
Less: Amount representing interest	240,667
Present value of net minimum lease payments	$34,336

NOTE 6. PREFERRED EQUITY (Entergy Corporation and Entergy Texas)

The number of shares and units authorized and outstanding and dollar value of preferred stock, preferred membership interests, and non-controlling interest for Entergy Corporation subsidiaries as of December 31, 2020 and 2019 are presented below.

	Shares/Units Authorized		Shares/Units Outstanding			
	2020	2019	2020	2019	2020	2019
Entergy Corporation					(Dollars in Thousands)	
Utility:						
Preferred Stock or Preferred Membership Interests without sinking fund:						
Entergy Utility Holding Company, LLC, 7.5% Series (a)	110,000	110,000	110,000	110,000	$107,425	$107,425
Entergy Utility Holding Company, LLC, 6.25% Series (b)	15,000	15,000	15,000	15,000	14,366	14,366
Entergy Utility Holding Company, LLC, 6.75% Series (c)	75,000	75,000	75,000	75,000	73,370	73,370
Entergy Texas, 5.375% Series	1,400,000	1,400,000	1,400,000	1,400,000	35,000	35,000
Total Utility Preferred Stock or Preferred Membership Interests without sinking fund	1,600,000	1,600,000	1,600,000	1,600,000	230,161	230,161
Entergy Wholesale Commodities:						
Preferred Stock without sinking fund:						
Entergy Finance Holding, Inc. 8.75% (d)	250,000	250,000	250,000	250,000	24,249	24,249
Total Subsidiaries' Preferred Stock or Preferred Membership Interests without sinking fund	1,850,000	1,850,000	1,850,000	1,850,000	$254,410	$254,410

(a) In October 2015, Entergy Utility Holding Company, LLC issued 110,000 units of $1,000 liquidation value 7.5% Series A Preferred Membership Interests, all of which are outstanding as of December 31, 2020. The distributions are cumulative and payable quarterly. These units are redeemable on or after January 1, 2036, at Entergy Utility Holding Company, LLC's option, at the fixed redemption price of $1,000 per unit. Dollar amount outstanding is net of $2,575 thousand of preferred stock issuance costs.

(b) In November 2017, Entergy Utility Holding Company, LLC issued 15,000 units of $1,000 liquidation value 6.25% Series B Preferred Membership Interests, all of which are outstanding as of December 31, 2020. The distributions are cumulative and payable quarterly. These units are redeemable on or after February 28, 2038, at Entergy Utility Holding Company, LLC's option, at the fixed redemption price of $1,000 per unit. Dollar amount outstanding is net of $634 thousand of preferred stock issuance costs.

(c) In November 2018, Entergy Utility Holding Company, LLC issued 75,000 units of $1,000 liquidation value 6.75% Series C Preferred Membership Interests, all of which are outstanding as of December 31, 2020. The distributions are cumulative and payable quarterly. These units are redeemable on or after February 28, 2039, at Entergy Utility Holding Company, LLC's option, at the fixed redemption price of $1,000 per unit. Dollar amount outstanding is net of $1,630 thousand of preferred stock issuance costs.

(d) In December 2013, Entergy Finance Holding, Inc. issued 250,000 shares of $100 par value 8.75% Series Preferred Stock, all of which are outstanding as of December 31, 2020. The dividends are cumulative and payable quarterly. The preferred stock is redeemable on or after December 16, 2023, at Entergy Finance Holding, Inc.'s option, at the fixed redemption price of $100 per share. Dollar amount outstanding is net of $751 thousand of preferred stock issuance costs.

The number of shares authorized and outstanding and dollar value of preferred stock for Entergy Texas as of December 31, 2020 and 2019 are presented below.

	Shares Authorized and Outstanding				Call Price per Share as of December 31,
	2020	2019	2020	2019	2020
Entergy Texas Preferred Stock			(Dollars in Thousands)		
Without sinking fund:					
Cumulative, $25 par value:					
5.375% Series (a)	1,400,000	1,400,000	$35,000	$35,000	$—
Total without sinking fund	1,400,000	1,400,000	$35,000	$35,000	

(a) In September 2019, Entergy Texas issued $35 million of 5.375% Series A Preferred Stock, a total of 1,400,000 shares with a liquidation value of $25 per share, all of which are outstanding as of December 31, 2020. The dividends are cumulative and payable quarterly. The preferred stock is redeemable on or after October 15, 2024 at Entergy Texas's option, at a fixed redemption price of $25 per share.

Dividends and distributions paid on all of Entergy Corporation's subsidiaries' preferred stock and membership interests series may be eligible for the dividends received deduction.

Presentation of Preferred Stock without Sinking Fund

Accounting standards regarding non-controlling interests and the classification and measurement of redeemable securities require the classification of preferred securities between liabilities and shareholders' equity on the balance sheet if the holders of those securities have protective rights that allow them to gain control of the board of directors in certain circumstances. These rights would have the effect of giving the holders the ability to potentially redeem their securities, even if the likelihood of occurrence of these circumstances is considered remote. The outstanding preferred stock of Entergy Texas has protective rights with respect to unpaid dividends but provides for the election of board members that would not constitute a majority of the board, and the preferred stock of Entergy Texas is therefore classified as a component of equity.

The outstanding preferred securities of Entergy Utility Holding Company (a Utility subsidiary) and Entergy Finance Holding (an Entergy Wholesale Commodities subsidiary), whose preferred holders have protective rights, are presented between liabilities and equity on Entergy's consolidated balance sheets. The preferred dividends or distributions paid by all subsidiaries are reflected for all periods presented outside of consolidated net income.

NOTE 7. COMMON EQUITY (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Common Stock

Common stock and treasury stock shares activity for Entergy for 2020, 2019, and 2018 is as follows:

	2020		2019		2018	
	Common Shares Issued	Treasury Shares	Common Shares Issued	Treasury Shares	Common Shares Issued	Treasury Shares
Beginning Balance, January 1	270,035,180	70,886,400	261,587,009	72,530,866	254,752,788	74,235,135
Issuances:						
Equity forwards settled	—	—	8,448,171	—	6,834,221	—
Employee Stock-Based Compensation Plans	—	(1,076,511)	—	(1,624,358)	—	(1,683,174)
Directors' Plan	—	(19,543)	—	(20,108)	—	(21,095)
Ending Balance, December 31	270,035,180	69,790,346	270,035,180	70,886,400	261,587,009	72,530,866

Entergy Corporation reissues treasury shares to meet the requirements of the Stock Plan for Outside Directors (Directors' Plan), the four equity plans of Entergy Corporation and Subsidiaries, and certain other stock benefit plans. The Directors' Plan awards to non-employee directors a portion of their compensation in the form of a fixed dollar value of shares of Entergy Corporation common stock.

In October 2010 the Board granted authority for a $500 million share repurchase program. As of December 31, 2020, $350 million of authority remains under the $500 million share repurchase program.

Dividends declared per common share were $3.74 in 2020, $3.66 in 2019, and $3.58 in 2018.

(System Energy)

System Energy paid its parent, Entergy Corporation, distributions out of its common stock of $56.5 million in 2018.

Equity Forward Sale Agreements

In June 2018, Entergy marketed an equity offering of 15.3 million shares of common stock. In lieu of issuing equity at the time of the offering, Entergy entered into forward sale agreements with various investment banks. The equity forwards required Entergy to, at its election prior to June 7, 2019, either (i) physically settle the transactions by issuing the total of 15.3 million shares of its common stock to the investment banks in exchange for net proceeds at the then-applicable forward sale price specified by the agreements (initially $74.45 per share) or (ii) net settle the transactions in whole or in part through the delivery or receipt of cash or shares. The forward sale price was subject to adjustment on a daily basis based on a floating interest rate factor and decreased by other fixed amounts specified in the agreements.

In December 2018, Entergy physically settled a portion of its obligations under the forward sale agreements by delivering 6,834,221 shares of common stock in exchange for cash proceeds of $500 million. The forward sale price used to determine the cash proceeds received by Entergy was calculated based on the initial forward sale price of $74.45 per share as adjusted in accordance with the forward sale agreements. Entergy incurred approximately $728 thousand of common stock issuance costs with the settlement.

In May 2019, Entergy physically settled its remaining obligations under the forward sale agreements by delivering 8,448,171 shares of common stock in exchange for cash proceeds of $608 million. The forward sale price used to determine the cash proceeds received by Entergy was calculated based on the initial forward sale price of $74.45 per share as adjusted in accordance with the forward sale agreements. Entergy incurred approximately $7 thousand of common stock issuance costs with the settlement.

Entergy used the net proceeds for general corporate purposes, which included repayment of commercial paper, outstanding loans under Entergy's revolving credit facility, and other debt.

Retained Earnings and Dividends

Entergy implemented ASU No. 2016-01 "Financial Instruments (Subtopic 825-10): Recognition and Measurement of Financial Assets and Financial Liabilities" effective January 1, 2018. The ASU requires investments in equity securities, excluding those accounted for under the equity method or resulting in consolidation of the investee, to be measured at fair value with changes recognized in net income. Entergy implemented this standard using a modified retrospective method, and recorded an adjustment increasing retained earnings and reducing accumulated other comprehensive income by $633 million as of January 1, 2018 for the cumulative effect of the unrealized gains and losses on investments in equity securities held by the decommissioning trust funds that do not meet the criteria for regulatory accounting treatment. See Note 16 to the financial statements for further discussion of effects of the new standard.

Entergy implemented ASU No. 2016-16, "Income Taxes (Topic 740): Intra-Entity Transfers of Assets Other Than Inventory" effective January 1, 2018. The ASU requires entities to recognize the income tax consequences of intra-entity asset transfers, other than inventory, at the time the transfer occurs. Entergy implemented this standard using a modified retrospective method, and recorded an adjustment decreasing retained earnings by $56 million as of January 1, 2018 for the cumulative effect of recording deferred tax assets on previously-recognized intra-entity asset transfers.

Entergy adopted ASU No. 2018-02, "Income Statement - Reporting Comprehensive Income (Topic 220): Reclassification of Certain Tax Effects from Accumulated Other Comprehensive Income," in the first quarter 2018. The ASU allows a one-time reclassification from accumulated other comprehensive income to retained earnings for certain tax effects resulting from the Tax Cuts and Jobs Act that would otherwise be stranded in accumulated other comprehensive income. Entergy's policy for releasing income tax effects from accumulated other comprehensive income for available-for-sale securities is to use the portfolio approach. Entergy elected to reclassify the $15.5 million of stranded tax effects in accumulated other comprehensive income resulting from the Tax Cuts and Jobs Act to retained earnings ($32 million decrease) or the regulatory liability for income taxes ($16.5 million increase). Entergy's reclassification only includes the effect of the change in the federal corporate income tax rate on accumulated other comprehensive income.

Entergy implemented ASU No. 2017-12 "Derivatives and Hedging (Topic 815): Targeted Improvements to Accounting for Hedging Activities" effective January 1, 2019. The ASU makes a number of amendments to hedge accounting, most significantly changing the recognition and presentation of highly effective hedges. Entergy implemented this standard using a modified retrospective method, and recorded an adjustment increasing retained earnings and increasing accumulated other comprehensive loss by approximately $8 million as of January 1, 2019 for the cumulative effect of the ineffectiveness portion of designated hedges on nuclear power sales.

Entergy implemented ASU 2017-08 "Receivables (Topic 310): Nonrefundable Fees and Other Costs" effective January 1, 2019. The ASU amends the amortization period for certain purchased callable debt securities held at a premium to the earliest call date. Entergy implemented this standard using the modified retrospective approach, and recorded an adjustment decreasing retained earnings and decreasing accumulated other

comprehensive loss by approximately $1 million as of January 1, 2019 for the cumulative effect of the amended amortization period.

Entergy Corporation received dividend payments and distributions from subsidiaries totaling $113 million in 2020, $124 million in 2019, and $27 million in 2018.

Comprehensive Income

Accumulated other comprehensive income (loss) is included in the equity section of the balance sheets of Entergy and Entergy Louisiana. The following table presents changes in accumulated other comprehensive income (loss) for Entergy for the year ended December 31, 2020 by component:

	Cash flow hedges net unrealized gain (loss)	Pension and other postretirement liabilities	Net unrealized investment gain (loss)	Total Accumulated Other Comprehensive Income (Loss)
		(In Thousands)		
Beginning balance, January 1, 2020	$84,206	($557,072)	$25,946	($446,920)
Other comprehensive income (loss) before reclassifications	60,928	(49,113)	41,354	53,169
Amounts reclassified from accumulated other comprehensive income (loss)	(116,415)	71,609	(10,650)	(55,456)
Net other comprehensive income (loss) for the period	(55,487)	22,496	30,704	(2,287)
Ending balance, December 31, 2020	$28,719	($534,576)	$56,650	($449,207)

The following table presents changes in accumulated other comprehensive income (loss) for Entergy for the year ended December 31, 2019 by component:

	Cash flow hedges net unrealized gain (loss)	Pension and other postretirement liabilities	Net unrealized investment gain (loss)	Total Accumulated Other Comprehensive Income (Loss)
	(In Thousands)			
Ending balance, December 31, 2018	($23,135)	($531,922)	($2,116)	($557,173)
Implementation of accounting standards	(7,685)	—	879	(6,806)
Beginning balance, January 1, 2019	($30,820)	($531,922)	($1,237)	($563,979)
Other comprehensive income (loss) before reclassifications	191,147	(93,696)	32,914	130,365
Amounts reclassified from accumulated other comprehensive income (loss)	(76,121)	68,546	(5,731)	(13,306)
Net other comprehensive income (loss) for the period	115,026	(25,150)	27,183	117,059
Ending balance, December 31, 2019	$84,206	($557,072)	$25,946	($446,920)

The following table presents changes in accumulated other comprehensive income (loss) for Entergy Louisiana for the year ended December 31, 2020:

	Pension and Other Postretirement Liabilities
	(In Thousands)
Beginning balance, January 1, 2020	$4,562
Other comprehensive income (loss) before reclassifications	3,002
Amounts reclassified from accumulated other comprehensive income (loss)	(3,237)
Net other comprehensive income (loss) for the period	(235)
Ending balance, December 31, 2020	$4,327

The following table presents changes in accumulated other comprehensive income (loss) for Entergy Louisiana for the year ended December 31, 2019:

	Pension and Other Postretirement Liabilities
	(In Thousands)
Beginning balance, January 1, 2019	($6,153)
Other comprehensive income (loss) before reclassifications	14,591
Amounts reclassified from accumulated other comprehensive income (loss)	(3,876)
Net other comprehensive income (loss) for the period	10,715
Ending balance, December 31, 2019	$4,562

Total reclassifications out of accumulated other comprehensive income (loss) (AOCI) for Entergy for the years ended December 31, 2020 and 2019 are as follows:

	Amounts reclassified from AOCI		Income Statement Location
	2020	2019	
	(In Thousands)		
Cash flow hedges net unrealized gain (loss)			
Power contracts	$147,554	$96,549	Competitive business operating revenues
Interest rate swaps	(194)	(194)	Miscellaneous - net
Total realized gain (loss) on cash flow hedges	147,360	96,355	
Income taxes	(30,945)	(20,234)	Income taxes
Total realized gain (loss) on cash flow hedges (net of tax)	$116,415	$76,121	
Pension and other postretirement liabilities			
Amortization of prior-service costs	$20,769	$21,300	(a)
Amortization of loss	(110,185)	(83,246)	(a)
Settlement loss	(243)	(25,155)	(a)
Total amortization and settlement loss	(89,659)	(87,101)	
Income taxes	18,050	18,555	Income taxes
Total amortization and settlement loss (net of tax)	($71,609)	($68,546)	
Net unrealized investment gain (loss)			
Realized gain (loss)	$16,851	$9,069	Interest and investment income
Income taxes	(6,201)	(3,338)	Income taxes
Total realized investment gain (loss) (net of tax)	$10,650	$5,731	
Total reclassifications for the period (net of tax)	$55,456	$13,306	

(a) These accumulated other comprehensive income (loss) components are included in the computation of net periodic pension and other postretirement cost. See Note 11 to the financial statements for additional details.

Total reclassifications out of accumulated other comprehensive income (loss) (AOCI) for Entergy Louisiana for the years ended December 31, 2020 and 2019 are as follows:

	Amounts reclassified from AOCI		Income Statement Location
	2020	2019	
	(In Thousands)		
Pension and other postretirement liabilities			
Amortization of prior-service costs	$6,179	$7,349	(a)
Amortization of loss	(1,557)	(2,106)	(a)
Settlement loss	(243)	—	(a)
Total amortization	4,379	5,243	
Income taxes	(1,142)	(1,367)	Income taxes
Total amortization (net of tax)	3,237	3,876	
Total reclassifications for the period (net of tax)	$3,237	$3,876	

(a) These accumulated other comprehensive income (loss) components are included in the computation of net periodic pension and other postretirement cost. See Note 11 to the financial statements for additional details.

NOTE 8. COMMITMENTS AND CONTINGENCIES (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Entergy and the Registrant Subsidiaries are involved in a number of legal, regulatory, and tax proceedings before various courts, regulatory commissions, and governmental agencies in the ordinary course of business. While management is unable to predict with certainty the outcome of such proceedings, management does not believe that the ultimate resolution of these matters will have a material adverse effect on Entergy's results of operations, cash flows, or financial condition. Entergy discusses regulatory proceedings in Note 2 to the financial statements and discusses tax proceedings in Note 3 to the financial statements.

Vidalia Purchased Power Agreement

Entergy Louisiana has an agreement extending through the year 2031 to purchase energy generated by a hydroelectric facility known as the Vidalia project. Entergy Louisiana made payments under the contract of approximately $132.7 million in 2020, $135.5 million in 2019, and $137.6 million in 2018. If the maximum percentage (94%) of the energy is made available to Entergy Louisiana, current production projections would require estimated payments of approximately $141 million in 2021, and a total of $1.41 billion for the years 2022 through 2031. Entergy Louisiana currently recovers the costs of the purchased energy through its fuel adjustment clause.

In an LPSC-approved settlement related to tax benefits from the tax treatment of the Vidalia contract, Entergy Louisiana agreed to credit rates by $11 million each year for up to 10 years, beginning in October 2002. In

October 2011 the LPSC approved a settlement under which Entergy Louisiana agreed to provide credits to customers by crediting billings an additional $20.235 million per year for 15 years beginning January 2012. Entergy Louisiana recorded a regulatory charge and a corresponding regulatory liability to reflect this obligation. The settlement agreement allowed for an adjustment to the credits if, among other things, there was a change in the applicable federal or state income tax rate. As a result of the enactment of the Tax Cuts and Jobs Act, in December 2017, and the lowering of the federal corporate income tax rate from 35% to 21%, the Vidalia purchased power regulatory liability was reduced by $30.5 million, with a corresponding increase to Other regulatory credits on the income statement. The effects of the Tax Cuts and Jobs Act are discussed further in Note 3 to the financial statements.

ANO Damage, Outage, and NRC Reviews

In March 2013, during a scheduled refueling outage at ANO 1, a contractor-owned and operated heavy-lifting apparatus collapsed while moving the generator stator out of the turbine building. The collapse resulted in the death of an ironworker and injuries to several other contract workers, caused ANO 2 to shut down, and damaged the ANO turbine building. The total cost of assessment, restoration of off-site power, site restoration, debris removal, and replacement of damaged property and equipment was approximately $95 million. Entergy Arkansas has pursued its options for recovering damages that resulted from the stator drop, including its insurance coverage and legal action. Entergy Arkansas collected $50 million in 2014 from Nuclear Electric Insurance Limited (NEIL), a mutual insurance company that provides property damage coverage to the members' nuclear generating plants. Entergy Arkansas also collected a total of $21 million in 2018 as a result of stator-related settlements.

In addition, Entergy Arkansas incurred replacement power costs for ANO 2 power during its outage and incurred incremental replacement power costs for ANO 1 power because the outage extended beyond the originally-planned duration of the refueling outage. In February 2014 the APSC authorized Entergy Arkansas to retain the $65.9 million in its deferred fuel balance with recovery to be reviewed in a later period after more information regarding various claims associated with the ANO stator incident is available.

In March 2015, after several NRC inspections and regulatory conferences, arising from the stator incident, the NRC placed ANO into the "multiple/repetitive degraded cornerstone column," or Column 4, of the NRC's Reactor Oversight Process Action Matrix. Entergy Arkansas incurred incremental costs of approximately $53 million in 2015 to prepare for the NRC inspections that began in early 2016 in order to address the issues required to move ANO back to "licensee response" or Column 1 of the NRC's Reactor Oversight Process Action Matrix. Excluding remediation and response costs that resulted from the additional NRC inspection activities, Entergy Arkansas incurred approximately $44 million in 2016 and $7 million in 2017 in support of NRC inspection activities and to implement Entergy Arkansas's performance improvement initiatives developed in 2015. In June 2018 the NRC moved ANO 1 and ANO 2 into the "licensee response column," or Column 1, of the NRC's Reactor Oversight Process Action Matrix.

In July 2017, Entergy Arkansas filed for a change in rates pursuant to its formula rate plan rider. In that proceeding, the APSC approved a settlement agreement agreed upon by the parties, including a provision that requires Entergy Arkansas to initiate a regulatory proceeding for the purpose of recovering funds currently withheld from rates and related to the stator incident, including the $65.9 million of deferred fuel and purchased energy costs and costs related to the incremental oversight previously noted, subject to certain timelines and conditions set forth in the settlement agreement.

Spent Nuclear Fuel Litigation

Under the Nuclear Waste Policy Act of 1982, the DOE is required, for a specified fee, to construct storage facilities for, and to dispose of, all spent nuclear fuel and other high-level radioactive waste generated by domestic nuclear power reactors. Entergy's nuclear owner/licensee subsidiaries have been charged fees for the estimated future disposal costs of spent nuclear fuel in accordance with the Nuclear Waste Policy Act of 1982. The affected

Entergy companies entered into contracts with the DOE, whereby the DOE is to furnish disposal services at a cost of one mill per net kWh generated and sold after April 7, 1983, plus a one-time fee for generation prior to that date. Entergy considers all costs incurred for the disposal of spent nuclear fuel, except accrued interest, to be proper components of nuclear fuel expense. Provisions to recover such costs have been or will be made in applications to regulatory authorities for the Utility plants. Following the defunding of the Yucca Mountain spent fuel repository program, the National Association of Regulatory Utility Commissioners and others sued the government seeking cessation of collection of the one mill per net kWh generated and sold after April 7, 1983 fee. In November 2013 the D.C. Circuit Court of Appeals ordered the DOE to submit a proposal to Congress to reset the fee to zero until the DOE complies with the Nuclear Waste Policy Act or Congress enacts an alternative waste disposal plan. In January 2014 the DOE submitted the proposal to Congress under protest, and also filed a petition for rehearing with the D.C. Circuit. The petition for rehearing was denied. The zero spent fuel fee went into effect prospectively in May 2014.

Because the DOE has not begun accepting spent fuel, it is in non-compliance with the Nuclear Waste Policy Act of 1982 and has breached its spent fuel disposal contracts. As a result of the DOE's failure to begin disposal of spent nuclear fuel in 1998 pursuant to the Nuclear Waste Policy Act of 1982 and the spent fuel disposal contracts, Entergy's nuclear owner/licensee subsidiaries have incurred and will continue to incur damages. Beginning in November 2003 these subsidiaries have pursued litigation to recover the damages caused by the DOE's delay in performance. Following are details of final judgments recorded by Entergy in 2018, 2019, and 2020 related to Entergy's nuclear owner licensee subsidiaries' litigation with the DOE.

In September 2018 the DOE submitted an offer of judgment to resolve claims in the second round Entergy Nuclear Generation Company case involving Pilgrim. The $62 million offer was accepted by Entergy Nuclear Generation Company, and the U.S. Court of Federal Claims issued a judgment in that amount in favor of Entergy Nuclear Generation Company. Entergy received payment from the U.S. Treasury in October 2018. The effect in 2018 of recording the judgment was a reduction to plant and other operation and maintenance expenses. The Pilgrim damages awarded included $60 million related to costs previously capitalized and $2 million related to costs previously recorded as other operation and maintenance expense. Of the $60 million, Entergy recorded $4 million as a reduction to previously-recorded depreciation expense, a $10 million reduction to bring its remaining Pilgrim plant asset balance to zero, and the excess $46 million as a reduction to other operation and maintenance expense because Pilgrim's plant asset balance is fully impaired.

In August 2019 the U.S. Court of Federal Claims issued a final judgment in the amount of $19 million in favor of Entergy Louisiana against the DOE in the second round River Bend damages case. Entergy Louisiana received payment from the U.S. Treasury in September 2019. The effects in 2019 of recording the judgment were reductions to plant, nuclear fuel expense, and other operation and maintenance expense. The River Bend damages awarded included $12 million related to costs previously recorded as nuclear fuel expense, $5 million related to costs previously recorded as other operation and maintenance expense, and $2 million in costs previously capitalized.

In December 2019 the DOE submitted an offer of judgment to resolve claims in the third round ANO damages case. The $80 million offer was accepted by Entergy Arkansas, and the U.S. Court of Federal Claims issued a judgment in that amount in favor of Entergy Arkansas and against the DOE. Entergy Arkansas received payment from the U.S. Treasury in January 2020. The effects in 2019 of recording the judgment were reductions to plant, nuclear fuel expense, other operation and maintenance expense, depreciation expense, and taxes other than income taxes. The ANO damages awarded included $55 million in costs previously capitalized, $12 million related to costs previously recorded as nuclear fuel expense, $12 million related to costs previously recorded as other operation and maintenance expense, and $1 million related to costs previously recorded as taxes other than income taxes. Of the $55 million, Entergy Arkansas, recorded $5 million as a reduction to previously-recorded depreciation expense.

In December 2019 the Entergy FitzPatrick Properties (formerly Entergy Nuclear FitzPatrick) and the DOE entered into a settlement agreement and the U.S. Court of Federal Claims issued a judgment in the amount of $7

million in favor of Entergy FitzPatrick Properties against the DOE in the second round FitzPatrick damages case. Entergy received payment from the U.S. Treasury in January 2020. Substantially all of the FitzPatrick damages awarded relate to costs previously expensed as asset write-offs, impairments, and related charges, and in December 2019 Entergy recorded $7 million as a reduction to asset write-offs, impairments, and related charges.

In April 2020 the U.S. Court of Federal Claims issued a final judgment in the amount of $33 million in favor of Entergy Louisiana against the DOE in the second round Waterford 3 damages case. Entergy Louisiana received payment from the U.S. Treasury in June 2020. The effects of recording the judgment were reductions to plant, nuclear fuel expense, and other operation and maintenance expense. The Waterford 3 damages awarded included $20 million related to costs previously recorded as nuclear fuel expense, $8 million related to costs previously recorded as other operation and maintenance expenses, and $5 million in costs previously capitalized.

In October 2020 the U.S. Court of Federal Claims issued a final judgment in the amount of $40.5 million in favor of System Energy and against the DOE in the third round Grand Gulf damages case. System Energy received payment from the U.S. Treasury in December 2020. The effects of recording the judgment were reductions to plant, nuclear fuel expense, and other operation and maintenance expense. The amounts of Grand Gulf damages awarded related to System Energy's 90% ownership of Grand Gulf included $5 million related to costs previously capitalized, $21 million related to costs previously recorded as nuclear fuel expense, and $10 million related to costs previously recorded as other operation and maintenance expense.

In January 2021 the U.S. Court of Federal Clams issued a final judgment in the amount of $23.1 million in favor of Entergy Nuclear Palisades and against the DOE in the second round Palisades damages case. Entergy received payment from the U.S. Treasury in February 2021. The effects of recording the judgment were reductions to plant, other operation and maintenance expense, and taxes other than income taxes. The Palisades damages awarded included $15.7 million related to costs previously capitalized, $7.1 million related to costs previously recorded as other operation and maintenance expenses, and $0.3 million related to costs previously recorded as taxes other than income taxes. Of the $15.7 million previously capitalized, Entergy recorded $9.1 million as a reduction to previously-recorded depreciation expense.

Management cannot predict the timing or amount of any potential recoveries on other claims filed by Entergy subsidiaries, and cannot predict the timing of any eventual receipt from the DOE of the U.S. Court of Federal Claims damage awards.

Nuclear Insurance

Third Party Liability Insurance

The Price-Anderson Act requires that reactor licensees purchase insurance and participate in a secondary insurance pool that provides insurance coverage for the public in the event of a nuclear power plant accident. The costs of this insurance are borne by the nuclear power industry. Congress amended and renewed the Price-Anderson Act in 2005 for a term through 2025. The Price-Anderson Act requires nuclear power plants to show evidence of financial protection in the event of a nuclear accident. This protection must consist of two layers of coverage:

1. The primary level is private insurance underwritten by American Nuclear Insurers (ANI) and provides public liability insurance coverage of $450 million for each operating reactor. If this amount is not sufficient to cover claims arising from an accident, the second level, Secondary Financial Protection, applies.
2. Within the Secondary Financial Protection level, each nuclear reactor has a contingent obligation to pay a retrospective premium, equal to its proportionate share of the loss in excess of the primary level, regardless of proximity to the incident or fault, up to a maximum of approximately $137.6 million per reactor per incident (Entergy's maximum total contingent obligation per incident is $1.101 billion). This retrospective

premium is payable at a rate currently set at approximately $21 million per year per incident per nuclear power reactor.

3. In the event that one or more acts of terrorism cause a nuclear power plant accident, which results in third-party damages – off-site property and environmental damage, off-site bodily injury, and on-site third-party bodily injury (i.e. contractors), the primary level provided by ANI combined with the Secondary Financial Protection would provide approximately $14 billion in coverage. The Terrorism Risk Insurance Reauthorization Act of 2007 created a government program that provides for up to $100 billion in coverage in excess of existing coverage for a terrorist event. Under current law, the Terrorism Risk Insurance Act extends through 2027.

The shutdown Big Rock Point facility maintains its NRC site specific statutory nuclear liability insurance requirement limit of $44.4 million.

Currently, 97 nuclear reactors are participating in the Secondary Financial Protection program that provides approximately $13 billion in secondary layer insurance coverage to compensate the public in the event of a nuclear power reactor accident. The Price-Anderson Act provides that all potential liability for a nuclear accident is limited to the amounts of insurance coverage available under the primary and secondary layers.

Entergy Arkansas and Entergy Louisiana each have two licensed reactors. System Energy has one licensed reactor (10% of Grand Gulf is owned by a non-affiliated company (Cooperative Energy) that would share on a pro-rata basis in any retrospective premium assessment to System Energy under the Price-Anderson Act). The Entergy Wholesale Commodities segment includes the ownership, operation, and decommissioning of three nuclear power reactors and the ownership of the shutdown Indian Point 1 reactor and Big Rock Point facility. Indian Point 2 was shutdown in April 2020 and has been defueled successfully as of May 2020. Indian Point 3 and Palisades are scheduled for shutdown in April 2021 and May 2022, respectively. The Entergy Wholesale Commodities segment previously included two nuclear power reactors that were sold in 2019. Vermont Yankee was sold in January 2019 and Pilgrim was sold in August 2019.

Property Insurance

Entergy's nuclear owner/licensee subsidiaries are members of NEIL, a mutual insurance company that provides property damage coverage, including decontamination and reactor stabilization, to the members' nuclear generating plants. The property damage insurance limits procured by Entergy for its Utility plants and Entergy Wholesale Commodity plants are in compliance with the financial protection requirements of the NRC.

The Utility plants' (ANO 1 and 2, Grand Gulf, River Bend, and Waterford 3) property damage insurance limits are $1.5 billion per occurrence at each plant with an additional $100 million per nuclear property occurrence that is shared among the plants. Property damage from earth movement is excluded from the first $500 million in coverage for all Utility plants. Property damage from flood is excluded from the first $500 million in coverage at ANO 1 and 2 and Grand Gulf. Property damage from flood for Waterford 3 and River Bend includes a deductible of $10 million plus an additional 10% of the amount of the loss in excess of $10 million, up to a maximum deductible of $50 million. Property damage from wind for all of the Utility nuclear plants includes a deductible of $10 million plus an additional 10% of the amount of the loss in excess of $10 million, up to a total maximum deductible of $50 million.

The Entergy Wholesale Commodities' plants (Palisades, Indian Point 2, Indian Point 3, and Big Rock Point) have property damage insurance limits as follows: Big Rock Point - $50 million per occurrence; Palisades - $1.115 billion per occurrence; and Indian Point - $1.06 billion per occurrence. For losses that are considered non-nuclear in nature, the property damage insurance limit at Palisades and Indian Point is $500 million. Property damage from wind and flood at Indian Point includes a deductible of $10 million plus an additional 10% of the amount of the loss in excess of $10 million, up to a maximum deductible of $50 million, and property damage from earth movement at Indian Point is excluded. Property damage from wind, flood, and earth movement at Palisades includes a deductible

of $10 million plus an additional 10% of the amount of the loss in excess of $10 million, up to a maximum deductible of $50 million. Property damage from wind, flood, and earth movement at Big Rock Point includes a deductible of $10 million plus an additional 10% of the amount of the loss in excess of $10 million, up to a maximum deductible of $14 million.

The valuation basis of the insured property at Palisades and Indian Point have been changed from replacement cost to actual cash value, given the sites' ages, anticipated ownership horizon and/or shutdown status.

In addition, Waterford 3 and Grand Gulf are also covered under NEIL's Accidental Outage Coverage program. Due to Entergy's gradual exit from the merchant/wholesale power business, Entergy no longer purchases Accidental Outage Coverage for its non-regulated, non-generation assets. Accidental outage coverage provides indemnification for the actual cost incurred in the event of an unplanned outage resulting from property damage covered under the NEIL Primary Property Insurance policy, subject to a deductible period. The indemnification for the actual cost incurred is based on market power prices at the time of the loss. After the deductible period has passed, weekly indemnities for an unplanned outage, covered under NEIL's Accidental Outage Coverage program, would be paid according to the amounts listed below:

- 100% of the weekly indemnity for each week for the first payment period of 52 weeks; then
- 80% of the weekly indemnity for each week for the second payment period of 52 weeks; and thereafter
- 80% of the weekly indemnity for an additional 58 weeks for the third and final payment period.

Under the property damage and accidental outage insurance programs, all NEIL insured plants could be subject to assessments should losses exceed the accumulated funds available from NEIL. Effective April 1, 2020, the maximum amounts of such possible assessments per occurrence were as follows:

	Assessments
	(In Millions)
Utility:	
Entergy Arkansas	$29.6
Entergy Louisiana	$51.8
Entergy Mississippi	$0.11
Entergy New Orleans	$0.11
Entergy Texas	N/A
System Energy	$22.4
Entergy Wholesale Commodities	$—

Potential assessments for the Entergy Wholesale Commodities plants are covered by insurance obtained through NEIL's reinsurers.

NRC regulations provide that the proceeds of this insurance must be used, first, to render the reactor safe and stable, and second, to complete decontamination operations. Only after proceeds are dedicated for such use and regulatory approval is secured would any remaining proceeds be made available for the benefit of plant owners or their creditors.

In the event that one or more acts of terrorism causes property damage under one or more or all nuclear insurance policies issued by NEIL (including, but not limited to, those described above) within 12 months from the date the first property damage occurs, the maximum recovery under all such nuclear insurance policies shall be an aggregate not exceeding $3.24 billion plus the additional amounts recovered for such losses from reinsurance, indemnity, and any other sources applicable to such losses.

Non-Nuclear Property Insurance

Entergy's non-nuclear property insurance program provides coverage on a system-wide basis for Entergy's non-nuclear assets. The insurance program provides coverage for property damage up to $400 million per occurrence in excess of a $20 million self-insured retention except for property damage caused by the following: earthquake shock, flood, and named windstorm, including associated storm surge. For earthquake shock and flood, the insurance program provides coverage up to $400 million on an annual aggregate basis in excess of a $40 million self-insured retention. For named windstorm and associated storm surge, the insurance program provides coverage up to $125 million on an annual aggregate basis in excess of a $40 million self-insured retention. The coverage provided by the insurance program for the Entergy New Orleans gas distribution system is limited to $50 million per occurrence and is subject to the same annual aggregate limits and retentions listed above for earthquake shock, flood, and named windstorm, including associated storm surge.

Covered property generally includes power plants, substations, facilities, inventories, and gas distribution-related properties. Excluded property generally includes transmission and distribution lines, poles, and towers. For substations valued at $5 million or less, coverage for named windstorm and associated storm surge is excluded. This coverage is in place for Entergy Corporation, the Registrant Subsidiaries, and certain other Entergy subsidiaries. Entergy also purchases $300 million in terrorism insurance coverage for its conventional property. The Terrorism Risk Insurance Reauthorization Act of 2007 created a government program that provides for up to $100 billion in coverage in excess of existing coverage for a terrorist event. Under current law, the Terrorism Risk Insurance Act extends through 2027.

Employment and Labor-related Proceedings

The Registrant Subsidiaries and other Entergy subsidiaries are responding to various lawsuits in both state and federal courts and to other labor-related proceedings filed by current and former employees, recognized bargaining representatives, and certain third parties. Generally, the amount of damages being sought is not specified in these proceedings. These actions include, but are not limited to, allegations of wrongful employment actions; wage disputes and other claims under the Fair Labor Standards Act or its state counterparts; claims of race, gender, age, and disability discrimination; disputes arising under collective bargaining agreements; unfair labor practice proceedings and other administrative proceedings before the National Labor Relations Board or concerning the National Labor Relations Act; claims of retaliation; claims of harassment and hostile work environment; and claims for or regarding benefits under various Entergy Corporation-sponsored plans. Entergy and the Registrant Subsidiaries are responding to these lawsuits and proceedings and deny liability to the claimants. Management believes that loss exposure has been and will continue to be handled so that the ultimate resolution of these matters will not be material, in the aggregate, to the financial position, results of operation, or cash flows of Entergy or the Utility operating companies.

Asbestos Litigation (Entergy Arkansas, Entergy Louisiana, Entergy New Orleans, and Entergy Texas)

Numerous lawsuits have been filed in state courts against primarily Entergy Texas and Entergy Louisiana by individuals alleging exposure to asbestos while working at Entergy facilities between 1955 and 1980. Entergy is being sued as a premises owner. Many other defendants are named in these lawsuits as well. Currently, there are approximately 200 lawsuits involving approximately 350 claimants. Management believes that adequate provisions have been established to cover any exposure. Additionally, negotiations continue with insurers to recover reimbursements. Management believes that loss exposure has been and will continue to be handled so that the ultimate resolution of these matters will not be material, in the aggregate, to the financial position, results of operation, or cash flows of the Utility operating companies.

Grand Gulf - Related Agreements

Unit Power Sales Agreement (Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and System Energy)

System Energy has agreed to sell all of its share of capacity and energy from Grand Gulf to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans in accordance with specified percentages (Entergy Arkansas-36%, Entergy Louisiana-14%, Entergy Mississippi-33%, and Entergy New Orleans-17%) as ordered by the FERC. Charges under this agreement are paid in consideration for the purchasing companies' respective entitlement to receive capacity and energy and are payable irrespective of the quantity of energy delivered. The agreement will remain in effect until terminated by the parties and the termination is approved by the FERC, most likely upon Grand Gulf's retirement from service. In December 2016 the NRC granted the extension of Grand Gulf's operating license to 2044. Monthly obligations are based on actual capacity and energy costs. The average monthly payments for 2020 under the agreement were approximately $15.7 million for Entergy Arkansas, $6.3 million for Entergy Louisiana, $13.8 million for Entergy Mississippi, and $7.6 million for Entergy New Orleans. See Note 2 to the financial statements for discussion of the complaints filed with the FERC against System Energy seeking a reduction in the return on equity component of the Unit Power Sales Agreement.

Availability Agreement (Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and System Energy)

Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans are individually obligated to make payments or subordinated advances to System Energy in accordance with stated percentages (Entergy Arkansas-17.1%, Entergy Louisiana-26.9%, Entergy Mississippi-31.3%, and Entergy New Orleans-24.7%) in amounts that, when added to amounts received under the Unit Power Sales Agreement or otherwise, are adequate to cover all of System Energy's operating expenses as defined, including an amount sufficient to amortize the cost of Grand Gulf 2 over 27 years (See Reallocation Agreement terms below) and expenses incurred in connection with a permanent shutdown of Grand Gulf. System Energy has assigned its rights to payments and advances to certain creditors as security for certain obligations. Since commercial operation of Grand Gulf began, payments under the Unit Power Sales Agreement have exceeded the amounts payable under the Availability Agreement. Accordingly, no payments under the Availability Agreement have ever been required. If Entergy Arkansas or Entergy Mississippi fails to make its Unit Power Sales Agreement payments, and System Energy is unable to obtain funds from other sources, Entergy Louisiana and Entergy New Orleans could become subject to claims or demands by System Energy or its creditors for payments or advances under the Availability Agreement (or the assignments thereof) equal to the difference between their required Unit Power Sales Agreement payments and their required Availability Agreement payments.

Reallocation Agreement (Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and System Energy)

System Energy, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans entered into the Reallocation Agreement relating to the sale of capacity and energy from Grand Gulf and the related costs, in which Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans agreed to assume all of Entergy Arkansas's responsibilities and obligations with respect to Grand Gulf under the Availability Agreement. The FERC's decision allocating a portion of Grand Gulf capacity and energy to Entergy Arkansas supersedes the Reallocation Agreement as it relates to Grand Gulf. Responsibility for any Grand Gulf 2 amortization amounts has been individually allocated (Entergy Louisiana-26.23%, Entergy Mississippi-43.97%, and Entergy New Orleans-29.80%) under the terms of the Reallocation Agreement. However, the Reallocation Agreement does not affect Entergy Arkansas's obligation to System Energy's lenders under the assignments referred to in the preceding paragraph. Entergy Arkansas would be liable for its share of such amounts if Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans were unable to meet their contractual obligations. No payments of any

amortization amounts will be required so long as amounts paid to System Energy under the Unit Power Sales Agreement, including other funds available to System Energy, exceed amounts required under the Availability Agreement, which is expected to be the case for the foreseeable future.

NOTE 9. ASSET RETIREMENT OBLIGATIONS (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Accounting standards require companies to record liabilities for all legal obligations associated with the retirement of long-lived assets that result from the normal operation of the assets. For Entergy, substantially all of its asset retirement obligations consist of its liability for decommissioning its nuclear power plants. In addition, an insignificant amount of removal costs associated with non-nuclear power plants is also included in the decommissioning and asset retirement costs line item on the balance sheets.

These liabilities are recorded at their fair values (which are the present values of the estimated future cash outflows) in the period in which they are incurred, with an accompanying addition to the recorded cost of the long-lived asset. The asset retirement obligation is accreted each year through a charge to expense, to reflect the time value of money for this present value obligation. The accretion will continue through the completion of the asset retirement activity. The amounts added to the carrying amounts of the long-lived assets will be depreciated over the useful lives of the assets. The application of accounting standards related to asset retirement obligations is earnings neutral to the rate-regulated business of the Registrant Subsidiaries.

In accordance with ratemaking treatment and as required by regulatory accounting standards, the depreciation provisions for the Registrant Subsidiaries include a component for removal costs that are not asset retirement obligations under accounting standards. In accordance with regulatory accounting principles, the Registrant Subsidiaries have recorded regulatory assets (liabilities) in the following amounts to reflect their estimates of the difference between estimated incurred removal costs and estimated removal costs expected to be recovered in rates:

	December 31,	
	2020	**2019**
	(In Millions)	
Entergy Arkansas	$212.6	$168.9
Entergy Louisiana	$302.5	($2.4)
Entergy Mississippi	$107.3	$80.8
Entergy New Orleans	$63.2	$52.9
Entergy Texas	$115.3	$42.5
System Energy	$92.9	$75.9

As of December 31, 2020 the regulatory asset for removal costs for the Utility operating companies includes amounts related to Hurricane Laura, Hurricane Delta, and Hurricane Zeta restoration costs.

The cumulative decommissioning and retirement cost liabilities and expenses recorded in 2020 and 2019 by Entergy were as follows:

	Liabilities as of December 31, 2019	Accretion	Spending	Liabilities as of December 31, 2020
		(In Millions)		
Entergy	$6,159.2	$394.6	($84.3)	$6,469.5
Utility				
Entergy Arkansas	1,242.6	73.3	(1.7)	1,314.2
Entergy Louisiana	1,497.3	76.0	—	1,573.3
Entergy Mississippi	9.7	0.6	(0.5)	9.8
Entergy New Orleans	3.5	0.3	—	3.8
Entergy Texas	7.6	0.5	—	8.1
System Energy	931.7	37.2	—	968.9
Entergy Wholesale Commodities				
Big Rock Point	40.3	3.3	(2.5)	41.1
Indian Point 1	238.6	20.4	(12.4)	246.6
Indian Point 2	829.0	69.4	(58.6)	839.8
Indian Point 3	808.4	67.4	(6.4)	869.4
Palisades	549.8	46.4	(2.1)	594.1
Other (a)	0.5	—	—	0.5

	Liabilities as of December 31, 2018	Accretion	Change in Cash Flow Estimate	Spending	Dispositions	Liabilities as of December 31, 2019
			(In Millions)			
Entergy	$6,923.4	$414.0	$273.7	($45.6)	($1,406.3)	$6,159.2
Utility						
Entergy Arkansas	1,048.4	68.0	126.2	—	—	1,242.6
Entergy Louisiana	1,280.3	69.5	147.5	—	—	1,497.3
Entergy Mississippi	9.2	0.5	—	—	—	9.7
Entergy New Orleans	3.3	0.2	—	—	—	3.5
Entergy Texas	7.2	0.4	—	—	—	7.6
System Energy	896.0	35.7	—	—	—	931.7
Entergy Wholesale Commodities						
Big Rock Point	39.7	3.2	—	(2.6)	—	40.3
Indian Point 1	227.9	19.5	—	(8.8)	—	238.6
Indian Point 2	768.0	65.5	—	(4.5)	—	829.0
Indian Point 3	750.6	62.5	—	(4.7)	—	808.4
Palisades	508.0	42.9	—	(1.1)	—	549.8
Pilgrim	816.5	44.1	—	(23.9)	(836.7) (b)	—
Vermont Yankee	567.9	1.7	—	—	(569.6) (b)	—
Other (a)	0.4	0.1	—	—	—	0.5

(a) See "**Coal Combustion Residuals**" below for additional discussion regarding the asset retirement obligations related to coal combustion residuals management.

(b) See Note 14 to the financial statements for discussion of the sale of the Pilgrim plant to Holtec International in August 2019 and the sale of the Vermont Yankee plant to NorthStar in January 2019.

Nuclear Plant Decommissioning

Entergy periodically reviews and updates estimated decommissioning costs. The actual decommissioning costs may vary from the estimates because of the timing of plant decommissioning, regulatory requirements, changes in technology, and increased costs of labor, materials, and equipment. As described below, during 2019 and 2018, Entergy updated decommissioning cost estimates for certain nuclear power plants. Entergy did not update decommissioning cost estimates in 2020.

Utility

In the first quarter 2019, Entergy Arkansas recorded a revision to its estimated decommissioning cost liabilities for ANO 1 and ANO 2 as a result of a revised decommissioning cost study. The revised estimates resulted in a $126.2 million increase in its decommissioning cost liabilities, along with corresponding increases in the related asset retirement cost assets that will be depreciated over the remaining lives of the units.

In the second quarter 2019, Entergy Louisiana recorded a revision to its estimated decommissioning cost liability for Waterford 3 as a result of a revised decommissioning cost study. The revised estimate resulted in a $147.5 million increase in its decommissioning cost liability, along with a corresponding increase in the related asset retirement cost asset that will be depreciated over the remaining useful life of the unit.

Entergy Wholesale Commodities

Pilgrim

Entergy Nuclear Generation Company filed its Post-Shutdown Decommissioning Activities report (PSDAR) with the NRC in the fourth quarter 2018 for the Pilgrim plant in anticipation of its May 2019 shutdown. As part of the development of the PSDAR, Entergy obtained a revised decommissioning cost study in the third quarter 2018. The revised estimate resulted in a $117.5 million increase in the decommissioning cost liability and a corresponding impairment charge.

Vermont Yankee

In the fourth quarter 2018, Entergy Wholesale Commodities recorded a revision to its estimated decommissioning cost liability for Vermont Yankee. The revised estimate resulted in a $293 million increase in the decommissioning cost liability, along with a corresponding increase in the related asset retirement cost asset. The revision was prompted by the progress of the Vermont Yankee sales transaction, which is described in Note 14 to the financial statements. Entergy accordingly evaluated the Vermont Yankee asset retirement obligation in light of the terms of the sale transaction, upon determining that Vermont Yankee was in held for sale status. Based on the terms of the sales agreement, which include Entergy receiving a note receivable from the purchaser, Entergy determined that $165 million of the asset retirement cost was impaired, and it was accordingly written down in the fourth quarter 2018. The Vermont Yankee plant was sold to NorthStar in January 2019.

NRC Filings Regarding Trust Funding Levels

Plant owners are required to provide the NRC with a biennial report (annually for units that have shut down or will shut down within five years), based on values as of December 31, addressing the owners' ability to meet the NRC minimum funding levels. Depending on the value of the trust funds, plant owners may be required to take steps, such as providing financial guarantees through letters of credit or parent company guarantees or making additional contributions to the trusts, to ensure that the trusts are adequately funded and that NRC minimum funding requirements are met.

As nuclear plants individually approach and begin decommissioning, filings will be submitted to the NRC for planned shutdown activities. These filings with the NRC also determine whether financial assurance may be required in addition to the nuclear decommissioning trust fund.

Coal Combustion Residuals

In June 2010 the EPA issued a proposed rule on coal combustion residuals (CCRs) that contained two primary regulatory options: (1) regulating CCRs destined for disposal in landfills or received (including stored) in surface impoundments as so-called "special wastes" under the hazardous waste program of Resource Conservation and Recovery Act (RCRA) Subtitle C; or (2) regulating CCRs destined for disposal in landfills or surface impoundments as non-hazardous wastes under Subtitle D of RCRA. Under both options, CCRs that are beneficially reused in certain processes would remain excluded from hazardous waste regulation. In April 2015 the EPA published the final CCR rule with the material being regulated under the second scenario presented above - as non-hazardous wastes regulated under RCRA Subtitle D. The final regulations create new compliance requirements including modified storage, new notification and reporting practices, product disposal considerations, and CCR unit closure criteria. Entergy believes that on-site disposal options will be available at its facilities, to the extent needed for CCR that cannot be transferred for beneficial reuse. In December 2016 the Water Infrastructure Improvements for the Nation Act (WIIN Act) was signed into law, which authorizes states to regulate coal ash rather than leaving primary enforcement to citizen suit actions. States may submit to the EPA proposals for permit programs.

NOTE 10. LEASES (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Entergy implemented ASU 2016-02, "Leases (Topic 842)," effective January 1, 2019. The ASU's core principle is that "a lessee should recognize the assets and liabilities that arise from leases." The ASU considers that "all leases create an asset and a liability," and accordingly requires recording the assets and liabilities related to all leases with a term greater than 12 months. Concurrent with the implementation of ASU 2016-02, Entergy implemented ASU 2018-01, "Leases (Topic 842): Land Easement Practical Expedient for Transition to Topic 842," which provided Entergy the option to elect not to evaluate existing land easements that are not currently accounted for as leases under the previous lease standard, and ASU 2018-11, "Leases (Topic 842): Targeted Improvements," which intended to simplify the transition requirement giving Entergy the option to apply the transition provisions of the new standard at the date of adoption instead of at the earliest comparative period. In implementing these ASUs, Entergy elected the options provided in both ASU 2018-01 and ASU 2018-11. This accounting was applied to all lease agreements using the modified retrospective method, which required an adjustment to retained earnings for the cumulative effect of adopting the standard as of the effective date, and when implemented with ASU 2018-11, allowed Entergy to recognize the leased assets and liabilities on its balance sheet beginning on January 1, 2019 without restating prior periods. In adopting the standard in January 2019, Entergy recognized right-of-use assets and corresponding lease liabilities totaling approximately $263 million, including $59 million for Entergy Arkansas, $51 million for Entergy Louisiana, $26 million for Entergy Mississippi, $7 million for Entergy New Orleans, and $16 million for Entergy Texas. Implementation of the standards had no material effect on consolidated net income; therefore, no adjustment to retained earnings was recorded. The adoption of the standards had no effect on cash flows.

General

As of December 31, 2020 and 2019, Entergy and the Registrant Subsidiaries held operating and finance leases for fleet vehicles used in operations, real estate, and aircraft. Excluded are power purchase agreements not meeting the definition of a lease, nuclear fuel leases, and the Grand Gulf sale-leaseback which were determined not to be leases under the accounting standards.

Leases have remaining terms of one year to 60 years. Real estate leases generally include at least one five-year renewal option; however, renewal is not typically considered reasonably certain unless Entergy or a Registrant Subsidiary makes significant leasehold improvements or other modifications that would hinder its ability to easily move. In certain of the lease agreements for fleet vehicles used in operations, Entergy and the Registrant Subsidiaries provide residual value guarantees to the lessor. Due to the nature of the agreements and Entergy's continuing relationship with the lessor, however, Entergy and the Registrant Subsidiaries expect to renegotiate or refinance the leases prior to conclusion of the lease. As such, Entergy and the Registrant Subsidiaries do not believe it is probable that they will be required to pay anything pertaining to the residual value guarantee, and the lease liabilities and right-of-use assets are measured accordingly.

Entergy incurred the following total lease costs for the years ended December 31, 2020 and 2019:

	2020	2019
	(In Thousands)	
Operating lease cost	$67,471	$63,566
Finance lease cost:		
Amortization of right-of-use assets	$12,180	$16,048
Interest on lease liabilities	$2,884	$3,667

Of the lease costs disclosed above, Entergy had $759 thousand and $43 thousand in short-term leases costs for the years ended December 31, 2020 and 2019, respectively.

The lease costs disclosed above materially approximate the cash flows used by Entergy for leases with all costs included within operating activities on the Consolidated Statements of Cash Flows, except for the finance lease costs which are included in financing activities.

The Registrant Subsidiaries incurred the following lease costs for the year ended December 31, 2020:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
Operating lease cost	$14,344	$13,944	$6,584	$1,443	$4,870
Finance lease cost:					
Amortization of right-of-use assets	$2,693	$4,097	$1,627	$712	$1,340
Interest on lease liabilities	$408	$597	$254	$120	$196

Of the lease costs disclosed above, Entergy Arkansas had $43 thousand and Entergy Louisiana had $719 thousand in short-term lease costs for the year ended December 31, 2020.

The lease costs disclosed above materially approximate the cash flows used by the Registrant Subsidiaries for leases with all costs included within operating activities on the respective Statements of Cash Flows, except for the finance lease costs which are included in financing activities.

The Registrant Subsidiaries incurred the following lease costs for the year ended December 31, 2019:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
Operating lease cost	$13,213	$11,975	$6,927	$1,406	$4,259
Finance lease cost:					
Amortization of right-of-use assets	$3,643	$5,940	$2,097	$1,042	$1,568
Interest on lease liabilities	$594	$895	$353	$168	$241

Of the lease costs disclosed above, Entergy Louisiana had $43 thousand in short-term lease costs for the year ended December 31, 2019.

The lease costs disclosed above materially approximate the cash flows used by the Registrant Subsidiaries for leases with all costs included within operating activities on the respective Statements of Cash Flows, except for the finance lease costs which are included in financing activities.

Entergy has elected to account for short-term leases in accordance with policy options provided by accounting guidance; therefore, there are no related lease liabilities or right-of-use assets for the costs recognized above by Entergy or by its Registrant Subsidiaries in the table below.

Included within Property, Plant, and Equipment on Entergy's consolidated balance sheet at December 31, 2020 and 2019 are $230 million and $234 million related to operating leases, respectively, and $60 million and $61 million related to finance leases, respectively.

Included within Utility Plant on the Registrant Subsidiaries' respective balance sheets at December 31, 2020 and 2019 are the following amounts:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
2020					
Operating leases	$55,840	$43,189	$16,538	$5,222	$14,738
Finance leases	$12,447	$16,425	$7,452	$3,428	$5,719
2019					
Operating leases	$52,317	$36,034	$16,900	$3,878	$14,020
Finance leases	$11,216	$17,209	$6,869	$3,291	$5,273

The following lease-related liabilities are recorded within the respective Other lines on Entergy's consolidated balance sheet as of December 31, 2020 and 2019:

	2020	2019
	(In Thousands)	
Current liabilities:		
Operating leases	$59,004	$52,678
Finance leases	$11,921	$11,413
Non-current liabilities:		
Operating leases	$170,980	$181,339
Finance leases	$52,803	$53,396

The following lease-related liabilities are recorded within the respective Other lines on the Registrant Subsidiaries' respective balance sheets at December 31, 2020:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
Current liabilities:					
Operating leases	$11,942	$11,934	$5,738	$1,406	$4,277
Finance leases	$2,660	$3,821	$1,644	$686	$1,327
Non-current liabilities:					
Operating leases	$43,914	$31,260	$10,867	$3,819	$10,469
Finance leases	$9,788	$12,603	$5,808	$2,741	$4,392

The following lease-related liabilities are recorded within the respective Other lines on the Registrant Subsidiaries' respective balance sheets at December 31, 2019:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
Current liabilities:					
Operating leases	$11,443	$10,331	$5,633	$1,134	$3,698
Finance leases	$2,442	$3,919	$1,487	$647	$1,222
Non-current liabilities:					
Operating leases	$40,880	$25,743	$11,232	$2,746	$10,364
Finance leases	$8,768	$13,376	$5,382	$2,644	$4,009

The following information contains the weighted average remaining lease term in years and the weighted average discount rate for the operating and finance leases of Entergy at December 31, 2020 and 2019:

	2020	2019
Weighted average remaining lease terms:		
Operating leases	4.82	5.14
Finance leases	6.34	6.69
Weighted average discount rate:		
Operating leases	3.58 %	3.86 %
Finance leases	4.42 %	4.60 %

The following information contains the weighted average remaining lease term in years and the weighted average discount rate for the operating and finance leases of the Registrant Subsidiaries at December 31, 2020:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
Weighted average remaining lease terms:					
Operating leases	5.74	4.72	5.30	5.78	4.30
Finance leases	5.60	5.20	5.44	5.69	5.39
Weighted average discount rate:					
Operating leases	3.34 %	3.11 %	3.43 %	3.09 %	3.07 %
Finance leases	3.18 %	3.33 %	3.22 %	3.35 %	3.22 %

The following information contains the weighted average remaining lease term in years and the weighted average discount rate for the operating and finance leases of the Registrant Subsidiaries at December 31, 2019:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
Weighted average remaining lease terms:					
Operating leases	5.84	4.33	5.04	5.62	4.54
Finance leases	5.43	5.24	5.32	5.93	5.12
Weighted average discount rate:					
Operating leases	3.67 %	3.65 %	3.75 %	3.88 %	3.73 %
Finance leases	3.68 %	3.65 %	3.67 %	3.74 %	3.82 %

Maturity of the lease liabilities for Entergy as of December 31, 2020 are as follows:

Year	Operating Leases	Finance Leases
	(In Thousands)	
2021	$65,693	$14,436
2022	57,497	13,175
2023	46,540	12,114
2024	38,525	10,013
2025	20,269	8,225
Years thereafter	20,999	16,436
Minimum lease payments	249,523	74,399
Less: amount representing interest	19,539	9,675
Present value of net minimum lease payments	$229,984	$64,724

Maturity of the lease liabilities for the Registrant Subsidiaries as of December 31, 2020 are as follows:

Operating Leases

Year	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
2021	$13,527	$13,076	$6,183	$1,533	$4,650
2022	11,547	10,581	4,890	1,256	3,705
2023	9,868	8,624	2,788	1,028	3,299
2024	8,524	6,466	1,749	773	2,313
2025	6,993	3,693	872	406	1,037
Years thereafter	10,737	3,717	1,927	694	657
Minimum lease payments	61,196	46,157	18,409	5,690	15,661
Less: amount representing interest	5,340	2,963	1,804	465	915
Present value of net minimum lease payments	$55,856	$43,194	$16,605	$5,225	$14,746

Finance Leases

Year	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
2021	$3,013	$4,305	$1,857	$790	$1,490
2022	2,712	3,856	1,665	729	1,258
2023	2,441	3,437	1,483	684	1,119
2024	1,978	2,493	1,156	561	882
2025	1,498	1,783	885	456	677
Years thereafter	1,843	1,893	1,027	523	759
Minimum lease payments	13,485	17,767	8,073	3,743	6,185
Less: amount representing interest	1,037	1,343	621	316	467
Present value of net minimum lease payments	$12,448	$16,424	$7,452	$3,427	$5,718

In allocating consideration in lease contracts to the lease and non-lease components, Entergy and the Registrant Subsidiaries have made the accounting policy election to combine lease and non-lease components related to fleet vehicles used in operations, fuel storage agreements, and purchased power agreements and to allocate the contract consideration to both lease and non-lease components for real estate leases.

Following are the relevant lease disclosures from Note 10 to the financial statements in the Form 10-K for the year ended December 31, 2018.

Total 2018 rental expenses for all leases (excluding power purchase agreement operating leases, nuclear fuel leases, and the Grand Gulf sale and leaseback transaction) amounted to $47.8 million for Entergy.

Total 2018 rental expenses for leases (excluding power purchase agreement operating leases, nuclear fuel leases, and the Grand Gulf sale and leaseback transaction) amounted to $6.2 million for Entergy Arkansas, $20.2 million for Entergy Louisiana, $4.6 million for Entergy Mississippi, $2.5 million for Entergy New Orleans, $3.1 million for Entergy Texas, and $1.9 million for System Energy.

In addition to rental expense, railcar operating lease payments and oil tank facilities lease payments are recorded in fuel expense in accordance with regulatory treatment. Railcar operating lease payments were $2.8 million in 2018 for Entergy Arkansas and $0.4 million in 2018 for Entergy Louisiana. Oil tank facilities lease payments for Entergy Mississippi were $0.1 million in 2018.

Total capacity expense under the power purchase agreement accounted for as an operating lease at Entergy Texas was $30.5 million in 2018.

NOTE 11. RETIREMENT, OTHER POSTRETIREMENT BENEFITS, AND DEFINED CONTRIBUTION PLANS (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Qualified Pension Plans

Entergy has eight defined benefit qualified pension plans covering substantially all employees. The Entergy Corporation Retirement Plan for Non-Bargaining Employees (Non-Bargaining Plan I), the Entergy Corporation Retirement Plan for Bargaining Employees (Bargaining Plan I), the Entergy Corporation Retirement Plan II for Non-Bargaining Employees (Non-Bargaining Plan II), the Entergy Corporation Retirement Plan II for Bargaining Employees, the Entergy Corporation Retirement Plan III, and the Entergy Corporation Retirement Plan IV for Bargaining Employees are non-contributory final average pay plans and provide pension benefits that are based on employees' credited service and compensation during employment. Non-bargaining employees whose most recent date of hire is after June 30, 2014 but before January 1, 2021 participate in the Entergy Corporation Cash Balance Plan for Non-Bargaining Employees (Non-Bargaining Cash Balance Plan). Certain bargaining employees hired or rehired after June 30, 2014, or such later date provided for in their applicable collective bargaining agreements, participate in the Entergy Corporation Cash Balance Plan for Bargaining Employees (Bargaining Cash Balance Plan). The Registrant Subsidiaries participate in these four plans: Non-Bargaining Plan I, Bargaining Plan I, Non-Bargaining Cash Balance Plan, and Bargaining Cash Balance Plan.

The assets of the six final average pay defined benefit qualified pension plans are held in a master trust established by Entergy, and the assets of the two cash balance pension plans are held in a second master trust established by Entergy. Each pension plan has an undivided beneficial interest in each of the investment accounts in its respective master trust that is maintained by a trustee. Use of the master trusts permits the commingling of the trust assets of the pension plans of Entergy Corporation and its Registrant Subsidiaries for investment and administrative purposes. Although assets in the master trusts are commingled, the trustee maintains supporting records for the purpose of allocating the trust level equity in net earnings (loss) and the administrative expenses of the investment accounts in each trust to the various participating pension plans in that particular trust. The fair value of the trusts' assets is determined by the trustee and certain investment managers. For each trust, the trustee calculates a daily earnings factor, including realized and unrealized gains or losses, collected and accrued income, and administrative expenses, and allocates earnings to each plan in the master trusts on a pro rata basis.

Within each pension plan, the record of each Registrant Subsidiary's beneficial interest in the plan assets is maintained by the plan's actuary and is updated quarterly. Assets for each Registrant Subsidiary are increased for investment net income and contributions, and are decreased for benefit payments. A plan's investment net income/loss (i.e. interest and dividends, realized and unrealized gains and losses and expenses) is allocated to the Registrant Subsidiaries participating in that plan based on the value of assets for each Registrant Subsidiary at the beginning of the quarter adjusted for contributions and benefit payments made during the quarter.

Entergy Corporation and its subsidiaries fund pension plans in an amount not less than the minimum required contribution under the Employee Retirement Income Security Act of 1974, as amended, and the Internal Revenue Code of 1986, as amended. The assets of the plans include common and preferred stocks, fixed-income securities, interest in a money market fund, and insurance contracts. The Registrant Subsidiaries' pension costs are recovered from customers as a component of cost of service in each of their respective jurisdictions.

Components of Qualified Net Pension Cost and Other Amounts Recognized as a Regulatory Asset and/or Accumulated Other Comprehensive Income (AOCI)

Entergy Corporation and its subsidiaries' total 2020, 2019, and 2018 qualified pension costs and amounts recognized as a regulatory asset and/or other comprehensive income, including amounts capitalized, included the following components:

	2020	2019	2018
		(In Thousands)	
Net periodic pension cost:			
Service cost - benefits earned during the period	$161,487	$134,193	$155,010
Interest cost on projected benefit obligation	239,614	293,114	267,415
Expected return on assets	(414,273)	(414,947)	(442,142)
Amortization of prior service cost	—	—	398
Recognized net loss	350,010	241,117	274,104
Settlement charges	36,946	23,492	828
Net periodic pension costs	$373,784	$276,969	$255,613
Other changes in plan assets and benefit obligations recognized as a regulatory asset and/or AOCI (before tax)			
Arising this period:			
Net loss	$483,653	$614,600	$394,951
Amounts reclassified from regulatory asset and/or AOCI to net periodic pension cost in the current year:			
Amortization of prior service cost	—	—	(398)
Amortization of net loss	(358,473)	(241,117)	(274,104)
Settlement charge	(36,946)	(23,492)	(828)
Total	$88,234	$349,991	$119,621
Total recognized as net periodic pension cost, regulatory asset, and/or AOCI (before tax)	$462,018	$626,960	$375,234

The Registrant Subsidiaries' total 2020, 2019, and 2018 qualified pension costs and amounts recognized as a regulatory asset and/or other comprehensive income, including amounts capitalized, for their employees included the following components:

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Net periodic pension cost:						
Service cost - benefits earned during the period	$26,329	$35,158	$8,060	$2,654	$6,116	$7,883
Interest cost on projected benefit obligation	44,165	50,432	12,922	5,825	10,731	11,006
Expected return on assets	(78,187)	(89,691)	(23,147)	(10,509)	(21,951)	(18,757)
Recognized net loss	68,338	66,640	18,983	8,018	13,173	17,104
Settlement charges	21,078	8,109	3,366	—	4,289	105
Net pension cost	$81,723	$70,648	$20,184	$5,988	$12,358	$17,341
Other changes in plan assets and benefit obligations recognized as a regulatory asset and/or AOCI (before tax)						
Arising this period:						
Net loss	$106,178	$90,064	$36,899	$8,148	$13,379	$35,403
Amounts reclassified from regulatory asset and/or AOCI to net periodic pension cost in the current year:						
Amortization of net loss	(69,713)	(68,248)	(19,393)	(8,213)	(13,564)	(17,434)
Settlement charge	(21,078)	(8,109)	(3,366)	—	(4,289)	(105)
Total	$15,387	$13,707	$14,140	($65)	($4,474)	$17,864
Total recognized as net periodic pension cost, regulatory asset, and/or AOCI (before tax)	$97,110	$84,355	$34,324	$5,923	$7,884	$35,205

2019	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Net periodic pension cost:						
Service cost - benefits earned during the period	$21,043	$29,137	$6,516	$2,274	$5,401	$6,199
Interest cost on projected benefit obligation	56,701	63,529	16,272	7,495	14,451	13,456
Expected return on assets	(80,705)	(90,607)	(23,873)	(10,785)	(23,447)	(18,710)
Recognized net loss	47,361	46,571	12,416	6,117	9,335	11,400
Net pension cost	$44,400	$48,630	$11,331	$5,101	$5,740	$12,345
Other changes in plan assets and benefit obligations recognized as a regulatory asset and/or AOCI (before tax)						
Arising this period:						
Net loss	$118,898	$99,346	$41,088	$6,531	$10,869	$36,711
Amounts reclassified from regulatory asset and/or AOCI to net periodic pension cost in the current year:						
Amortization of net loss	(47,361)	(46,571)	(12,416)	(6,117)	(9,335)	(11,400)
Total	$71,537	$52,775	$28,672	$414	$1,534	$25,311
Total recognized as net periodic pension cost, regulatory asset, and/or AOCI (before tax)	$115,937	$101,405	$40,003	$5,515	$7,274	$37,656

2018	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Net periodic pension cost:						
Service cost - benefits earned during the period	$24,757	$33,783	$7,286	$2,693	$6,356	$7,102
Interest cost on projected benefit obligation	52,017	59,761	15,075	7,253	13,390	12,907
Expected return on assets	(87,404)	(99,236)	(26,007)	(11,973)	(26,091)	(19,963)
Recognized net loss	53,650	57,800	14,438	7,816	10,503	14,859
Net pension cost	$43,020	$52,108	$10,792	$5,789	$4,158	$14,905
Other changes in plan assets and benefit obligations recognized as a regulatory asset and/or AOCI (before tax)						
Arising this period:						
Net (gain)/loss	$74,570	$41,642	$19,244	$2,351	$24,121	($2,359)
Amounts reclassified from regulatory asset and/or AOCI to net periodic pension cost in the current year:						
Amortization of net loss	(53,650)	(57,800)	(14,438)	(7,816)	(10,503)	(14,859)
Total	$20,920	($16,158)	$4,806	($5,465)	$13,618	($17,218)
Total recognized as net periodic pension cost, regulatory asset, and/or AOCI (before tax)	$63,940	$35,950	$15,598	$324	$17,776	($2,313)

Qualified Pension Obligations, Plan Assets, Funded Status, Amounts Recognized in the Balance Sheet

Qualified pension obligations, plan assets, funded status, amounts recognized in the Consolidated Balance Sheets for Entergy Corporation and its Subsidiaries as of December 31, 2020 and 2019 are as follows:

	2020	2019
	(In Thousands)	
Change in Projected Benefit Obligation (PBO)		
Balance at January 1	$8,406,203	$7,404,917
Service cost	161,487	134,193
Interest cost	239,614	293,114
Actuarial loss	969,609	1,292,767
Benefits paid (including settlement lump sum benefit payments of ($84,754) in 2020 and ($68,203) in 2019)	(633,261)	(718,788)
Balance at December 31	$9,143,652	$8,406,203
Change in Plan Assets		
Fair value of assets at January 1	$6,271,160	$5,497,415
Actual return on plan assets	900,229	1,093,114
Employer contributions	316,298	399,419
Benefits paid (including settlement lump sum benefit payments of ($84,754) in 2020 and ($68,203) in 2019)	(633,261)	(718,788)
Fair value of assets at December 31	$6,854,426	$6,271,160
Funded status	($2,289,226)	($2,135,043)
Amount recognized in the balance sheet		
Non-current liabilities	($2,289,226)	($2,135,043)
Amount recognized as a regulatory asset		
Net loss	$2,926,670	$2,831,408
Amount recognized as AOCI (before tax)		
Net loss	$726,010	$724,575

Qualified pension obligations, plan assets, funded status, amounts recognized in the Balance Sheets for the Registrant Subsidiaries as of December 31, 2020 and 2019 are as follows:

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Change in Projected Benefit Obligation (PBO)						
Balance at January 1	$1,615,084	$1,784,474	$471,510	$206,962	$396,764	$393,607
Service cost	26,329	35,158	8,060	2,654	6,116	7,883
Interest cost	44,165	50,432	12,922	5,825	10,731	11,006
Actuarial loss	196,755	196,032	62,564	20,535	37,579	57,574
Benefits paid (a)	(142,951)	(138,825)	(44,947)	(15,689)	(40,526)	(28,922)
Balance at December 31	$1,739,382	$1,927,271	$510,109	$220,287	$410,664	$441,148
Change in Plan Assets						
Fair value of assets at January 1	$1,200,035	$1,364,030	$354,928	$160,777	$339,126	$282,668
Actual return on plan assets	168,764	195,658	48,812	22,896	46,151	40,927
Employer contributions	60,008	55,443	12,601	4,567	4,997	16,145
Benefits paid (a)	(142,951)	(138,825)	(44,947)	(15,689)	(40,526)	(28,922)
Fair value of assets at December 31	$1,285,856	$1,476,306	$371,394	$172,551	$349,748	$310,818
Funded status	($453,526)	($450,965)	($138,715)	($47,736)	($60,916)	($130,330)
Amounts recognized in the balance sheet (funded status)						
Non-current liabilities	($453,526)	($450,965)	($138,715)	($47,736)	($60,916)	($130,330)
Amounts recognized as regulatory asset						
Net loss	$816,002	$766,099	$239,904	$91,991	$156,480	$212,062
Amounts recognized as AOCI (before tax)						
Net loss	$—	$31,921	$—	$—	$—	$—

(a) Including settlement lump sum benefit payments of ($48.4) million at Entergy Arkansas, ($18.6) million at Entergy Louisiana, ($7.7) million at Entergy Mississippi, ($9.8) million at Entergy Texas, and ($236) thousand at System Energy.

2019	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Change in Projected Benefit Obligation (PBO)						
Balance at January 1	$1,443,808	$1,599,916	$414,089	$191,190	$369,604	$339,034
Service cost	21,043	29,137	6,516	2,274	5,401	6,199
Interest cost	56,701	63,529	16,272	7,495	14,451	13,456
Actuarial loss	248,213	248,509	79,453	24,299	49,235	66,460
Benefits paid	(154,681)	(156,617)	(44,820)	(18,296)	(41,927)	(31,542)
Balance at December 31	$1,615,084	$1,784,474	$471,510	$206,962	$396,764	$393,607
Change in Plan Assets						
Fair value of assets at January 1	$1,068,842	$1,215,926	$316,716	$145,968	$315,514	$245,516
Actual return on plan assets	210,020	239,770	62,238	28,552	61,814	48,460
Employer contributions	75,854	64,951	20,794	4,553	3,725	20,234
Benefits paid	(154,681)	(156,617)	(44,820)	(18,296)	(41,927)	(31,542)
Fair value of assets at December 31	$1,200,035	$1,364,030	$354,928	$160,777	$339,126	$282,668
Funded status	($415,049)	($420,444)	($116,582)	($46,185)	($57,638)	($110,939)
Amounts recognized in the balance sheet (funded status)						
Non-current liabilities	($415,049)	($420,444)	($116,582)	($46,185)	($57,638)	($110,939)
Amounts recognized as regulatory asset						
Net loss	$799,235	$759,228	$225,354	$91,862	$160,564	$193,870
Amounts recognized as AOCI (before tax)						
Net loss	$—	$23,481	$—	$—	$—	$—

The qualified pension plans incurred actuarial losses during 2020 and 2019 primarily due to a fall in bond yields that resulted in decreases to the discount rates used to develop the benefit obligations. These losses were partially offset by gains resulting from the actual return on assets exceeding the expected return on assets for both 2020 and 2019.

Accumulated Pension Benefit Obligation

The accumulated benefit obligation for Entergy's qualified pension plans was $8.4 billion and $7.8 billion at December 31, 2020 and 2019, respectively.

The qualified pension accumulated benefit obligation for each of the Registrant Subsidiaries for their employees as of December 31, 2020 and 2019 was as follows:

	December 31,	
	2020	2019
	(In Thousands)	
Entergy Arkansas	$1,617,858	$1,519,998
Entergy Louisiana	$1,753,980	$1,643,759
Entergy Mississippi	$466,497	$438,817
Entergy New Orleans	$201,159	$192,561
Entergy Texas	$379,050	$371,589
System Energy	$410,296	$368,771

Other Postretirement Benefits

Entergy also currently offers retiree medical, dental, vision, and life insurance benefits (other postretirement benefits) for eligible retired employees. Employees who commenced employment before July 1, 2014 and who satisfy certain eligibility requirements (including retiring from Entergy after a certain age and/or years of service with Entergy and immediately commencing their Entergy pension benefit), may become eligible for other postretirement benefits.

In March 2020, Entergy announced changes to its other postretirement benefits. Effective January 1, 2021, certain retired, former non-bargaining employees age 65 and older who are eligible for Entergy-sponsored retiree welfare benefits, and their eligible spouses who are age 65 and older (collectively, Medicare-eligible participants), will be eligible to participate in a new Entergy-sponsored retiree health plan, and will no longer be eligible for retiree coverage under the Entergy Corporation Companies' Benefits Plus Medical, Dental and Vision Plans. Under the new Entergy retiree health plan, Medicare-eligible participants will be eligible to participate in a health reimbursement arrangement which they may use towards the purchase of various types of qualified insurance offered through a Medicare exchange provider and for other qualified medical expenses. In accordance with accounting standards, the effects of this change are reflected in the December 31, 2020 other postretirement obligation. The changes affecting active bargaining unit employees will be negotiated with the unions prior to implementation, where necessary, and to the extent required by law.

Effective January 1, 1993, Entergy adopted an accounting standard requiring a change from a cash method to an accrual method of accounting for postretirement benefits other than pensions. Entergy Arkansas, Entergy Mississippi, Entergy New Orleans, and Entergy Texas have received regulatory approval to recover accrued other postretirement benefit costs through rates. The LPSC ordered Entergy Louisiana to continue the use of the pay-as-you-go method for ratemaking purposes for postretirement benefits other than pensions. However, the LPSC retains the flexibility to examine individual companies' accounting for other postretirement benefits to determine if special exceptions to this order are warranted. Pursuant to regulatory directives, Entergy Arkansas, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy contribute the other postretirement benefit costs collected in rates into external trusts. System Energy is funding, on behalf of Entergy Operations, other postretirement benefits associated with Grand Gulf.

Trust assets contributed by participating Registrant Subsidiaries are in master trusts, established by Entergy Corporation and maintained by a trustee. Each participating Registrant Subsidiary holds a beneficial interest in the trusts' assets. The assets in the master trusts are commingled for investment and administrative purposes. Although assets are commingled, supporting records are maintained for the purpose of allocating the beneficial interest in net earnings/(losses) and the administrative expenses of the investment accounts to the various participating plans and participating Registrant Subsidiaries. Beneficial interest in an investment account's net income/(loss) is comprised of interest and dividends, realized and unrealized gains and losses, and expenses. Beneficial interest from these

investments is allocated to the plans and participating Registrant Subsidiary based on their portion of net assets in the pooled accounts.

Components of Net Other Postretirement Benefit Cost and Other Amounts Recognized as a Regulatory Asset and/or AOCI

Entergy Corporation's and its subsidiaries' total 2020, 2019, and 2018 other postretirement benefit costs, including amounts capitalized and amounts recognized as a regulatory asset and/or other comprehensive income, included the following components:

	2020	2019	2018
		(In Thousands)	
Other postretirement costs:			
Service cost - benefits earned during the period	$24,500	$18,699	$27,129
Interest cost on accumulated postretirement benefit obligation (APBO)	28,597	47,901	50,725
Expected return on assets	(40,880)	(38,246)	(41,493)
Amortization of prior service credit	(32,882)	(35,377)	(37,002)
Recognized net loss	3,481	1,430	13,729
Net other postretirement benefit (income)/cost	($17,184)	($5,593)	$13,088
Other changes in plan assets and benefit obligations recognized as a regulatory asset and /or AOCI (before tax)			
Arising this period:			
Prior service credit for period	($128,837)	$—	$—
Net (gain)/loss	41,031	(38,526)	(274,354)
Amounts reclassified from regulatory asset and /or AOCI to net periodic benefit cost in the current year:			
Amortization of prior service credit	32,882	35,377	37,002
Amortization of net loss	(3,481)	(1,430)	(13,729)
Total	($58,405)	($4,579)	($251,081)
Total recognized as net periodic benefit (income)/cost, regulatory asset, and/or AOCI (before tax)	($75,589)	($10,172)	($237,993)

Total 2020, 2019, and 2018 other postretirement benefit costs of the Registrant Subsidiaries, including amounts capitalized and deferred, for their employees included the following components:

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
Other postretirement costs:						
Service cost - benefits earned during the period	$3,626	$5,993	$1,468	$445	$1,219	$1,254
Interest cost on APBO	4,712	6,216	1,536	784	2,008	1,130
Expected return on assets	(17,104)	—	(5,167)	(5,382)	(9,643)	(2,958)
Amortization of prior service credit	(1,849)	(6,179)	(1,652)	(763)	(3,364)	(1,065)
Recognized net (gain)/ loss	540	(447)	171	(13)	907	121
Net other postretirement benefit (income)/cost	($10,075)	$5,583	($3,644)	($4,929)	($8,873)	($1,518)
Other changes in plan assets and benefit obligations recognized as a regulatory asset and/or AOCI (before tax)						
Arising this period:						
Prior service cost/(credit) for the period	$12,320	($23,508)	($4,428)	($5,493)	($22,441)	($1,963)
Net (gain)/loss	$2,245	$8,744	($4,456)	($5,351)	($3,266)	$58
Amounts reclassified from regulatory asset and/or AOCI to net periodic benefit cost in the current year:						
Amortization of prior service credit	1,849	6,179	1,652	763	3,364	1,065
Amortization of net (gain)/loss	(540)	447	(171)	13	(907)	(121)
Total	$15,874	($8,138)	($7,403)	($10,068)	($23,250)	($961)
Total recognized as net periodic other postretirement (income)/cost, regulatory asset, and/or AOCI (before tax)	$5,799	($2,555)	($11,047)	($14,997)	($32,123)	($2,479)

2019	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Other postretirement costs:						
Service cost - benefits earned during the period	$2,363	$4,639	$1,046	$367	$943	$973
Interest cost on APBO	7,226	10,664	2,681	1,581	3,415	1,902
Expected return on assets	(15,962)	—	(4,794)	(4,947)	(9,103)	(2,788)
Amortization of prior service credit	(4,950)	(7,349)	(1,756)	(682)	(2,243)	(1,450)
Recognized net (gain)/loss	576	(695)	723	231	485	354
Net other postretirement benefit (income)/cost	($10,747)	$7,259	($2,100)	($3,450)	($6,503)	($1,009)
Other changes in plan assets and benefit obligations recognized as a regulatory asset and/or AOCI (before tax)						
Arising this period:						
Net gain	($26,707)	($2,220)	($11,950)	($10,967)	($6,406)	($5,539)
Amounts reclassified from regulatory asset and/or AOCI to net periodic benefit cost in the current year:						
Amortization of prior service credit	4,950	7,349	1,756	682	2,243	1,450
Amortization of net (gain)/ loss	(576)	695	(723)	(231)	(485)	(354)
Total	($22,333)	$5,824	($10,917)	($10,516)	($4,648)	($4,443)
Total recognized as net periodic other postretirement (income)/cost, regulatory asset, and/or AOCI (before tax)	($33,080)	$13,083	($13,017)	($13,966)	($11,151)	($5,452)

2018	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Other postretirement costs:						
Service cost - benefits earned during the period	$3,170	$6,225	$1,284	$516	$1,319	$1,223
Interest cost on APBO	7,986	11,154	2,731	1,669	3,754	1,998
Expected return on assets	(17,368)	—	(5,213)	(5,250)	(9,784)	(3,130)
Amortization of prior service credit	(5,110)	(7,735)	(1,823)	(745)	(2,316)	(1,513)
Recognized net loss	1,154	1,550	1,508	137	823	932
Net other postretirement benefit (income)/cost	($10,168)	$11,194	($1,513)	($3,673)	($6,204)	($490)
Other changes in plan assets and benefit obligations recognized as a regulatory asset and/or AOCI (before tax)						
Arising this period:						
Net gain	(32,219)	(73,249)	(7,794)	(981)	(10,561)	(6,680)
Amounts reclassified from regulatory asset and/or AOCI to net periodic benefit cost in the current year:						
Amortization of prior service credit	5,110	7,735	1,823	745	2,316	1,513
Amortization of net loss	(1,154)	(1,550)	(1,508)	(137)	(823)	(932)
Total	($28,263)	($67,064)	($7,479)	($373)	($9,068)	($6,099)
Total recognized as net periodic other postretirement (income)/cost, regulatory asset, and/or AOCI (before tax)	($38,431)	($55,870)	($8,992)	($4,046)	($15,272)	($6,589)

Other Postretirement Benefit Obligations, Plan Assets, Funded Status, and Amounts Not Yet Recognized and Recognized in the Balance Sheet

Other postretirement benefit obligations, plan assets, funded status, and amounts not yet recognized and recognized in the Consolidated Balance Sheets of Entergy Corporation and its Subsidiaries as of December 31, 2020 and 2019 are as follows:

	2020	2019
	(In Thousands)	
Change in APBO		
Balance at January 1	$1,252,903	$1,232,619
Service cost	24,500	18,699
Interest cost	28,597	47,901
Plan amendments	(128,837)	—
Plan participant contributions	37,176	38,640
Actuarial loss	80,162	23,673
Benefits paid	(113,786)	(109,223)
Medicare Part D subsidy received	360	594
Balance at December 31	$1,181,075	$1,252,903
Change in Plan Assets		
Fair value of assets at January 1	$686,262	$609,782
Actual return on plan assets	80,011	100,445
Employer contributions	48,203	46,618
Plan participant contributions	37,176	38,640
Benefits paid	(113,786)	(109,223)
Fair value of assets at December 31	$737,866	$686,262
Funded status	($443,209)	($566,641)
Amounts recognized in the balance sheet		
Current liabilities	($38,963)	($48,040)
Non-current liabilities	(404,246)	(518,601)
Total funded status	($443,209)	($566,641)
Amounts recognized as a regulatory asset		
Prior service credit	($45,501)	($11,899)
Net gain	(8,565)	(5,081)
	($54,066)	($16,980)
Amounts recognized as AOCI (before tax)		
Prior service credit	($83,581)	($21,231)
Net (gain)/loss	24,365	(16,670)
	($59,216)	($37,901)

Other postretirement benefit obligations, plan assets, funded status, and amounts not yet recognized and recognized in the Balance Sheets of the Registrant Subsidiaries as of December 31, 2020 and 2019 are as follows:

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Change in APBO						
Balance at January 1	$185,744	$274,175	$65,979	$38,460	$94,742	$47,348
Service cost	3,626	5,993	1,468	445	1,219	1,254
Interest cost	4,712	6,216	1,536	784	2,008	1,130
Plan amendments	12,320	(23,508)	(4,428)	(5,493)	(22,441)	(1,963)
Plan participant contributions	7,792	8,269	2,122	1,123	2,456	1,732
Actuarial (gain)/loss	18,257	8,744	684	(91)	5,952	3,025
Benefits paid	(23,141)	(24,395)	(5,382)	(3,530)	(9,721)	(4,851)
Medicare Part D subsidy received	59	77	11	9	18	26
Balance at December 31	$209,369	$255,571	$61,990	$31,707	$74,233	$47,701
Change in Plan Assets						
Fair value of assets at January 1	$284,224	$—	$86,085	$93,858	$161,810	$48,471
Actual return on plan assets	33,116	—	10,307	10,642	18,861	5,925
Employer contributions	2,201	16,126	343	641	690	1,342
Plan participant contributions	7,792	8,269	2,122	1,123	2,456	1,732
Benefits paid	(23,141)	(24,395)	(5,382)	(3,530)	(9,721)	(4,851)
Fair value of assets at December 31	$304,192	$—	$93,475	$102,734	$174,096	$52,619
Funded status	$94,823	($255,571)	$31,485	$71,027	$99,863	$4,918
Amounts recognized in the balance sheet						
Current liabilities	$—	($15,580)	$—	$—	$—	$—
Non-current liabilities	94,823	(239,991)	31,485	71,027	99,863	4,918
Total funded status	$94,823	($255,571)	$31,485	$71,027	$99,863	$4,918
Amounts recognized in regulatory asset						
Prior service cost/(credit)	$7,655	$—	($5,884)	($4,730)	($20,498)	($1,754)
Net (gain)/loss	(16,557)	—	(1,355)	(13,385)	2,030	2,818
	($8,902)	$—	($7,239)	($18,115)	($18,468)	$1,064
Amounts recognized in AOCI (before tax)						
Prior service credit	$—	($22,244)	$—	$—	$—	$—
Net gain	—	(15,548)	—	—	—	—
	$—	($37,792)	$—	$—	$—	$—

2019	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Change in APBO						
Balance at January 1	$187,830	$275,269	$68,976	$41,987	$88,310	$48,791
Service cost	2,363	4,639	1,046	367	943	973
Interest cost	7,226	10,664	2,681	1,581	3,415	1,902
Plan participant contributions	8,125	8,876	2,197	1,343	2,602	1,765
Actuarial (gain)/loss	166	(2,220)	(3,778)	(4,234)	8,279	(891)
Benefits paid	(20,048)	(23,160)	(5,159)	(2,598)	(8,830)	(5,229)
Medicare Part D subsidy received	82	107	16	14	23	37
Balance at December 31	$185,744	$274,175	$65,979	$38,460	$94,742	$47,348
Change in Plan Assets						
Fair value of assets at January 1	$252,055	$—	$75,853	$81,774	$144,846	$43,670
Actual return on plan assets	42,835	—	12,966	11,680	23,788	7,436
Employer contributions	1,257	14,284	228	1,659	(596)	829
Plan participant contributions	8,125	8,876	2,197	1,343	2,602	1,765
Benefits paid	(20,048)	(23,160)	(5,159)	(2,598)	(8,830)	(5,229)
Fair value of assets at December 31	$284,224	$—	$86,085	$93,858	$161,810	$48,471
Funded status	$98,480	($274,175)	$20,106	$55,398	$67,068	$1,123
Amounts recognized in the balance sheet						
Current liabilities	$—	($18,467)	$—	$—	$—	$—
Non-current liabilities	98,480	(255,708)	20,106	55,398	67,068	1,123
Total funded status	$98,480	($274,175)	$20,106	$55,398	$67,068	$1,123
Amounts recognized in regulatory asset						
Prior service credit	($6,515)	$—	($3,108)	$—	($1,422)	($854)
Net (gain)/loss	(18,262)	—	3,272	(8,046)	6,203	2,881
	($24,777)	$—	$164	($8,046)	$4,781	$2,027
Amounts recognized in AOCI (before tax)						
Prior service credit	$—	($4,915)	$—	$—	$—	$—
Net gain	—	(24,739)	—	—	—	—
	$—	($29,654)	$—	$—	$—	$—

The other postretirement plans incurred actuarial losses during 2020 primarily due to a reduction in the projected Employer Group Waiver Plan (EGWP) revenue and a fall in bond yields that resulted in decreases to the discount rates used to develop the benefit obligations. These losses were partially offset by gains resulting from the actual return on assets exceeding the expected return on assets for 2020, an update to the latest mortality projection scale MP-2020, and favorable claims experience. The other postretirement plans experienced actuarial gains during 2019 primarily due to the actual return on assets exceeding the expected return on assets for 2019, favorable claims

experience, an increase in projected EGWP revenue, and the adoption of the Pri.H-2012 mortality table with improvement scale MP-2019. These gains were partially offset by losses resulting from a fall in bond yields that resulted in decreases to the discount rates used to develop the benefit obligations.

Non-Qualified Pension Plans

Entergy also sponsors non-qualified, non-contributory defined benefit pension plans that provide benefits to certain key employees. Entergy recognized net periodic pension cost related to these plans of $18.1 million in 2020, $22.6 million in 2019, and $24.4 million in 2018. In 2019, and 2018 Entergy recognized $7.4 million and $7.7 million, respectively in settlement charges related to the payment of lump sum benefits out of the plan that is included in the non-qualified pension plan cost above.

The projected benefit obligation was $182.4 million as of December 31, 2020 of which $22.9 million was a current liability and $159.5 million was a non-current liability. The projected benefit obligation was $162.8 million as of December 31, 2019 of which $18.1 million was a current liability and $144.6 million was a non-current liability. The accumulated benefit obligation was $161.3 million and $143.4 million as of December 31, 2020 and 2019, respectively. The unamortized prior service cost and net loss are recognized in regulatory assets ($77.3 million at December 31, 2020 and $58.8 million at December 31, 2019) and accumulated other comprehensive income before taxes ($16.7 million at December 31, 2020 and $24.9 million at December 31, 2019).

The following Registrant Subsidiaries participate in Entergy's non-qualified, non-contributory defined benefit pension plans that provide benefits to certain key employees. The net periodic pension cost for their employees for the non-qualified plans for 2020, 2019, and 2018, was as follows:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
2020	$333	$148	$359	$31	$469
2019	$275	$159	$326	$20	$481
2018	$474	$180	$300	$81	$650

Included in the 2019 net periodic pension cost above are settlement charges of $40 thousand for Entergy Mississippi related to the lump sum benefits paid out of the plan. Included in the 2018 net periodic pension cost above are settlement charges of $30 thousand and $139 thousand for Entergy Arkansas and Entergy Texas, respectively, related to the lump sum benefits paid out of the plan.

The projected benefit obligation for their employees for the non-qualified plans as of December 31, 2020 and 2019 was as follows:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
2020	$3,197	$1,965	$3,852	$247	$8,475
2019	$2,755	$1,682	$3,286	$231	$7,783

The accumulated benefit obligation for their employees for the non-qualified plans as of December 31, 2020 and 2019 was as follows:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
2020	$2,626	$1,802	$3,345	$240	$7,949
2019	$2,248	$1,682	$2,938	$230	$7,391

The following amounts were recorded on the balance sheet as of December 31, 2020 and 2019:

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
Current liabilities	($218)	($193)	($181)	($17)	($633)
Non-current liabilities	(2,979)	(1,772)	(3,671)	(230)	(7,842)
Total funded status	($3,197)	($1,965)	($3,852)	($247)	($8,475)
Regulatory asset/(liability)	$1,535	$424	$1,757	($558)	$147
Accumulated other comprehensive income (before taxes)	$—	$18	$—	$—	$—

2019	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
Current liabilities	($249)	($216)	($357)	($17)	($723)
Non-current liabilities	(2,506)	(1,467)	(2,930)	(215)	(7,060)
Total funded status	($2,755)	($1,683)	($3,287)	($232)	($7,783)
Regulatory asset/(liability)	$1,232	$3	$1,432	($559)	($603)

The non-qualified pension plans incurred actuarial losses during 2020 and 2019 primarily due to a fall in bond yields that resulted in decreases to the discount rates used to develop the benefit obligations.

Reclassification out of Accumulated Other Comprehensive Income (Loss)

Entergy and Entergy Louisiana reclassified the following costs out of accumulated other comprehensive income (loss) (before taxes and including amounts capitalized) as of December 31, 2020:

	Qualified Pension Costs	Other Postretirement Costs	Non-Qualified Pension Costs	Total
		(In Thousands)		
Entergy				
Amortization of prior service cost	$—	$21,000	($231)	$20,769
Amortization of loss	(105,853)	(1,006)	(3,326)	(110,185)
Settlement loss	(243)	—	—	(243)
	($106,096)	$19,994	($3,557)	($89,659)
Entergy Louisiana				
Amortization of prior service cost	$—	$6,179	$—	$6,179
Amortization of loss	(2,001)	447	(3)	(1,557)
Settlement loss	(243)	—	—	(243)
	($2,244)	$6,626	($3)	$4,379

Entergy and Entergy Louisiana reclassified the following costs out of accumulated other comprehensive income (loss) (before taxes and including amounts capitalized) as of December 31, 2019:

	Qualified Pension Costs	Other Postretirement Costs	Non-Qualified Pension Costs	Total
		(In Thousands)		
Entergy				
Amortization of prior service cost	$—	$21,498	($198)	$21,300
Amortization of loss	(82,284)	1,230	(2,192)	(83,246)
Settlement loss	(23,458)	—	(1,697)	(25,155)
	($105,742)	$22,728	($4,087)	($87,101)
Entergy Louisiana				
Amortization of prior service cost	$—	$7,349	$—	$7,349
Amortization of loss	(2,795)	695	(6)	(2,106)
	($2,795)	$8,044	($6)	$5,243

Accounting for Pension and Other Postretirement Benefits

Accounting standards require an employer to recognize in its balance sheet the funded status of its benefit plans. This is measured as the difference between plan assets at fair value and the benefit obligation. Entergy uses a December 31 measurement date for its pension and other postretirement plans. Employers are to record previously unrecognized gains and losses, prior service costs, and any remaining transition asset or obligation (that resulted from adopting prior pension and other postretirement benefits accounting standards) as comprehensive income and/or as a regulatory asset reflective of the recovery mechanism for pension and other postretirement benefit costs in the Registrant Subsidiaries' respective regulatory jurisdictions. For the portion of Entergy Louisiana that is not regulated, the unrecognized prior service cost, gains and losses, and transition asset/obligation for its pension and other postretirement benefit obligations are recorded as other comprehensive income. Entergy Louisiana recovers other postretirement benefit costs on a pay-as-you-go basis and records the unrecognized prior

service cost, gains and losses, and transition obligation for its other postretirement benefit obligation as other comprehensive income. Accounting standards also require that changes in the funded status be recorded as other comprehensive income and/or a regulatory asset in the period in which the changes occur.

With regard to pension and other postretirement costs, Entergy calculates the expected return on pension and other postretirement benefit plan assets by multiplying the long-term expected rate of return on assets by the market-related value (MRV) of plan assets. In general, Entergy determines the MRV of its pension plan assets by calculating a value that uses a 20-quarter phase-in of the difference between actual and expected returns and for its other postretirement benefit plan assets Entergy generally uses fair value.

In accordance with ASU No. 2017-07, "Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost", the other components of net benefit cost are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations and are presented by Entergy in miscellaneous - net in other income.

Qualified Pension Settlement Cost

In 2020, year-to-date lump sum benefit payments from the Entergy Corporation Retirement Plan for Bargaining Employees exceeded the sum of the Plan's 2020 service and interest cost, resulting in a settlement cost of $36.9 million. In accordance with accounting standards, settlement accounting requires immediate recognition of the portion of previously unrecognized losses associated with the settled portion of the plan's pension liability. Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy Texas participate in the Entergy Corporation Retirement Plan for Bargaining Employees and incurred settlement costs of $21.1 million, $8.1 million, $3.4 million, and $4.3 million, respectively. The settlement costs were included with employee labor costs and charged to expense and capital in the same manner that labor costs were charged. Entergy Arkansas, Entergy Louisiana, and Entergy Mississippi received regulatory approval to defer the expense portion of the settlement costs, with future amortization of the deferred settlement expense over the period in which the expense otherwise would be recorded had the immediate recognition not occurred.

Entergy Texas Reserve

In 2020, Entergy Texas elected to establish a reserve, in accordance with PUCT regulations, for the difference between the amount recorded for pension and other postretirement benefits expense under generally accepted accounting principles during the first year that rates from Entergy Texas's last general rate proceeding were in effect, and the annual amount of actuarially determined pension and other postretirement benefits chargeable to Entergy Texas's expense in 2020. The reserve amount will be evaluated in Entergy Texas's next base rate case proceeding and a reasonable amortization period will be determined by the PUCT at that time. At December 31, 2020, the balance in this reserve was approximately $3.8 million.

Qualified Pension and Other Postretirement Plans' Assets

The Plan Administrator's trust asset investment strategy is to invest the assets in a manner whereby long-term earnings on the assets (plus cash contributions) provide adequate funding for retiree benefit payments. The mix of assets is based on an optimization study that identifies asset allocation targets in order to achieve the maximum return for an acceptable level of risk, while minimizing the expected contributions and pension and postretirement expense.

In the optimization studies, the Plan Administrator formulates assumptions about characteristics, such as expected asset class investment returns, volatility (risk), and correlation coefficients among the various asset classes. The future market assumptions used in the optimization study are determined by examining historical market characteristics of the various asset classes and making adjustments to reflect future conditions expected to prevail over the study period.

The target asset allocation for pension adjusts dynamically based on the pension plans' funded status. The current targets are shown below. The expectation is that the allocation to fixed income securities will increase as the pension plans' funded status increases. The following ranges were established to produce an acceptable, economically efficient plan to manage around the targets.

For postretirement assets the target and range asset allocations (as shown below) reflect recommendations made in the latest optimization study. The target asset allocations for postretirement assets adjust dynamically based on the funded status of each sub-account within each trust. The current weighted average targets shown below represent the aggregate of all targets for all sub-accounts within all trusts.

Entergy's qualified pension and postretirement weighted-average asset allocations by asset category at December 31, 2020 and 2019 and the target asset allocation and ranges for 2020 are as follows:

Pension Asset Allocation	Target	Range			Actual 2020	Actual 2019
Domestic Equity Securities	39%	32%	to	46%	38%	39%
International Equity Securities	19%	15%	to	23%	19%	19%
Fixed Income Securities	42%	39%	to	45%	42%	41%
Other	0%	0%	to	10%	1%	1%

Postretirement Asset Allocation	Non-Taxable and Taxable					
	Target	Range			Actual 2020	Actual 2019
Domestic Equity Securities	26%	21%	to	31%	29%	29%
International Equity Securities	18%	13%	to	23%	18%	18%
Fixed Income Securities	56%	51%	to	61%	53%	53%
Other	0%	0%	to	5%	0%	0%

In determining its expected long-term rate of return on plan assets used in the calculation of benefit plan costs, Entergy reviews past performance, current and expected future asset allocations, and capital market assumptions of its investment consultant and some investment managers.

The expected long-term rate of return for the qualified pension plans' assets is based primarily on the geometric average of the historical annual performance of a representative portfolio weighted by the target asset allocation defined in the table above, along with other indications of expected return on assets. The time period reflected is a long-dated period spanning several decades.

The expected long-term rate of return for the non-taxable postretirement trust assets is determined using the same methodology described above for pension assets, but the aggregate asset allocation specific to the non-taxable postretirement assets is used.

For the taxable postretirement trust assets, the investment allocation includes tax-exempt fixed income securities. This asset allocation, in combination with the same methodology employed to determine the expected return for other postretirement assets (as described above), and with a modification to reflect applicable taxes, is used to produce the expected long-term rate of return for taxable postretirement trust assets.

Concentrations of Credit Risk

Entergy's investment guidelines mandate the avoidance of risk concentrations. Types of concentrations specified to be avoided include, but are not limited to, investment concentrations in a single entity, type of industry,

foreign country, geographic area and individual security issuance. As of December 31, 2020, all investment managers and assets were materially in compliance with the approved investment guidelines, therefore there were no significant concentrations (defined as greater than 10 percent of plan assets) of credit risk in Entergy's pension and other postretirement benefit plan assets.

Fair Value Measurements

Accounting standards provide the framework for measuring fair value. That framework provides a fair value hierarchy that prioritizes the inputs to valuation techniques used to measure fair value. The hierarchy gives the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (Level 1 measurements) and the lowest priority to unobservable inputs (Level 3 measurements).

The three levels of the fair value hierarchy are described below:

- Level 1 - Level 1 inputs are unadjusted quoted prices for identical assets or liabilities in active markets that the Plan has the ability to access at the measurement date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis.

- Level 2 - Level 2 inputs are inputs other than quoted prices included in Level 1 that are, either directly or indirectly, observable for the asset or liability at the measurement date. Assets are valued based on prices derived by an independent party that uses inputs such as benchmark yields, reported trades, broker/dealer quotes, and issuer spreads. Prices are reviewed and can be challenged with the independent parties and/or overridden if it is believed such would be more reflective of fair value. Level 2 inputs include the following:

  - quoted prices for similar assets or liabilities in active markets;
  - quoted prices for identical assets or liabilities in inactive markets;
  - inputs other than quoted prices that are observable for the asset or liability; or
  - inputs that are derived principally from or corroborated by observable market data by correlation or other means.

  If an asset or liability has a specified (contractual) term, the Level 2 input must be observable for substantially the full term of the asset or liability.

- Level 3 - Level 3 refers to securities valued based on significant unobservable inputs.

Assets and liabilities are classified in their entirety based on the lowest level of input that is significant to the fair value measurement. The following tables set forth by level within the fair value hierarchy, measured at fair value on a recurring basis at December 31, 2020, and December 31, 2019, a summary of the investments held in the master trusts for Entergy's qualified pension and other postretirement plans in which the Registrant Subsidiaries participate.

Qualified Defined Benefit Pension Plan Trusts

2020	Level 1	Level 2	Level 3	Total
		(In Thousands)		
Equity securities:				
Corporate stocks:				
Preferred	$15,756 (b)	$—	$—	$15,756
Common	1,031,213 (b)	— (b)	—	1,031,213
Common collective trusts (c)				2,958,767
Registered investment companies	— (d)	—	—	—
Fixed income securities:				
U.S. Government securities	—	731,319 (a)	—	731,319
Corporate debt instruments	—	1,029,370 (a)	—	1,029,370
Registered investment companies (e)	81,800 (d)	3,076 (d)	—	1,128,107
Other	156 (f)	56,323 (f)	—	56,479
Other:				
Insurance company general account (unallocated contracts)	—	6,253 (g)	—	6,253
Total investments	$1,128,925	$1,826,341	$—	$6,957,264
Cash				2,316
Other pending transactions				(29,121)
Less: Other postretirement assets included in total investments				(76,033)
Total fair value of qualified pension assets				$6,854,426

2019	Level 1	Level 2	Level 3	Total
		(In Thousands)		
Equity securities:				
Corporate stocks:				
Preferred	$10,379 (b)	$—	$—	$10,379
Common	857,159 (b)	— (b)	—	857,159
Common collective trusts (c)				2,698,697
Registered investment companies	132,389 (d)	—	—	132,389
Fixed income securities:				
U.S. Government securities	— (b)	805,671 (a)	—	805,671
Corporate debt instruments	—	762,577 (a)	—	762,577
Registered investment companies (e)	53,842 (d)	2,903 (d)	—	1,008,371
Other	73 (f)	43,106 (f)	—	43,179
Other:				
Insurance company general account (unallocated contracts)	—	40,452 (g)	—	40,452
Total investments	$1,053,842	$1,654,709	$—	$6,358,874
Cash				1,407
Other pending transactions				(22,549)
Less: Other postretirement assets included in total investments				(66,572)
Total fair value of qualified pension assets				$6,271,160

Other Postretirement Trusts

2020	Level 1	Level 2	Level 3	Total
		(In Thousands)		
Equity securities:				
Common collective trust (c)				$315,191
Fixed income securities:				
U.S. Government securities	46,498 (b)	97,604 (a)	—	144,102
Corporate debt instruments	—	147,287 (a)	—	147,287
Registered investment companies	16,965 (d)	—	—	16,965
Other	—	60,219 (f)	—	60,219
Total investments	$63,463	$305,110	$—	$683,764
Other pending transactions				(21,931)
Plus: Other postretirement assets included in the investments of the qualified pension trust				76,033
Total fair value of other postretirement assets				$737,866

2019	Level 1		Level 2		Level 3	Total
			(In Thousands)			
Equity securities:						
Common collective trust (c)						$289,398
Fixed income securities:						
U.S. Government securities	49,930	(b)	89,297	(a)	—	139,227
Corporate debt instruments	—		130,333	(a)	—	130,333
Registered investment companies	1,877	(d)	—		—	1,877
Other	—		57,210	(f)	—	57,210
Total investments	$51,807		$276,840		$—	$618,045
Other pending transactions						1,645
Plus: Other postretirement assets included in the investments of the qualified pension trust						66,572
Total fair value of other postretirement assets						$686,262

(a) Certain preferred stocks and certain fixed income debt securities (corporate, government, and securitized) are stated at fair value as determined by broker quotes.

(b) Common stocks, certain preferred stocks, and certain fixed income debt securities (government) are stated at fair value determined by quoted market prices.

(c) The common collective trusts hold investments in accordance with stated objectives. The investment strategy of the trusts is to capture the growth potential of equity markets by replicating the performance of a specified index. Net asset value per share of common collective trusts estimate fair value. Certain of these common collective trusts are not publicly quoted and are valued by the fund administrators using net asset value as a practical expedient. Accordingly, these funds are not assigned a level in the fair value table, but are included in the total.

(d) Registered investment companies are money market mutual funds with a stable net asset value of one dollar per share. Registered investment companies may hold investments in domestic and international bond markets or domestic equities and estimate fair value using net asset value per share.

(e) Certain of these registered investment companies are not publicly quoted and are valued by the fund administrators using net asset value as a practical expedient. Accordingly, these funds are not assigned a level in the fair value table, but are included in the total.

(f) The other remaining assets are U.S. municipal and foreign government bonds stated at fair value as determined by broker quotes.

(g) The unallocated insurance contract investments are recorded at contract value, which approximates fair value. The contract value represents contributions made under the contract, plus interest, less funds used to pay benefits and contract expenses, and less distributions to the master trust.

Estimated Future Benefit Payments

Based upon the assumptions used to measure Entergy's qualified pension and other postretirement benefit obligations at December 31, 2020, and including pension and other postretirement benefits attributable to estimated future employee service, Entergy expects that benefits to be paid and the Medicare Part D subsidies to be received over the next ten years for Entergy Corporation and its subsidiaries will be as follows:

	Estimated Future Benefits Payments			
	Qualified Pension	Non-Qualified Pension	Other Postretirement (before Medicare Subsidy)	Estimated Future Medicare D Subsidy Receipts
			(In Thousands)	
Year(s)				
2021	$566,242	$22,851	$68,109	$123
2022	$568,058	$24,193	$67,904	$82
2023	$569,348	$23,906	$68,149	$93
2024	$576,365	$17,183	$67,569	$101
2025	$552,303	$25,477	$66,414	$112
2026 - 2030	$2,641,864	$56,584	$314,972	$703

Based upon the same assumptions, Entergy expects that benefits to be paid and the Medicare Part D subsidies to be received over the next ten years for the Registrant Subsidiaries for their employees will be as follows:

Estimated Future Qualified Pension Benefits Payments	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Year(s)						
2021	$115,340	$130,058	$38,131	$15,011	$32,935	$29,202
2022	$114,260	$130,019	$38,104	$15,202	$32,859	$28,854
2023	$111,759	$128,199	$37,159	$15,030	$31,439	$28,833
2024	$110,128	$126,927	$35,571	$14,437	$29,541	$28,641
2025	$108,314	$124,911	$34,377	$14,052	$27,781	$27,378
2026 - 2030	$513,207	$575,141	$155,722	$63,426	$123,688	$132,163

Estimated Future Non-Qualified Pension Benefits Payments	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
Year(s)					
2021	$218	$193	$181	$17	$633
2022	$424	$211	$411	$17	$871
2023	$328	$217	$377	$21	$1,004
2024	$285	$196	$454	$19	$851
2025	$580	$209	$439	$19	$762
2026 - 2030	$976	$718	$2,146	$111	$3,250

Estimated Future Other Postretirement Benefits Payments (before Medicare Part D Subsidy)	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Year(s)						
2021	$12,693	$15,600	$3,386	$2,412	$5,322	$2,739
2022	$12,542	$15,502	$3,498	$2,322	$4,840	$2,734
2023	$12,329	$15,397	$3,541	$2,238	$4,770	$2,676
2024	$12,156	$15,034	$3,574	$2,151	$4,597	$2,579
2025	$11,869	$14,825	$3,614	$2,070	$4,486	$2,518
2026 - 2030	$56,603	$69,424	$17,668	$8,853	$20,622	$11,749

Estimated Future Medicare Part D Subsidy	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Year(s)						
2021	$40	$20	$15	$—	$13	$5
2022	$39	$6	$15	$—	$4	$1
2023	$42	$6	$17	$—	$5	$2
2024	$45	$8	$17	$—	$5	$2
2025	$49	$8	$19	$—	$6	$1
2026 - 2030	$289	$58	$112	$—	$43	$12

Contributions

Entergy currently expects to contribute approximately $356 million to its qualified pension plans and approximately $39.9 million to other postretirement plans in 2021. The expected 2021 pension and other postretirement plan contributions of the Registrant Subsidiaries for their employees are shown below. The 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021.

The Registrant Subsidiaries expect to contribute approximately the following to the qualified pension and other postretirement plans for their employees in 2021:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Pension Contributions	$66,649	$59,882	$13,715	$5,395	$6,955	$18,663
Other Postretirement Contributions	$517	$15,600	$130	$175	$66	$22

Actuarial Assumptions

The significant actuarial assumptions used in determining the pension PBO and the other postretirement benefit APBO as of December 31, 2020 and 2019 were as follows:

	2020	2019
Weighted-average discount rate:		
Qualified pension	2.60% - 2.83% Blended 2.77%	3.26% - 3.43% Blended 3.39%
Other postretirement	2.62%	3.26%
Non-qualified pension	1.61%	2.72%
Weighted-average rate of increase in future compensation levels	3.98% - 4.40%	3.98% - 4.40%
Interest crediting rate	2.60%	2.60%
Assumed health care trend rate:		
Pre-65	5.87%	6.13%
Post-65	6.31%	6.25%
Ultimate rate	4.75%	4.75%
Year ultimate rate is reached and beyond:		
Pre-65	2030	2027
Post-65	2028	2027

The significant actuarial assumptions used in determining the net periodic pension and other postretirement benefit costs for 2020, 2019, and 2018 were as follows:

	2020	2019	2018
Weighted-average discount rate:			
Qualified pension:			
Service cost	3.42%	4.57%	3.89%
Interest cost	2.99%	4.15%	3.44%
Other postretirement:			
Service cost	3.27%	4.62%	3.88%
Interest cost	2.41%	4.01%	3.33%
Non-qualified pension:			
Service cost	2.71%	3.94%	3.35%
Interest cost	2.25%	3.46%	2.76%
Weighted-average rate of increase in future compensation levels	3.98% - 4.40%	3.98%	3.98%
Expected long-term rate of return on plan assets:			
Pension assets	7.00%	7.25%	7.50%
Other postretirement non-taxable assets	6.25% - 7.00%	6.5%-7.25%	6.50% - 7.50%
Other postretirement taxable assets	5.25%	5.50%	5.50%
Assumed health care trend rate:			
Pre-65	6.13%	6.59%	6.95%
Post-65	6.25%	7.15%	7.25%
Ultimate rate	4.75%	4.75%	4.75%
Year ultimate rate is reached and beyond:			
Pre-65	2027	2027	2027
Post-65	2027	2026	2027

With respect to the mortality assumptions, Entergy used the Pri-2012 Employee and Healthy Annuitant Tables with a fully generational MP-2020 projection scale, in determining its December 31, 2020 pension plans' PBOs and the Pri.H 2012 (headcount weighted) Employee and Healthy Annuitant Tables with a fully generational MP-2020 projection scale, in determining its December 31, 2020 other postretirement benefit APBO. Entergy used the Pri-2012 Employee and Healthy Annuitant Tables with a fully generational MP-2019 projection scale, in determining its December 31, 2019 pension plans' PBOs and the Pri.H 2012 (headcount weighted) Employee and Healthy Annuitant Tables with a fully generational MP-2019 projection scale, in determining its December 31, 2019 other postretirement benefit APBO.

Defined Contribution Plans

Entergy sponsors the Savings Plan of Entergy Corporation and Subsidiaries (System Savings Plan). The System Savings Plan is a defined contribution plan covering eligible employees of Entergy and certain of its subsidiaries. The participating Entergy subsidiary makes matching contributions to the System Savings Plan for all eligible participating employees in an amount equal to either 70% or 100% of the participants' basic contributions, up to 6% of their eligible earnings per pay period. The matching contribution is allocated to investments as directed by the employee.

Entergy also sponsors the Savings Plan of Entergy Corporation and Subsidiaries VI (established in April 2007) and the Savings Plan of Entergy Corporation and Subsidiaries VII (established in April 2007) to which matching contributions are also made. The plans are defined contribution plans that cover eligible employees, as defined by each plan, of Entergy and certain of its subsidiaries.

Entergy also sponsors the Savings Plan of Entergy Corporation and Subsidiaries VIII (established January 2021) and the Savings Plan of Entergy Corporation and Subsidiaries IX (established January 2021) to which company contributions are made. The participating Entergy subsidiary makes matching contributions to these defined contribution plans for all eligible participating employees in an amount equal to 100% of the participants' basic contributions, up to 5% of their eligible earnings per pay period. Eligible participants may also receive a discretionary annual company contribution up to 4% of the participant's eligible earnings (subject to vesting).

Entergy's subsidiaries' contributions to defined contribution plans collectively were $63.1 million in 2020, $57.6 million in 2019, and $54.3 million in 2018. The majority of the contributions were to the System Savings Plan.

The Registrant Subsidiaries' 2020, 2019, and 2018 contributions to defined contribution plans for their employees were as follows:

Year	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
2020	$4,515	$6,518	$2,863	$1,115	$2,596
2019	$4,111	$5,641	$2,424	$882	$2,136
2018	$3,985	$5,450	$2,307	$795	$1,992

NOTE 12. STOCK-BASED COMPENSATION (Entergy Corporation)

Entergy grants stock options, restricted stock, performance units, and restricted stock units to key employees of the Entergy subsidiaries under its equity plans which are shareholder-approved stock-based compensation plans. Effective May 3, 2019, Entergy's shareholders approved the 2019 Omnibus Incentive Plan

(2019 Plan). The maximum number of common shares that can be issued from the 2019 Plan for stock-based awards is 7,300,000 all of which are available for incentive stock option grants. The 2019 Plan applies to awards granted on or after May 3, 2019 and awards expire ten years from the date of grant. As of December 31, 2020, there were 6,108,451 authorized shares remaining for stock-based awards.

Stock Options

Stock options are granted at exercise prices that equal the closing market price of Entergy Corporation common stock on the date of grant. Generally, stock options granted will become exercisable in equal amounts on each of the first three anniversaries of the date of grant. Unless they are forfeited previously under the terms of the grant, options expire 10 years after the date of the grant if they are not exercised.

The following table includes financial information for stock options for each of the years presented:

	2020	2019	2018
		(In Millions)	
Compensation expense included in Entergy's consolidated net income	$3.9	$3.8	$4.3
Tax benefit recognized in Entergy's consolidated net income	$1.0	$1.0	$1.1
Compensation cost capitalized as part of fixed assets and inventory	$1.5	$1.4	$0.7

Entergy determines the fair value of the stock option grants by considering factors such as lack of marketability, stock retention requirements, and regulatory restrictions on exercisability in accordance with accounting standards. The stock option weighted-average assumptions used in determining the fair values are as follows:

	2020	2019	2018
Stock price volatility	17.16%	17.23%	17.44%
Expected term in years	7.04	7.32	7.33
Risk-free interest rate	1.49%	2.50%	2.54%
Dividend yield	4.00%	4.50%	4.75%
Dividend payment per share	$3.74	$3.66	$3.58

Stock price volatility is calculated based upon the daily public stock price volatility of Entergy Corporation common stock over a period equal to the expected term of the award. The expected term of the options is based upon historical option exercises and the weighted average life of options when exercised and the estimated weighted average life of all vested but unexercised options. In 2008, Entergy implemented stock ownership guidelines for its senior executive officers. These guidelines require an executive officer to own shares of Entergy Corporation common stock equal to a specified multiple of his or her salary. Until an executive officer achieves this ownership position the executive officer is required to retain 75% of the net-of-tax net profit upon exercise of the option to be held in Entergy Corporation common stock. The reduction in fair value of the stock options due to this restriction is based upon an estimate of the call option value of the reinvested gain discounted to present value over the applicable reinvestment period.

A summary of stock option activity for the year ended December 31, 2020 and changes during the year are presented below:

	Number of Options	Weighted-Average Exercise Price	Aggregate Intrinsic Value	Weighted-Average Contractual Life
Options outstanding as of January 1, 2020	2,448,913	$78.48		
Options granted	530,716	$131.72		
Options exercised	(544,082)	$79.27		
Options forfeited/expired	(36,168)	$108.69		
Options outstanding as of December 31, 2020	2,399,379	$89.63	$40,842,152	6.72 years
Options exercisable as of December 31, 2020	1,264,641	$74.55	$31,979,370	5.26 years
Weighted-average grant-date fair value of options granted during 2020	$11.45			

The weighted-average grant-date fair value of options granted during the year was $8.32 for 2019 and $6.99 for 2018. The total intrinsic value of stock options exercised was $26 million during 2020, $29 million during 2019, and $19 million during 2018. The intrinsic value, which has no effect on net income, of the outstanding stock options exercised is calculated by the positive difference between the weighted average exercise price of the stock options granted and Entergy Corporation's common stock price as of December 31, 2020. The aggregate intrinsic value of the stock options outstanding as of December 31, 2020 was $40.8 million. Stock options outstanding as of December 31, 2020 includes 512,316 out of the money options with an intrinsic value of zero. Entergy recognizes compensation cost over the vesting period of the options based on their grant-date fair value. The total fair value of options that vested was approximately $5 million during 2020, $5 million during 2019, and $4 million during 2018. Cash received from option exercises was $43 million for the year ended December 31, 2020. The tax benefits realized from options exercised was $7 million for the year ended December 31, 2020.

The following table summarizes information about stock options outstanding as of December 31, 2020:

	Options Outstanding			Options Exercisable	
Range of Exercise Price	As of December 31, 2020	Weighted-Average Remaining Contractual Life-Yrs.	Weighted Average Exercise Price	Number Exercisable as of December 31, 2020	Weighted Average Exercise Price
$51 - $64.99	240,200	2.72	$63.69	240,200	$63.69
$65 - $78.99	960,110	6.09	$73.86	759,031	$72.74
$79 - $91.99	686,753	7.24	$89.34	265,410	$89.57
$92 - $131.72	512,316	9.08	$131.72	—	$0.00
$51 - $131.72	2,399,379	6.72	$89.63	1,264,641	$74.55

Stock-based compensation cost related to non-vested stock options outstanding as of December 31, 2020 not yet recognized is approximately $6 million and is expected to be recognized over a weighted-average period of 1.72 years.

Restricted Stock Awards

Entergy grants restricted stock awards earned under its stock benefit plans in the form of stock units. One-third of the restricted stock awards will vest upon each anniversary of the grant date and are expensed ratably over the three-year vesting period. Shares of restricted stock have the same dividend and voting rights as other common stock and are considered issued and outstanding shares of Entergy upon vesting. In January 2020 the Board approved and Entergy granted 313,805 restricted stock awards under the 2019 Plan. The restricted stock awards were made effective on January 30, 2020 and were valued at $131.72 per share, which was the closing price of Entergy Corporation's common stock on that date.

The following table includes information about the restricted stock awards outstanding as of December 31, 2020:

	Shares	Weighted-Average Grant Date Fair Value Per Share
Outstanding shares at January 1, 2020	692,134	$82.56
Granted	336,363	$130.11
Vested	(345,271)	$79.41
Forfeited	(34,728)	$101.32
Outstanding shares at December 31, 2020	648,498	$107.89

The following table includes financial information for restricted stock for each of the years presented:

	2020	2019	2018
		(In Millions)	
Compensation expense included in Entergy's consolidated net income	$23.1	$20.2	$19.8
Tax benefit recognized in Entergy's consolidated net income	$5.9	$5.1	$5.1
Compensation cost capitalized as part of fixed assets and inventory	$8.5	$7.1	$5.7

The total fair value of the restricted stock awards granted was $44 million, $34 million, and $28 million for the years ended December 31, 2020, 2019, and 2018, respectively.

The total fair value of the restricted stock awards vested was $27 million, $25 million, and $25 million for the years ended December 31, 2020, 2019, and 2018, respectively.

Long-Term Performance Unit Program

Entergy grants long-term incentive awards earned under its stock benefit plans in the form of performance units, which represents the value of, and are settled with, one share of Entergy Corporation common stock at the end of the three-year performance period, plus dividends accrued during the performance period on the number of performance units earned. The Long-Term Performance Unit Program specifies a minimum, target, and maximum achievement level, the achievement of which will determine the number of performance units that may be earned. Entergy measures performance by assessing Entergy's total shareholder return relative to the total shareholder return of the companies in the Philadelphia Utility Index. For the 2020-2021 performance period, performance will be measured based eighty percent on relative total shareholder return and twenty percent on a cumulative adjusted earnings per share metric.

In January 2020 the Board approved and Entergy granted 134,853 performance units under the 2019 Plan. The performance units were granted on January 30, 2020, and eighty percent were valued at $169.74 per share based on various factors, primarily market conditions; and twenty percent were valued at $131.72 per share, the closing price of Entergy Corporation's common stock on that date. Performance units have the same dividend and voting rights as other common stock, are considered issued and outstanding shares of Entergy upon vesting, and are expensed ratably over the 3-year vesting period, and compensation cost for the portion of the award based on cumulative adjusted earnings per share will be adjusted based on the number of units that ultimately vest.

The following table includes information about the long-term performance units outstanding at the target level as of December 31, 2020:

	Shares	Weighted-Average Grant Date Fair Value Per Share
Outstanding shares at January 1, 2020	551,933	$84.01
Granted	376,557	$105.90
Vested	(423,225)	$71.40
Forfeited	(29,500)	$111.86
Outstanding shares at December 31, 2020	475,765	$110.82

The following table includes financial information for the long-term performance units for each of the years presented:

	2020	2019	2018
		(In Millions)	
Compensation expense included in Entergy's consolidated net income	$12.6	$11.1	$11.5
Tax benefit recognized in Entergy's consolidated net income	$3.2	$2.8	$2.9
Compensation cost capitalized as part of fixed assets and inventory	$4.9	$4.0	$3.3

The total fair value of the long-term performance units granted was $40 million, $23 million, and $16 million for the years ended December 31, 2020, 2019, and 2018, respectively.

In January 2020, Entergy issued 423,184 shares of Entergy Corporation common stock at a share price of $126.31 for awards earned and dividends accrued under the 2017-2019 Long-Term Performance Unit Program. In January 2019, Entergy issued 226,208 shares of Entergy Corporation common stock at a share price of $86.03 for awards earned and dividends accrued under the 2016-2018 Long-Term Performance Unit Program. In January

2018, Entergy issued 50,812 shares of Entergy Corporation common stock at a share price of $78.51 for awards earned and dividends accrued under the 2015-2017 Long-Term Performance Unit Program.

Restricted Stock Unit Awards

Entergy grants restricted stock unit awards earned under its stock benefit plans in the form of stock units that are subject to time-based restrictions. The restricted stock units may be settled in shares of Entergy Corporation common stock or the cash value of shares of Entergy Corporation common stock at the time of vesting. The costs of restricted stock unit awards are charged to income over the restricted period, which varies from grant to grant. The average vesting period for restricted stock unit awards granted is 33 months. As of December 31, 2020, there were 86,175 unvested restricted stock units that are expected to vest over an average period of 16 months.

The following table includes information about the restricted stock unit awards outstanding as of December 31, 2020:

	Shares	Weighted-Average Grant Date Fair Value Per Share
Outstanding shares at January 1, 2020	130,463	$82.72
Granted	18,100	$114.30
Vested	(55,888)	$77.04
Forfeited	(6,500)	$84.32
Outstanding shares at December 31, 2020	86,175	$92.92

The following table includes financial information for restricted stock unit awards for each of the years presented:

	2020	2019	2018
	(In Millions)		
Compensation expense included in Entergy's consolidated net income	$2.0	$2.2	$2.9
Tax benefit recognized in Entergy's consolidated net income	$0.5	$0.6	$0.7
Compensation cost capitalized as part of fixed assets and inventory	$0.9	$0.9	$0.7

The total fair value of the restricted stock unit awards granted was $2 million, $3 million, and $2 million for the years ended December 31, 2020, 2019, and 2018, respectively.

The total fair value of the restricted stock unit awards vested was $4 million, $6 million, and $3.1 million for the years ended December 31, 2020, 2019, and 2018, respectively.

NOTE 13. BUSINESS SEGMENT INFORMATION (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Entergy's reportable segments as of December 31, 2020 are Utility and Entergy Wholesale Commodities. Utility includes the generation, transmission, distribution, and sale of electric power in portions of Arkansas, Louisiana, Mississippi, and Texas, and natural gas utility service in portions of Louisiana. Entergy Wholesale Commodities includes the ownership, operation, and decommissioning of nuclear power plants located in the northern United States and the sale of the electric power produced by its operating plants to wholesale customers. Entergy Wholesale Commodities also includes the ownership of interests in non-nuclear power plants that sell the electric power produced by those plants to wholesale customers. "All Other" includes the parent company, Entergy Corporation, and other business activity.

Entergy's segment financial information was as follows:

2020	Utility	Entergy Wholesale Commodities	All Other	Eliminations	Consolidated
			(In Thousands)		
Operating revenues	$9,170,714	$942,869	$78	($25)	$10,113,636
Asset write-offs, impairments, and related charges	$—	$26,623	$—	$—	$26,623
Depreciation, amortization, & decommissioning	$1,685,138	$306,974	$2,835	$—	$1,994,947
Interest and investment income	$299,004	$234,194	$19,563	($159,943)	$392,818
Interest expense	$648,851	$22,432	$146,730	($32,350)	$785,663
Income taxes	($282,311)	$104,937	$55,868	$—	($121,506)
Consolidated net income (loss)	$1,816,354	($62,763)	($219,344)	($127,594)	$1,406,653
Total assets	$55,940,153	$3,800,378	$552,632	($2,053,951)	$58,239,212
Cash paid for long-lived asset additions	$5,102,322	$54,455	$84	$—	$5,156,861

2019	Utility	Entergy Wholesale Commodities	All Other	Eliminations	Consolidated
			(In Thousands)		
Operating revenues	$9,583,985	$1,294,719	$21	($52)	$10,878,673
Asset write-offs, impairments, and related charges	$—	$290,027	$—	$—	$290,027
Depreciation, amortization, & decommissioning	$1,493,167	$384,707	$2,944	$—	$1,880,818
Interest and investment income	$289,570	$414,636	$26,295	($182,589)	$547,912
Interest expense	$589,395	$29,450	$178,575	($54,995)	$742,425
Income taxes	$19,634	($161,295)	($28,164)	$—	($169,825)
Consolidated net income (loss)	$1,425,643	$148,870	($188,675)	($127,594)	$1,258,244
Total assets	$49,557,664	$4,154,961	$514,020	($2,502,733)	$51,723,912
Cash paid for long-lived asset additions	$4,527,045	$104,300	$160	$—	$4,631,505

2018	Utility	Entergy Wholesale Commodities	All Other	Eliminations	Consolidated
			(In Thousands)		
Operating revenues	$9,540,670	$1,468,905	$—	($123)	$11,009,452
Asset write-offs, impairments, and related charges	$—	$532,321	$—	$—	$532,321
Depreciation, amortization, & decommissioning	$1,367,944	$388,732	$1,274	$—	$1,757,950
Interest and investment income	$203,936	$14,543	$31,602	($186,217)	$63,864
Interest expense	$552,919	$33,694	$179,358	($58,623)	$707,348
Income taxes	($732,548)	($269,025)	($35,253)	$—	($1,036,826)
Consolidated net income (loss)	$1,495,061	($340,641)	($164,271)	($127,594)	$862,555
Total assets	$44,777,167	$5,459,275	$733,366	($2,694,742)	$48,275,066
Investment in affiliates - at equity	$—	$—	$—	$—	$—
Cash paid for long-lived asset additions	$3,987,424	$283,707	$86	$—	$4,271,217

The Entergy Wholesale Commodities business is sometimes referred to as the “competitive businesses.” Eliminations are primarily intersegment activity. Almost all of Entergy’s goodwill is related to the Utility segment.

In January 2019, Entergy sold the Vermont Yankee plant, which it had previously shut down, to NorthStar. In August 2019, Entergy sold the Pilgrim plant, which it had previously shut down, to Holtec. Indian Point 2 was shut down in April 2020, and Entergy has also announced plans to shut down Indian Point 3 in April 2021 and Palisades in May 2022, and has purchase and sale agreements with Holtec for each of them expected to close after they are shut down. Management expects these transactions to result in the cessation of merchant power generation at all Entergy Wholesale Commodities nuclear power plants owned and operated by Entergy by 2022. Entergy will continue to have the obligation to decommission the nuclear plants pending their sales to third parties.

The decisions to shut down these plants and the related transactions resulted in asset impairments; employee retention and severance expenses and other benefits-related costs; and contracted economic development contributions. The employee retention and severance expenses and other benefits-related costs and contracted economic development contributions are included in "Other operation and maintenance" in the consolidated income statements.

Total restructuring charges in 2020, 2019, and 2018 were comprised of the following:

	Employee retention and severance expenses and other benefits-related costs	Contracted economic development costs	Total
	(In Millions)		
Balance as of December 31, 2017	$83	$14	$97
Restructuring costs accrued	139	—	139
Cash paid out	43	—	43
Balance as of December 31, 2018	$179	$14	$193
Restructuring costs accrued	91	—	91
Cash paid out	141	—	141
Balance as of December 31, 2019	$129	$14	$143
Restructuring costs accrued	71	—	71
Cash paid out	55	—	55
Balance as of December 31, 2020	$145	$14	$159

In addition, Entergy Wholesale Commodities incurred $19 million in 2020, $290 million in 2019, and $532 million in 2018 of impairment, loss on sales, and other related charges associated with these strategic decisions and transactions. See Note 14 to the financial statements for further discussion of these impairment charges.

Going forward, Entergy Wholesale Commodities expects to incur employee retention and severance expenses of approximately $40 million in 2021 and approximately $15 million in 2022 associated with these strategic transactions.

Geographic Areas

For the years ended December 31, 2020, 2019, and 2018, the amount of revenue Entergy derived from outside of the United States was insignificant. As of December 31, 2020 and 2019, Entergy had no long-lived assets located outside of the United States.

Registrant Subsidiaries

Each of the Registrant Subsidiaries has one reportable segment, which is an integrated utility business, except for System Energy, which is an electricity generation business. Each of the Registrant Subsidiaries' operations is managed on an integrated basis by that company because of the substantial effect of cost-based rates and regulatory oversight on the business process, cost structures, and operating results.

NOTE 14. ACQUISITIONS, DISPOSITIONS, AND IMPAIRMENT OF LONG-LIVED ASSETS (Entergy Corporation, Entergy Louisiana, and Entergy Mississippi)

Acquisitions

Choctaw Generating Station

In October 2019, Entergy Mississippi purchased the Choctaw Generating Station, an 810 MW natural gas fired combined-cycle turbine plant located near French Camp, Mississippi, from a subsidiary of GenOn Energy Inc. The purchase price for the Choctaw Generating Station was approximately $305 million.

Washington Parish Energy Center

In April 2017, Entergy Louisiana entered into an agreement with a subsidiary of Calpine Corporation for the construction and purchase of Washington Parish Energy Center, which consists of two natural gas-fired combustion turbine units with a total nominal capacity of approximately 361 MW. In November 2020, Entergy Louisiana completed the purchase, as approved by the LPSC, of the Washington Parish Energy Center. The total investment including transmission and other related costs, is approximately $261 million, including a payment of $222 million to purchase the plant.

Dispositions

Pilgrim

In July 2018, Entergy entered into a purchase and sale agreement with Holtec International to sell to a Holtec subsidiary 100% of the equity interests in Entergy Nuclear Generation Company, the owner of the Pilgrim plant. In August 2019 the NRC approved the sale of the plant to Holtec. The transaction closed in August 2019 for a purchase price of $1,000 (subject to adjustments for net liabilities and other amounts). The sale included the transfer of the Pilgrim nuclear decommissioning trust and the asset retirement obligation for spent fuel management and plant decommissioning. The transaction resulted in a loss of $190 million ($156 million net-of-tax) in the third quarter 2019. The disposition-date fair value of the nuclear decommissioning trust fund was approximately $1,030 million and the disposition-date fair value of the asset retirement obligation was $837 million. The transaction also included property, plant, and equipment with a net book value of zero, materials and supplies, and prepaid assets.

Willow Glen

In December 2018, Entergy Louisiana sold the Willow Glen Power Station, a non-operating gas plant. Entergy Louisiana sold Willow Glen for approximately $12 million in cash and the transfer of the obligation to decommission the plant. Entergy Louisiana recognized a regulatory liability of $5.7 million for return of removal costs previously collected in rates. Entergy Louisiana realized a pre-tax gain of $14.8 million on the sale. Entergy Louisiana recorded a $31.9 million regulatory liability to recognize the obligation to refund excess customer collections for decommissioning Willow Glen.

Vermont Yankee

In November 2016, Entergy entered into an agreement to sell 100% of the membership interests in Entergy Nuclear Vermont Yankee, LLC to a subsidiary of NorthStar. Entergy Nuclear Vermont Yankee was the owner of the Vermont Yankee plant. The sale of Entergy Nuclear Vermont Yankee to NorthStar included the transfer of the nuclear decommissioning trust fund and the asset retirement obligation for the spent fuel management and decommissioning of the plant.

In March 2018, Entergy and NorthStar entered into a settlement agreement and a Memorandum of Understanding with State of Vermont agencies and other interested parties that set forth the terms on which the agencies and parties support the Vermont Public Utility Commission’s approval of the transaction. The agreements provide additional financial assurance for decommissioning, spent fuel management and site restoration, and detail the site restoration standards. In October 2018 the NRC issued an order approving the application to transfer Vermont Yankee’s license to NorthStar for decommissioning. In December 2018, the Vermont Public Utility Commission issued an order approving the transaction consistent with the Memorandum of Understanding’s terms. On January 11, 2019, Entergy and NorthStar closed the transaction.

Entergy Nuclear Vermont Yankee had an outstanding credit facility that was used to pay for dry fuel storage costs. This credit facility was guaranteed by Entergy Corporation. A subsidiary of Entergy assumed the

obligations under the credit facility, which remains outstanding. At the closing of the sale transaction, NorthStar caused Entergy Nuclear Vermont Yankee, renamed NorthStar Vermont Yankee, to issue a $139 million promissory note to the Entergy subsidiary that assumed the credit facility obligations. The amount of the note included the balance outstanding on the credit facility, as well as borrowing fees and costs incurred by Entergy in connection with the credit facility.

With the receipt of the NRC and Vermont Public Utility Commission approvals and the resolution among the parties of the significant conditions of the sale, Entergy concluded that as of December 31, 2018 Vermont Yankee was in held for sale status. Entergy accordingly evaluated the Vermont Yankee asset retirement obligation in light of the terms of the sale transaction and evaluated the remaining values of the Vermont Yankee assets. These evaluations resulted in an increase in the asset retirement obligation and $173 million of asset impairment and related other charges in the fourth quarter 2018. See Note 9 to the financial statements for additional discussion of the asset retirement obligation. Upon closing of the transaction in January 2019, the Vermont Yankee decommissioning trust, along with the decommissioning obligation for the plant, was transferred to NorthStar. The assets and liabilities associated with the sale of Vermont Yankee were classified as held for sale on the Entergy Corporation and Subsidiaries Consolidated Balance Sheet as of December 31, 2018. As of December 31, 2018, the value of the decommissioning trust was $532 million. As of December 31, 2018, the asset retirement cost asset was $127 million, classified within other deferred debits, and the asset retirement cost obligation was $568 million, classified within other non-current liabilities.

The Vermont Yankee spent fuel disposal contract was assigned to NorthStar as part of the transaction. The Vermont Yankee transaction resulted in Entergy generating a net deferred tax asset in January 2019. The deferred tax asset could not be fully realized by Entergy in the first quarter of 2019; accordingly, Entergy accrued a net tax expense of $29 million on the disposition of Vermont Yankee. The transaction also resulted in other charges of $5.4 million ($4.2 million net-of-tax) in the first quarter 2019.

Impairment of Long-lived Assets

2018, 2019, and 2020 Impairments

Entergy continues to execute its strategy to shut down and sell all of the remaining plants in Entergy Wholesale Commodities' merchant nuclear fleet, with planned shutdowns of Indian Point 3 by April 30, 2021 and Palisades by May 31, 2022. The Indian Point 2 plant permanently ceased operations on April 30, 2020. The other three Entergy Wholesale Commodities' nuclear plants, FitzPatrick, Vermont Yankee, and Pilgrim, have been sold. The FitzPatrick plant was classified as held-for-sale at December 31, 2016, and subsequently sold to Exelon in March 2017. The Vermont Yankee plant was classified as held-for-sale at December 31, 2018, and subsequently sold to NorthStar on January 11, 2019. The Pilgrim plant was sold to Holtec International on August 26, 2019.

Entergy Wholesale Commodities incurred $19 million in 2020, $100 million in 2019, and $532 million in 2018 of impairment charges related to nuclear fuel spending, nuclear refueling outage spending, expenditures for capital assets, and asset retirement obligation revisions. These costs were charged to expense as incurred as a result of the impaired fair value of the Entergy Wholesale Commodities nuclear plants' long-lived assets due to the significantly reduced remaining estimated operating lives associated with management's strategy to exit the Entergy Wholesale Commodities merchant power business.

With respect to Palisades, Entergy and Consumers Energy had agreed to amend the existing PPA so that it would terminate early, on May 31, 2018. In September 2017, however, Entergy and Consumers Energy agreed to terminate the PPA amendment agreement. Entergy continues to operate Palisades under the current PPA with Consumers Energy, instead of shutting down in the fall of 2018 as previously planned. Entergy intends to shut down the Palisades plant permanently no later than May 31, 2022. As a result of the change in expected operating life of the Palisades plant, the expected probability-weighted undiscounted net cash flows as of September 30, 2017 exceeded the carrying value of the plant and related assets. Accordingly, nuclear fuel spending, nuclear refueling

outage spending, and expenditures for capital assets incurred at Palisades after September 30, 2017 are no longer charged to expense as incurred, but recorded as assets and depreciated or amortized, subject to the typical periodic impairment reviews prescribed in the accounting rules.

The impairments and other related charges are recorded as a separate line item in Entergy's consolidated statements of operations and are included within the results of the Entergy Wholesale Commodities segment. In addition to the impairments and other related charges, Entergy expects to incur additional charges through mid-2022 associated with these strategic transactions. See Note 13 to the financial statements for further discussion of these additional charges.

2018 Pilgrim Impairment

The Pilgrim plant ceased operations on May 31, 2019, at the end of its current fuel cycle. Entergy Nuclear Generation Company filed its Post-Shutdown Decommissioning Activities Report (PSDAR) with the NRC in the fourth quarter 2018 for the Pilgrim plant. As part of the development of the PSDAR, Entergy obtained a revised decommissioning cost study in the third quarter 2018. The revised estimate resulted in a $117.5 million increase in the decommissioning cost liability and a corresponding impairment charge in the third quarter 2018. As discussed above in **Dispositions**, on August 26, 2019, Entergy sold the Pilgrim plant to a Holtec International subsidiary.

2018 Vermont Yankee Impairment

As discussed above in **Dispositions**, on January 11, 2019, Entergy sold the Vermont Yankee plant to NorthStar. With the receipt of the NRC and Vermont Public Utility Commission approvals and the resolution among the parties of the significant conditions of the sale, Entergy concluded that as of December 31, 2018 Vermont Yankee was in held-for- sale status. Entergy accordingly evaluated the Vermont Yankee asset retirement obligation in light of the terms of the sale transaction, and evaluated the remaining values of the Vermont Yankee assets. These evaluations resulted in $173 million of asset impairment and related charges in the fourth quarter 2018. See Note 9 to the financial statements for additional discussion of the revision of the asset retirement obligation.

NOTE 15. RISK MANAGEMENT AND FAIR VALUES (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Market Risk

In the normal course of business, Entergy is exposed to a number of market risks. Market risk is the potential loss that Entergy may incur as a result of changes in the market or fair value of a particular commodity or instrument. All financial and commodity-related instruments, including derivatives, are subject to market risk including commodity price risk, equity price, and interest rate risk. Entergy uses derivatives primarily to mitigate commodity price risk, particularly power price and fuel price risk.

The Utility has limited exposure to the effects of market risk because it operates primarily under cost-based rate regulation. To the extent approved by their retail regulators, the Utility operating companies use derivative instruments to hedge the exposure to price volatility inherent in their purchased power, fuel, and gas purchased for resale costs that are recovered from customers.

As a wholesale generator, Entergy Wholesale Commodities' core business is selling energy, measured in MWh, to its customers. Entergy Wholesale Commodities enters into forward contracts with its customers and also sells energy and capacity in the day ahead or spot markets. In addition to its forward physical power and gas contracts, Entergy Wholesale Commodities may also use a combination of financial contracts, including swaps, collars, and options, to mitigate commodity price risk. When the market price falls, the combination of instruments

is expected to settle in gains that offset lower revenue from generation, which results in a more predictable cash flow.

Entergy's exposure to market risk is determined by a number of factors, including the size, term, composition, and diversification of positions held, as well as market volatility and liquidity. For instruments such as options, the time period during which the option may be exercised and the relationship between the current market price of the underlying instrument and the option's contractual strike or exercise price also affects the level of market risk. A significant factor influencing the overall level of market risk to which Entergy is exposed is its use of hedging techniques to mitigate such risk. Hedging instruments and volumes are chosen based on ability to mitigate risk associated with future energy and capacity prices; however, other considerations are factored into hedge product and volume decisions including corporate liquidity, corporate credit ratings, counterparty credit risk, hedging costs, firm settlement risk, and product availability in the marketplace. Entergy manages market risk by actively monitoring compliance with stated risk management policies as well as monitoring the effectiveness of its hedging policies and strategies. Entergy's risk management policies limit the amount of total net exposure and rolling net exposure during the stated periods. These policies, including related risk limits, are regularly assessed to ensure their appropriateness given Entergy's objectives.

Derivatives

Some derivative instruments are classified as cash flow hedges due to their financial settlement provisions while others are classified as normal purchase/normal sale transactions due to their physical settlement provisions. Normal purchase/normal sale risk management tools include power purchase and sales agreements, fuel purchase agreements, capacity contracts, and tolling agreements. Financially-settled cash flow hedges can include natural gas and electricity swaps and options and interest rate swaps. Entergy may enter into financially-settled swap and option contracts to manage market risk that may or may not be designated as hedging instruments.

Entergy enters into derivatives to manage natural risks inherent in its physical or financial assets or liabilities. Electricity over-the-counter instruments and futures contracts that financially settle against day-ahead power pool prices are used to manage price exposure for Entergy Wholesale Commodities generation. The maximum length of time over which Entergy Wholesale Commodities is currently hedging the variability in future cash flows with derivatives for forecasted power transactions at December 31, 2020 is approximately 3 months. Planned generation currently under contract from Entergy Wholesale Commodities nuclear power plants is 98% for 2021, of which approximately 29% is sold under financial derivatives and the remainder under normal purchase/normal sale contracts. Total planned generation for 2021 is 9.6 TWh.

Entergy may use standardized master netting agreements to help mitigate the credit risk of derivative instruments. These master agreements facilitate the netting of cash flows associated with a single counterparty and may include collateral requirements. Cash, letters of credit, and parental/affiliate guarantees may be obtained as security from counterparties in order to mitigate credit risk. The collateral agreements require a counterparty to post cash or letters of credit in the event an exposure exceeds an established threshold. The threshold represents an unsecured credit limit, which may be supported by a parental/affiliate guarantee, as determined in accordance with Entergy's credit policy. In addition, collateral agreements allow for termination and liquidation of all positions in the event of a failure or inability to post collateral.

Certain of the agreements to sell the power produced by Entergy Wholesale Commodities power plants contain provisions that require an Entergy subsidiary to provide credit support to secure its obligations depending on the mark-to-market values of the contracts. The primary form of credit support to satisfy these requirements is an Entergy Corporation guarantee. As of December 31, 2020, there were no derivative contracts with counterparties in a liability position. In addition to the corporate guarantee, $5 million in cash collateral was required to be posted by the Entergy subsidiary to its counterparties and $39 million in letters of credit were required to be posted by its counterparties to the Entergy subsidiary. As of December 31, 2019, there were no derivative contracts with counterparties in a liability position. In addition to the corporate guarantee, $11 million in cash collateral was

required to be posted by the Entergy subsidiary to its counterparties and $1 million in cash collateral and $98 million in letters of credit were required to be posted by its counterparties to the Entergy subsidiary. If the Entergy Corporation credit rating falls below investment grade, Entergy would have to post collateral equal to the estimated outstanding liability under the contract at the applicable date.

Entergy manages fuel price volatility for its Louisiana jurisdictions (Entergy Louisiana and Entergy New Orleans) and Entergy Mississippi through the purchase of natural gas swaps and options that financially settle against either the average Henry Hub Gas Daily prices or the NYMEX Henry Hub. These swaps and options are marked-to-market through fuel expense with offsetting regulatory assets or liabilities. All benefits or costs of the program are recorded in fuel costs. The notional volumes of these swaps are based on a portion of projected annual exposure to gas price volatility for electric generation at Entergy Louisiana and Entergy Mississippi and projected winter purchases for gas distribution at Entergy New Orleans. The maximum length of time over which Entergy had executed natural gas swaps and options as of December 31, 2020 is 3.25 years for Entergy Louisiana and the maximum length of time over which Entergy has executed natural gas swaps as of December 31, 2020 is 10 months for Entergy Mississippi and 3 months Entergy New Orleans. The total volume of natural gas swaps and options outstanding as of December 31, 2020 is 38,799,000 MMBtu for Entergy, including 23,720,000 MMBtu for Entergy Louisiana, 14,573,000 MMBtu for Entergy Mississippi, and 506,000 MMBtu for Entergy New Orleans. Credit support for these natural gas swaps and options is covered by master agreements that do not require Entergy to provide collateral based on mark-to-market value, but do carry adequate assurance language that may lead to requests for collateral.

During the second quarter 2020, Entergy participated in the annual financial transmission rights auction process for the MISO planning year of June 1, 2020 through May 31, 2021. Financial transmission rights are derivative instruments that represent economic hedges of future congestion charges that will be incurred in serving Entergy's customer load. They are not designated as hedging instruments. Entergy initially records financial transmission rights at their estimated fair value and subsequently adjusts the carrying value to their estimated fair value at the end of each accounting period prior to settlement. Unrealized gains or losses on financial transmission rights held by Entergy Wholesale Commodities are included in operating revenues. The Utility operating companies recognize regulatory liabilities or assets for unrealized gains or losses on financial transmission rights. The total volume of financial transmission rights outstanding as of December 31, 2020 is 57,196 GWh for Entergy, including 14,138 GWh for Entergy Arkansas, 26,679 GWh for Entergy Louisiana, 6,362 GWh for Entergy Mississippi, 2,618 GWh for Entergy New Orleans, and 7,205 GWh for Entergy Texas. Credit support for financial transmission rights held by the Utility operating companies is covered by cash and/or letters of credit issued by each Utility operating company as required by MISO. Credit support for financial transmission rights held by Entergy Wholesale Commodities is covered by cash. No cash or letters of credit were required to be posted for financial transmission rights exposure for Entergy Wholesale Commodities as of December 31, 2020 and December 31, 2019. Letters of credit posted with MISO covered the financial transmission rights exposure for Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas as of December 31, 2020 and for Entergy Mississippi as of December 31, 2019.

The fair values of Entergy's derivative instruments in the consolidated balance sheet as of December 31, 2020 are shown in the table below. Certain investments, including those not designated as hedging instruments, are subject to master netting agreements and are presented in the balance sheet on a net basis in accordance with accounting guidance for derivatives and hedging.

Instrument	Balance Sheet Location	Gross Fair Value (a)	Offsetting Position (b)	Net Fair Value (c) (d)	Business
			(In Millions)		
Derivatives designated as hedging instruments					
Assets:					
Electricity swaps and options	Prepayments and other (current portion)	$39	($1)	$38	Entergy Wholesale Commodities
Liabilities:					
Electricity swaps and options	Other current liabilities (current portion)	$1	($1)	$—	Entergy Wholesale Commodities
Derivatives not designated as hedging instruments					
Assets:					
Natural gas swaps and options	Prepayments and other (current portion)	$1	$—	$1	Utility
Natural gas swaps and options	Other deferred debits and other assets (non-current portion)	$1	$—	$1	Utility
Financial transmission rights	Prepayments and other	$9	$—	$9	Utility and Entergy Wholesale Commodities
Liabilities:					
Natural gas swaps and options	Other current liabilities (current portion)	$6	$—	$6	Utility
Natural gas swaps and options	Other non-current liabilities (non-current portion)	$1	$—	$1	Utility

The fair values of Entergy's derivative instruments in the consolidated balance sheet as of December 31, 2019 are shown in the table below. Certain investments, including those not designated as hedging instruments, are subject to master netting agreements and are presented in the balance sheet on a net basis in accordance with accounting guidance for derivatives and hedging.

Instrument	Balance Sheet Location	Gross Fair Value (a)	Offsetting Position (b)	Net Fair Value (c) (d)	Business
			(In Millions)		
Derivatives designated as hedging instruments					
Assets:					
Electricity swaps and options	Prepayments and other (current portion)	$92	($1)	$91	Entergy Wholesale Commodities
Electricity swaps and options	Other deferred debits and other assets (non-current portion)	$17	$—	$17	Entergy Wholesale Commodities
Liabilities:					
Electricity swaps and options	Other current liabilities (current portion)	$1	($1)	$—	Entergy Wholesale Commodities
Derivatives not designated as hedging instruments					
Assets:					
Electricity swaps and options	Prepayments and other (current portion)	$11	($1)	$10	Entergy Wholesale Commodities
Natural gas swaps and options	Other deferred debits and other assets (non-current portion)	$1	$—	$1	Utility
Financial transmission rights	Prepayments and other	$10	$—	$10	Utility and Entergy Wholesale Commodities
Liabilities:					
Electricity swaps and options	Other current liabilities (current portion)	$2	($2)	$—	Entergy Wholesale Commodities
Natural gas swaps and options	Other current liabilities (current portion)	$5	$—	$5	Utility
Natural gas swaps and options	Other non-current liabilities (non-current portion)	$2	$—	$2	Utility

(a) Represents the gross amounts of recognized assets/liabilities
(b) Represents the netting of fair value balances with the same counterparty
(c) Represents the net amounts of assets/liabilities presented on the Entergy Corporation and Subsidiaries' Consolidated Balance Sheet
(d) Excludes cash collateral in the amount of $5 million posted as of December 31, 2020 and $11 million posted and $1 million held as of December 31, 2019. Also excludes letters of credit in the amount of $1 million posted and $39 million held as of December 31, 2020 and $98 million held as of December 31, 2019.

The effects of Entergy's derivative instruments designated as cash flow hedges on the consolidated income statements for the years ended December 31, 2020, 2019, and 2018 are as follows:

Instrument	Amount of gain (loss) recognized in other comprehensive income	Income Statement location	Amount of gain (loss) reclassified from accumulated other comprehensive income into income (a)
	(In Millions)		(In Millions)
2020			
Electricity swaps and options	$77	Competitive business operating revenues	$148
2019			
Electricity swaps and options	$232	Competitive business operating revenues	$97
2018			
Electricity swaps and options	($40)	Competitive business operating revenues	($68)

(a) Before taxes of $31 million, $20 million, and ($14) million, for the years ended December 31, 2020, 2019, and 2018, respectively

Prior to the adoption of ASU 2017-12, Entergy measured its hedges for ineffectiveness. Any ineffectiveness was recognized in earnings during the period. The ineffective portion of cash flow hedges was recorded in competitive businesses operating revenues. The change in fair value of Entergy's cash flow hedges due to ineffectiveness was ($5.9) million for the year ended December 31, 2018.

Based on market prices as of December 31, 2020, unrealized gains recorded in accumulated other comprehensive income on cash flow hedges relating to power sales totaled $38 million of net unrealized losses. Approximately $38 million is expected to be reclassified from accumulated other comprehensive income to operating revenues in the next twelve months. The actual amount reclassified from accumulated other comprehensive income, however, could vary due to future changes in market prices.

Entergy may effectively liquidate a cash flow hedge instrument by entering into a contract offsetting the original hedge, and then de-designating the original hedge in this situation. Gains or losses accumulated in other comprehensive income prior to de-designation continue to be deferred in other comprehensive income until they are included in income as the original hedged transaction occurs. From the point of de-designation, the gains or losses on the original hedge and the offsetting contract are recorded as assets or liabilities on the balance sheet and offset as they flow through to earnings.

The effects of Entergy's derivative instruments not designated as hedging instruments on the consolidated income statements for the years ended December 31, 2020, 2019, and 2018 are as follows:

Instrument	Income Statement location		Amount of gain (loss) recorded in the income statement
			(In Millions)
2020			
Natural gas swaps and options	Fuel, fuel-related expenses, and gas purchased for resale	(a)	($12)
Financial transmission rights	Purchased power expense	(b)	$92
Electricity swaps and options (c)	Competitive business operating revenues		$1
2019			
Natural gas swaps and option	Fuel, fuel-related expenses, and gas purchased for resale	(a)	($13)
Financial transmission rights	Purchased power expense	(b)	$94
Electricity swaps and options (c)	Competitive business operating revenues		$12
2018			
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	(a)	$8
Financial transmission rights	Purchased power expense	(b)	$131
Electricity swaps and options (c)	Competitive business operating revenues		$8

(a) Due to regulatory treatment, the natural gas swaps and options are marked-to-market through fuel, fuel-related expenses, and gas purchased for resale and then such amounts are simultaneously reversed and recorded as an offsetting regulatory asset or liability. The gains or losses recorded as fuel expenses when the swaps and options are settled are recovered or refunded through fuel cost recovery mechanisms.

(b) Due to regulatory treatment, the changes in the estimated fair value of financial transmission rights for the Utility operating companies are recorded through purchased power expense and then such amounts are simultaneously reversed and recorded as an offsetting regulatory asset or liability. The gains or losses recorded as purchased power expense when the financial transmission rights for the Utility operating companies are settled are recovered or refunded through fuel cost recovery mechanisms.

(c) There were no gains (losses) recognized in accumulated other comprehensive income from electricity swaps and options.

The fair values of the Registrant Subsidiaries' derivative instruments not designated as hedging instruments on their balance sheets as of December 31, 2020 and 2019 are shown in the table below. Certain investments, including those not designated as hedging instruments, are subject to master netting agreements and are presented in the balance sheet on a net basis in accordance with accounting guidance for derivatives and hedging.

Instrument	Balance Sheet Location	Gross Fair Value (a)	Offsetting Position (b)	Net Fair Value (c) (d)	Registrant
			(In Millions)		
2020					
Assets:					
Natural gas swaps and options	Prepayments and other	$0.8	$—	$0.8	Entergy Louisiana
Natural gas swaps and options	Other deferred debits and other assets	$0.5	$—	$0.5	Entergy Louisiana
Financial transmission rights	Prepayments and other	$2.9	($0.2)	$2.7	Entergy Arkansas
Financial transmission rights	Prepayments and other	$4.3	($0.1)	$4.2	Entergy Louisiana
Financial transmission rights	Prepayments and other	$0.6	$—	$0.6	Entergy Mississippi
Financial transmission rights	Prepayments and other	$0.2	($0.1)	$0.1	Entergy New Orleans
Financial transmission rights	Prepayments and other	$1.6	$—	$1.6	Entergy Texas
Liabilities:					
Natural gas swaps and options	Other current liabilities	$0.3	$—	$0.3	Entergy Louisiana
Natural gas swaps and options	Other non-current liabilities	$1.3	$—	$1.3	Entergy Louisiana
Natural gas swaps	Other current liabilities	$5.0	$—	$5.0	Entergy Mississippi
Natural gas swaps	Other current liabilities	$0.3	$—	$0.3	Entergy New Orleans

Instrument	Balance Sheet Location	Gross Fair Value (a)	Offsetting Position (b)	Net Fair Value (c) (d)	Registrant
2019					
Assets:					
Natural gas swaps and options	Other deferred debits and other assets	$0.8	$—	$0.8	Entergy Louisiana
Financial transmission rights	Prepayments and other	$3.4	($0.1)	$3.3	Entergy Arkansas
Financial transmission rights	Prepayments and other	$4.5	$—	$4.5	Entergy Louisiana
Financial transmission rights	Prepayments and other	$0.8	$—	$0.8	Entergy Mississippi
Financial transmission rights	Prepayments and other	$0.3	$—	$0.3	Entergy New Orleans
Financial transmission rights	Prepayments and other	$1.0	($0.1)	$0.9	Entergy Texas
Liabilities:					
Natural gas swaps and options	Other current liabilities	$2.4	$—	$2.4	Entergy Louisiana
Natural gas swaps and options	Other non-current liabilities	$2.2	$—	$2.2	Entergy Louisiana
Natural gas swaps	Other current liabilities	$2.3	$—	$2.3	Entergy Mississippi
Natural gas swaps	Other current liabilities	$0.2	$—	$0.2	Entergy New Orleans

(a) Represents the gross amounts of recognized assets/liabilities
(b) Represents the netting of fair value balances with the same counterparty
(c) Represents the net amounts of assets/liabilities presented on the Registrant Subsidiaries' balance sheets
(d) As of December 31, 2020, letters of credit posted with MISO covered financial transmission rights exposure of $0.3 million for Entergy Louisiana, $0.2 million for Entergy Mississippi, $0.2 million for Entergy New Orleans, and $0.5 million for Entergy Texas. As of December 31, 2019, letters of credit posted with MISO covered financial transmission rights exposure of $0.2 million for Entergy Mississippi.

The effects of the Registrant Subsidiaries' derivative instruments not designated as hedging instruments on their income statements for the years ended December 31, 2020, 2019, and 2018 are as follows:

Instrument	Income Statement Location	Amount of gain (loss) recorded in the income statement		Registrant
		(In Millions)		
2020				
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	($11.1)	(a)	Entergy Mississippi
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	($0.8)	(a)	Entergy New Orleans
Financial transmission rights	Purchased power	$26.7	(b)	Entergy Arkansas
Financial transmission rights	Purchased power	$19.6	(b)	Entergy Louisiana
Financial transmission rights	Purchased power	$3.0	(b)	Entergy Mississippi
Financial transmission rights	Purchased power	$1.4	(b)	Entergy New Orleans
Financial transmission rights	Purchased power	$40.4	(b)	Entergy Texas
2019				
Natural gas swaps and options	Fuel, fuel-related expenses, and gas purchased for resale	($5.3)	(a)	Entergy Louisiana
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	($7.7)	(a)	Entergy Mississippi
Financial transmission rights	Purchased power	$22.3	(b)	Entergy Arkansas
Financial transmission rights	Purchased power	$46.7	(b)	Entergy Louisiana
Financial transmission rights	Purchased power	$6.8	(b)	Entergy Mississippi
Financial transmission rights	Purchased power	$2.7	(b)	Entergy New Orleans
Financial transmission rights	Purchased power	$15.7	(b)	Entergy Texas
2018				
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	$4.4	(a)	Entergy Louisiana
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	$3.2	(a)	Entergy Mississippi
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	$0.2	(a)	Entergy New Orleans
Financial transmission rights	Purchased power	$25.3	(b)	Entergy Arkansas
Financial transmission rights	Purchased power	$72.7	(b)	Entergy Louisiana
Financial transmission rights	Purchased power	$26.3	(b)	Entergy Mississippi
Financial transmission rights	Purchased power	$13.8	(b)	Entergy New Orleans
Financial transmission rights	Purchased power	($6.0)	(b)	Entergy Texas

(a) Due to regulatory treatment, the natural gas swaps and options are marked-to-market through fuel, fuel-related expenses, and gas purchased for resale and then such amounts are simultaneously reversed and recorded as an offsetting regulatory asset or liability. The gains or losses recorded as fuel expenses when the swaps and options are settled are recovered or refunded through fuel cost recovery mechanisms.

(b) Due to regulatory treatment, the changes in the estimated fair value of financial transmission rights for the Utility operating companies are recorded through purchased power expense and then such amounts are simultaneously reversed and recorded as an offsetting regulatory asset or liability. The gains or losses recorded as purchased power expense when the financial transmission rights for the Utility operating companies are settled are recovered or refunded through fuel cost recovery mechanisms.

Fair Values

The estimated fair values of Entergy's financial instruments and derivatives are determined using historical prices, bid prices, market quotes, and financial modeling. Considerable judgment is required in developing the estimates of fair value. Therefore, estimates are not necessarily indicative of the amounts that Entergy could realize in a current market exchange. Gains or losses realized on financial instruments other than those instruments held by the Entergy Wholesale Commodities business are reflected in future rates and therefore do not affect net income. Entergy considers the carrying amounts of most financial instruments classified as current assets and liabilities to be a reasonable estimate of their fair value because of the short maturity of these instruments.

Accounting standards define fair value as an exit price, or the price that would be received to sell an asset or the amount that would be paid to transfer a liability in an orderly transaction between knowledgeable market participants at the date of measurement. Entergy and the Registrant Subsidiaries use assumptions or market input data that market participants would use in pricing assets or liabilities at fair value. The inputs can be readily observable, corroborated by market data, or generally unobservable. Entergy and the Registrant Subsidiaries endeavor to use the best available information to determine fair value.

Accounting standards establish a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy establishes the highest priority for unadjusted market quotes in an active market for the identical asset or liability and the lowest priority for unobservable inputs.

The three levels of the fair value hierarchy are:

- Level 1 - Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the entity has the ability to access at the measurement date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis. Level 1 primarily consists of individually owned common stocks, cash equivalents (temporary cash investments, securitization recovery trust account, and escrow accounts), debt instruments, and gas swaps traded on exchanges with active markets. Cash equivalents includes all unrestricted highly liquid debt instruments with an original or remaining maturity of three months or less at the date of purchase.

- Level 2 - Level 2 inputs are inputs other than quoted prices included in Level 1 that are, either directly or indirectly, observable for the asset or liability at the measurement date. Assets are valued based on prices derived by independent third parties that use inputs such as benchmark yields, reported trades, broker/dealer quotes, and issuer spreads. Prices are reviewed and can be challenged with the independent parties and/or overridden by Entergy if it is believed such would be more reflective of fair value. Level 2 inputs include the following:

  – quoted prices for similar assets or liabilities in active markets;
  – quoted prices for identical assets or liabilities in inactive markets;

– inputs other than quoted prices that are observable for the asset or liability; or
– inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 2 consists primarily of individually-owned debt instruments and gas swaps and options valued using observable inputs.

- Level 3 - Level 3 inputs are pricing inputs that are generally less observable or unobservable from objective sources. These inputs are used with internally developed methodologies to produce management's best estimate of fair value for the asset or liability. Level 3 consists primarily of financial transmission rights and derivative power contracts used as cash flow hedges of power sales at merchant power plants.

The values for power contract assets or liabilities are based on both observable inputs including public market prices and interest rates, and unobservable inputs such as implied volatilities, unit contingent discounts, expected basis differences, and credit adjusted counterparty interest rates. They are classified as Level 3 assets and liabilities. The valuations of these assets and liabilities are performed by the Office of Corporate Risk Oversight and the Entergy Wholesale Commodities Accounting group. The primary related functions of the Office of Corporate Risk Oversight include: gathering, validating and reporting market data, providing market risk analyses and valuations in support of Entergy Wholesale Commodities' commercial transactions, developing and administering protocols for the management of market risks, and implementing and maintaining controls around changes to market data in the energy trading and risk management system. The Office of Corporate Risk Oversight is also responsible for managing the energy trading and risk management system, forecasting revenues, forward positions and analysis. The Entergy Wholesale Commodities Accounting group performs functions related to market and counterparty settlements, revenue reporting and analysis, and financial accounting. The Office of Corporate Risk Oversight reports to the Vice President and Treasurer while the Entergy Wholesale Commodities Accounting group reports to the Chief Accounting Officer.

The amounts reflected as the fair value of electricity swaps are based on the estimated amount that the contracts are in-the-money at the balance sheet date (treated as an asset) or out-of-the-money at the balance sheet date (treated as a liability) and would equal the estimated amount receivable to or payable by Entergy if the contracts were settled at that date. These derivative contracts include cash flow hedges that swap fixed for floating cash flows for sales of the output from the Entergy Wholesale Commodities business. The fair values are based on the mark-to-market comparison between the fixed contract prices and the floating prices determined each period from quoted forward power market prices. The differences between the fixed price in the swap contract and these market-related prices multiplied by the volume specified in the contract and discounted at the counterparties' credit adjusted risk free rate are recorded as derivative contract assets or liabilities. For contracts that have unit contingent terms, a further discount is applied based on the historical relationship between contract and market prices for similar contract terms.

The amounts reflected as the fair values of electricity options are valued based on a Black Scholes model, and are calculated at the end of each month for accounting purposes. Inputs to the valuation include end of day forward market prices for the period when the transactions will settle, implied volatilities based on market volatilities provided by a third-party data aggregator, and U.S. Treasury rates for a risk-free return rate. As described further below, prices and implied volatilities are reviewed and can be adjusted if it is determined that there is a better representation of fair value.

On a daily basis, the Office of Corporate Risk Oversight calculates the mark-to-market for electricity swaps and options. The Office of Corporate Risk Oversight also validates forward market prices by comparing them to other sources of forward market prices or to settlement prices of actual market transactions. Significant differences are analyzed and potentially adjusted based on these other sources of forward market prices or settlement prices of actual market transactions. Implied volatilities used to value options are also validated using actual counterparty quotes for Entergy Wholesale Commodities transactions when available and compared with other sources of market

implied volatilities. Moreover, on a quarterly basis, the Office of Corporate Risk Oversight confirms the mark-to-market calculations and prepares price scenarios and credit downgrade scenario analysis. The scenario analysis is communicated to senior management within Entergy and within Entergy Wholesale Commodities. Finally, for all proposed derivative transactions, an analysis is completed to assess the risk of adding the proposed derivative to Entergy Wholesale Commodities' portfolio. In particular, the credit and liquidity effects are calculated for this analysis. This analysis is communicated to senior management within Entergy and Entergy Wholesale Commodities.

The values of financial transmission rights are based on unobservable inputs, including estimates of congestion costs in MISO between applicable generation and load pricing nodes based on the 50th percentile of historical prices. They are classified as Level 3 assets and liabilities. The valuations of these assets and liabilities are performed by the Office of Corporate Risk Oversight. The values are calculated internally and verified against the data published by MISO. Entergy's Entergy Wholesale Commodities Accounting group review these valuations for reasonableness, with the assistance of others within the organization with knowledge of the various inputs and assumptions used in the valuation. The Office of Corporate Risk Oversight reports to the Vice President and Treasurer. The Entergy Wholesale Commodities Accounting group reports to the Chief Accounting Officer.

The following tables set forth, by level within the fair value hierarchy, Entergy's assets and liabilities that are accounted for at fair value on a recurring basis as of December 31, 2020 and December 31, 2019. The assessment of the significance of a particular input to a fair value measurement requires judgment and may affect their placement within the fair value hierarchy levels.

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$1,630	$—	$—	$1,630
Decommissioning trust funds (a):				
Equity securities	1,533	—	—	1,533
Debt securities (b)	919	1,698	—	2,617
Common trusts (c)				3,103
Power contracts	—	—	38	38
Securitization recovery trust account	42	—	—	42
Escrow accounts	148	—	—	148
Gas hedge contracts	1	1	—	2
Financial transmission rights	—	—	9	9
	$4,273	$1,699	$47	$9,122
Liabilities:				
Gas hedge contracts	$6	$1	$—	$7

2019	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$391	$—	$—	$391
Decommissioning trust funds (a):				
Equity securities	905	—	—	905
Debt securities	1,139	1,824	—	2,963
Common trusts (c)				2,536
Power contracts	—	—	118	118
Securitization recovery trust account	47	—	—	47
Escrow accounts	459	—	—	459
Gas hedge contracts	—	1	—	1
Financial transmission rights	—	—	10	10
	$2,941	$1,825	$128	$7,430
Liabilities:				
Gas hedge contracts	$5	$2	$—	$7

(a) The decommissioning trust funds hold equity and fixed income securities. Equity securities are invested to approximate the returns of major market indices. Fixed income securities are held in various governmental and corporate securities. See Note 16 to the financial statements herein for additional information on the investment portfolios.

(b) The decommissioning trust funds fair value presented herein does not include the recognition of a credit loss valuation allowance of $0.1 million on debt securities due to the adoption of ASU 2016-13. See Note 16 to the financial statements herein for additional information on the allowance for expected credit losses.

(c) Common trust funds are not publicly quoted and are valued by the fund administrators using net asset value as a practical expedient. Accordingly, these funds are not assigned a level in the fair value table. The fund administrator of these investments allows daily trading at the net asset value and trades settle at a later date.

The following table sets forth a reconciliation of changes in the net assets (liabilities) for the fair value of derivatives classified as Level 3 in the fair value hierarchy for the years ended December 31, 2020, 2019, and 2018:

	2020		2019		2018	
	Power Contracts	Financial transmission rights	Power Contracts	Financial transmission rights	Power Contracts	Financial transmission rights
			(In Millions)			
Balance as of January 1,	$118	$10	($31)	$15	($65)	$21
Total gains (losses) for the period (a)						
Included in earnings	1	1	12	—	2	(1)
Included in other comprehensive income	77	—	232	—	(40)	—
Included as a regulatory liability/asset	—	67	—	54	—	80
Issuances of financial transmission rights	—	23	—	35	—	46
Settlements	(158)	(92)	(95)	(94)	72	(131)
Balance as of December 31,	$38	$9	$118	$10	($31)	$15

(a) Change in unrealized gains or losses for the period included in earnings for derivatives held at the end of the reporting period is ($0.3) million, ($9.2) million, and ($3.5) million for the years ended December 31, 2020, 2019, and 2018, respectively.

The following table sets forth a description of the types of transactions classified as Level 3 in the fair value hierarchy and significant unobservable inputs to each which cause that classification, as of December 31, 2020:

Transaction Type	Fair Value as of December 31, 2020	Significant Unobservable Inputs	Range from Average %	Effect on Fair Value
	(In Millions)			(In Millions)
Power contracts - electricity swaps	$38	Unit contingent discount	4.75%	$4

The values of financial transmission rights are based on unobservable inputs calculated internally and verified against historical pricing data published by MISO.

The following table sets forth an analysis of each of the types of unobservable inputs impacting the fair value of items classified as Level 3 within the fair value hierarchy, and the sensitivity to changes to those inputs:

Significant Unobservable Input	Transaction Type	Position	Change to Input	Effect on Fair Value
Unit contingent discount	Electricity swaps	Sell	Increase (Decrease)	Decrease (Increase)

The following table sets forth, by level within the fair value hierarchy, the Registrant Subsidiaries' assets and liabilities that are accounted for at fair value on a recurring basis as of December 31, 2020 and December 31, 2019. The assessment of the significance of a particular input to a fair value measurement requires judgment and may affect its placement within the fair value hierarchy levels.

Entergy Arkansas

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$168.0	$—	$—	$168.0
Decommissioning trust funds (a):				
Equity securities	1.3	—	—	1.3
Debt securities	98.2	349.7	—	447.9
Common trusts (b)				824.7
Financial transmission rights	—	—	2.7	2.7
	$267.5	$349.7	$2.7	$1,444.6

2019	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Decommissioning trust funds (a):				
Equity securities	$0.6	$—	$—	$0.6
Debt securities	108.7	304.1	—	412.8
Common trusts (b)				687.9
Securitization recovery trust account	4.0	—	—	4.0
Financial transmission rights	—	—	3.3	3.3
	$113.3	$304.1	$3.3	$1,108.6

Entergy Louisiana

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$726.7	$—	$—	$726.7
Decommissioning trust funds (a):				
Equity securities	8.7	—	—	8.7
Debt securities	172.4	459.8	—	632.2
Common trusts (b)				1,153.1
Securitization recovery trust account	2.7	—	—	2.7
Gas hedge contracts	0.8	0.5	—	1.3
Financial transmission rights	—	—	4.2	4.2
	$911.3	$460.3	$4.2	$2,528.9
Liabilities:				
Gas hedge contracts	$0.3	$1.3	$—	$1.6

2019	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$1.5	$—	$—	$1.5
Decommissioning trust funds (a):				
Equity securities	4.3	—	—	4.3
Debt securities	180.8	420.7	—	601.5
Common trusts (b)				958.0
Escrow accounts	295.9	—	—	295.9
Securitization recovery trust account	3.7	—	—	3.7
Gas hedge contracts	—	0.8	—	0.8
Financial transmission rights	—	—	4.5	4.5
	$486.2	$421.5	$4.5	$1,870.2
Liabilities:				
Gas hedge contracts	$2.4	$2.2	$—	$4.6

Entergy Mississippi

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Escrow accounts	$64.6	$—	$—	$64.6
Financial transmission rights	—	—	0.6	0.6
	$64.6	$—	$0.6	$65.2
Liabilities:				
Gas hedge contracts	$5.0	$—	$—	$5.0

2019	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$51.6	$—	$—	$51.6
Escrow accounts	80.2	—	—	80.2
Financial transmission rights	—	—	0.8	0.8
	$131.8	$—	$0.8	$132.6
Liabilities:				
Gas hedge contracts	$2.3	$—	$—	$2.3

Entergy New Orleans

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Securitization recovery trust account	$3.4	$—	$—	$3.4
Escrow accounts	83.0	—	—	83.0
Financial transmission rights	—	—	0.1	0.1
	$86.4	$—	$0.1	$86.5
Liabilities:				
Gas hedge contracts	$0.3	$—	$—	$0.3

2019	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$6.0	$—	$—	$6.0
Securitization recovery trust account	2.0	—	—	2.0
Escrow accounts	82.6	—	—	82.6
Financial transmission rights	—	—	0.3	0.3
	$90.6	$—	$0.3	$90.9
Liabilities:				
Gas hedge contracts	$0.2	$—	$—	$0.2

Entergy Texas

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$248.6	$—	$—	$248.6
Securitization recovery trust account	36.2	—	—	36.2
Financial transmission rights	—	—	1.6	1.6
	$284.8	$—	$1.6	$286.4

2019	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$12.9	$—	$—	$12.9
Securitization recovery trust account	37.7	—	—	37.7
Financial transmission rights	—	—	0.9	0.9
	$50.6	$—	$0.9	$51.5

System Energy

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$216.4	$—	$—	$216.4
Decommissioning trust funds (a):				
Equity securities	3.8	—	—	3.8
Debt securities	177.3	250.4	—	427.7
Common trusts (b)				784.4
	$397.5	$250.4	$—	$1,432.3

2019	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$68.4	$—	$—	$68.4
Decommissioning trust funds (a):				
Equity securities	13.3	—	—	13.3
Debt securities	176.3	209.9	—	386.2
Common trusts (b)				654.6
	$258.0	$209.9	$—	$1,122.5

(a) The decommissioning trust funds hold equity and fixed income securities. Equity securities are invested to approximate the returns of major market indices. Fixed income securities are held in various governmental and corporate securities. See Note 16 to the financial statements herein for additional information on the investment portfolios.

(b) Common trust funds are not publicly quoted and are valued by the fund administrators using net asset value as a practical expedient. Accordingly, these funds are not assigned a level in the fair value table. The fund administrator of these investments allows daily trading at the net asset value and trades settle at a later date.

The following table sets forth a reconciliation of changes in the net assets for the fair value of derivatives classified as Level 3 in the fair value hierarchy for the year ended December 31, 2020.

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Millions)		
Balance as of January 1, 2020	$3.3	$4.5	$0.8	$0.3	$0.9
Issuances of financial transmission rights	6.5	13.2	1.4	(0.1)	2.4
Gains (losses) included as a regulatory liability/asset	19.6	6.1	1.4	1.3	38.7
Settlements	(26.7)	(19.6)	(3.0)	(1.4)	(40.4)
Balance as of December 31, 2020	$2.7	$4.2	$0.6	$0.1	$1.6

The following table sets forth a reconciliation of changes in the net assets (liabilities) for the fair value of derivatives classified as Level 3 in the fair value hierarchy for the year ended December 31, 2019.

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Millions)		
Balance as of January 1, 2019	$3.4	$8.3	$2.2	$1.3	($0.5)
Issuances of financial transmission rights	9.6	18.7	3.9	2.7	0.1
Gains (losses) included as a regulatory liability/asset	12.6	24.2	1.5	(1.0)	17.0
Settlements	(22.3)	(46.7)	(6.8)	(2.7)	(15.7)
Balance as of December 31, 2019	$3.3	$4.5	$0.8	$0.3	$0.9

NOTE 16. DECOMMISSIONING TRUST FUNDS (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, and System Energy)

The NRC requires Entergy subsidiaries to maintain nuclear decommissioning trusts to fund the costs of decommissioning ANO 1, ANO 2, River Bend, Waterford 3, Grand Gulf, Indian Point 1, Indian Point 2, Indian Point 3, and Palisades. Entergy's nuclear decommissioning trust funds invest in equity securities, fixed-rate debt securities, and cash and cash equivalents.

Entergy records decommissioning trust funds on the balance sheet at their fair value. Because of the ability of the Registrant Subsidiaries to recover decommissioning costs in rates and in accordance with the regulatory treatment for decommissioning trust funds, the Registrant Subsidiaries have recorded an offsetting amount of unrealized gains/(losses) on investment securities in other regulatory liabilities/assets. For the 30% interest in River Bend formerly owned by Cajun, Entergy Louisiana records an offsetting amount in other deferred credits for the unrealized trust earnings not currently expected to be needed to decommission the plant. Decommissioning trust funds for the Entergy Wholesale Commodities nuclear plants do not meet the criteria for regulatory accounting treatment. Accordingly, unrealized gains/(losses) recorded on the equity securities in the trust funds are recognized in earnings. Unrealized gains recorded on the available-for-sale debt securities in the trust funds are recognized in the accumulated other comprehensive income component of shareholders' equity. Unrealized losses (where cost exceeds fair market value) on the available-for-sale debt securities in the trust funds are also recorded in the accumulated other comprehensive income component of shareholders' equity unless the unrealized loss is other than temporary and therefore recorded in earnings. A portion of Entergy's decommissioning trust funds were held in a wholly-owned registered investment company, and unrealized gains and losses on both the equity and debt securities held in the registered investment company were recognized in earnings. In December 2020, Entergy liquidated its interest in the registered investment company. Generally, Entergy records gains and losses on its debt and equity securities using the specific identification method to determine the cost basis of its securities.

The unrealized gains/(losses) recognized during the year ended December 31, 2020 on equity securities still held as of December 31, 2020 were $531 million. The equity securities are generally held in funds that are designed to approximate or somewhat exceed the return of the Standard Poor's 500 Index. A relatively small percentage of the equity securities are held in funds intended to replicate the return of the Wilshire 4500 index or the Russell 3000 Index. The debt securities are generally held in individual government and credit issuances.

The available-for-sale securities held as of December 31, 2020 and 2019 are summarized as follows:

	Fair Value	Total Unrealized Gains	Total Unrealized Losses
		(In Millions)	
2020			
Debt Securities (a)	$2,617	$197	$3
2019			
Debt Securities (a)	$2,456	$96	$6

(a) Debt securities presented herein do not include the $507 million of debt securities held in the wholly-owned registered investment company as of December 31, 2019, which are not accounted for as available-for-sale.

The unrealized gains/(losses) above are reported before deferred taxes of $31 million as of December 31, 2020 and $13 million as of December 31, 2019 for debt securities. The amortized cost of available-for-sale debt securities was $2,423 million as of December 31, 2020 and $2,366 million as of December 31, 2019. As of December 31, 2020, available-for-sale debt securities have an average coupon rate of approximately 3.01%, an average duration of approximately 7.36 years, and an average maturity of approximately 10.72 years.

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities have been in a continuous loss position, are as follows as of December 31, 2020:

	Fair Value	Gross Unrealized Losses
	(In Millions)	
Less than 12 months	$187	$3
More than 12 months	2	—
Total	$189	$3

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities have been in a continuous loss position, are as follows as of December 31, 2019:

	Fair Value	Gross Unrealized Losses
	(In Millions)	
Less than 12 months	$404	$5
More than 12 months	38	1
Total	$442	$6

The fair value of available-for-sale debt securities, summarized by contractual maturities, as of December 31, 2020 and 2019 are as follows:

	2020	2019
	(In Millions)	
Less than 1 year	($4)	$128
1 year - 5 years	672	807
5 years - 10 years	852	666
10 years - 15 years	377	125
15 years - 20 years	144	126
20 years+	576	604
Total	$2,617	$2,456

During the years ended December 31, 2020, 2019, and 2018, proceeds from the dispositions of available-for-sale securities amounted to $1,024 million, $1,427 million, and $2,406 million, respectively. During the years ended December 31, 2020, 2019, and 2018, gross gains of $47 million, $25 million, and $7 million, respectively, and gross losses of $4 million, $4 million, and $47 million, respectively, related to available-for-sale securities were reclassified out of other comprehensive income or other regulatory liabilities/assets into earnings.

The fair values of the decommissioning trust funds related to the Entergy Wholesale Commodities nuclear plants as of December 31, 2020 are $631 million for Indian Point 1, $794 million for Indian Point 2, $991 million for Indian Point 3, and $554 million for Palisades. The fair values of the decommissioning trust funds related to the Entergy Wholesale Commodities nuclear plants as of December 31, 2019 are $556 million for Indian Point 1, $701 million for Indian Point 2, $930 million for Indian Point 3, and $498 million for Palisades. The fair values of the decommissioning trust funds for the Registrant Subsidiaries' nuclear plants are detailed below.

Entergy Arkansas

Entergy Arkansas holds equity securities and available-for-sale debt securities in nuclear decommissioning trust accounts. The available-for-sale securities held as of December 31, 2020 and 2019 are summarized as follows:

	Fair Value	Total Unrealized Gains	Total Unrealized Losses
		(In Millions)	
2020			
Debt Securities	$447.9	$27.7	$0.3
2019			
Debt Securities	$412.8	$9.9	$2.6

The amortized cost of available-for-sale debt securities was $420.4 million as of December 31, 2020 and $405.4 million as of December 31, 2019. As of December 31, 2020, the available-for-sale debt securities have an average coupon rate of approximately 2.57%, an average duration of approximately 6.97 years, and an average maturity of approximately 8.24 years.

The unrealized gains/(losses) recognized during the year ended December 31, 2020 on equity securities still held as of December 31, 2020 were $116.8 million. The equity securities are generally held in funds that are designed to approximate the return of the Standard & Poor's 500 Index. A relatively small percentage of the equity securities are held in funds intended to replicate the return of the Wilshire 4500 Index.

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities have been in a continuous loss position, are as follows as of December 31, 2020:

	Fair Value	Gross Unrealized Losses
	(In Millions)	
Less than 12 months	$29.9	$0.3
More than 12 months	—	—
Total	$29.9	$0.3

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities have been in a continuous loss position, are as follows as of December 31, 2019:

	Fair Value	Gross Unrealized Losses
	(In Millions)	
Less than 12 months	$104.8	$2.5
More than 12 months	7.7	0.1
Total	$112.5	$2.6

The fair value of available-for-sale debt securities, summarized by contractual maturities, as of December 31, 2020 and 2019 are as follows:

	2020	2019
	(In Millions)	
Less than 1 year	$—	$44.1
1 year - 5 years	113.1	109.1
5 years - 10 years	189.8	156.0
10 years - 15 years	81.4	31.3
15 years - 20 years	28.5	23.8
20 years+	35.1	48.5
Total	$447.9	$412.8

During the years ended December 31, 2020, 2019, and 2018, proceeds from the dispositions of available-for-sale securities amounted to $94.5 million, $110.6 million, and $82.1 million, respectively. During the years ended December 31, 2020, 2019, and 2018, gross gains of $8.8 million, $2.9 million, and $0.1 million, respectively, and gross losses of $0.2 million, $0.1 million, and $2.9 million, respectively, related to available-for-sale securities were reclassified out of other regulatory liabilities/assets into earnings.

Entergy Louisiana

Entergy Louisiana holds equity securities and available-for-sale debt securities in nuclear decommissioning trust accounts. The available-for-sale securities held as of December 31, 2020 and 2019 are summarized as follows:

	Fair Value	Total Unrealized Gains	Total Unrealized Losses
		(In Millions)	
2020			
Debt Securities	$632.2	$51.3	$0.5
2019			
Debt Securities	$601.5	$29.3	$0.8

The amortized cost of available-for-sale debt securities was $581.4 million as of December 31, 2020 and $573 million as of December 31, 2019. As of December 31, 2020, the available-for-sale debt securities have an average coupon rate of approximately 3.64%, an average duration of approximately 7.25 years, and an average maturity of approximately 12.73 years.

The unrealized gains/(losses) recognized during the year ended December 31, 2020 on equity securities still held as of December 31, 2020 were $163.6 million. The equity securities are generally held in funds that are designed to approximate the return of the Standard & Poor's 500 Index. A relatively small percentage of the equity securities are held in funds intended to replicate the return of the Wilshire 4500 Index.

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities have been in a continuous loss position, are as follows as of December 31, 2020:

	Fair Value	Gross Unrealized Losses
	(In Millions)	
Less than 12 months	$36.4	$0.5
More than 12 months	0.8	—
Total	$37.2	$0.5

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities have been in a continuous loss position, are as follows as of December 31, 2019:

	Fair Value	Gross Unrealized Losses
	(In Millions)	
Less than 12 months	$71.2	$0.8
More than 12 months	7.9	—
Total	$79.1	$0.8

The fair value of available-for-sale debt securities, summarized by contractual maturities, as of December 31, 2020 and 2019 are as follows:

	2020	2019
	(In Millions)	
Less than 1 year	$—	$40.7
1 year - 5 years	117.0	142.0
5 years - 10 years	159.4	132.4
10 years - 15 years	101.2	39.8
15 years - 20 years	66.9	49.2
20 years+	187.7	197.4
Total	$632.2	$601.5

During the years ended December 31, 2020, 2019, and 2018, proceeds from the dispositions of available-for-sale securities amounted to $159.7 million, $186 million, and $401.7 million, respectively. During the years ended December 31, 2020, 2019, and 2018, gross gains of $8.1 million, $4.8 million, and $2.1 million, respectively, and gross losses of $0.7 million, $0.3 million, and $7.5 million, respectively, related to available-for-sale securities were reclassified out of other regulatory liabilities/assets into earnings.

System Energy

System Energy holds equity securities and available-for-sale debt securities in nuclear decommissioning trust accounts. The available-for-sale securities held as of December 31, 2020 and 2019 are summarized as follows:

	Fair Value	Total Unrealized Gains	Total Unrealized Losses
		(In Millions)	
2020			
Debt Securities	$427.7	$30.0	$0.8
2019			
Debt Securities	$386.2	$15.1	$0.3

The amortized cost of available-for-sale debt securities was $398.4 million as of December 31, 2020 and $371.4 million as of December 31, 2019. As of December 31, 2020, the available-for-sale debt securities have an average coupon rate of approximately 2.74%, an average duration of approximately 7.54 years, and an average maturity of approximately 11.09 years.

The unrealized gains/(losses) recognized during the year ended December 31, 2020 on equity securities still held as of December 31, 2020 were $111.1 million. The equity securities are generally held in funds that are designed to approximate the return of the Standard & Poor's 500 Index. A relatively small percentage of the equity securities are held in funds intended to replicate the return of the Wilshire 4500 Index.

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities have been in a continuous loss position, are as follows as of December 31, 2020:

	Fair Value	Gross Unrealized Losses
	(In Millions)	
Less than 12 months	$28.9	$0.8
More than 12 months	—	—
Total	$28.9	$0.8

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities have been in a continuous loss position, are as follows as of December 31, 2019:

	Fair Value	Gross Unrealized Losses
	(In Millions)	
Less than 12 months	$56.9	$0.3
More than 12 months	0.3	—
Total	$57.2	$0.3

The fair value of available-for-sale debt securities, summarized by contractual maturities, as of December 31, 2020 and 2019 are as follows:

	2020	2019
	(In Millions)	
Less than 1 year	($1.1)	$8.5
1 year - 5 years	134.7	154.6
5 years - 10 years	141.5	92.3
10 years - 15 years	31.5	13.4
15 years - 20 years	5.3	14.4
20 years+	115.8	103.0
Total	$427.7	$386.2

During the years ended December 31, 2020, 2019, and 2018, proceeds from the dispositions of available-for-sale securities amounted to $252.2 million, $338.1 million, and $361.9 million, respectively. During the years ended December 31, 2020, 2019, and 2018, gross gains of $11.5 million, $5.4 million, and $0.5 million, respectively, and gross losses of $0.6 million, $0.7 million, and $6.1 million, respectively, related to available-for-sale securities were reclassified out of other regulatory liabilities/assets into earnings.

Allowance for expected credit losses

Entergy implemented ASU 2016-13, Financial Instruments-Credit Losses (Topic 326): Measurement of Credit Losses on Financial Instruments, effective January 1, 2020. In accordance with the new standard, Entergy estimates the expected credit losses for its available for sale securities based on the current credit rating and remaining life of the securities. To the extent an individual security is determined to be uncollectible it is written off against this allowance. Entergy's available-for-sale securities are held in trusts managed by third parties who operate in accordance with agreements that define investment guidelines and place restrictions on the purchases and sales of investments. Specifically, available-for-sale securities are subject to credit worthiness restrictions, with requirements for both the average credit rating of the portfolio and minimum credit ratings for individual debt

securities. As of December 31, 2020, Entergy's allowance for expected credit losses related to available-for-sale securities was $0.1 million. Entergy did not record any impairments of available-for-sale debt securities for the year ended December 31, 2020.

Other-than-temporary impairments and unrealized gains and losses

Prior to the implementation of ASU 2016-13 on January 1, 2020, Entergy evaluated the available-for-sale debt securities in the Entergy Wholesale Commodities nuclear decommissioning trust funds with unrealized losses at the end of each period to determine whether an other-than-temporary impairment had occurred. The assessment of whether an investment in a debt security suffered an other-than-temporary impairment was based on whether Entergy had the intent to sell or more likely than not would have been required to sell the debt security before recovery of its amortized costs. Further, if Entergy did not expect to recover the entire amortized cost basis of the debt security, an other-than-temporary impairment was considered to have occurred and it was measured by the present value of cash flows expected to be collected less the amortized cost basis (credit loss). Entergy did not have any material other-than-temporary impairments relating to credit losses on debt securities for the years ended December 31, 2019 and 2018.

NOTE 17. VARIABLE INTEREST ENTITIES (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Under applicable authoritative accounting guidance, a variable interest entity (VIE) is an entity that conducts a business or holds property that possesses any of the following characteristics: an insufficient amount of equity at risk to finance its activities, equity owners who do not have the power to direct the significant activities of the entity (or have voting rights that are disproportionate to their ownership interest), or where equity holders do not receive expected losses or returns. An entity may have an interest in a VIE through ownership or other contractual rights or obligations, and is required to consolidate a VIE if it is the VIE's primary beneficiary. The primary beneficiary of a VIE is the entity that has the power to direct the activities of the VIE that most significantly affect the VIE's economic performance and has the obligation to absorb losses or has the right to residual returns that would potentially be significant to the entity.

Entergy Arkansas, Entergy Louisiana, and System Energy consolidate the respective companies from which they lease nuclear fuel, usually in a sale and leaseback transaction. This is because Entergy directs the nuclear fuel companies with respect to nuclear fuel purchases, assists the nuclear fuel companies in obtaining financing, and, if financing cannot be arranged, the lessee (Entergy Arkansas, Entergy Louisiana, or System Energy) is responsible to repurchase nuclear fuel to allow the nuclear fuel company (the VIE) to meet its obligations. During the term of the arrangements, none of the Entergy operating companies have been required to provide financial support apart from their scheduled lease payments. See Note 4 to the financial statements for details of the nuclear fuel companies' credit facility and commercial paper borrowings and long-term debt that are reported by Entergy, Entergy Arkansas, Entergy Louisiana, and System Energy. These amounts also represent Entergy's and the respective Registrant Subsidiary's maximum exposure to losses associated with their respective interests in the nuclear fuel companies.

Entergy Gulf States Reconstruction Funding I, LLC, and Entergy Texas Restoration Funding, LLC, companies wholly-owned and consolidated by Entergy Texas, are variable interest entities and Entergy Texas is the primary beneficiary. In June 2007, Entergy Gulf States Reconstruction Funding issued senior secured transition bonds (securitization bonds) to finance Entergy Texas's Hurricane Rita reconstruction costs. In November 2009, Entergy Texas Restoration Funding issued senior secured transition bonds (securitization bonds) to finance Entergy Texas's Hurricane Ike and Hurricane Gustav restoration costs. With the proceeds, the variable interest entities purchased from Entergy Texas the transition property, which is the right to recover from customers through a transition charge amounts sufficient to service the securitization bonds. The transition property is reflected as a regulatory asset on the consolidated Entergy Texas balance sheet. The creditors of Entergy Texas do not have recourse to the assets or revenues of the variable interest entities, including the transition property, and the creditors

of the variable interest entities do not have recourse to the assets or revenues of Entergy Texas. Entergy Texas has no payment obligations to the variable interest entities except to remit transition charge collections. See Note 5 to the financial statements for additional details regarding the securitization bonds.

Entergy Arkansas Restoration Funding, LLC, a company wholly-owned and consolidated by Entergy Arkansas, is a variable interest entity and Entergy Arkansas is the primary beneficiary. In August 2010, Entergy Arkansas Restoration Funding issued storm cost recovery bonds to finance Entergy Arkansas's January 2009 ice storm damage restoration costs. With the proceeds, Entergy Arkansas Restoration Funding purchased from Entergy Arkansas the storm recovery property, which is the right to recover from customers through a storm recovery charge amounts sufficient to service the securitization bonds. The storm recovery property is reflected as a regulatory asset on the consolidated Entergy Arkansas balance sheet as of December 31, 2019. Although the principal amount was not due until August 2021, Entergy Arkansas Restoration Funding made principal payments on the bonds in 2020, after which the bonds were fully repaid. See Note 5 to the financial statements for additional details regarding the storm cost recovery bonds.

Entergy Louisiana Investment Recovery Funding I, L.L.C., a company wholly-owned and consolidated by Entergy Louisiana, is a variable interest entity and Entergy Louisiana is the primary beneficiary. In September 2011, Entergy Louisiana Investment Recovery Funding issued investment recovery bonds to recover Entergy Louisiana's investment recovery costs associated with the canceled Little Gypsy repowering project. With the proceeds, Entergy Louisiana Investment Recovery Funding purchased from Entergy Louisiana the investment recovery property, which is the right to recover from customers through an investment recovery charge amounts sufficient to service the bonds. The investment recovery property is reflected as a regulatory asset on the consolidated Entergy Louisiana balance sheet. The creditors of Entergy Louisiana do not have recourse to the assets or revenues of Entergy Louisiana Investment Recovery Funding, including the investment recovery property, and the creditors of Entergy Louisiana Investment Recovery Funding do not have recourse to the assets or revenues of Entergy Louisiana. Entergy Louisiana has no payment obligations to Entergy Louisiana Investment Recovery Funding except to remit investment recovery charge collections. See Note 5 to the financial statements for additional details regarding the investment recovery bonds.

Entergy New Orleans Storm Recovery Funding I, L.L.C., a company wholly-owned and consolidated by Entergy New Orleans, is a variable interest entity, and Entergy New Orleans is the primary beneficiary. In July 2015, Entergy New Orleans Storm Recovery Funding issued storm cost recovery bonds to recover Entergy New Orleans's Hurricane Isaac storm restoration costs, including carrying costs, the costs of funding and replenishing the storm recovery reserve, and up-front financing costs associated with the securitization. With the proceeds, Entergy New Orleans Storm Recovery Funding purchased from Entergy New Orleans the storm recovery property, which is the right to recover from customers through a storm recovery charge amounts sufficient to service the securitization bonds. The storm recovery property is reflected as a regulatory asset on the consolidated Entergy New Orleans balance sheet. The creditors of Entergy New Orleans do not have recourse to the assets or revenues of Entergy New Orleans Storm Recovery Funding, including the storm recovery property, and the creditors of Entergy New Orleans Storm Recovery Funding do not have recourse to the assets or revenues of Entergy New Orleans. Entergy New Orleans has no payment obligations to Entergy New Orleans Storm Recovery Funding except to remit storm recovery charge collections. See Note 5 to the financial statements for additional details regarding the securitization bonds.

System Energy is considered to hold a variable interest in the lessor from which it leases an undivided interest in the Grand Gulf nuclear plant. System Energy is the lessee under this arrangement, which is described in more detail in Note 5 to the financial statements. System Energy made payments on its lease, including interest, of $17.2 million in 2020, $17.2 million in 2019, and $17.2 million in 2018. The lessor is a bank acting in the capacity of owner trustee for the benefit of equity investors in the transaction pursuant to trust agreement entered solely for the purpose of facilitating the lease transaction. It is possible that System Energy may be considered as the primary beneficiary of the lessor, but it is unable to apply the authoritative accounting guidance with respect to this VIE because the lessor is not required to, and could not, provide the necessary financial information to consolidate the

lessor. Because System Energy accounts for this leasing arrangement as a capital financing, however, System Energy believes that consolidating the lessor would not materially affect the financial statements. In the unlikely event of default under a lease, remedies available to the lessor include payment by the lessee of the fair value of the undivided interest in the plant, payment of the present value of the basic rent payments, or payment of a predetermined casualty value. System Energy believes, however, that the obligations recorded on the balance sheet materially represent its potential exposure to loss.

Entergy has also reviewed various lease arrangements, power purchase agreements, including agreements for renewable power, and other agreements that represent variable interests in other legal entities which have been determined to be variable interest entities. In these cases, Entergy has determined that it is not the primary beneficiary of the related VIE because it does not have the power to direct the activities of the VIE that most significantly affect the VIE's economic performance, or it does not have the obligation to absorb losses or the right to residual returns that would potentially be significant to the entity, or both.

NOTE 18. TRANSACTIONS WITH AFFILIATES (Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Each Registrant Subsidiary purchases electricity from or sells electricity to the other Registrant Subsidiaries, or both, under rate schedules filed with the FERC. The Registrant Subsidiaries receive management, technical, advisory, operating, and administrative services from Entergy Services; and receive management, technical, and operating services from Entergy Operations. These transactions are on an "at cost" basis.

As described in Note 1 to the financial statements, all of System Energy's operating revenues consist of billings to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans.

As described in Note 4 to the financial statements, the Registrant Subsidiaries participate in Entergy's money pool and earn interest income from the money pool. As described in Note 2 to the financial statements, Entergy Louisiana receives preferred membership interest distributions from Entergy Holdings Company.

The tables below contain the various affiliate transactions of the Utility operating companies, System Energy, and other Entergy affiliates.

Intercompany Revenues

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Millions)			
2020	$105.2	$280.5	$1.2	$—	$40.4	$520.7
2019	$117.5	$277.8	$1.4	$—	$51.6	$584.1
2018	$104.3	$299.0	$2.5	$—	$58.8	$456.7

Intercompany Operating Expenses

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Millions)			
2020	$515.5	$661.5	$283.3	$266.0	$260.3	$177.4
2019	$534.0	$665.4	$306.7	$292.1	$255.0	$156.2
2018	$471.9	$627.8	$266.8	$256.4	$240.2	$176.5

Intercompany Interest and Investment Income

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Millions)			
2020	$—	$127.7	$0.1	$—	$—	$0.2
2019	$0.4	$128.5	$0.4	$—	$0.4	$1.0
2018	$0.4	$128.2	$—	$—	$0.2	$1.2

Transactions with Equity Method Investees

EWO Marketing, LLC, an indirect wholly-owned subsidiary of Entergy, paid capacity charges and gas transportation to RS Cogen in the amounts of $26 million in 2020, $24.5 million in 2019, and $24 million in 2018.

Entergy's operating transactions with its other equity method investees were not significant in 2020, 2019, or 2018.

NOTE 19. REVENUE (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Revenues from electric service and the sale of natural gas are recognized when services are transferred to the customer in an amount equal to what Entergy has the right to bill the customer because this amount represents the value of services provided to customers. Entergy's total revenues for the years ended December 31, 2020 and 2019 are as follows:

	2020	2019
	(In Thousands)	
Utility:		
Residential	$3,550,317	$3,531,500
Commercial	2,292,740	2,475,586
Industrial	2,331,170	2,541,287
Governmental	212,131	228,470
Total billed retail	8,386,358	8,776,843
Sales for resale (a)	295,810	285,722
Other electric revenues (b)	348,102	343,143
Revenues from contracts with customers	9,030,270	9,405,708
Other revenues (c)	16,373	24,270
Total electric revenues	9,046,643	9,429,978
Natural gas	124,008	153,954
Entergy Wholesale Commodities:		
Competitive businesses sales from contracts with customers (a)	771,360	1,164,552
Other revenues (c)	171,625	130,189
Total competitive businesses revenues	942,985	1,294,741
Total operating revenues	$10,113,636	$10,878,673

The Registrant Subsidiaries' total revenues for the year ended December 31, 2020 were as follows:

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
Residential	$841,162	$1,270,187	$523,379	$243,502	$672,087
Commercial	466,273	886,548	395,875	179,406	364,638
Industrial	461,907	1,314,234	145,100	24,248	385,681
Governmental	18,011	68,901	41,955	59,819	23,445
Total billed retail	1,787,353	3,539,870	1,106,309	506,975	1,445,851
Sales for resale (a)	173,115	333,594	77,530	33,213	100,273
Other electric revenues (b)	109,642	141,004	54,590	8,294	39,981
Revenues from contracts with customers	2,070,110	4,014,468	1,238,429	548,482	1,586,105
Other revenues (c)	14,384	4,595	9,425	12,150	1,020
Total electric revenues	2,084,494	4,019,063	1,247,854	560,632	1,587,125
Natural gas	—	50,799	—	73,209	—
Total operating revenues	$2,084,494	$4,069,862	$1,247,854	$633,841	$1,587,125

The Registrant Subsidiaries' total revenues for the year ended December 31, 2019 were as follows:

2019	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
Residential	$795,269	$1,270,478	$562,219	$245,081	$658,453
Commercial	538,850	947,412	444,173	202,138	343,013
Industrial	520,958	1,450,966	164,491	31,824	373,048
Governmental	20,795	71,046	44,300	70,865	21,464
Total billed retail	1,875,872	3,739,902	1,215,183	549,908	1,395,978
Sales for resale (a)	257,864	333,395	39,295	38,626	59,074
Other electric revenues (b)	112,618	135,783	58,269	9,842	32,424
Revenues from contracts with customers	2,246,354	4,209,080	1,312,747	598,376	1,487,476
Other revenues (c)	13,240	13,947	10,296	(3,959)	1,479
Total electric revenues	2,259,594	4,223,027	1,323,043	594,417	1,488,955
Natural gas	—	62,148	—	91,806	—
Total operating revenues	$2,259,594	$4,285,175	$1,323,043	$686,223	$1,488,955

(a) Sales for resale and competitive businesses sales include day-ahead sales of energy in a market administered by an ISO. These sales represent financially binding commitments for the sale of physical energy the next day. These sales are adjusted to actual power generated and delivered in the real time market. Given the short duration of these transactions, Entergy does not consider them to be derivatives subject to fair value adjustments, and includes them as part of customer revenues.

(b) Other electric revenues consist primarily of transmission and ancillary services provided to participants of an ISO-administered market and unbilled revenue.

(c) Other revenues include the settlement of financial hedges, occasional sales of inventory, alternative revenue programs, provisions for revenue subject to refund, and late fees.

Electric Revenues

Entergy's primary source of revenue is from retail electric sales sold under tariff rates approved by regulators in its various jurisdictions. Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas generate, transmit, and distribute electric power primarily to retail customers in Arkansas, Louisiana, Mississippi, and Texas. Entergy's Utility operating companies provide power to customers on demand throughout the month, measured by a meter located at the customer's property. Approved rates vary by customer class due to differing requirements of the customers and market factors involved in fulfilling those requirements. Entergy issues monthly bills to customers at rates approved by regulators for power and related services provided during the previous billing cycle.

To the extent that deliveries have occurred but a bill has not been issued, Entergy's Utility operating companies record an estimate for energy delivered since the latest billings. The Utility operating companies calculate the estimate based upon several factors including billings through the last billing cycle in a month, actual generation in the month, historical line loss factors, and market prices of power in the respective jurisdiction. The inputs are revised as needed to approximate actual usage and cost. Each month, estimated unbilled amounts are recorded as unbilled revenue and accounts receivable, and the prior month's estimate is reversed. Price and volume differences resulting from factors such as weather affect the calculation of unbilled revenues from one period to the other.

Entergy may record revenue based on rates that are subject to refund. Such revenues are reduced by estimated refund amounts when Entergy believes refunds are probable based on the status of rate proceedings as of the date financial statements are prepared. Because these refunds will be made through a reduction in future rates, and not as a reduction in bills previously issued, they are presented as other revenues in the table above.

System Energy's only source of revenue is the sale of electric power and capacity generated from its 90% interest in the Grand Gulf nuclear plant to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans. System Energy issues monthly bills to its affiliated customers equal to its actual operating costs plus a return on common equity approved by the FERC.

Entergy's Utility operating companies also sell excess power not needed for its own customers, primarily through transactions with MISO, a regional transmission organization that maintains functional control over the combined transmission systems of its members and manages one of the largest energy markets in the U.S. In the MISO market, Entergy offers its generation and bids its load into the market. MISO settles these offers and bids based on locational marginal prices. These represent pricing for energy at a given location based on a market clearing price that takes into account physical limitations on the transmission system, generation, and demand throughout the MISO region. MISO evaluates each market participant's energy offers and demand bids to economically and reliably dispatch the entire MISO system. Entergy nets purchases and sales within the MISO market and reports in operating revenues when in a net selling position and in operating expenses when in a net purchasing position.

Natural Gas

Entergy Louisiana and Entergy New Orleans also distribute natural gas to retail customers in and around Baton Rouge, Louisiana, and New Orleans, Louisiana, respectively. Gas transferred to customers is measured by a meter at the customer's property. Entergy issues monthly invoices to customers at rates approved by regulators for the volume of gas transferred to date.

Competitive Businesses Revenues

The Entergy Wholesale Commodities segment derives almost all of its revenue from sales of electric power and capacity produced by its operating plants to wholesale customers. The majority of Entergy Wholesale Commodities' revenues are from Entergy's nuclear power plants located in the northern United States. Entergy issues monthly invoices to the counterparties for these electric sales at the respective contracted or ISO market rate of electricity and related services provided during the previous month.

Almost all of the Palisades nuclear plant output is sold under a 15-year PPA with Consumers Energy, executed as part of the acquisition of the plant in 2007 and expiring in April 2022. Prices under the original PPA range from $43.50/MWh in 2007 to $61.50/MWh in 2022, and the average price under the PPA is $51/MWh. Entergy executed an additional PPA to cover the period from the expiration of the original PPA through final shutdown in May 2022, at a price of $24.14/MWh. Entergy issues monthly invoices to Consumers Energy for electric sales based on the actual output of electricity and related services provided during the previous month at the contract price. The PPA was at below-market prices at the time of the acquisition and Entergy amortizes a liability to revenue over the life of the agreement. The amount amortized each period is based upon the present value, calculated at the date of acquisition, of each year's difference between revenue under the agreement and revenue based on estimated market prices. Amounts amortized to revenue were $11 million in 2020, $10 million in 2019, and $6 million in 2018. Amounts to be amortized to revenue through the remaining life of the agreement will be approximately $12 million in 2021 and $5 million in 2022.

Practical Expedients and Exceptions

Entergy has elected not to disclose the value of unsatisfied performance obligations for contracts with an original expected term of one year or less, or for revenue recognized in an amount equal to what Entergy has the right to bill the customer for services performed.

Most of Entergy's contracts, except in a few cases where there are defined minimums or stated terms, are on demand. This results in customer bills that vary each month based on an approved tariff and usage. Entergy imposes monthly or annual minimum requirements on some customers primarily as credit and cost recovery guarantees and not as pricing for unsatisfied performance obligations. These minimums typically expire after the initial term or when specified costs have been recovered. The minimum amounts are part of each month's bill and recognized as revenue accordingly. Some of the subsidiaries within the Entergy Wholesale Commodities segment have operations and maintenance services contracts that have fixed components and terms longer than one year. The total fixed consideration related to these unsatisfied performance obligations, however, is not material to Entergy revenues.

Recovery of Fuel Costs

Entergy's Utility operating companies' rate schedules include either fuel adjustment clauses or fixed fuel factors, which allow either current recovery in billings to customers or deferral of fuel costs until the costs are billed to customers. Where the fuel component of revenues is based on a pre-determined fuel cost (fixed fuel factor), the fuel factor remains in effect until changed as part of a general rate case, fuel reconciliation, or fixed fuel factor filing. System Energy's operating revenues are intended to recover from Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans operating expenses and capital costs attributable to Grand Gulf. The capital costs are based on System Energy's common equity funds allocable to its net investment in Grand Gulf, plus System Energy's effective interest cost for its debt allocable to its investment in Grand Gulf.

Taxes Imposed on Revenue-Producing Transactions

Governmental authorities assess taxes that are both imposed on and concurrent with a specific revenue-producing transaction between a seller and a customer, including, but not limited to, sales, use, value added, and

some excise taxes. Entergy presents these taxes on a net basis, excluding them from revenues.

Allowance for doubtful accounts

The allowance for doubtful accounts reflects Entergy's best estimate of expected losses on its accounts receivable balances. Due to the essential nature of utility services, Entergy has historically experienced a low rate of default on its accounts receivables. Due to the effect of the COVID-19 pandemic on customer receivables, however, Entergy recorded an increase in its allowance for doubtful accounts, as shown below:

	Entergy	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Millions)			
Balance as of December 31, 2019	$7.4	$1.2	$1.9	$0.6	$3.2	$0.5
Provisions (a)	109.0	16.2	43.7	18.8	14.1	16.2
Write-offs	(8.6)	(1.8)	(3.5)	(1.2)	(1.0)	(1.1)
Recoveries	9.9	2.7	3.6	1.3	1.1	1.2
Balance as of December 31, 2020	$117.7	$18.3	$45.7	$19.5	$17.4	$16.8

(a) Provisions include estimated incremental bad debt expenses resulting from the COVID-19 pandemic of $87.1 million for Entergy, $10.5 million for Entergy Arkansas, $36 million for Entergy Louisiana, $15.5 million for Entergy Mississippi, $12.2 million for Entergy New Orleans, and $12.9 million for Entergy Texas that have been deferred as regulatory assets. See Note 2 to the financial statements for discussion of the COVID-19 orders issued by retail regulators.

The allowance for currently expected credit losses is calculated as the historical rate of customer write-offs multiplied by the current accounts receivable balance, taking into account the length of time the receivable balances have been outstanding. Although the rate of customer write-offs has historically experienced minimal variation, management monitors the current condition of individual customer accounts to manage collections and ensure bad debt expense is recorded in a timely manner.

NOTE 20. QUARTERLY FINANCIAL DATA (UNAUDITED) (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Operating results for the four quarters of 2020 and 2019 for Entergy Corporation and subsidiaries were:

	Operating Revenues	Operating Income	Consolidated Net Income	Net Income Attributable to Entergy Corporation
		(In Thousands)		
2020:				
First Quarter	$2,427,179	$399,756	$123,294	$118,714
Second Quarter	$2,412,788	$439,311	$365,113	$360,533
Third Quarter	$2,903,568	$778,016	$525,699	$521,119
Fourth Quarter	$2,370,101	$152,112	$392,547	$387,968
2019:				
First Quarter	$2,609,584	$283,254	$258,646	$254,537
Second Quarter	$2,666,209	$338,775	$240,533	$236,424
Third Quarter	$3,140,575	$519,929	$369,459	$365,240
Fourth Quarter	$2,462,305	$248,539	$389,606	$385,025

Earnings per average common share

	2020		2019	
	Basic	Diluted	Basic	Diluted
First Quarter	$0.59	$0.59	$1.34	$1.32
Second Quarter	$1.80	$1.79	$1.22	$1.22
Third Quarter	$2.60	$2.59	$1.84	$1.82
Fourth Quarter	$1.95	$1.93	$1.96	$1.94

Results of operations for 2020 include resolution of the 2014-2015 IRS audit, which resulted in a reduction in deferred income tax expense of $230 million that includes a $396 million reduction in deferred income tax expense at Utility related to the basis of assets contributed in the 2015 Entergy Louisiana and Entergy Gulf States Louisiana business combination, including the recognition of previously uncertain tax positions, and deferred income tax expense of $105 million at Entergy Wholesale Commodities and $61 million at Parent and Other resulting from the revaluation of net operating losses as a result of the release of the reserves. See Note 3 to the financial statements for further discussion of the IRS audit resolution.

Results of operations for 2019 include: 1) a loss of $190 million ($156 million net-of-tax) as a result of the sale of the Pilgrim plant in August 2019; 2) a $156 million reduction in income tax expense recognized by Entergy Wholesale Commodities as a result of an internal restructuring; and 3) impairment charges of $100 million ($79 million net-of-tax) due to costs being charged directly to expense as incurred as a result of the impaired value of the Entergy Wholesale Commodities nuclear plants' long-lived assets due to the significantly reduced remaining estimated operating lives associated with management's strategy to exit the Entergy Wholesale Commodities' merchant power business. See Note 3 to the financial statements for further discussion of the internal restructuring. See Note 14 to the financial statements for further discussion of the sale of the Pilgrim plant.

The business of the Utility operating companies is subject to seasonal fluctuations with the peak periods occurring during the third quarter. Operating results for the Registrant Subsidiaries for the four quarters of 2020 and 2019 were:

Operating Revenues

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
	(In Thousands)					
2020:						
First Quarter	$481,912	$930,647	$293,922	$149,302	$339,336	$130,664
Second Quarter	$491,767	$1,011,652	$297,954	$147,343	$372,194	$126,049
Third Quarter	$644,389	$1,120,022	$356,496	$182,064	$494,922	$148,517
Fourth Quarter	$466,426	$1,007,541	$299,482	$155,132	$380,673	$90,228
2019:						
First Quarter	$545,812	$959,330	$282,244	$163,194	$340,474	$140,104
Second Quarter	$542,929	$1,106,317	$302,737	$175,793	$363,580	$139,009
Third Quarter	$687,526	$1,231,677	$398,732	$194,204	$442,877	$145,472
Fourth Quarter	$483,327	$987,851	$339,330	$153,032	$342,024	$148,825

Operating Income

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
	(In Thousands)					
2020:						
First Quarter	$67,835	$166,779	$41,181	$12,091	$36,060	$35,309
Second Quarter	$107,949	$256,412	$67,705	$7,602	$56,443	$31,236
Third Quarter	$217,648	$324,496	$93,843	$32,322	$108,306	$48,896
Fourth Quarter	$9,126	$117,134	$33,466	$12,397	$46,040	$1,303
2019:						
First Quarter	$42,471	$153,944	$30,792	$16,136	$16,741	$31,368
Second Quarter	$69,774	$241,520	$45,607	$17,509	$36,022	$24,300
Third Quarter	$182,176	$336,754	$87,024	$28,876	$69,510	$29,086
Fourth Quarter	$32,576	$164,424	$40,331	$6,164	$24,229	$30,231

Net Income

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
2020:						
First Quarter	$44,595	$189,396	$22,526	$11,186	$32,707	$28,513
Second Quarter	$60,170	$170,459	$38,893	$4,929	$46,868	$28,991
Third Quarter	$135,843	$223,466	$58,589	$19,450	$92,164	$31,064
Fourth Quarter	$4,624	$499,031	$20,575	$13,773	$43,334	$10,563
2019:						
First Quarter	$39,121	$127,633	$15,398	$9,023	$21,342	$23,578
Second Quarter	$50,299	$183,084	$26,667	$13,003	$38,936	$24,472
Third Quarter	$149,716	$255,260	$56,237	$24,908	$73,224	$25,031
Fourth Quarter	$23,828	$125,560	$21,623	$5,695	$25,895	$26,039

Earnings Applicable to Common Equity/Stock

	Entergy Texas
	(In Thousands)
2020:	
First Quarter	$32,237
Second Quarter	$46,397
Third Quarter	$91,694
Fourth Quarter	$42,863
2019:	
First Quarter	$21,342
Second Quarter	$38,936
Third Quarter	$73,114
Fourth Quarter	$25,425

RISK FACTORS SUMMARY

Entergy's business is subject to numerous risks and uncertainties that could affect its ability to successfully implement its business strategy and affect its financial results. Carefully consider all of the information in this report and, in particular, the following principal risks and all of the other specific factors described in Item 1A. of this report, "Risk Factors," before deciding whether to invest in Entergy or the Registrant Subsidiaries.

Utility Regulatory Risks

- The impacts of the COVID-19 pandemic and responsive measures taken are highly uncertain and cannot be predicted.
- The terms and conditions of service, including electric and gas rates, of the Utility operating companies and System Energy are determined through regulatory approval proceedings that can be lengthy and subject to appeal, potentially resulting in lengthy litigation and uncertainty as to ultimate results.
- The Utility operating companies recover fuel, purchased power, and associated costs through rate mechanisms that are subject to risks of delay or disallowance in regulatory proceedings.
- Entergy's business could experience adverse effects related to changes to state or federal legislation or regulation.
- There remains uncertainty regarding the effect of the termination of the System Agreement on the Utility operating companies.
- The Utility operating companies are subject to risks associated with participation in the MISO markets and the allocation of transmission upgrade costs.
- A delay or failure in recovering amounts for storm restoration costs incurred as a result of severe weather (including from Hurricane Laura, Hurricane Delta, and Hurricane Zeta) could have material effects on Entergy and those Utility operating companies affected by severe weather.

Nuclear Operating, Shutdown, and Regulatory Risks

- The results of operations, financial condition, and liquidity of Entergy Arkansas, Entergy Louisiana, System Energy, and Entergy Wholesale Commodities could be materially affected by the following:
  - failure to consistently operate their nuclear power plants at high capacity factors;
  - refueling outages that last longer than anticipated or unplanned outages;
  - risks related to the purchase of uranium fuel (and its conversion, enrichment, and fabrication);
  - the risk that the NRC will change or modify its regulations, suspend or revoke their licenses, or increase oversight of their nuclear plants;
  - risks and costs related to operating and maintaining their nuclear power plants;
  - the costs associated with the storage of the spent nuclear fuel, as well as the costs of and their ability to fully decommission their nuclear power plants;
  - the potential requirement to pay substantial retrospective premiums imposed under the Price-Anderson Act in the event of a nuclear incident, and losses not covered by insurance;
  - the risk that the decommissioning trust fund assets for the nuclear power plants may not be adequate to meet decommissioning obligations if market performance and other changes decrease the value of assets in the decommissioning trusts; and
  - new or existing safety concerns regarding operating nuclear power plants and nuclear fuel.
- Entergy Wholesale Commodities' power plants are subject to impairment charges in certain circumstances and its nuclear power plants are exposed to price risk.
- The Entergy Wholesale Commodities business is subject to substantial governmental regulation and may be adversely affected by legislative, regulatory, or market design changes, as well as liability under, or any future inability to comply with, existing or future regulations or requirements.

General Business Risks

- Entergy and the Utility operating companies depend on access to the capital markets and, at times, may face potential liquidity constraints, which could make it more difficult to handle future contingencies. Disruptions in the capital and credit markets may adversely affect Entergy's and its subsidiaries' ability to meet liquidity needs, access capital and operate and grow their businesses, and the cost of capital.
- A downgrade in Entergy Corporation's or its subsidiaries' credit ratings could, among other things, negatively affect Entergy Corporation's and its subsidiaries' ability to access capital.
- Changes in tax legislation and taxation as well as the inherent difficulty in quantifying potential tax effects of business decisions could negatively impact Entergy's, the Utility operating companies', and System Energy's results of operations, financial condition, and liquidity.
- Entergy and its subsidiaries' ability to successfully execute on their business strategies, including their ability to complete capital projects, other capital improvements, and strategic transactions is subject to significant risks, and, as a result, they may be unable to achieve some or all of the anticipated results of such strategies.
- Failure to attract, retain, and manage an appropriately qualified workforce could negatively affect Entergy or its subsidiaries' results of operations.
- The Utility operating companies, System Energy, and the Entergy Wholesale Commodities business may incur substantial costs (i) to fulfill their obligations related to environmental and other matters or (ii) related to reliability standards.
- Weather, economic conditions, technological developments, and other factors may have a material impact on electricity and gas usage and otherwise materially affect the Utility operating companies' results of operations.
- Entergy could be negatively affected by the effects of climate change and environmental and regulatory obligations intended to compel greenhouse gas emission reductions or increase clean or renewable energy requirements or to place a price on greenhouse gas emissions.
- Entergy is dependent on the continued and future availability and quality of water for cooling, process, and sanitary uses.
- Entergy and its subsidiaries may not be adequately hedged against changes in commodity prices.
- The Utility operating companies and the Entergy Wholesale Commodities business are exposed to the risk that counterparties may not meet their obligations.
- Market performance and other changes may decrease the value of benefit plan assets, which then could require additional funding and result in increased benefit plan costs.
- The litigation environment in the states in which certain Entergy subsidiaries operate poses a significant risk to those businesses.
- Terrorist attacks, cyber attacks, system failures, or data breaches of Entergy's and its subsidiaries' or its suppliers' technology systems may adversely affect Entergy's results of operations.
- The effect of higher purchased gas cost charges to customers taking gas service may adversely affect Entergy New Orleans's results of operations and liquidity.
- System Energy owns and, through an affiliate, operates a single nuclear generating facility, and it is dependent on sales to affiliated companies for all of its revenues. Certain contractual arrangements relating to System Energy, the affiliated companies, and these revenues are the subject of ongoing litigation and regulatory proceedings.
- As a holding company, Entergy Corporation depends on cash distributions from its subsidiaries to meet its debt service and other financial obligations and to pay dividends on its common stock.

ENTERGY'S BUSINESS

Entergy is an integrated energy company engaged primarily in electric power production and retail distribution operations. Entergy owns and operates power plants with approximately 30,000 MW of electric generating capacity, including approximately 8,000 MW of nuclear power. Entergy delivers electricity to 3.0 million utility customers in Arkansas, Louisiana, Mississippi, and Texas. Entergy had annual revenues of $10.1 billion in 2020 and had more than 13,000 employees as of December 31, 2020.

Entergy operates primarily through two business segments: Utility and Entergy Wholesale Commodities.

- The **Utility** business segment includes the generation, transmission, distribution, and sale of electric power in portions of Arkansas, Mississippi, Texas, and Louisiana, including the City of New Orleans; and operation of a small natural gas distribution business.
- The **Entergy Wholesale Commodities** business segment includes the ownership, operation, and decommissioning of nuclear power plants located in the northern United States and the sale of the electric power produced by its operating plants to wholesale customers. Entergy Wholesale Commodities also provides services to other nuclear power plant owners and owns interests in non-nuclear power plants that sell the electric power produced by those plants to wholesale customers. See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Entergy Wholesale Commodities Exit from the Merchant Power Business**" for discussion of the operation and planned shutdown and sale of each of the Entergy Wholesale Commodities nuclear power plants.

See Note 13 to the financial statements for financial information regarding Entergy's business segments.

Strategy

Entergy's strategy is to operate and grow the premier utility business that creates sustainable value for its customers, employees, communities, and owners. Entergy's strategy to achieve its stakeholder objectives has two key aspects. First, Entergy invests in the Utility for the benefit of its customers, which supports steady, predictable growth in earnings and dividends. Second, Entergy manages risks by ensuring its Utility investments are customer-centric, supported by progressive regulatory constructs, and executed with disciplined project management. Entergy's strategy for the Entergy Wholesale Commodities business segment is to continue to manage the risk of its operating portfolio as Entergy completes its exit from the merchant power business.

Utility

The Utility business segment includes five retail electric utility subsidiaries: Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas. These companies generate, transmit, distribute, and sell electric power to retail and wholesale customers in Arkansas, Louisiana, Mississippi, and Texas. Entergy Louisiana and Entergy New Orleans also provide natural gas utility services to customers in and around Baton Rouge, Louisiana, and New Orleans, Louisiana, respectively. Also included in the Utility is System Energy, a wholly-owned subsidiary of Entergy Corporation that owns or leases 90 percent of Grand Gulf. System Energy sells its power and capacity from Grand Gulf at wholesale to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans. The five retail utility subsidiaries are each regulated by the FERC and by state utility commissions, or, in the case of Entergy New Orleans, the City Council. System Energy is regulated by the FERC because all of its transactions are at wholesale. The overall generation portfolio of the Utility, which relies heavily on natural gas and nuclear generation, is consistent with Entergy's strong support for the environment.

Customers

As of December 31, 2020, the Utility operating companies provided retail electric and gas service to customers in Arkansas, Louisiana, Mississippi, and Texas, as follows:

		Electric Customers		Gas Customers	
	Area Served	(In Thousands)	**(%)**	(In Thousands)	**(%)**
Entergy Arkansas	Portions of Arkansas	722	25 %		
Entergy Louisiana	Portions of Louisiana	1,096	37 %	94	47 %
Entergy Mississippi	Portions of Mississippi	456	15 %		
Entergy New Orleans	City of New Orleans	207	7 %	108	53 %
Entergy Texas	Portions of Texas	473	16 %		
Total customers		2,954	100 %	202	100 %

Electric Energy Sales

The electric energy sales of the Utility operating companies are subject to seasonal fluctuations, with the peak sales period normally occurring during the third quarter of each year. On August 10, 2020, Entergy reached a 2020 peak demand of 21,340 MWh, compared to the 2019 peak of 21,598 MWh recorded on August 12, 2019. Selected electric energy sales data is shown in the table below:

Selected 2020 Electric Energy Sales Data

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy	Entergy (a)
				(In GWh)			
Sales to retail customers	20,749	53,896	12,402	5,447	18,677	—	111,170
Sales for resale:							
Affiliates	1,659	5,585	—	—	1,203	5,849	—
Others	4,198	2,365	4,316	1,969	810	—	13,658
Total	26,606	61,846	16,718	7,416	20,690	5,849	124,828
Average use per residential customer (kWh)	12,633	14,576	14,093	12,315	14,829	—	13,917

(a) Includes the effect of intercompany eliminations.

The following table illustrates the Utility operating companies' 2020 combined electric sales volume as a percentage of total electric sales volume, and 2020 combined electric revenues as a percentage of total 2020 electric revenue, each by customer class.

Customer Class	% of Sales Volume	% of Revenue
Residential	28.2	39.2
Commercial	21.2	25.4
Industrial (a)	37.7	25.8
Governmental	2.0	2.3
Wholesale/Other	10.9	7.3

(a) Major industrial customers are primarily in the petroleum refining and chemical industries.

See "Selected Financial Data" for each of the Utility operating companies for the detail of their sales by customer class for 2016-2020.

Selected 2020 Natural Gas Sales Data

Entergy New Orleans and Entergy Louisiana provide both electric power and natural gas to retail customers. Entergy New Orleans and Entergy Louisiana sold 9,467,899 and 6,268,003 Mcf, respectively, of natural gas to retail customers in 2020. In 2020, 99% of Entergy Louisiana's operating revenue was derived from the electric utility business, and only 1% from the natural gas distribution business. For Entergy New Orleans, 88% of operating revenue was derived from the electric utility business and 12% from the natural gas distribution business in 2020.

Following is data concerning Entergy New Orleans's 2020 retail operating revenue sources.

Customer Class	Electric Operating Revenue	Natural Gas Operating Revenue
Residential	48%	51%
Commercial	35%	25%
Industrial	5%	18%
Governmental/Municipal	12%	6%

Retail Rate Regulation

General (Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas)

Each Utility operating company regularly participates in retail rate proceedings. The status of material retail rate proceedings is described in Note 2 to the financial statements. Certain aspects of the Utility operating companies' retail rate mechanisms are discussed below.

	Rate base (in billions)	Current authorized return on common equity	Weighted average cost of capital (after-tax)	Equity ratio	Regulatory construct
Entergy Arkansas	$8.4 (a)	9.25% - 10.25%	5.04%	36.6%	- forward test year formula rate plan through 2021 test year (i) - riders: MISO, capacity, Grand Gulf, tax adjustment, energy efficiency, fuel and purchased power
Entergy Louisiana (electric)	$11.9 (b)	9.2% - 10.4%	6.97%	48.63%	- formula rate plan through 2019 test year (j) - riders/specific recovery: MISO, capacity, transmission, fuel
Entergy Louisiana (gas)	$0.08 (c)	9.3% - 10.3%	6.96%	48.37%	- gas rate stabilization plan - rider: gas infrastructure

Entergy Mississippi	$3.0 (d)	8.89% - 10.93%	6.82%	49.09%	- formula rate plan with forward-looking features - riders: power management, Grand Gulf, fuel, MISO, unit power cost, storm damage, energy efficiency, ad valorem tax adjustment, vegetation, grid modernization, restructuring credit
Entergy New Orleans (electric)	$0.8 (e)	9.35%	7.09%	50%	- formula rate plan with forward-looking features - riders/specific recovery: fuel and purchased power, MISO, energy efficiency, environmental
Entergy New Orleans (gas)	$0.1 (e)	9.35%	7.09%	50%	- formula rate plan with forward-looking features - rider: purchased gas
Entergy Texas	$2.4 (f)	9.65%	7.73%	50.9%	- rate case - riders: fuel, distribution and transmission, generation, rate case expenses, AMI surcharge, tax reform, among others
System Energy	$1.6 (g)	10.94% (h)	8.57 %	65% (h)	- monthly cost of service

(a) Based on 2021 test year.
(b) Based on December 31, 2019 test year and excludes approximately $800 million for the Lake Charles Power Station and $300 million for the Washington Parish Energy Center, each included in the capacity rider, and $400 million of transmission plant, included in the transmission rider.
(c) Based on September 30, 2019 test year.
(d) Based on 2020 forward test year and excludes approximately $300 million for the Choctaw Generating Station, included in interim capacity mechanism.
(e) Based on December 31, 2018 test year and known and measurables through December 31, 2019. Electric rate base excludes approximately $190 million for New Orleans Power Station and $40 million for New Orleans Solar Station.
(f) Based on December 31, 2017 test year and excludes $1.0 billion in cost recovery riders.
(g) Based on calculation as of December 31, 2020.
(h) See Note 2 to the financial statements for discussion of ongoing proceedings at the FERC challenging System Energy's authorized return on common equity and capital structure.
(i) See Note 2 to the financial statements for discussion of Entergy Arkansas's pending formula rate plan extension request.
(j) See Note 2 to the financial statements for discussion of Entergy Louisiana's pending formula rate plan extension request.

Entergy Arkansas

Fuel and Purchased Power Cost Recovery

Entergy Arkansas's rate schedules include an energy cost recovery rider to recover fuel and purchased power costs in monthly bills. The rider utilizes prior calendar year energy costs and projected energy sales for the twelve-month period commencing on April 1 of each year to develop an energy cost rate, which is redetermined annually and includes a true-up adjustment reflecting the over-recovery or under-recovery, including carrying charges, of the energy cost for the prior calendar year. The energy cost recovery rider tariff also allows an interim rate request depending upon the level of over- or under-recovery of fuel and purchased energy costs. In December 2007 the APSC issued an order stating that Entergy Arkansas's energy cost recovery rider will remain in effect, and any future termination of the rider would be subject to eighteen months advance notice by the APSC, which would occur following notice and hearing.

Production Cost Allocation Rider

Entergy Arkansas has in place an APSC-approved production cost allocation rider for recovery from customers of the retail portion of the costs allocated to Entergy Arkansas as a result of System Agreement proceedings.

Entergy Louisiana

Fuel Recovery

Entergy Louisiana's rate schedules include a fuel adjustment clause designed to recover the cost of fuel and purchased power costs. The fuel adjustment clause contains a surcharge or credit for deferred fuel expense and related carrying charges arising from the monthly reconciliation of actual fuel costs incurred with fuel cost revenues billed to customers, including carrying charges. See Note 2 to the financial statements for a discussion of proceedings related to audits of Entergy Louisiana's fuel adjustment clause filings.

To help stabilize electricity costs, Entergy Louisiana received approval from the LPSC to hedge its exposure to natural gas price volatility through the use of financial instruments. Entergy Louisiana historically hedged approximately one-third of the projected exposure to natural gas price changes for the gas used to serve its native electric load for all months of the year. The hedge quantity was reviewed on an annual basis. In January 2018, Entergy Louisiana filed an application with the LPSC to suspend these seasonal hedging programs and implement financial hedges with terms up to five years for a portion of its natural gas exposure, which was approved in November 2018.

Entergy Louisiana's gas rates include a purchased gas adjustment clause based on estimated gas costs for the billing month adjusted by a surcharge or credit that arises from an annual reconciliation of fuel costs incurred with fuel cost revenues billed to customers, including carrying charges.

Retail Rates - Gas

In accordance with the settlement of Entergy Gulf States Louisiana's gas rate stabilization plan for the test year ended September 30, 2012, in August 2014, Entergy Gulf States Louisiana submitted for consideration a proposal for implementation of an infrastructure rider to recover expenditures associated with strategic plant investment and relocation projects mandated by local governments. After review by the LPSC staff and inclusion of certain customer safeguards required by the LPSC staff, in December 2014, Entergy Gulf States Louisiana and the LPSC staff submitted a joint settlement for implementation of an accelerated gas pipe replacement program providing for the replacement of approximately 100 miles of pipe over the next ten years, as well as relocation of certain existing pipe resulting from local government-related infrastructure projects, and for a rider to recover the

investment associated with these projects. The rider allows for recovery of approximately $65 million over ten years. The rider recovery will be adjusted on a quarterly basis to include actual investment incurred for the prior quarter and is subject to the following conditions, among others: a ten-year term; application of any earnings in excess of the upper end of the earnings band as an offset to the revenue requirement of the infrastructure rider; adherence to a specified spending plan, within plus or minus 20% annually; annual filings comparing actual versus planned rider spending with actual spending and explanation of variances exceeding 10%; and an annual true-up. The joint settlement was approved by the LPSC in January 2015. Implementation of the infrastructure rider commenced with bills rendered on and after the first billing cycle of April 2015.

Storm Cost Recovery

See Note 2 to the financial statements for a discussion of Entergy Louisiana's filings to recover storm-related costs.

Other

In March 2016 the LPSC opened two dockets to examine, on a generic basis, issues that it identified in connection with its review of Cleco Corporation's acquisition by third party investors. The first docket is captioned "In re: Investigation of double leveraging issues for all LPSC-jurisdictional utilities," and the second is captioned "In re: Investigation of tax structure issues for all LPSC-jurisdictional utilities." In April 2016 the LPSC clarified that the concerns giving rise to the two dockets arose as a result of its review of the structure of the Cleco-Macquarie transaction and that the specific intent of the directives is to seek more information regarding intra-corporate debt financing of a utility's capital structure as well as the use of investment tax credits to mitigate the tax obligation at the parent level of a consolidated entity. No schedule has been set for either docket, and limited discovery has occurred.

In December 2019 an LPSC commissioner issued an unopposed directive to staff to research customer-centered options for all customer classes, as well as other regulatory environments, and recommend a plan for how to ensure customers are the focus. There was no opposition to the directive from other commissioners but several remarked that the intent of the directive was not initiated to pursue retail open access. In furtherance of the directive, the LPSC issued a notice of the opening of a docket to conduct a rulemaking to research and evaluate customer-centered options for all electric customer classes as well as other regulatory environments in January 2020.

Entergy Mississippi

Fuel Recovery

Entergy Mississippi's rate schedules include energy cost recovery riders to recover fuel and purchased power costs. The energy cost rate for each calendar year is redetermined annually and includes a true-up adjustment reflecting the over-recovery or under-recovery of the energy costs as of the 12-month period ended September 30. Entergy Mississippi's fuel cost recoveries are subject to annual audits conducted pursuant to the authority of the MPSC.

To help stabilize electricity costs, Entergy Mississippi received approval from the MPSC to hedge its exposure to natural gas price volatility through the use of financial instruments. Entergy Mississippi hedges approximately one-third of the projected exposure to natural gas price changes for the gas used to serve its native electric load for all months of the year. The hedge quantity is reviewed on an annual basis.

Storm Cost Recovery

See Note 2 to the financial statements for a discussion of proceedings regarding recovery of Entergy Mississippi's storm-related costs.

Formula Rate Plan

In August 2012 the MPSC opened inquiries to review whether the current formulaic methodology used to calculate the return on common equity in both Entergy Mississippi's formula rate plan and Mississippi Power Company's annual formula rate plan was still appropriate or could be improved to better serve the public interest. The intent of this inquiry and review was for informational purposes only; the evaluation of any recommendations for changes to the existing methodology would take place in a general rate case or in the existing formula rate plan proceeding. In March 2013 the Mississippi Public Utilities Staff filed its consultant's report which noted the return on common equity estimation methods used by Entergy Mississippi and Mississippi Power Company are commonly used throughout the electric utility industry. The report suggested ways in which the methods used by Entergy Mississippi and Mississippi Power Company might be improved, but did not recommend specific changes in the return on common equity formulas or calculations at that time. In June 2014 the MPSC expanded the scope of the August 2012 inquiry to study the merits of adopting a uniform formula rate plan that could be applied, where possible in whole or in part, to both Entergy Mississippi and Mississippi Power Company in order to achieve greater consistency in the plans. The MPSC directed the Mississippi Public Utilities Staff to investigate and review Entergy Mississippi's formula rate plan rider schedule and Mississippi Power Company's Performance Evaluation Plan by considering the merits and deficiencies and possibilities for improvement of each and then to propose a uniform formula rate plan that, where possible, could be applicable to both companies. No procedural schedule has been set. In October 2014 the Mississippi Public Utilities Staff conducted a public technical conference to discuss performance benchmarking and its potential application to the electric utilities' formula rate plans. The docket remains open.

Entergy New Orleans

Fuel Recovery

Entergy New Orleans's electric rate schedules include a fuel adjustment tariff designed to reflect no more than targeted fuel and purchased power costs, adjusted by a surcharge or credit for deferred fuel expense arising from the monthly reconciliation of actual fuel and purchased power costs incurred with fuel cost revenues billed to customers, including carrying charges.

Entergy New Orleans's gas rate schedules include a purchased gas adjustment to reflect estimated gas costs for the billing month, adjusted by a surcharge or credit similar to that included in the electric fuel adjustment clause, including carrying charges.

To help stabilize gas costs, Entergy New Orleans seeks approval annually from the City Council to continue implementation of its natural gas hedging program consistent with the City Council's stated policy objectives. The program uses financial instruments to hedge exposure to volatility in the wholesale price of natural gas purchased to serve Entergy New Orleans gas customers. Entergy New Orleans hedges up to 25% of actual gas sales made during the winter months.

Storm Cost Recovery

See Note 2 to the financial statements for a discussion of Entergy New Orleans's efforts to recover storm-related costs.

Energy Efficiency Programs

A 2008 rate case settlement included $3.1 million per year in electric rates to fund the Energy Smart energy efficiency programs. The rate settlement provided an incentive for Entergy New Orleans to meet or exceed energy savings targets set by the City Council and provided a mechanism for Entergy New Orleans to recover lost contribution to fixed costs associated with the energy savings generated from the energy efficiency programs. In January 2015 the City Council approved funding for the Energy Smart program from April 2015 through March 2017 using the remainder of the approximately $12.8 million of 2014 rough production cost equalization funds, with any remaining costs being recovered through the fuel adjustment clause. This funding methodology was modified in November 2015 when the City Council directed Entergy New Orleans to use a combination of guaranteed customer savings related to a prior agreement with the City Council and rough production cost equalization funds to cover program costs prior to recovering any costs through the fuel adjustment clause. In April 2017 the City Council approved an implementation plan for the Energy Smart program from April 2017 through December 2019. The City Council directed that the $11.8 million balance reported for Energy Smart funds be used to continue funding the program for Entergy New Orleans's legacy customers and that the Energy Smart Algiers program continue to be funded through the Algiers fuel adjustment clause, until additional customer funding is required for the legacy customers. In September 2017, Entergy New Orleans filed a supplemental plan and proposed several options for an interim cost recovery mechanism necessary to recover program costs during the period between when existing funds directed to Energy Smart programs are depleted and when new rates from the 2018 combined rate case, which includes a cost recovery mechanism for Energy Smart funding, take effect. In December 2017 the City Council approved an energy efficiency cost recovery rider as an interim funding mechanism for Energy Smart, subject to verification that no additional funding sources exist. In June 2018 the City Council also approved a resolution recommending that Entergy New Orleans allocate approximately $13.5 million of benefits resulting from the Tax Act to Energy Smart. See Note 2 to the financial statements for discussion of Entergy New Orleans's application with the City Council seeking approval of an implementation plan for the Energy Smart program from April 2020 through December 2022.

Entergy Texas

Fuel Recovery

Entergy Texas's rate schedules include a fixed fuel factor to recover fuel and purchased power costs, including interest, that are not included in base rates. Semi-annual revisions of the fixed fuel factor are made in March and September based on the market price of natural gas and changes in fuel mix. The amounts collected under Entergy Texas's fixed fuel factor and any interim surcharge or refund are subject to fuel reconciliation proceedings before the PUCT. The PUCT fuel cost proceedings are discussed in Note 2 to the financial statements.

At the PUCT's April 2013 open meeting, the PUCT Commissioners discussed their view that a purchased power capacity rider was good public policy. The PUCT issued an order in May 2013 adopting the rule allowing for a purchased power capacity rider, subject to an offsetting adjustment for load growth. The rule, as adopted, also includes a process for obtaining pre-approval by the PUCT of purchased power agreements. Entergy Texas has not exercised the option to recover its capacity costs under the new rider mechanism, but will continue to evaluate the benefits of utilizing the new rider to recover future capacity costs.

Electric Industry Restructuring

In June 2009, a law was enacted in Texas that required Entergy Texas to cease all activities relating to Entergy Texas's transition to competition. The law allows Entergy Texas to remain a part of the SERC Reliability Corporation (SERC) Region, although it does not prevent Entergy Texas from joining another power region. The law provides that proceedings to certify a power region that Entergy Texas belongs to as a qualified power region can be initiated by the PUCT, or on motion by another party, when the conditions supporting such a proceeding

exist. Under the law, the PUCT may not approve a transition to competition plan for Entergy Texas until the expiration of four years from the PUCT's certification of Entergy Texas's power region.

The law also contains provisions that allow Entergy Texas to take advantage of a cost recovery mechanism that permits annual filings for the recovery of reasonable and necessary expenditures for transmission infrastructure improvement and changes in wholesale transmission charges. This mechanism was previously available to other non-ERCOT Texas utility companies, but not to Entergy Texas.

The law further amended already existing law that had required Entergy Texas to propose for PUCT approval a tariff to allow eligible customers the ability to contract for competitive generation. The amending language in the law provides, among other things, that: 1) the tariff shall not be implemented in a manner that harms the sustainability or competitiveness of manufacturers who choose not to participate in the tariff; 2) Entergy Texas shall "purchase competitive generation service, selected by the customer, and provide the generation at retail to the customer;" and 3) Entergy Texas shall provide and price transmission service and ancillary services under that tariff at a rate that is unbundled from its cost of service. The law directs that the PUCT may not issue an order on the tariff that is contrary to an applicable decision, rule, or policy statement of a federal regulatory agency having jurisdiction.

The PUCT determined that unrecovered costs that may be recovered through the rider consist only of those costs necessary to implement and administer the competitive generation program and do not include lost revenues or embedded generation costs. The amount of customer load that may be included in the competitive generation service program is limited to 115 MW.

In September 2011 the PUCT adopted a proposed rule implementing a distribution cost recovery factor to recover capital and capital-related costs related to distribution infrastructure. The distribution cost recovery factor permits utilities once per year to implement an increase or decrease in rates above or below amounts reflected in base rates to reflect depreciation expense, federal income tax and other taxes, and return on investment. The distribution cost recovery factor rider may be changed a maximum of four times between base rate cases.

In September 2019 the PUCT initiated a rulemaking to promulgate a generation cost recovery factor rule, implementing legislation passed in the 2019 Texas legislative session intended to allow electric utilities to recover generation investments between base rate proceedings. The PUCT approved the final rule in July 2020.

Franchises

Entergy Arkansas holds exclusive franchises to provide electric service in approximately 308 incorporated cities and towns in Arkansas. These franchises are unlimited in duration and continue unless the municipalities purchase the utility property. In Arkansas franchises are considered to be contracts and, therefore, are terminable pursuant to the terms of the franchise agreement and applicable statutes.

Entergy Louisiana holds non-exclusive franchises to provide electric service in approximately 175 incorporated municipalities and in the unincorporated areas of approximately 59 parishes of Louisiana. Entergy Louisiana holds non-exclusive franchises to provide natural gas service to customers in the City of Baton Rouge and in East Baton Rouge Parish. Municipal franchise agreement terms range from 25 to 60 years while parish franchise terms range from 25 to 99 years.

Entergy Mississippi has received from the MPSC certificates of public convenience and necessity to provide electric service to areas within 45 counties, including a number of municipalities, in western Mississippi. Under Mississippi statutory law, such certificates are exclusive. Entergy Mississippi may continue to serve in such municipalities upon payment of a statutory franchise fee, regardless of whether an original municipal franchise is still in existence.

Entergy New Orleans provides electric and gas service in the City of New Orleans pursuant to indeterminate permits set forth in city ordinances. These ordinances contain a continuing option for the City of New Orleans to purchase Entergy New Orleans's electric and gas utility properties.

Entergy Texas holds a certificate of convenience and necessity from the PUCT to provide electric service to areas within approximately 27 counties in eastern Texas, and holds non-exclusive franchises to provide electric service in approximately 68 incorporated municipalities. Entergy Texas typically obtains 25-year franchise agreements as existing agreements expire. Entergy Texas's electric franchises expire over the period 2020-2058.

The business of System Energy is limited to wholesale power sales. It has no distribution franchises.

Property and Other Generation Resources

Owned Generating Stations

The total capability of the generating stations owned and leased by the Utility operating companies and System Energy as of December 31, 2020, is indicated below:

	Owned and Leased Capability MW(a)					
Company	**Total**	**Gas/Oil**	**Nuclear**	**Coal**	**Hydro**	**Solar**
Entergy Arkansas	5,175	2,091	1,817	1,194	73	—
Entergy Louisiana	11,317	8,827	2,144	346	—	—
Entergy Mississippi	3,347	2,929	—	416	—	2
Entergy New Orleans	665	638	—	—	—	27
Entergy Texas	2,260	2,005	—	255	—	—
System Energy	1,256	—	1,256	—	—	—
Total	24,020	16,490	5,217	2,211	73	29

(a) "Owned and Leased Capability" is the dependable load carrying capability as demonstrated under actual operating conditions based on the primary fuel (assuming no curtailments) that each station was designed to utilize.

Summer peak load for the Utility has averaged 21,591 MW over the previous decade.

The Utility operating companies' load and capacity projections are reviewed periodically to assess the need and timing for additional generating capacity and interconnections. These reviews consider existing and projected demand, the availability and price of power, the location of new load, the economy, Entergy's clean energy and other public policy goals, environmental regulations, and the age and condition of Entergy's existing infrastructure.

The Utility operating companies' long-term resource strategy (Portfolio Transformation Strategy) calls for the bulk of capacity needs to be met through long-term resources, whether owned or contracted. Over the past decade, the Portfolio Transformation Strategy has resulted in the addition of about 8,801 MW of new long-term resources and the deactivation of about 4,664 MW of legacy generation. As MISO market participants, the Utility operating companies also participate in MISO's Day Ahead and Real Time Energy and Ancillary Services markets to economically dispatch generation and purchase energy to serve customers reliably and at the lowest reasonable cost.

Other Generation Resources

RFP Procurements

The Utility operating companies from time to time issue requests for proposals (RFP) to procure supply-side resources from sources other than the spot market to meet the unique regional needs of the Utility operating companies. The RFPs issued by the Utility operating companies have sought resources needed to meet near-term MISO reliability requirements as well as long-term requirements through a broad range of wholesale power products, including limited-term (1 to 3 years) and long-term contractual products and asset acquisitions. The RFP process has resulted in selections or acquisitions, including, among other things:

- Entergy Louisiana's construction of the 980 MW, combined-cycle, gas turbine J. Wayne Leonard Power Station (previously referred to as the St. Charles generating facility) at its existing Little Gypsy electric generating station. The facility began commercial operation in May 2019;
- Entergy Texas's construction of the 993 MW, combined-cycle, gas turbine Montgomery County Power Station at its existing Lewis Creek electric generating station. The facility began commercial operation in January 2021;
- Entergy Louisiana's construction of the 994 MW, combined-cycle, gas turbine Lake Charles generating facility at its existing Nelson electric generating station site. The facility began commercial operation in March 2020;
- In October 2018, Entergy Mississippi signed an agreement for the purchase of an approximately 100 MW to-be-constructed solar photovoltaic energy facility that will be sited on approximately 1,000 acres in Sunflower County, Mississippi. Entergy Mississippi received regulatory approval from the MPSC in April 2020, and the facility is scheduled to be in service by early 2022;
- In March 2019, Entergy Arkansas signed an agreement for the purchase of an approximately 100 MW to-be- constructed solar photovoltaic energy facility that will be sited on approximately 800 acres in White County near Searcy, Arkansas. Entergy Arkansas received regulatory approval from the APSC in April 2020 and the facility is scheduled to be in service by the end of 2021;
- Entergy New Orleans received regulatory approval in August 2019 to construct the New Orleans Solar Station (a 20 MW self-build solar project) located at the NASA Michoud Facility. The facility was placed in service in December 2020;
- In June 2020, Entergy Arkansas signed an agreement for the purchase of an approximately 100 MW to-be-constructed solar photovoltaic energy facility that will be sited on approximately 1,000 acres in Lee County, Arkansas. In October 2020, Entergy Arkansas filed a petition with the APSC seeking a finding that the transaction is in the public interest and requesting all necessary approvals. Closing is expected to occur by the end of 2022;
- In September 2020, Entergy Arkansas signed an agreement for the purchase of an approximately 180 MW to-be-constructed solar photovoltaic energy facility that will be sited on approximately 1,500 acres in Crittenden County, Arkansas. In January 2021, Entergy Arkansas filed a petition with the APSC seeking a finding that the transaction is in the public interest and requesting all necessary approvals. Closing is expected to occur by the end of 2023; and
- In June 2020, Entergy Texas signed an agreement for the purchase of an approximately 100 MW to-be- constructed solar photovoltaic energy facility that will be sited on approximately 1,200 acres in Liberty County near Dayton, Texas. In September 2020, Entergy Texas filed a petition with the PUCT seeking a finding that the transaction is in the public interest and requesting all necessary approvals. Closing is expected to occur by the end of 2023.

The RFP process has also resulted in the selection, or confirmation of the economic merits of, long-term purchased power agreements (PPAs), including, among others:

- River Bend's 30% life-of-unit PPA between Entergy Louisiana and Entergy New Orleans for 100 MW related to Entergy Louisiana's unregulated portion of the River Bend nuclear station, which portion was formerly owned by Cajun;
- Entergy Arkansas's wholesale base load capacity life-of-unit PPAs executed in 2003 totaling approximately 220 MW between Entergy Arkansas and Entergy Louisiana (110 MW) and between Entergy Arkansas and Entergy New Orleans (110 MW) related to the sale of a portion of Entergy Arkansas's coal and nuclear base load resources (which had not been included in Entergy Arkansas's retail rates);
- In May 2011, Entergy Texas and Calpine Energy Services, L.P. executed a 10-year agreement for 485 MW from the Carville Energy Center located in St. Gabriel, Louisiana. Entergy Louisiana purchases 50% of the facility's capacity and energy from Entergy Texas. In July 2014, LS Power purchased the Carville Energy Center and replaced Calpine Energy Services as the counterparty to the agreement;
- In September 2012, Entergy Gulf States Louisiana executed a 20-year agreement for 28 MW, with the potential to purchase an additional 9 MW when available, from Rain CII Carbon LLC's petroleum coke calcining facility in Sulphur, Louisiana. The facility began commercial operation in May 2013. Entergy Louisiana, as successor in interest to Entergy Gulf States Louisiana, now holds the agreement with the facility;
- In March 2013, Entergy Gulf States Louisiana executed a 20-year agreement for 8.5 MW from Agrilectric Power Partners, LP's refurbished rice hull-fueled electric generation facility located in Lake Charles, Louisiana. Entergy Louisiana, as successor in interest to Entergy Gulf States Louisiana, now holds the agreement with Agrilectric;
- In September 2013, Entergy Louisiana executed a 10-year agreement with TX LFG Energy, LP, a wholly-owned subsidiary of Montauk Energy Holdings, LLC, to purchase approximately 3 MW from its landfill gas-fueled power generation facility located in Cleveland, Texas;
- Entergy Mississippi's cost-based purchase, beginning in January 2013, of 90 MW from Entergy Arkansas's share of Grand Gulf (only 60 MW of this PPA came through the RFP process). Cost recovery for the 90 MW was approved by the MPSC in January 2013;
- In April 2015, Entergy Arkansas and Stuttgart Solar, LLC executed a 20-year agreement for 81 MW from a solar photovoltaic electric generation facility located near Stuttgart, Arkansas. The APSC approved the project and deliveries pursuant to that agreement commenced in June 2018;
- In November 2016, Entergy Louisiana and LS Power executed a 10-year agreement for 485 MW from the Carville Energy Center located in St. Gabriel, Louisiana. The transaction received regulatory approval and will begin in June 2022;
- In November 2016, Entergy Louisiana and Occidental Chemical Corporation executed a 10-year agreement for 500 MW from the Taft Cogeneration facility located in Hahnville, Louisiana. The transaction received regulatory approval and began in June 2018;
- In June 2017, Entergy Arkansas and Chicot Solar, LLC executed a 20-year agreement for 100 MW from a solar photovoltaic electric generating facility located in Chicot County, Arkansas. The transaction received regulatory approval and the PPA began in November 2020;
- In February 2018, Entergy Louisiana and LA3 West Baton Rouge, LLC (Capital Region Solar project) executed a 20-year agreement for 50 MW from a solar photovoltaic electric generating facility located in West Baton Rouge Parish, Louisiana. The transaction received regulatory approval in February 2019 and the PPA began in October 2020;
- In July 2018, Entergy New Orleans and St. James Solar, LLC executed a 20-year agreement for 20 MW from a solar photovoltaic electric generating facility located in St. James Parish, Louisiana. The transaction received regulatory approval in July 2019 and is targeting commercial operation in mid-2021;
- In August 2018, Entergy Louisiana and South Alexander Development I, LLC executed a five-year agreement for 5 MW from a solar photovoltaic electric generating facility located in Livingston Parish, Louisiana. The PPA began in December 2020 and received regulatory approval in January 2021;

- In February 2019, Entergy New Orleans and Iris Solar, LLC executed a 20-year agreement for 50 MW from a solar photovoltaic electric generating facility located in Washington Parish, Louisiana. The transaction received regulatory approval in July 2019 and is targeting commercial operation in mid-2021; and
- In August 2020, Entergy Texas and Umbriel Solar, LLC executed a 20-year agreement for 150 MW from a solar photovoltaic electric generating facility located in Polk County, Texas. The PPA is expected to start when the facility reaches commercial operation in 2023.

In April 2020, Entergy Services, on behalf of Entergy Texas, issued an RFP for combined-cycle gas turbine capacity and energy resources. The RFP was seeking up to 1,000 MW - 1,200 MW of capacity, capacity-related benefits, energy, other electric products, and environmental attributes, if any, from a single generation resource located in the "Eastern Region" of Entergy Texas's service area. In December 2020, Entergy Texas posted notice that it has elected to proceed with the self-build alternative, Orange County Power Station. The self-build alternative will be conditioned on receipt of required internal and regulatory approvals.

In June 2020, Entergy Services, on behalf of Entergy Louisiana, issued an RFP for solar photovoltaic resources. The RFP was seeking 300 MW of energy, capacity, capacity-related benefits, other electric products, and environmental attributes from eligible new-build solar photovoltaic generation resources. In December 2020, Entergy Louisiana concluded evaluations of the RFP. Three proposals have been placed on the primary selection list and two proposals have been placed on the secondary selection list. Negotiations are currently in progress.

In January 2021, Entergy Texas provided notice that it intends to issue an RFP for solar generation resources. The RFP is seeking a minimum of 200 MW through a combination of build-own-transfer agreements, self-build alternatives, and power purchase agreements that can provide cost-effective energy supply, fuel diversity, and other benefits to Entergy Texas customers.

Other Procurements From Third Parties

The Utility operating companies have also made resource acquisitions outside of the RFP process, including Entergy Mississippi's January 2006 acquisition of the 480 MW, combined-cycle, gas-fired Attala power plant; Entergy Gulf States Louisiana's March 2008 acquisition of the 322 MW, simple-cycle, gas-fired Calcasieu Generating Facility; Entergy Louisiana's April 2011 acquisition of the 580 MW, combined-cycle, gas-fired Acadia Energy Center Unit 2; Entergy Arkansas's (Power Block 2), Entergy Louisiana's (Power Blocks 3 and 4), and Entergy New Orleans's (Power Block 1) March 2016 acquisitions of the 1,980 MW (summer rating), natural gas-fired, combined-cycle gas turbine Union Power Station power blocks, each rated at 495 MW (summer rating); and Entergy Mississippi's October 2019 acquisition of the 810 MW, combined-cycle, natural gas-fired Choctaw Generating Station. The Utility operating companies have also entered into various limited- and long-term contracts in recent years as a result of bilateral negotiations.

The Washington Parish Energy Center is a 361 MW natural gas-fired peaking power plant approximately 60 miles north of New Orleans on a site Entergy Louisiana purchased from Calpine in 2019. In May 2018, Entergy Louisiana received LPSC approval of its certification application for this simple-cycle power plant to be developed pursuant to an agreement between Calpine and Entergy Louisiana. Calpine began construction on the plant in early 2019 and Entergy Louisiana purchased the plant upon completion in November 2020.

The Hardin County Peaking Facility is an existing 147 MW simple-cycle gas-fired peaking power plant in Kountze, Texas, owned by East Texas Electric Cooperative. Entergy Texas is currently seeking regulatory certification to move forward with the purchase of the facility. The facility has been in operation since January 2010.

Power Through Program

In December 2020, Entergy Texas filed an application with the PUCT to amend its certificate of convenience and necessity to own and operate up to 75 MW of natural gas-fired distributed generation that is to be installed at commercial and industrial customer premises. If approved, Entergy Texas would own and operate a fleet of generators ranging from 100 kW to 10 MW that would supply a portion of Entergy Texas's long-term resource needs and enhance the resiliency of Entergy Texas's electric grid. This fleet of generators would also be available to customers during outages to supply backup electric service as part of a program known as "Power Through."

Interconnections

The Utility operating companies' generating units are interconnected to a transmission system operating at various voltages up to 500 kV. These generating units consist of steam-electric production facilities, combustion-turbine generators, pressurized and boiling water nuclear reactors, and inverter-based technologies operating in the MISO energy and ancillary services market. Entergy's Utility operating companies are MISO market participants and are interconnected with many neighboring utilities. MISO is an essential link in the safe, cost-effective delivery of electric power across all or parts of 15 U.S. states and the Canadian province of Manitoba. As a Regional Transmission Organization, MISO assures consumers of unbiased regional grid management and open access to the transmission facilities under MISO's functional supervision. In addition, the Utility operating companies are members of SERC Reliability Corporation (SERC). SERC is a nonprofit corporation responsible for promoting and improving the reliability, adequacy, and critical infrastructure of the bulk power supply systems in all or portions of 16 central and southeastern states. SERC serves as a regional entity with delegated authority from the North American Electric Reliability Corporation (NERC) for the purpose of proposing and enforcing Bulk Electric System reliability standards within the SERC Region.

Gas Property

As of December 31, 2020, Entergy New Orleans distributed and transported natural gas for distribution within New Orleans, Louisiana, through approximately 2,600 miles of gas pipeline. As of December 31, 2020, the gas properties of Entergy Louisiana, which are located in and around Baton Rouge, Louisiana, were not material to Entergy Louisiana's financial position.

Title

The Utility operating companies' generating stations are generally located on properties owned in fee simple. Most of the substations and transmission and distribution lines are constructed on private property or public rights-of-way pursuant to easements, servitudes, or appropriate franchises. Some substation properties are owned in fee simple. The Utility operating companies generally have the right of eminent domain, whereby they may perfect title to, or secure easements or servitudes on, private property for their utility operations.

Substantially all of the physical properties and assets owned by Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy are subject to the liens of mortgages securing bonds issued by those companies. The Lewis Creek generating station of Entergy Texas was acquired by merger with a subsidiary of Entergy Texas and is currently not subject to the lien of the Entergy Texas indenture.

Fuel Supply

The sources of generation and average fuel cost per kWh for the Utility operating companies and System Energy for the years 2018-2020 were:

	Natural Gas		Nuclear		Coal		Purchased Power		MISO Purchases	
Year	% of Gen	Cents Per kWh	% of Gen	Cents Per kWh	% of Gen	Cents Per kWh	% of Gen	Cents Per kWh	% of Gen	Cents Per kWh
2020	47	1.92	29	0.57	3	2.54	8	4.36	13	2.48
2019	40	2.33	28	0.73	6	2.31	8	4.86	18	2.71
2018	39	2.84	27	0.84	9	2.24	8	5.23	17	3.71

Actual 2020 and projected 2021 sources of generation for the Utility operating companies and System Energy, including certain power purchases from affiliates under life of unit power purchase agreements, including the Unit Power Sales Agreement, are:

	Natural Gas		Nuclear		Coal		Purchased Power (d)		MISO Purchases (e)	
	2020	2021	2020	2021	2020	2021	2020	2021	2020	2021
Entergy Arkansas (a)	24 %	35 %	60 %	51 %	10 %	13 %	1 %	1 %	5 %	—
Entergy Louisiana	51 %	59 %	26 %	27 %	1 %	2 %	9 %	12 %	13 %	—
Entergy Mississippi (b)	73 %	69 %	14 %	22 %	4 %	9 %	—	—	9 %	—
Entergy New Orleans (b)	55 %	56 %	33 %	40 %	1 %	2 %	2 %	2 %	9 %	—
Entergy Texas	39 %	60 %	11 %	13 %	2 %	6 %	23 %	21 %	25 %	—
System Energy (c)	—	—	100 %	100 %	—	—	—	—	—	—
Utility (a) (b)	47 %	55 %	29 %	31 %	3 %	6 %	8 %	8 %	13 %	—

(a) Hydroelectric power provided less than 1% of Entergy Arkansas's generation in 2020 and is expected to provide less than 1% of its generation in 2021.

(b) Solar power provided less than 1% of Entergy Mississippi's and Entergy New Orleans's generation in 2020 and is expected to provide less than 1% of each of Entergy Mississippi's and Entergy New Orleans's generation in 2021.

(c) Capacity and energy from System Energy's interest in Grand Gulf is allocated as follows under the Unit Power Sales Agreement: Entergy Arkansas - 36%; Entergy Louisiana - 14%; Entergy Mississippi - 33%; and Entergy New Orleans - 17%. Pursuant to purchased power agreements, Entergy Arkansas is selling a portion of its owned capacity and energy from Grand Gulf to Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans.

(d) Excludes MISO purchases.

(e) In December 2013, Entergy integrated its transmission system into the MISO RTO. Entergy offers all of its generation into the MISO energy market on a day-ahead and real-time basis and bids for power in the MISO energy market to serve the demand of its customers, with MISO making dispatch decisions. The MISO purchases metric provided for 2020 is not projected for 2021.

Some of the Utility's gas-fired plants are also capable of using fuel oil, if necessary. Although based on current economics the Utility does not expect fuel oil use in 2021, it is possible that various operational events including weather or pipeline maintenance may require the use of fuel oil.

Natural Gas

The Utility operating companies have long-term firm and short-term interruptible gas contracts for both supply and transportation. Over 50% of the Utility operating companies' power plants maintain some level of long-

term firm transportation. Short-term contracts and spot-market purchases satisfy additional gas requirements. Entergy Texas owns a gas storage facility that provides reliable and flexible natural gas service to certain generating stations.

Many factors, including wellhead deliverability, storage, pipeline capacity, and demand requirements of end users, influence the availability and price of natural gas supplies for power plants. Demand is primarily tied to weather conditions as well as to the prices and availability of other energy sources. Pursuant to federal and state regulations, gas supplies to power plants may be interrupted during periods of shortage. To the extent natural gas supplies are disrupted or natural gas prices significantly increase, the Utility operating companies may in some instances use alternate fuels, such as oil when available, or rely to a larger extent on coal, nuclear generation, and purchased power.

Coal

Entergy Arkansas has committed to seven one- to three-year contracts that will supply approximately 85% of the total coal supply needs in 2021. These contracts are staggered in term so that not all contracts have to be renewed the same year. The remaining 15% of total coal requirements will be satisfied by contracts with a term of less than one year. Based on continued improved Powder River Basin (PRB) coal deliveries by rail and the high cost of alternate sources and modes of transportation, no alternative coal consumption is expected at Entergy Arkansas during 2021. Coal will be transported to Arkansas via an existing transportation agreement that is expected to provide all of Entergy Arkansas's rail transportation requirements for 2021.

Entergy Louisiana has committed to five one- to three-year contracts that will supply approximately 90% of Nelson Unit 6 coal needs in 2021. If needed, additional PRB coal will be purchased through contracts with a term of less than one year to provide the remaining supply needs. For the same reasons as for Entergy Arkansas's plants, no alternative coal consumption is expected at Nelson Unit 6 during 2021. Coal will be transported to Nelson primarily via an existing transportation agreement that is expected to provide all of Entergy Louisiana's rail transportation requirements for 2021.

For the year 2020, coal transportation delivery rates to Entergy Arkansas-and Entergy Louisiana-operated coal-fired units were adequate to meet supply needs and obligations, and it is expected that delivery times in 2021 will continue to be consistent. Both Entergy Arkansas and Entergy Louisiana control a sufficient number of railcars to satisfy the rail transportation requirement.

The operator of Big Cajun 2 - Unit 3, Louisiana Generating, LLC, has advised Entergy Louisiana and Entergy Texas that it has adequate rail car and barge capacity to meet the volumes of PRB coal requested for 2021. Entergy Louisiana's and Entergy Texas's coal nomination requests to Big Cajun 2 - Unit 3 are made on an annual basis.

Nuclear Fuel

The nuclear fuel cycle consists of the following:

- mining and milling of uranium ore to produce a concentrate;
- conversion of the concentrate to uranium hexafluoride gas;
- enrichment of the uranium hexafluoride gas;
- fabrication of nuclear fuel assemblies for use in fueling nuclear reactors; and
- disposal of spent fuel.

The Registrant Subsidiaries that own nuclear plants, Entergy Arkansas, Entergy Louisiana, and System Energy, are responsible through a shared regulated uranium pool for contracts to acquire nuclear material to be used in fueling Entergy's Utility nuclear units. These companies own the materials and services in this shared regulated

uranium pool on a pro rata fractional basis determined by the nuclear generation capability of each company. Any liabilities for obligations of the pooled contracts are on a several but not joint basis. The shared regulated uranium pool maintains inventories of nuclear materials during the various stages of processing. The Registrant Subsidiaries purchase enriched uranium hexafluoride for their nuclear plant reload requirements at the average inventory cost from the shared regulated uranium pool. Entergy Operations, Inc. contracts separately for the fabrication of nuclear fuel as agent on behalf of each of the Registrant Subsidiaries that owns a nuclear plant. All contracts for the disposal of spent nuclear fuel are between the DOE and the owner of a nuclear power plant.

Based upon currently planned fuel cycles, the Utility nuclear units have a diversified portfolio of contracts and inventory that provides substantially adequate nuclear fuel materials and conversion and enrichment services at what Entergy believes are reasonably predictable or fixed prices through most of 2023. Entergy's ability to purchase nuclear fuel at reasonably predictable prices, however, depends upon the performance reliability of uranium miners. There are a number of possible supply alternatives that may be accessed to mitigate any supplier performance failure, including potentially drawing upon Entergy's inventory intended for later generation periods depending upon its risk management strategy at that time, although the pricing of any alternate uranium supply from the market will be dependent upon the market for uranium supply at that time. In addition, some nuclear fuel contracts are on a non-fixed price basis subject to prevailing prices at the time of delivery.

The effects of market price changes may be reduced and deferred by risk management strategies, such as negotiation of floor and ceiling amounts for long-term contracts, buying for inventory or entering into forward physical contracts at fixed prices when Entergy believes it is appropriate and useful. Entergy buys uranium from a diversified mix of sellers located in a diversified mix of countries, and from time to time purchases from nearly all qualified reliable major market participants worldwide that sell into the U.S.

Entergy's ability to assure nuclear fuel supply also depends upon the performance reliability of conversion, enrichment, and fabrication services providers. There are fewer of these providers than for uranium. For conversion and enrichment services, like uranium, Entergy diversifies its supply by supplier and country and may take special measures as needed to ensure supply of enriched uranium for the reliable fabrication of nuclear fuel. For fabrication services, each plant is dependent upon the effective performance of the fabricator of that plant's nuclear fuel, therefore, Entergy provides additional monitoring, inspection, and oversight for the fabrication process to assure reliability and quality.

Entergy Arkansas, Entergy Louisiana, and System Energy each have made arrangements to lease nuclear fuel and related equipment and services. The lessors, which are consolidated in the financial statements of Entergy and the applicable Registrant Subsidiary, finance the acquisition and ownership of nuclear fuel through credit agreements and the issuance of notes. These credit facilities are subject to periodic renewal, and the notes are issued periodically, typically for terms between three and seven years.

Natural Gas Purchased for Resale

Entergy New Orleans has several suppliers of natural gas. Its system is interconnected with one interstate and three intrastate pipelines. Entergy New Orleans has a "no-notice" service gas purchase contract with CenterPoint Energy Services which guarantees Entergy New Orleans gas delivery at specific delivery points and at any volume within the minimum and maximum set forth in the contract amounts. The CenterPoint Energy Service gas supply is transported to Entergy New Orleans pursuant to a transportation service agreement with Gulf South Pipeline Co. This service is subject to FERC-approved rates. Entergy New Orleans also makes interruptible spot market purchases.

Entergy Louisiana purchased natural gas for resale in 2020 under a firm contract from Sequent Energy Management L.P. The gas is delivered through a combination of intrastate and interstate pipelines.

As a result of the implementation of FERC-mandated interstate pipeline restructuring in 1993, curtailments of interstate gas supply could occur if Entergy Louisiana's or Entergy New Orleans's suppliers failed to perform their obligations to deliver gas under their supply agreements. Gulf South Pipeline Co. could curtail transportation capacity only in the event of pipeline system constraints.

Federal Regulation of the Utility

State or local regulatory authorities, as described above, regulate the retail rates of the Utility operating companies. The FERC regulates wholesale sales of electricity rates and interstate transmission of electricity, including System Energy's sales of capacity and energy from Grand Gulf to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans pursuant to the Unit Power Sales Agreement. See Note 2 to the financial statements for further discussion of federal regulation proceedings.

System Agreement (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas)

Prior to each operating company's termination of participation in the System Agreement (Entergy Arkansas in December 2013, Entergy Mississippi in November 2015, and Entergy Louisiana, Entergy New Orleans, and Entergy Texas each in August 2016), the Utility operating companies engaged in the coordinated planning, construction, and operation of generating and bulk transmission facilities under the terms of the System Agreement, which was a rate schedule approved by the FERC. Under the terms of the System Agreement, generating capacity and other power resources were jointly operated by the Utility operating companies that were participating in the System Agreement. The System Agreement provided, among other things, that parties having generating reserves greater than their allocated share of reserves (long companies) would receive payments from those parties having generating reserves that were less than their allocated share of reserves (short companies). Such payments were at amounts sufficient to cover certain of the long companies' costs for intermediate and peaking oil/gas-fired generation, including operating expenses, fixed charges on debt, dividend requirements on preferred equity, and a fair rate of return on common equity investment. Under the System Agreement, the rates used to compensate long companies were based on costs associated with the long companies' steam electric generating units fueled by oil or gas and having an annual average heat rate above 10,000 Btu/kWh. In addition, for all energy exchanged among the Utility operating companies under the System Agreement, the companies purchasing exchange energy were required to pay the cost of fuel consumed in generating such energy plus a charge to cover other associated costs.

Although the System Agreement has terminated, certain of the Utility operating companies' and their retail regulators are pursuing litigation involving the System Agreement at the FERC and in federal courts. The proceedings include challenges to the allocation of costs as defined by the System Agreement and other matters. See Note 2 to the financial statements for discussion of legal proceedings at the FERC and in federal courts involving the System Agreement.

Transmission and MISO Markets

In December 2013 the Utility operating companies integrated into the MISO RTO. Although becoming a member of MISO did not affect the ownership by the Utility operating companies of their transmission facilities or the responsibility for maintaining those facilities, MISO maintains functional control over the combined transmission systems of its members and administers wholesale energy and ancillary services markets for market participants in the MISO region, including the Utility operating companies. MISO also exercises functional control of transmission planning and congestion management and provides schedules and pricing for the commitment and dispatch of generation that is offered into MISO's markets, as well as pricing for load that bids into the markets. The Utility operating companies sell capacity, energy, and ancillary services on a bilateral basis to certain wholesale customers and offer available electricity production of their generating facilities into the MISO day-ahead and real-time energy markets pursuant to the MISO tariff and market rules. Each Utility operating company has its own transmission pricing zone and a formula rate template (included as Attachment O to the MISO tariff) used to

establish transmission rates within MISO. The terms and conditions of the MISO tariff, including provisions related to the design and implementation of wholesale markets and the allocation of transmission upgrade costs, are subject to regulation by the FERC.

System Energy and Related Agreements

System Energy recovers costs related to its interest in Grand Gulf through rates charged to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans for capacity and energy under the Unit Power Sales Agreement (described below). In July 2001 a rate proceeding commenced by System Energy at the FERC in 1995 became final, with the FERC approving a prospective 10.94% return on equity. In 1998 the FERC approved requests by Entergy Arkansas and Entergy Mississippi to accelerate a portion of their Grand Gulf purchased power obligations. Entergy Arkansas's and Entergy Mississippi's acceleration of Grand Gulf purchased power obligations ceased effective July 2001 and July 2003, respectively, as approved by the FERC. See Note 2 to the financial statements for discussion of complaints filed with the FERC regarding System Energy's return on equity.

Unit Power Sales Agreement

The Unit Power Sales Agreement allocates capacity, energy, and the related costs from System Energy's ownership and leasehold interests in Grand Gulf to Entergy Arkansas (36%), Entergy Louisiana (14%), Entergy Mississippi (33%), and Entergy New Orleans (17%). Each of these companies is obligated to make payments to System Energy for its entitlement of capacity and energy on a full cost-of-service basis regardless of the quantity of energy delivered. Payments under the Unit Power Sales Agreement are System Energy's only source of operating revenue. The financial condition of System Energy depends upon the continued commercial operation of Grand Gulf and the receipt of such payments. Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans generally recover payments made under the Unit Power Sales Agreement through rates charged to their customers.

In the case of Entergy Arkansas and Entergy Louisiana, payments are also recovered through sales of electricity from their respective retained shares of Grand Gulf. Under a settlement agreement entered into with the APSC in 1985 and amended in 1988, Entergy Arkansas retains 22% of its 36% share of Grand Gulf-related costs and recovers the remaining 78% of its share in rates. In the event that Entergy Arkansas is not able to sell its retained share to third parties, it may sell such energy to its retail customers at a price equal to its avoided cost, which is currently less than Entergy Arkansas's cost from its retained share. Entergy Arkansas has life-of-resources purchased power agreements with Entergy Louisiana and Entergy New Orleans that sell a portion of the output of Entergy Arkansas's retained share of Grand Gulf to those companies, with the remainder of the retained share being sold to Entergy Mississippi through a separate life-of-resources purchased power agreement. In a series of LPSC orders, court decisions, and agreements from late 1985 to mid-1988, Entergy Louisiana was granted rate relief with respect to costs associated with Entergy Louisiana's share of capacity and energy from Grand Gulf, subject to certain terms and conditions. Entergy Louisiana retains and does not recover from retail ratepayers 18% of its 14% share of the costs of Grand Gulf capacity and energy and recovers the remaining 82% of its share in rates. Entergy Louisiana is allowed to recover through the fuel adjustment clause at 4.6 cents per kWh for the energy related to its retained portion of these costs. Alternatively, Entergy Louisiana may sell such energy to non-affiliated parties at prices above the fuel adjustment clause recovery amount, subject to the LPSC's approval. Entergy Arkansas also has a life-of-resources purchased power agreement with Entergy Mississippi to sell a portion of the output of Entergy Arkansas's non-retained share of Grand Gulf. Entergy Mississippi was granted rate relief for those purchases by the MPSC through its annual unit power cost rate mechanism.

Availability Agreement

The Availability Agreement among System Energy and Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans was entered into in 1974 in connection with the financing by System Energy

of Grand Gulf. The Availability Agreement provides that System Energy make available to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans all capacity and energy available from System Energy's share of Grand Gulf.

Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans also agreed severally to pay System Energy monthly for the right to receive capacity and energy from Grand Gulf in amounts that (when added to any amounts received by System Energy under the Unit Power Sales Agreement) would at least equal System Energy's total operating expenses for Grand Gulf (including depreciation at a specified rate and expenses incurred in a permanent shutdown of Grand Gulf) and interest charges.

The allocation percentages under the Availability Agreement are fixed as follows: Entergy Arkansas - 17.1%; Entergy Louisiana - 26.9%; Entergy Mississippi - 31.3%; and Entergy New Orleans - 24.7%. The allocation percentages under the Availability Agreement would remain in effect and would govern payments made under such agreement in the event of a shortfall of funds available to System Energy from other sources, including payments under the Unit Power Sales Agreement.

System Energy has assigned its rights to payments and advances from Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans under the Availability Agreement as security for its two outstanding series of first mortgage bonds. In these assignments, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans further agreed that, in the event they were prohibited by governmental action from making payments under the Availability Agreement (for example, if the FERC reduced or disallowed such payments as constituting excessive rates), they would then make subordinated advances to System Energy in the same amounts and at the same times as the prohibited payments. System Energy would not be allowed to repay these subordinated advances so long as it remained in default under the related indebtedness or in other similar circumstances.

Each of the assignment agreements relating to the Availability Agreement provides that Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans will make payments directly to System Energy. However, if there is an event of default, those payments must be made directly to the holders of indebtedness that are the beneficiaries of such assignment agreements. The payments must be made pro rata according to the amount of the respective obligations secured.

The obligations of Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans to make payments under the Availability Agreement are subject to the receipt and continued effectiveness of all necessary regulatory approvals. Sales of capacity and energy under the Availability Agreement would require that the Availability Agreement be submitted to the FERC for approval with respect to the terms of such sale. No such filing with the FERC has been made because sales of capacity and energy from Grand Gulf are being made pursuant to the Unit Power Sales Agreement. If, for any reason, sales of capacity and energy are made in the future pursuant to the Availability Agreement, the jurisdictional portions of the Availability Agreement would be submitted to the FERC for approval.

Since commercial operation of Grand Gulf began, payments under the Unit Power Sales Agreement to System Energy have exceeded the amounts payable under the Availability Agreement and, therefore, no payments under the Availability Agreement have ever been required. If Entergy Arkansas or Entergy Mississippi fails to make its Unit Power Sales Agreement payments, and System Energy is unable to obtain funds from other sources, Entergy Louisiana and Entergy New Orleans could become subject to claims or demands by System Energy or its creditors for payments or advances under the Availability Agreement (or the assignments thereof) equal to the difference between their required Unit Power Sales Agreement payments and their required Availability Agreement payments because their Availability Agreement obligations exceed their Unit Power Sales Agreement obligations.

The Availability Agreement may be terminated, amended, or modified by mutual agreement of the parties thereto, without further consent of any assignees or other creditors.

Service Companies

Entergy Services, a limited liability company wholly-owned by Entergy Corporation, provides management, administrative, accounting, legal, engineering, and other services primarily to the Utility operating companies, but also provides services to Entergy Wholesale Commodities. Entergy Operations is also wholly-owned by Entergy Corporation and provides nuclear management, operations and maintenance services under contract for ANO, River Bend, Waterford 3, and Grand Gulf, subject to the owner oversight of Entergy Arkansas, Entergy Louisiana, and System Energy, respectively. Entergy Services and Entergy Operations provide their services to the Utility operating companies and System Energy on an "at cost" basis, pursuant to cost allocation methodologies for these service agreements that were approved by the FERC.

Jurisdictional Separation of Entergy Gulf States, Inc. into Entergy Gulf States Louisiana and Entergy Texas

Effective December 31, 2007, Entergy Gulf States, Inc. completed a jurisdictional separation into two vertically integrated utility companies, one operating under the sole retail jurisdiction of the PUCT, Entergy Texas, and the other operating under the sole retail jurisdiction of the LPSC, Entergy Gulf States Louisiana. Entergy Texas owns all Entergy Gulf States, Inc. distribution and transmission assets located in Texas, the gas-fired generating plants located in Texas, undivided 42.5% ownership shares of Entergy Gulf States, Inc.'s 70% ownership interest in Nelson Unit 6 and 42% ownership interest in Big Cajun 2, Unit 3, which are coal-fired generating plants located in Louisiana, and other assets and contract rights to the extent related to utility operations in Texas. Entergy Louisiana, as successor in interest to Entergy Gulf States Louisiana, owns all of the remaining assets that were owned by Entergy Gulf States, Inc. On a book value basis, approximately 58.1% of the Entergy Gulf States, Inc. assets were allocated to Entergy Gulf States Louisiana and approximately 41.9% were allocated to Entergy Texas.

Entergy Texas purchases from Entergy Louisiana pursuant to a life-of-unit purchased power agreement a 42.5% share of capacity and energy from the 70% of River Bend subject to retail regulation. Entergy Texas was allocated a share of River Bend's nuclear and environmental liabilities that is identical to the share of the plant's output purchased by Entergy Texas under the purchased power agreement. In connection with the termination of the System Agreement effective August 31, 2016, the purchased power agreements that were put in place for certain legacy units at the time of the jurisdictional separation were also terminated at that time. See Note 2 to the financial statements for additional discussion of the purchased power agreements.

Entergy Louisiana and Entergy Gulf States Louisiana Business Combination

On October 1, 2015, the businesses formerly conducted by Entergy Louisiana (Old Entergy Louisiana) and Entergy Gulf States Louisiana (Old Entergy Gulf States Louisiana) were combined into a single public utility. In order to effect the business combination, under the Texas Business Organizations Code (TXBOC), Old Entergy Louisiana allocated substantially all of its assets to a new subsidiary, Entergy Louisiana Power, LLC, a Texas limited liability company (New Entergy Louisiana), and New Entergy Louisiana assumed the liabilities of Old Entergy Louisiana, in a transaction regarded as a merger under the TXBOC. Under the TXBOC, Old Entergy Gulf States Louisiana allocated substantially all of its assets to a new subsidiary (New Entergy Gulf States Louisiana) and New Entergy Gulf States Louisiana assumed the liabilities of Old Entergy Gulf States Louisiana, in a transaction regarded as a merger under the TXBOC. New Entergy Gulf States Louisiana then merged into New Entergy Louisiana with New Entergy Louisiana surviving the merger. Thereupon, Old Entergy Louisiana changed its name from "Entergy Louisiana, LLC" to "EL Investment Company, LLC" and New Entergy Louisiana changed its name from "Entergy Louisiana Power, LLC" to "Entergy Louisiana, LLC" (Entergy Louisiana). With the completion of the business combination, Entergy Louisiana holds substantially all of the assets, and has assumed the liabilities, of Old Entergy Louisiana and Old Entergy Gulf States Louisiana.

Entergy New Orleans Internal Restructuring

In November 2017, pursuant to the agreement in principle, Entergy New Orleans, Inc. undertook a multi-step restructuring, including the following:

- Entergy New Orleans, Inc. redeemed its outstanding preferred stock at a price of approximately $21 million, which included a call premium of approximately $819,000, plus any accumulated and unpaid dividends.
- Entergy New Orleans, Inc. converted from a Louisiana corporation to a Texas corporation.
- Under the Texas Business Organizations Code (TXBOC), Entergy New Orleans, Inc. allocated substantially all of its assets to a new subsidiary, Entergy New Orleans Power, LLC, a Texas limited liability company (Entergy New Orleans Power), and Entergy New Orleans Power assumed substantially all of the liabilities of Entergy New Orleans, Inc. in a transaction regarded as a merger under the TXBOC. Entergy New Orleans, Inc. remained in existence and held the membership interests in Entergy New Orleans Power.
- Entergy New Orleans, Inc. contributed the membership interests in Entergy New Orleans Power to an affiliate (Entergy Utility Holding Company, LLC, a Texas limited liability company and subsidiary of Entergy Corporation). As a result of the contribution, Entergy New Orleans Power is a wholly-owned subsidiary of Entergy Utility Holding Company, LLC.

In December 2017, Entergy New Orleans, Inc. changed its name to Entergy Utility Group, Inc., and Entergy New Orleans Power then changed its name to Entergy New Orleans, LLC. Entergy New Orleans, LLC holds substantially all of the assets, and has assumed substantially all of the liabilities, of Entergy New Orleans, Inc. The restructuring was accounted for as a transaction between entities under common control.

Entergy Arkansas Internal Restructuring

In November 2018, Entergy Arkansas undertook a multi-step restructuring, including the following:

- Entergy Arkansas, Inc. redeemed its outstanding preferred stock at the aggregate redemption price of approximately $32.7 million.
- Entergy Arkansas, Inc. converted from an Arkansas corporation to a Texas corporation.
- Under the Texas Business Organizations Code (TXBOC), Entergy Arkansas, Inc. allocated substantially all of its assets to a new subsidiary, Entergy Arkansas Power, LLC, a Texas limited liability company (Entergy Arkansas Power), and Entergy Arkansas Power assumed substantially all of the liabilities of Entergy Arkansas, Inc., in a transaction regarded as a merger under the TXBOC. Entergy Arkansas, Inc. remained in existence and held the membership interests in Entergy Arkansas Power.
- Entergy Arkansas, Inc. contributed the membership interests in Entergy Arkansas Power to an affiliate (Entergy Utility Holding Company, LLC, a Texas limited liability company and subsidiary of Entergy Corporation). As a result of the contribution, Entergy Arkansas Power is a wholly-owned subsidiary of Entergy Utility Holding Company, LLC.

In December 2018, Entergy Arkansas, Inc. changed its name to Entergy Utility Property, Inc., and Entergy Arkansas Power then changed its name to Entergy Arkansas, LLC. Entergy Arkansas, LLC holds substantially all of the assets, and assumed substantially all of the liabilities, of Entergy Arkansas, Inc. The transaction was accounted for as a transaction between entities under common control.

Entergy Mississippi Internal Restructuring

In November 2018, Entergy Mississippi undertook a multi-step restructuring, including the following:

- Entergy Mississippi, Inc. redeemed its outstanding preferred stock, at the aggregate redemption price of approximately $21.2 million.
- Entergy Mississippi, Inc. converted from a Mississippi corporation to a Texas corporation.

- Under the Texas Business Organizations Code (TXBOC), Entergy Mississippi, Inc. allocated substantially all of its assets to a new subsidiary, Entergy Mississippi Power and Light, LLC, a Texas limited liability company (Entergy Mississippi Power and Light), and Entergy Mississippi Power and Light assumed substantially all of the liabilities of Entergy Mississippi, Inc., in a transaction regarded as a merger under the TXBOC. Entergy Mississippi, Inc. remained in existence and held the membership interests in Entergy Mississippi Power and Light.
- Entergy Mississippi, Inc. contributed the membership interests in Entergy Mississippi Power and Light to an affiliate (Entergy Utility Holding Company, LLC, a Texas limited liability company and subsidiary of Entergy Corporation). As a result of the contribution, Entergy Mississippi Power and Light is a wholly-owned subsidiary of Entergy Utility Holding Company, LLC.

In December 2018, Entergy Mississippi, Inc. changed its name to Entergy Utility Enterprises, Inc., and Entergy Mississippi Power and Light then changed its name to Entergy Mississippi, LLC. Entergy Mississippi, LLC holds substantially all of the assets, and assumed substantially all of the liabilities, of Entergy Mississippi, Inc. The restructuring was accounted for as a transaction between entities under common control.

Entergy Wholesale Commodities

Entergy Wholesale Commodities includes the ownership, operation, and decommissioning of nuclear power plants, located in the northern United States and the sale of the electric power produced by its operating plants to wholesale customers. Entergy Wholesale Commodities revenues are primarily derived from sales of energy and generation capacity from these plants. Entergy Wholesale Commodities also provides operations and management services, including decommissioning-related services, to nuclear power plants owned by non-affiliated entities in the United States. Entergy Wholesale Commodities also includes the ownership of interests in non-nuclear power plants that sell the electric power produced by those plants to wholesale customers.

See "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" in Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion of the operation and planned shutdown and sale of each of the remaining Entergy Wholesale Commodities nuclear power plants.

Property

Nuclear Generating Stations

Entergy Wholesale Commodities includes the ownership of the following nuclear power plants:

Power Plant	Market	In Service Year	Acquired	Location	Capacity - Reactor Type	License Expiration Date
Indian Point 3 (a)	NYISO	1976	Nov. 2000	Buchanan, NY	1,041 MW - Pressurized Water	2025 (a)
Indian Point 2 (a)	NYISO	1974	Sept. 2001	Buchanan, NY	1,028 MW - Pressurized Water	2024 (a)
Palisades (b)	MISO	1971	Apr. 2007	Covert, MI	811 MW - Pressurized Water	2031 (b)

(a) Power operations ceased at the Indian Point 2 plant in April 2020. The fuel was permanently removed from the reactor vessel and placed in the spent fuel pool in May 2020. The Indian Point 3 plant is expected to cease operations on April 30, 2021. Entergy and Holtec jointly filed a license transfer application with the NRC in November 2019, requesting approval for the transfer of the Indian Point plants, along with their nuclear decommissioning trusts and decommissioning liabilities, from Entergy to Holtec. The NRC approved the license transfer application on November 23, 2020.

(b) The Palisades plant is expected to cease operations on May 31, 2022. There is a contract to sell the plant to Holtec subject to NRC and other regulatory approvals.

See "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" in Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion of the operation and planned shutdown and sale of each of the remaining Entergy Wholesale Commodities nuclear power plants.

Entergy Wholesale Commodities also includes the ownership of two non-operating nuclear facilities, Big Rock Point in Michigan and Indian Point 1 in New York that were acquired when Entergy purchased the Palisades and Indian Point 2 nuclear plants, respectively. These facilities are in various stages of the decommissioning process. Both Big Rock Point and Indian Point 1 are under contract to be sold with their respective plants.

Non-nuclear Generating Stations

Entergy Wholesale Commodities includes the ownership, or interests in joint ventures that own, the following non-nuclear power plants:

Plant	Location	Ownership	Net Owned Capacity (a)	Type
Independence Unit 2; 842 MW	Newark, AR	14%	121 MW(b)	Coal
RS Cogen; 425 MW (c)	Lake Charles, LA	50%	213 MW	Gas/Steam
Nelson Unit 6; 550 MW	Westlake, LA	11%	60 MW(b)	Coal

(a) "Net Owned Capacity" refers to the nameplate rating on the generating unit.
(b) The owned MW capacity is the portion of the plant capacity owned by Entergy Wholesale Commodities. For a complete listing of Entergy's jointly-owned generating stations, refer to "**Jointly-Owned Generating Stations**" in Note 1 to the financial statements.
(c) Indirectly owned through an interest in an unconsolidated joint venture. In December 2020, Entergy's wholly-owned subsidiary with a direct interest in RS Cogen, LLC entered into a membership interest purchase agreement with a subsidiary of the other 50% equity partner to sell its 50% membership interest in the joint venture to the equity partner. The targeted closing date for the transaction is October 2022.

Independent System Operators

The Indian Point plants fall under the authority of the New York Independent System Operator (NYISO). The Palisades plant falls under the authority of the MISO. The primary purpose of NYISO and MISO is to direct the operations of the major generation and transmission facilities in their respective regions; ensure grid reliability; administer and monitor wholesale electricity markets; and plan for their respective region's energy needs.

Energy and Capacity Sales

As a wholesale generator, Entergy Wholesale Commodities' core business is selling energy, measured in MWh, to its customers. Entergy Wholesale Commodities enters into forward contracts with its customers and also sells energy in the day ahead or spot markets. Entergy Wholesale Commodities also sells unforced capacity, which allows load-serving entities to meet specified reserve and related requirements placed on them by the ISOs in their respective areas. Entergy Wholesale Commodities' forward physical power contracts consist of contracts to sell energy only, contracts to sell capacity only, and bundled contracts in which it sells both capacity and energy. While the terminology and payment mechanics vary in these contracts, each of these types of contracts requires Entergy Wholesale Commodities to deliver MWh of energy, make capacity available, or both. See "**Market and Credit Risk Sensitive Instruments**" in Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for additional information regarding these contracts.

As part of the purchase of the Palisades plant in 2007, Entergy executed a 15-year PPA with the seller, Consumers Energy, for 100% of the plant's output, excluding any future uprates. Under the purchased power agreement, Consumers Energy receives the value of any new environmental credits for the first ten years of the agreement. Palisades and Consumers Energy will share on a 50/50 basis the value of any new environmental credits for years 11 through 15 of the agreement. The environmental credits are defined as benefits from a change in law that causes capability of the plant as of the purchase date to become a tradable attribute (e.g., emission credit, renewable energy credit, environmental credit, "green" credit, etc.) or otherwise to have a market value. Entergy intends to shut down the Palisades nuclear power plant permanently on May 31, 2022 and transfer to Holtec thereafter.

Customers

Entergy Wholesale Commodities' customers for the sale of both energy and capacity from its nuclear plants include retail power providers, utilities, electric power co-operatives, power trading organizations, and other power generation companies. These customers include Consumers Energy, the company from which Entergy purchased the Palisades plant, and NYISO and MISO. Substantially all the credit exposure associated with the planned energy output under contract for Entergy Wholesale Commodities nuclear plants is with counterparties or their guarantors that have public investment grade credit ratings.

Competition

The NYISO market is highly competitive. Entergy Wholesale Commodities has numerous competitors in New York including generation companies affiliated with regulated utilities, other independent power producers, municipal and co-operative generators, owners of co-generation plants and wholesale power marketers. Entergy Wholesale Commodities is an independent power producer, which means it generates power for sale to third parties at day ahead or spot market prices to the extent that the power is not sold under a fixed price contract. Municipal and co-operative generators also generate power but use most of it to deliver power to their municipal or co-operative power customers. Owners of co-generation plants produce power primarily for their own consumption. Wholesale power marketers do not own generation; rather they buy power from generators or other market participants and resell it to retail providers or other market participants. Competition in the New York power market is affected by, among other factors, the amount of generation and transmission capacity in these markets. MISO does not have a centralized clearing capacity market, but load serving entities do meet most of their capacity needs through bilateral contracts and self-supply with a smaller portion coming through voluntary MISO auctions. Almost all of Palisades' current output is contracted to Consumers Energy through May 2022. Entergy Wholesale Commodities does not expect to be materially affected by competition in the MISO market in the near term.

Seasonality

Entergy Wholesale Commodities' revenues and operating income are subject to fluctuations during the year due to seasonal factors, weather conditions, and contract pricing. When outdoor and cooling water temperatures are low, generally during colder months, Entergy Wholesale Commodities nuclear power plants operate more efficiently, and consequently, generate more electricity. Many of Entergy Wholesale Commodities' contracts provide for shaped pricing over the course of the year. As a result of these factors, Entergy Wholesale Commodities' revenues are typically higher in the first and third quarters than in the second and fourth quarters.

Fuel Supply

Nuclear Fuel

See "**Fuel Supply** - Nuclear Fuel" in the Utility portion of Part I, Item 1 for a discussion of the nuclear fuel cycle and markets. Entergy Nuclear Fuels Company, a wholly-owned subsidiary, is responsible for contracts to acquire nuclear materials, except for fuel fabrication, for Entergy Wholesale Commodities nuclear power plants,

while Entergy Nuclear Operations, Inc. acts as the agent for the purchase of nuclear fuel assembly fabrication services. All contracts for the disposal of spent nuclear fuel are between the DOE and each of the nuclear power plant owners. The nuclear fuel supply portfolio for the Entergy Wholesale Commodities segment has been adjusted to reflect reduced overall requirements related to the planned permanent shutdowns of the Indian Point 3 and Palisades plants. Fuel procurement for the Entergy Wholesale Commodities segment was primarily limited to the requirements of the Palisades plant's final refueling in 2020.

Other Business Activities

Entergy Nuclear Power Marketing, LLC (ENPM) was formed in 2005 to centralize the power marketing function for Entergy Wholesale Commodities nuclear plants. Upon its formation, ENPM entered into long-term power purchase agreements with the Entergy Wholesale Commodities subsidiaries that own nuclear power plants (generating subsidiaries). As part of a series of agreements, ENPM agreed to assume and/or otherwise service the existing power purchase agreements that were in effect between the generating subsidiaries and their customers. ENPM's functions include origination of new energy and capacity transactions and generation scheduling.

Services provided by either Entergy Nuclear, Inc. or other Entergy Wholesale Commodities subsidiaries include engineering, operations and maintenance, fuel procurement, management and supervision, technical support and training, administrative support, and other managerial or technical services required to operate, maintain, and decommission nuclear electric power facilities.

TLG Services, a subsidiary in the Entergy Wholesale Commodities segment, offers decommissioning, engineering, and related services to nuclear power plant owners.

Entergy provides plant operation support services for the 800 MW Cooper Nuclear Station located near Brownville, Nebraska. In 2010 an Entergy subsidiary signed an agreement to extend the management support services to Cooper Nuclear Station by 15 years, through January 2029.

Regulation of Entergy's Business

Federal Power Act

The Federal Power Act provides the FERC the authority to regulate:

- the transmission and wholesale sale of electric energy in interstate commerce;
- the reliability of the high voltage interstate transmission system through reliability standards;
- sale or acquisition of certain assets;
- securities issuances;
- the licensing of certain hydroelectric projects;
- certain other activities, including accounting policies and practices of electric and gas utilities; and
- changes in control of FERC jurisdictional entities or rate schedules.

The Federal Power Act gives the FERC jurisdiction over the rates charged by System Energy for Grand Gulf capacity and energy provided to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans and over the rates charged by Entergy Arkansas and Entergy Louisiana to unaffiliated wholesale customers. The FERC also regulates wholesale power sales between the Utility operating companies. In addition, the FERC regulates the MISO RTO, an independent entity that maintains functional control over the combined transmission systems of its members and administers wholesale energy, capacity, and ancillary services markets for market participants in the MISO region, including the Utility operating companies. FERC regulation of the MISO RTO includes regulation of the design and implementation of the wholesale markets administered by the MISO RTO, as well as the rates, terms, and conditions of open access transmission service over the member systems and the allocation of costs associated with transmission upgrades.

Entergy Arkansas holds a FERC license that expires in 2053 for two hydroelectric projects totaling 70 MW of capacity.

State Regulation

Utility

Entergy Arkansas is subject to regulation by the APSC as to the following:

- utility service;
- utility service areas;
- retail rates and charges, including depreciation rates;
- fuel cost recovery, including audits of the energy cost recovery rider;
- terms and conditions of service;
- service standards;
- the acquisition, sale, or lease of any public utility plant or property constituting an operating unit or system;
- certificates of convenience and necessity and certificates of environmental compatibility and public need, as applicable, for generating and transmission facilities;
- avoided cost payments to Qualifying Facilities;
- net energy metering;
- integrated resource planning;
- utility mergers and acquisitions and other changes of control; and
- the issuance and sale of certain securities.

Additionally, Entergy Arkansas serves a limited number of retail customers in Tennessee. Pursuant to legislation enacted in Tennessee, Entergy Arkansas is subject to complaints before the Tennessee Regulatory Authority only if it fails to treat its retail customers in Tennessee in the same manner as its retail customers in Arkansas. Additionally, Entergy Arkansas maintains limited facilities in Missouri but does not provide retail electric service to customers in Missouri. Although Entergy Arkansas obtained a certificate with respect to its Missouri facilities, Entergy Arkansas is not subject to retail ratemaking or other regulatory jurisdiction in Missouri.

Entergy Louisiana’s electric and gas business is subject to regulation by the LPSC as to the following:

- utility service;
- retail rates and charges, including depreciation rates;
- fuel cost recovery, including audits of the fuel adjustment clause and purchased gas adjustment charge;
- terms and conditions of service;
- service standards;
- certification of certain transmission projects;
- certification of capacity acquisitions, both for owned capacity and purchase power contracts;
- procurement process to acquire over 50 MW;
- audits of the environmental adjustment charge, avoided cost payment to Qualifying Facilities, and energy efficiency rider;
- integrated resource planning;
- net energy metering; and
- utility mergers and acquisitions and other changes of control.

Entergy Mississippi is subject to regulation by the MPSC as to the following:

- utility service;
- utility service areas;

- retail rates and charges, including depreciation rates;
- fuel cost recovery, including audits of the energy cost recovery mechanism;
- terms and conditions of service;
- service standards;
- certification of generating facilities and certain transmission projects;
- avoided cost payments to Qualifying Facilities;
- integrated resource planning;
- net energy metering; and
- utility mergers, acquisitions, and other changes of control.

Entergy Mississippi is also subject to regulation by the APSC as to the certificate of environmental compatibility and public need for the Independence Station, which is located in Arkansas.

Entergy New Orleans is subject to regulation by the City Council as to the following:

- utility service;
- retail rates and charges, including depreciation rates;
- fuel cost recovery, including audits of the fuel adjustment charge and purchased gas adjustment charge;
- terms and conditions of service;
- service standards;
- audit of the environmental adjustment charge;
- certification of the construction or extension of any new plant, equipment, property, or facility that comprises more than 2% of the utility's rate base;
- integrated resource planning;
- net energy metering;
- issuance and sale of certain securities; and
- utility mergers and acquisitions and other changes of control.

To the extent authorized by governing legislation, Entergy Texas is subject to the original jurisdiction of the municipal authorities of a number of incorporated cities in Texas with appellate jurisdiction over such matters residing in the PUCT. Entergy Texas is also subject to regulation by the PUCT as to the following:

- retail rates and charges, including depreciation rates, and terms and conditions of service in unincorporated areas of its service territory, and in municipalities that have ceded jurisdiction to the PUCT;
- fuel recovery, including reconciliations (audits) of the fuel adjustment charges;
- service standards;
- certification of certain transmission and generation projects;
- utility service areas, including extensions into new areas;
- avoided cost payments to Qualifying Facilities;
- net energy metering; and
- utility mergers, sales/acquisitions/leases of plants over $10 million, sales of greater than 50% voting stock of utilities, and transfers of controlling interest in or operation of utilities.

Regulation of the Nuclear Power Industry

Atomic Energy Act of 1954 and Energy Reorganization Act of 1974

Under the Atomic Energy Act of 1954 and the Energy Reorganization Act of 1974, the operation of nuclear plants is heavily regulated by the NRC, which has broad power to impose licensing and safety-related requirements. The NRC has broad authority to impose civil penalties or shut down a unit, or both, depending upon its assessment of the severity of the situation, until compliance is achieved. Entergy Arkansas, Entergy Louisiana, and System Energy, as owners of all or portions of ANO, River Bend and Waterford 3, and Grand Gulf, respectively, and Entergy Operations, as the licensee and operator of these units, are subject to the jurisdiction of the NRC. Entergy subsidiaries in the Entergy Wholesale Commodities segment are subject to the NRC's jurisdiction as the owners and operators of Indian Point Energy Center, Palisades, and Big Rock Point.

Nuclear Waste Policy Act of 1982

Spent Nuclear Fuel

Under the Nuclear Waste Policy Act of 1982, the DOE is required, for a specified fee, to construct storage facilities for, and to dispose of, all spent nuclear fuel and other high-level radioactive waste generated by domestic nuclear power reactors. Entergy's nuclear owner/licensee subsidiaries have been charged fees for the estimated future disposal costs of spent nuclear fuel in accordance with the Nuclear Waste Policy Act of 1982. The affected Entergy companies entered into contracts with the DOE, whereby the DOE is to furnish disposal services at a cost of one mill per net kWh generated and sold after April 7, 1983, plus a one-time fee for generation prior to that date. Entergy Arkansas is the only one of the Utility operating companies that generated electric power with nuclear fuel prior to that date and has a recorded liability as of December 31, 2020 of $192.0 million for the one-time fee. Entergy accepted assignment of the Pilgrim, FitzPatrick, Indian Point 3, Indian Point 1 and Indian Point 2, Vermont Yankee, Palisades, and Big Rock Point spent fuel disposal contracts with the DOE held by their previous owners. The FitzPatrick spent fuel disposal contract was assigned to Exelon as part of the sale of the plant, completed in March 2017. The Vermont Yankee spent fuel disposal contract was assigned to NorthStar as part of the sale of the plant in January 2019. The Pilgrim spent fuel disposal contract was transferred to Holtec as part of the sale of Entergy Nuclear Generation Company in August 2019. The owners of these plants previous to Entergy have paid or retained liability for the fees for all generation prior to the purchase dates of those plants. The fees payable to the DOE may be adjusted in the future to assure full recovery. Entergy considers all costs incurred for the disposal of spent nuclear fuel, except accrued interest, to be proper components of nuclear fuel expense. Provisions to recover such costs have been or will be made in applications to regulatory authorities for the Utility plants. Entergy's total spent fuel fees to date, including the one-time fee liability of Entergy Arkansas, have surpassed $1.6 billion (exclusive of amounts relating to Entergy plants that were paid or are owed by prior owners of those plants).

The permanent spent fuel repository in the U.S. has been legislated to be Yucca Mountain, Nevada. The DOE is required by law to proceed with the licensing (the DOE filed the license application in June 2008) and, after the license is granted by the NRC, proceed with the repository construction and commencement of receipt of spent fuel. Because the DOE has not begun accepting spent fuel, it is in non-compliance with the Nuclear Waste Policy Act of 1982 and has breached its spent fuel disposal contracts. The DOE continues to delay meeting its obligation. Specific steps were taken to discontinue the Yucca Mountain project, including a motion to the NRC to withdraw the license application with prejudice and the establishment of a commission to develop recommendations for alternative spent fuel storage solutions. In August 2013 the U.S. Court of Appeals for the D.C. Circuit ordered the NRC to continue with the Yucca Mountain license review, but only to the extent of funds previously appropriated by Congress for that purpose and not yet used. Although the NRC completed the safety evaluation report for the license review in 2015, the previously appropriated funds are not sufficient to complete the review, including required hearings. The government has taken no effective action to date related to the recommendations of the appointed spent fuel study commission. Accordingly, large uncertainty remains regarding the time frame under

which the DOE will begin to accept spent fuel from Entergy's facilities for storage or disposal. As a result, continuing future expenditures will be required to increase spent fuel storage capacity at Entergy's nuclear sites.

Following the defunding of the Yucca Mountain spent fuel repository program, the National Association of Regulatory Utility Commissioners and others sued the government seeking cessation of collection of the one mill per net kWh generated and sold after April 7, 1983 fee. In November 2013 the D.C. Circuit Court of Appeals ordered the DOE to submit a proposal to Congress to reset the fee to zero until the DOE complies with the Nuclear Waste Policy Act or Congress enacts an alternative waste disposal plan. In January 2014 the DOE submitted the proposal to Congress under protest, and also filed a petition for rehearing with the D.C. Circuit. The petition for rehearing was denied. The zero spent fuel fee went into effect prospectively in May 2014.

As a result of the DOE's failure to begin disposal of spent nuclear fuel in 1998 pursuant to the Nuclear Waste Policy Act of 1982 and the spent fuel disposal contracts, Entergy's nuclear owner/licensee subsidiaries have incurred and will continue to incur damages. These subsidiaries have been, and continue to be, involved in litigation to recover the damages caused by the DOE's delay in performance. See Note 8 to the financial statements for discussion of final judgments recorded by Entergy in 2018, 2019, and 2020 related to Entergy's nuclear owner licensee subsidiaries' litigation with the DOE. Through 2020, Entergy's subsidiaries won and collected on judgments against the government totaling approximately $800 million.

Pending DOE acceptance and disposal of spent nuclear fuel, the owners of nuclear plants are providing their own spent fuel storage. Storage capability additions using dry casks began operations at Palisades in 1993, at ANO in 1996, at River Bend in 2005, at Grand Gulf in 2006, at Indian Point in 2008, and at Waterford 3 in 2011. These facilities will be expanded as needed.

Nuclear Plant Decommissioning

Entergy Arkansas, Entergy Louisiana, and System Energy are entitled to recover from customers through electric rates the estimated decommissioning costs for ANO, Waterford 3, and Grand Gulf, respectively. In addition, Entergy Louisiana and Entergy Texas are entitled to recover from customers through electric rates the estimated decommissioning costs for the portion of River Bend subject to retail rate regulation. The collections are deposited in trust funds that can only be used in accordance with NRC and other applicable regulatory requirements. Entergy periodically reviews and updates the estimated decommissioning costs to reflect inflation and changes in regulatory requirements and technology, and then makes applications to the regulatory authorities to reflect, in rates, the changes in projected decommissioning costs.

In December 2018 the APSC ordered collections in rates for decommissioning ANO 2 and found that ANO 1's decommissioning was adequately funded without additional collections. In October 2020, Entergy Arkansas filed a revised decommissioning cost recovery tariff for ANO indicating that both ANO 1 and ANO 2 decommissioning trusts were adequately funded without further collections, and in December 2020, the APSC ordered zero collections for ANO 1 and ANO 2 decommissioning.

In July 2010 the LPSC approved increased decommissioning collections for Waterford 3 and the Louisiana regulated share of River Bend to address previously identified funding shortfalls. This LPSC decision contemplated that the level of decommissioning collections could be revisited should the NRC grant license extensions for both Waterford 3 and River Bend. In July 2019, following the NRC approval of license extensions for Waterford 3 and River Bend, Entergy Louisiana made a filing with the LPSC seeking to adjust decommissioning and depreciation rates for those plants, including one proposed scenario that would adjust Louisiana-jurisdictional decommissioning collections to zero for both plants (including an offsetting increase in depreciation rates). Because of the ongoing public health emergency arising from the COVID-19 pandemic and accompanying economic uncertainty, Entergy Louisiana determined that the relief sought in the filing was no longer appropriate, and in November 2020, filed an unopposed motion to dismiss the proceeding. Following that filing, in a December 2020 order, the LPSC dismissed the proceeding without prejudice.

In December 2010 the PUCT approved increased decommissioning collections for the Texas share of River Bend to address previously identified funding shortfalls. In December 2018 the PUCT approved a settlement that eliminated River Bend decommissioning collections for the Texas jurisdictional share of the plant based on a determination by Entergy Texas that the existing decommissioning fund was adequate following license renewal.

In September 2016 the NRC issued a 20-year operating license renewal for Grand Gulf. In a 2017 filing at the FERC, System Energy stated that with the renewed operating license, Grand Gulf's decommissioning trust was sufficiently funded, and proposed, among other things, to cease decommissioning collections for Grand Gulf effective October 1, 2017. The FERC accepted a settlement including the proposed decommissioning revenue requirement by letter order in August 2018.

Entergy currently believes its decommissioning funding will be sufficient for its nuclear plants subject to retail rate regulation, although decommissioning cost inflation and trust fund performance will ultimately determine the adequacy of the funding amounts.

In January 2019, Entergy sold 100% of the membership interest in Entergy Nuclear Vermont Yankee to a subsidiary of NorthStar. As a result of the sale, NorthStar assumed ownership of Vermont Yankee and its decommissioning and site restoration trusts, together with complete responsibility for the facility's decommissioning and site restoration. See Note 9 to the financial statements for further discussion of Vermont Yankee decommissioning costs and see "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" in Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion of the NorthStar transaction.

In August 2019, Entergy sold 100% of the equity interests in Entergy Nuclear Generation Company, LLC to a subsidiary of Holtec International. As a result of the sale, Holtec assumed ownership of Pilgrim and its decommissioning trust, together with complete responsibility for the facility's decommissioning and site restoration. See Note 14 to the financial statements for further discussion of the sale.

For the Indian Point 3 and FitzPatrick plants purchased in 2000 from NYPA, NYPA retained the decommissioning trust funds and the decommissioning liabilities with the right to require the Entergy subsidiaries to assume each of the decommissioning liabilities provided that it assigns the corresponding decommissioning trust, up to a specified level, to the Entergy subsidiaries. In August 2016, Entergy entered into a trust transfer agreement with NYPA to transfer the decommissioning trust funds and decommissioning liabilities for the Indian Point 3 and FitzPatrick plants to Entergy, which was completed in January 2017. In March 2017, Entergy sold the FitzPatrick plant to Exelon, and as part of the transaction, the FitzPatrick decommissioning trust fund, along with the decommissioning obligation for that plant, was transferred to Exelon. The FitzPatrick spent fuel disposal contract was assigned to Exelon as part of the transaction. See Note 14 to the financial statements for discussion of the FitzPatrick sale.

In March 2020 filings with the NRC were made reporting on decommissioning funding for all of Entergy subsidiaries' nuclear plants. Those reports showed that decommissioning funding for each of the nuclear plants met the NRC's financial assurance requirements.

Additional information with respect to Entergy's decommissioning costs and decommissioning trust funds is found in Note 9 and Note 16 to the financial statements.

Price-Anderson Act

The Price-Anderson Act requires that reactor licensees purchase and maintain the maximum amount of nuclear liability insurance available and participate in an industry assessment program called Secondary Financial Protection in order to protect the public in the event of a nuclear power plant accident. The costs of this insurance

are borne by the nuclear power industry. Congress amended and renewed the Price-Anderson Act in 2005 for a term through 2025. The Price-Anderson Act limits the contingent liability for a single nuclear incident to a maximum assessment of approximately $137.6 million per reactor (with 97 nuclear industry reactors currently participating). In the case of a nuclear event in which Entergy Arkansas, Entergy Louisiana, System Energy, or an Entergy Wholesale Commodities company is liable, protection is afforded through a combination of private insurance and the Secondary Financial Protection program. In addition to this, insurance for property damage, costs of replacement power, and other risks relating to nuclear generating units is also purchased. The Price-Anderson Act and insurance applicable to the nuclear programs of Entergy are discussed in more detail in Note 8 to the financial statements.

NRC Reactor Oversight Process

The NRC's Reactor Oversight Process is a program to collect information about plant performance, assess the information for its safety significance, and provide for appropriate licensee and NRC response. The NRC evaluates plant performance by analyzing two distinct inputs: inspection findings resulting from the NRC's inspection program and performance indicators reported by the licensee. The evaluations result in the placement of each plant in one of the NRC's Reactor Oversight Process Action Matrix columns: "licensee response column," or Column 1, "regulatory response column," or Column 2, "degraded cornerstone column," or Column 3, and "multiple/repetitive degraded cornerstone column," or Column 4. Plants in Column 1 are subject to normal NRC inspection activities. Plants in Column 2, Column 3, or Column 4 are subject to progressively increasing levels of inspection by the NRC with, in general, progressively increasing levels of associated costs. The nuclear generating plants owned and operated by Entergy's Utility and Entergy Wholesale Commodities businesses are currently in Column 1, except for Grand Gulf, which is currently in Column 2.

In November 2020 the NRC placed Grand Gulf in Column 2 based on the incidence of three unplanned plant scrams during the second and third quarters of 2020. Two of the scram events related to new turbine control system components that failed, and a third related to a feedwater valve positioner that failed, all of which had been replaced in a refueling outage that ended in May 2020. The NRC plans to conduct a supplemental inspection of Grand Gulf in accordance with its inspection procedures for nuclear plants in Column 2. As a consequence of two additional Grand Gulf scrams during the fourth quarter 2020, System Energy expects Grand Gulf to be placed into NRC Column 3 based on plant performance indicators for the four quarters ended December 31, 2020. This will involve an additional supplemental NRC inspection of Grand Gulf in accordance with its inspection procedures for nuclear plants in Column 3.

Environmental Regulation

Entergy's facilities and operations are subject to regulation by various governmental authorities having jurisdiction over air quality, water quality, control of toxic substances and hazardous and solid wastes, and other environmental matters. Management believes that Entergy's businesses are in substantial compliance with environmental regulations currently applicable to its facilities and operations, with reference to possible exceptions noted below. Because environmental regulations are subject to change, future compliance requirements and costs cannot be precisely estimated. Except to the extent discussed below, at this time compliance with federal, state, and local provisions regulating the discharge of materials into the environment, or otherwise protecting the environment, is incorporated into the routine cost structure of Entergy's businesses and is not expected to have a material effect on their competitive position, results of operations, cash flows, or financial position.

Clean Air Act and Subsequent Amendments

The Clean Air Act and its amendments establish several programs that currently or in the future may affect Entergy's fossil-fueled generation facilities and, to a lesser extent, certain operations at nuclear and other facilities. Individual states also operate similar independent state programs or delegated federal programs that may include requirements more stringent than federal regulatory requirements. These programs include:

- New source review and preconstruction permits for new sources of criteria air pollutants, greenhouse gases, and significant modifications to existing facilities;
- Acid rain program for control of sulfur dioxide (SO_2) and nitrogen oxides (NO_x);
- Nonattainment area programs for control of criteria air pollutants, which could include fee assessments for air pollutant emission sources under Section 185 of the Clean Air Act if attainment is not reached in a timely manner;
- Hazardous air pollutant emissions reduction programs;
- Interstate Air Transport;
- Operating permit programs and enforcement of these and other Clean Air Act programs;
- Regional Haze programs; and
- New and existing source standards for greenhouse gas and other air emissions.

New Source Review (NSR)

Preconstruction permits are required for new facilities and for existing facilities that undergo a modification that results in a significant net emissions increase and is not classified as routine repair, maintenance, or replacement. Units that undergo certain non-routine modifications must obtain a permit modification and may be required to install additional air pollution control technologies. In December 2020 the EPA amended the NSR regulations to clarify when a physical change or change in the method of operation will constitute such a modification. Entergy has an established process for identifying modifications requiring additional permitting approval and is monitoring the regulations and associated guidance provided by the states and the federal government with regard to the determination of routine repair, maintenance, and replacement. Several years ago, however, the EPA implemented an enforcement initiative, aimed primarily at coal plants, to identify modifications that it does not consider routine for which the unit did not obtain a modified permit. Various courts and the EPA have been inconsistent in their judgments regarding modifications that are considered routine and on other legal issues that affect this program.

In February 2011, Entergy received a request from the EPA for several categories of information concerning capital and maintenance projects at the White Bluff and Independence facilities, both located in Arkansas, in order to determine compliance with the Clean Air Act, including NSR requirements and air permits issued by the Arkansas Department of Energy and Environment, Division of Environmental Quality (ADEQ). In August 2011, Entergy's Nelson facility, located in Louisiana, received a similar request for information from the EPA. In September 2015 an additional request for similar information was received for the White Bluff facility. Entergy responded to all requests. None of these EPA requests for information alleged that the facilities were in violation of law.

In January and February 2018, Entergy Arkansas, Entergy Mississippi, Entergy Power, and other co-owners received 60-day notice of intent to sue letters from the Sierra Club and the National Parks Conservation Association concerning allegations of violations of new source review and permitting provisions of the Clean Air Act at the Independence and White Bluff coal-burning units, respectively. In November 2018, following extensive negotiations, Entergy Arkansas, Entergy Mississippi, and Entergy Power entered a proposed settlement resolving those claims as well as other issues facing Entergy Arkansas's fossil generation plants. The settlement, which formally resolves a complaint filed by the Sierra Club and the National Parks Conservation Association, is subject to approval by the U.S. District Court for the Eastern District of Arkansas. In October 2019 the District Court requested supplemental briefing on several issues to be resolved prior to addressing the motion to approve the

settlement; that briefing was completed in May 2020. For further information about the settlement, see "Regional Haze" discussed below.

National Ambient Air Quality Standards

The Clean Air Act requires the EPA to set National Ambient Air Quality Standards (NAAQS) for ozone, carbon monoxide, lead, nitrogen dioxide, particulate matter, and sulfur dioxide, and requires periodic review of those standards. When an area fails to meet an ambient standard, it is considered to be in nonattainment and is classified as "marginal," "moderate," "serious," or "severe." When an area fails to meet the ambient air standard, the EPA requires state regulatory authorities to prepare state implementation plans meant to cause progress toward bringing the area into attainment with applicable standards.

Ozone Nonattainment

Entergy Texas operates two fossil-fueled generating facilities (Lewis Creek and Montgomery County Power Station) in a geographic area that is not in attainment with the applicable NAAQS for ozone. The ozone nonattainment area that affects Entergy Texas is the Houston-Galveston-Brazoria area. Both Lewis Creek and the Montgomery County Power Station hold all necessary permits for construction and operation and comply with applicable air quality program regulations. Measures enacted to return the area to ozone attainment could make these program regulations more stringent. Entergy will continue to work with state environmental agencies on appropriate methods for assessing attainment and nonattainment with the ozone NAAQS.

Potential SO_2 Nonattainment

The EPA issued a final rule in June 2010 adopting an SO_2 1-hour national ambient air quality standard of 75 parts per billion. In Entergy's utility service territory, only St. Bernard Parish and Evangeline Parish in Louisiana are designated as nonattainment. In August 2017 the EPA issued a letter indicating that East Baton Rouge and St. Charles parishes would be designated by December 31, 2020, as monitors were installed to determine compliance. In December 2020 the EPA designated East Baton Rouge, St. Charles, St. James, and West Baton Rouge parishes in Louisiana as attainment/unclassifiable, and, in Texas, Jefferson County as attainment/unclassifiable and Orange County as unclassifiable. Challenges to these final designations must be filed within 60 days of publication in the Federal Register. Entergy continues to monitor this situation.

Hazardous Air Pollutants

The EPA released the final Mercury and Air Toxics Standard (MATS) rule in December 2011, which had a compliance date, with a widely granted one-year extension, of April 2016. The required controls have been installed and are operational at all affected Entergy units. In May 2020 the EPA finalized a rule that finds that it is not "appropriate and necessary" to regulate hazardous air pollutants from electric steam generating units under the provisions of section 112(n) of the Clean Air Act. This is a reversal of the EPA's previous finding requiring such regulation. The final appropriate and necessary finding does not revise the underlying MATS rule. Several lawsuits have been filed challenging the appropriate and necessary finding. Entergy will continue to monitor this situation.

Cross-State Air Pollution

In March 2005 the EPA finalized the Clean Air Interstate Rule (CAIR), which was intended to reduce SO_2 and NO_x emissions from electric generation plants in order to improve air quality in twenty-nine eastern states. The rule required a combination of capital investment to install pollution control equipment and increased operating costs through the purchase of emission allowances. Entergy began implementation in 2007, including installation of controls at several facilities and the development of an emission allowance procurement strategy.

Based on several court challenges, CAIR and its subsequent versions, now known as the Cross-State Air Pollution Rule (CSAPR), have been remanded to and modified by the EPA on multiple occasions. In September 2016 the EPA finalized the CSAPR Update Rule to address interstate transport for the 2008 ozone NAAQS. Starting in 2017 the final rule requires reductions in summer nitrogen oxides (NO_x) emissions. Several states, including Arkansas and Texas, filed a challenge to the Update Rule. In September 2019 the D.C. Circuit upheld the EPA's underlying approach to the Update Rule, but determined that it was inconsistent with the Clean Air Act because it failed to include deadlines consistent with downwind states' deadlines for attainment. The court remanded the rule to the EPA for further consideration, but did not vacate so the rule remains in effect pending the EPA's further review. In October 2020 the EPA issued its proposal intended to address the D.C. Circuit's remand. The draft rule proposes to finalize interstate transport obligations for 21 states. For nine states, including Arkansas, Mississippi, and Texas, the EPA proposes that additional emission reductions are not necessary. For 12 states, however, including Louisiana, the EPA proposes additional emission reductions through proposed reductions in the number of NO_x emission allowances allocated to each state. Entergy, through its various trade associations, filed comments on the proposal and will continue to monitor the rulemaking and its potential impact on its facilities in Louisiana. If the October 2020 proposal is finalized, ozone season NO_x emissions may become more expensive in Louisiana.

Regional Haze

In June 2005 the EPA issued its final Clean Air Visibility Rule (CAVR) regulations that potentially could result in a requirement to install SO_2 and NO_x pollution control technology as Best Available Retrofit Control Technology (BART) to continue operating certain of Entergy's fossil generation units. The rule leaves certain CAVR determinations to the states.

In Arkansas, the Arkansas Department of Energy and Environment, Division of Environmental Quality (ADEQ) prepared a state implementation plan (SIP) for Arkansas facilities to implement its obligations under the CAVR. In April 2012 the EPA finalized a decision addressing the Arkansas Regional Haze SIP, in which it disapproved a large portion of the Arkansas plan, including the emission limits for NO_x and SO_2 at White Bluff. In April 2015 the EPA published a proposed federal implementation plan (FIP) for Arkansas, taking comment on requiring installation of scrubbers and low NO_x burners to continue operating both units at the White Bluff plant and both units at the Independence plant and NO_x controls to continue operating the Lake Catherine plant. Entergy filed comments by the deadline in August 2015. Among other comments, including opposition to the EPA's proposed controls on the Independence units, Entergy proposed to meet more stringent SO_2 and NO_x limits at both White Bluff and Independence within three years of the effective date of the final FIP and to cease the use of coal at the White Bluff units at a later date.

In September 2016 the EPA published the final Arkansas Regional Haze FIP. In most respects, the EPA finalized its original proposal but shortened the time for compliance for installation of the NO_x controls. The FIP required an emission limitation consistent with SO_2 scrubbers at both White Bluff and Independence by October 2021 and NO_x controls by April 2018. The EPA declined to adopt Entergy's proposals related to ceasing coal use as an alternative to SO_2 scrubbers for White Bluff SO_2 BART. In November 2016, Entergy and other interested parties, including the State of Arkansas, filed petitions for administrative reconsideration and stay at the EPA as well as petitions for judicial review in the U.S. Court of Appeals for the Eighth Circuit. The Eighth Circuit granted the stay pending settlement discussions and pending the State's development of a SIP that, if approved by the EPA, would replace the FIP. The state had proposed its replacement SIP in two parts: Part I considers NO_x requirements, and Part II considers SO_2 requirements. The EPA approved the Part I NO_x SIP in January 2018. The Part I SIP requires that Entergy address NO_x impacts on visibility via compliance with the Cross-State Air Pollution Rule ozone-season emission trading program. Arkansas has finalized a Part II SIP which has been approved by the EPA but is currently pending a state court appeal. That appeal has been stayed pending the outcome of a federal court case, which may resolve many of the issues on appeal. The final Part II SIP requires that Entergy achieve SO_2 emission reductions via the use of low-sulfur coal at both White Bluff and Independence within three years. The

Part II SIP also requires that Entergy cease to use coal at White Bluff by December 31, 2028 and notes the current planning assumption that Entergy's Independence units will cease to use coal by December 31, 2030.

In January and February 2018, Entergy Arkansas, Entergy Mississippi, Entergy Power, and other co-owners received 60-day notice of intent to sue letters from the Sierra Club and the National Parks Conservation Association concerning allegations of violations of new source review and permitting provisions of the Clean Air Act at the Independence and White Bluff coal-burning units, respectively. In November 2018, following extensive negotiations, Entergy Arkansas, Entergy Mississippi, and Entergy Power entered a proposed settlement resolving those claims and reducing the risk that Entergy Arkansas, as operator of Independence and White Bluff, might be compelled under the Clean Air Act's regional haze program to install costly emissions control technologies. Consistent with the terms of the settlement and in many cases also the Part II SIP, Entergy Arkansas, along with co-owners, will begin using only low-sulfur coal at Independence and White Bluff by mid-2021; cease to use coal at White Bluff and Independence by the end of 2028 and 2030, respectively; cease operation of the remaining gas unit at Lake Catherine by the end of 2027; reserve the option to develop new generating sources at each plant site; and commit to install or propose to regulators at least 800 MWs of renewable generation by the end of 2027, with at least half installed or proposed by the end of 2022 (which includes two existing Entergy Arkansas projects) and with all qualifying co-owner projects counting toward satisfaction of the obligation. Under the settlement, the Sierra Club and the National Parks Conservation Association also waive certain potential existing claims under federal and state environmental law with respect to specified generating plants. The settlement, which formally resolves a complaint filed by the Sierra Club and the National Parks Conservation Association, is subject to approval by the U.S. District Court for the Eastern District of Arkansas. The EPA, which is allowed to comment on such a settlement agreement, has stated that it has no objections to the settlement. In November 2020 the court denied motions by the Arkansas Attorney General and the Arkansas Affordable Energy Coalition to intervene and to stay the proceedings. The proposed intervenors did not appeal the ruling. Still pending before the court is a motion by the plaintiffs to approve the settlement, in support of which Entergy made a filing. The Arkansas Attorney General also filed an application before the APSC in December 2018 seeking an investigation into the effects of the settlement. The Arkansas Affordable Energy Coalition filed to support the Arkansas Attorney General's application, and Entergy Arkansas filed a motion to dismiss it. The application remains pending before the APSC. In October 2019 the District Court requested supplemental briefing on several issues prior to addressing the motion to approve the settlement; that briefing concluded in May 2020.

In Louisiana, Entergy has worked with the Louisiana Department of Environmental Quality (LDEQ) and the EPA to revise the Louisiana SIP for regional haze, which had been disapproved in part in 2012. The LDEQ submitted a revised SIP in February 2017. In May 2017 the EPA proposed to approve a majority of the revisions. In September 2017 the EPA issued a proposed SIP approval for the Nelson plant, requiring an emission limitation consistent with the use of low-sulfur coal, with a compliance date of January 22, 2021. The EPA issued final approval in December 2017. The EPA approval was appealed to the U.S. Court of Appeals for the Fifth Circuit. In October 2019 the Fifth Circuit affirmed the EPA's SIP approval. A petition for rehearing filed by plaintiffs was denied by the Fifth Circuit. Plaintiffs did not petition for further review by the Supreme Court.

The second planning period (2018-2028) for the regional haze program requires states to examine sources for impacts on visibility and to prepare SIPs by 2021. Entergy received information collection requests from Arkansas and Louisiana requesting an evaluation of technical and economic feasibility of various NO_x and SO_2 control technologies for Independence, Nelson 6, and Ninemile. Responses to the information requests have been submitted to the respective state agencies.

New and Existing Source Performance Standards for Greenhouse Gas Emissions

In July 2019 the EPA released the Affordable Clean Energy Rule (ACE), which applies only to existing coal-fired electric generating units. The ACE determines that heat rate improvements are the best system of emission reductions and lists six candidate technologies for consideration by states at each coal unit. The rule and associated rulemakings by the EPA replace the Obama administration's Clean Power Plan, which established

national emissions performance rates for existing fossil-fuel fired steam electric generating units and combustion turbines. The ACE rule provides states discretion in determining how the best system for emission reductions applies to individual units, including through the consideration of technical feasibility and the remaining useful life of the facility. The ADEQ and the LDEQ have issued information collection requests to Entergy facilities to help the states collect the information needed to determine the best system of emission reductions for each facility. Entergy responded to the requests and will continue to monitor litigation challenging the rule. In January 2021 the U.S. Court of Appeals for the D.C. Circuit vacated ACE. The court held that ACE relied on an incorrect interpretation of the Clean Air Act that the statute expressly forecloses emission reduction approaches, such as emissions trading and generating shifting, that cannot be applied at and to the individual source. The court remanded ACE to the EPA for further consideration and also vacated the repeal of the Clean Power Plan. The vacatur will not be effective until the court issues its mandate which is being held until after disposition of any petitions for rehearing. Entergy is currently reviewing the court's opinion.

In 2018 the EPA proposed a revision to the new source performance standard on greenhouse gas emissions that primarily impacts new coal units and, therefore, should not impact Entergy. In January 2021 the EPA finalized a pollutant-specific contribution finding for greenhouse gas emissions from new, modified, and reconstructed electric generating units. The rule establishes a three percent threshold for determining when a pollutant significantly contributes to air pollution and reaffirms the EPA's position that the Clean Air Act Section 111(b) requires the EPA to make pollutant-specific significant contribution findings before promulgation of a new source performance standard. The EPA did not, however, finalize the new source performance standard on greenhouse gas emissions and intends to address the 2018 proposal in a future action.

Potential Legislative, Regulatory, and Judicial Developments

In addition to the specific instances described above, there are a number of legislative and regulatory initiatives concerning air emissions, as well as other media, that are under consideration at the federal, state, and local level. Because of the nature of Entergy's business, the imposition of any of these initiatives could affect Entergy's operations. Entergy continues to monitor these initiatives and activities in order to analyze their potential operational and cost implications. These initiatives include:

- designation by the EPA and state environmental agencies of areas that are not in attainment with national ambient air quality standards;
- introduction of bills in Congress and development of regulations by the EPA proposing further limits on NO_x, SO_2, mercury, and carbon dioxide and other air emissions. New legislation or regulations applicable to stationary sources could take the form of market-based cap-and-trade programs, direct requirements for the installation of air emission controls onto air emission sources, or other or combined regulatory programs;
- efforts in Congress or at the EPA to establish a federal carbon dioxide emission tax, control structure, or unit performance standards;
- revisions to the estimates of the Social Cost of Carbon and its use for regulatory impact analysis of federal laws and regulations;
- implementation of the Regional Greenhouse Gas Initiative by several states in the northeastern United States and similar actions in other regions of the United States;
- efforts on the local, state, and federal level to codify renewable portfolio standards, clean energy standards, or a similar mechanism requiring utilities to produce or purchase a certain percentage of their power from defined renewable energy sources or energy sources with lower emissions;
- efforts to develop more stringent state water quality standards, effluent limitations for Entergy's industry sector, stormwater runoff control regulations, and cooling water intake structure requirements;
- efforts to restrict the previously-approved continued use of oil-filled equipment containing certain levels of polychlorinated biphenyls (PCBs);
- efforts by certain external groups to encourage reporting and disclosure of environmental, social, and governance risk;

- the listing of additional species as threatened or endangered, the protection of critical habitat for these species, and developments in the legal protection of eagles and migratory birds;
- the regulation of the management, disposal, and beneficial reuse of coal combustion residuals; and
- the regulation of the management and disposal and recycling of equipment associated with renewable and clean energy sources such as used solar panels, wind turbine blades, hydrogen usage, or battery storage.

Entergy continues to support national legislation that would increase planning certainty for electric utilities while addressing carbon dioxide emissions in an economy-wide, responsible, and flexible manner. By virtue of its proportionally large investment in low-emitting generation technologies, Entergy has a low overall carbon dioxide emission "intensity," or rate of carbon dioxide emitted per megawatt-hour of electricity generated. In anticipation of the imposition of carbon dioxide emission limits on the electric industry, Entergy initiated actions designed to reduce its exposure to potential new governmental requirements related to carbon dioxide emissions. These voluntary actions included a formal program to stabilize owned power plant carbon dioxide emissions at 2000 levels through 2005, and Entergy succeeded in reducing emissions below 2000 levels. In 2006, Entergy started including emissions from controllable power purchases in addition to its ownership share of generation and established a second formal voluntary program to stabilize power plant carbon dioxide emissions and emissions from controllable power purchases, cumulatively over the period, at 20% below 2000 levels through 2010. In 2011, Entergy extended this commitment through 2020. In 2020, Entergy succeeded in achieving its initial climate commitment to reduce carbon dioxide cumulative emissions by 20% from 2000 levels. Total carbon dioxide emissions representing Entergy's ownership share of power plants and controllable power purchases in the United States were approximately 39.1 million tons in 2020 and 40.7 million tons in 2019. Since its original commitment in 2001, Entergy's cumulative emissions are approximately 7.6% below its 2020 goal.

Entergy voluntarily conducted a climate scenario analysis and published a comprehensive report in March 2019. The report follows the framework and recommendations of the Task Force on Climate-related Disclosures, describing climate-related governance, strategy, risk management, and metrics and targets. Scenario analyses resulted in Entergy developing and publishing a new goal of reducing the Utility's emission rate by 50 percent from 2000 levels by 2030. In September 2020, Entergy committed to achieving net-zero carbon emissions by 2050, while continuing its commitment to grid reliability and affordability for customers. In December 2020, Entergy published a report regarding this long-term commitment that describes its approach and technology point-of-view. Technology research and development, innovation, and advancement are critical to Entergy's ability to meet this climate commitment.

Entergy participates in the M.J. Bradley & Associates' Annual Benchmarking Air Emissions Report, an annual analysis of the 100 largest U.S. electric power producers. The report is available on the M.J. Bradley website. Entergy's annual greenhouse gas emissions inventory is also third-party verified, and that certification is made available on the American Carbon Registry website. Entergy participates annually in the Dow Jones Sustainability Index and in 2020 was listed on the North American Index. Entergy has been listed on the World or North American Index, or both, for nineteen consecutive years. Entergy also participated in the 2020 CDP and CDP Water evaluations, receiving a 'B' for both responses.

Clean Water Act

The 1972 amendments to the Federal Water Pollution Control Act (known as the Clean Water Act) provide the statutory basis for the National Pollutant Discharge Elimination System permit program, section 402, and the basic structure for regulating the discharge of pollutants from point sources to waters of the United States. The Clean Water Act requires virtually all discharges of pollutants to waters of the United States to be permitted. Section 316(b) of the Clean Water Act regulates cooling water intake structures, section 401 of the Clean Water Act requires a water quality certification from the state in support of certain federal actions and approvals, and section 404 regulates the dredge and fill of waters of the United States, including jurisdictional wetlands.

Steam Electric Effluent Guidelines

The 2015 Steam Electric Effluent Limitations Guidelines (ELG) rule required, among other things, that there be no discharge of bottom ash transport water. In October 2020 the EPA issued its final rule revision on bottom ash transport water allowing the discharge of up to 10% system volume for certain purge waters, including storm events and non-routine operations. The final rule requires compliance as soon as possible beginning October 31, 2021, but no later than December 31, 2025. Several challenges to the final rule have been filed. Additionally, the Fifth Circuit Court of Appeals previously vacated and remanded the provisions of the rule related to legacy wastewater and leachate, which the EPA plans to address in a separate rulemaking. Despite the final rule and pending challenges, Entergy is implementing projects at its White Bluff and Independence plants to convert to zero-discharge systems to comply with the ELG rule and the coal combustion residuals restrictions on impoundments. Additionally, the Nelson Unit 6 facility is implementing operational and maintenance measures to minimize the potential for discharge of bottom ash transport water from the existing bottom ash handling system at the site, and is reviewing the effectiveness of these changes for compliance with the requirements of the October 2020 final rule.

Federal Jurisdiction of Waters of the United States

In February 2019 the EPA published its proposed revised definition of Waters of the United States, which proposes to narrow the scope of Clean Water Act jurisdiction, as compared to a 2015 definition which had been stayed by several federal courts. The final rule was released in January 2020 and effective in June 2020. In October 2019 the EPA repealed the 2015 rule and re-codified the pre-existing regulations. That rule was effective late December 2019. Numerous challenges have been filed against both rules.

Groundwater at Certain Nuclear Sites

The NRC requires nuclear power plants to monitor and report regularly the presence of radioactive material in the environment. Entergy joined other nuclear utilities and the Nuclear Energy Institute in 2006 to develop a voluntary groundwater monitoring and protection program. This initiative began after detection of very low levels of radioactive material, primarily tritium, in groundwater at several plants in the United States. Tritium is a radioactive form of hydrogen that occurs naturally and is also a byproduct of nuclear plant operations. In addition to tritium, other radionuclides have been found in site groundwater at nuclear plants.

As part of the groundwater monitoring and protection program, Entergy has: (1) performed reviews of plant groundwater characteristics (hydrology) and historical records of past events on site that may have potentially impacted groundwater; (2) implemented fleet procedures on how to handle events that could impact groundwater; and (3) installed groundwater monitoring wells and began periodic sampling. The program also includes protocols for notifying local officials if contamination is found. To date, radionuclides such as tritium have been detected at Arkansas Nuclear One, Indian Point, Palisades, Grand Gulf, and River Bend. Each of these sites has installed groundwater monitoring wells and implemented a program for testing groundwater at the sites for the presence of tritium and other radionuclides. Based on current information, the concentrations and locations of radionuclides detected at these plants pose no threat to public health or safety, but each site continues to evaluate the results from its groundwater monitoring program.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended (CERCLA), authorizes the EPA to mandate clean-up by, or to collect reimbursement of clean-up costs from, owners or operators of sites at which hazardous substances may be or have been released. Certain private parties also may use CERCLA to recover response costs. Parties that transported hazardous substances to these sites or arranged for the disposal of the substances are also deemed liable by CERCLA. CERCLA has been interpreted to impose strict, joint, and several liability on responsible parties. Many states have adopted programs similar to CERCLA. Entergy subsidiaries in the Utility and Entergy Wholesale Commodities businesses have sent waste materials to various

disposal sites over the years, and releases have occurred at Entergy facilities including nuclear facilities that have been or will be sold to decommissioning companies. In addition, environmental laws now regulate certain of Entergy's operating procedures and maintenance practices that historically were not subject to regulation. Some disposal sites used by Entergy subsidiaries have been the subject of governmental action under CERCLA or similar state programs, resulting in site clean-up activities. Entergy subsidiaries have participated to various degrees in accordance with their respective potential liabilities in such site clean-ups and have developed experience with clean-up costs. The affected Entergy subsidiaries have established provisions for the liabilities for such environmental clean-up and restoration activities. Details of potentially material CERCLA and similar state program liabilities are discussed in the "Other Environmental Matters" section below.

Coal Combustion Residuals

In June 2010 the EPA issued a proposed rule on coal combustion residuals (CCRs) that contained two primary regulatory options: (1) regulating CCRs destined for disposal in landfills or received (including stored) in surface impoundments as so-called "special wastes" under the hazardous waste program of Resource Conservation and Recovery Act (RCRA) Subtitle C; or (2) regulating CCRs destined for disposal in landfills or surface impoundments as non-hazardous wastes under Subtitle D of RCRA. Under both options, CCRs that are beneficially reused in certain processes would remain excluded from hazardous waste regulation. In April 2015 the EPA published the final CCR rule with the material being regulated under the second scenario presented above - as non-hazardous wastes regulated under RCRA Subtitle D.

The final regulations create new compliance requirements including modified storage, new notification and reporting practices, product disposal considerations, and CCR unit closure criteria. Entergy believes that on-site disposal options will be available at its facilities, to the extent needed for CCR that cannot be transferred for beneficial reuse. As of December 31, 2020, Entergy has recorded asset retirement obligations related to CCR management of $20.1 million.

In December 2016 the Water Infrastructure Improvements for the Nation Act (WIIN Act) was signed into law, which authorizes states to regulate coal ash rather than leaving primary enforcement to citizen suit actions. States may submit to the EPA proposals for a permit program.

Pursuant to the EPA Rule, Entergy operates groundwater monitoring systems surrounding its coal combustion residual landfills located at White Bluff, Independence, and Nelson. Monitoring to date has detected concentrations of certain listed constituents in the area, but has not indicated that these constituents originated at the active landfill cells. Reporting has occurred as required, and detection monitoring will continue as the rule requires. In late-2017, Entergy determined that certain in-ground wastewater treatment system recycle ponds at its White Bluff and Independence facilities require management under the new EPA regulations. Consequently, in order to move away from using the recycle ponds, White Bluff and Independence each have installed a new permanent bottom ash handling system that does not fall under the CCR rule. As of November 2020, both sites are operating the new system and no longer are sending waste to the recycle ponds. Each site has commenced closure of one of its two recycle ponds, with the remaining pond being held in reserve during initial operation of the new bottom ash handling system. Closure of the remaining recycle pond at each site will commence as soon as possible, but no later than April 11, 2021, which is the deadline under the finalized CCR rule to commence closure of any unlined recycle ponds. Any potential requirements for corrective action or operational changes under the new CCR rule continue to be assessed. Notably, ongoing litigation has resulted in the EPA's continuing review of the rule. Consequently, the nature and cost of additional corrective action requirements may depend, in part, on the outcome of the EPA's review.

Other Environmental Matters

Entergy Louisiana and Entergy Texas

Entergy Louisiana, as successor in interest to Entergy Gulf States Louisiana, currently is involved in the second phase of the remedial investigation of the Lake Charles Service Center site, located in Lake Charles, Louisiana. A manufactured gas plant (MGP) is believed to have operated at this site from approximately 1916 to 1931. Coal tar, a by-product of the distillation process employed at MGPs, apparently was routed to a portion of the property for disposal. The same area also has been used as a landfill. In 1999, Entergy Gulf States, Inc. signed a second administrative consent order with the EPA to perform a removal action at the site. Removal actions addressed contaminated source material, soil, and sediment and included capping certain soil on and off-site. In 2002 approximately 7,400 tons of contaminated soil and debris were excavated and disposed of from an area within the service center. In 2003 a cap was constructed over the remedial area to prevent the migration of contamination to the surface. In August 2005 an administrative order was issued by the EPA requiring that a 10-year groundwater study be conducted at this site. The groundwater monitoring study commenced in January 2006. The EPA released the second Five Year Review in 2015. In that review, the EPA indicated that the remediation technique was insufficient and that Entergy would need to utilize other remediation technologies on the site. In July 2015, Entergy submitted a Focused Feasibility Study to the EPA outlining the potential remedies and suggesting installation of the new remedial method, a waterloo barrier. The estimated cost for this remedy is approximately $2 million, to be allocated between Entergy Louisiana and Entergy Texas. In early 2017 the EPA indicated that the waterloo barrier may not be necessary and requested revisions to the Focused Feasibility Study. The EPA released the third Five Year Review in late-2019 confirming that a new remedial method is not necessary but requiring continuation of the current groundwater monitoring. The site's remedy includes monitored natural attenuation of groundwater, and institutional controls to restrict groundwater and land use. The EPA has determined that no additional actions are needed for the remedy to be protective over the long-term, and the remedy is protective of human health and the environment.

Entergy Arkansas, Entergy Louisiana, Entergy New Orleans, and Entergy Texas

The Texas Commission on Environmental Quality (TCEQ) notified Entergy Arkansas, Entergy Louisiana, Entergy New Orleans, and Entergy Texas that the TCEQ believes those entities are potentially responsible parties (PRPs) concerning contamination existing at the San Angelo Electric Service Company (SESCO) facility in San Angelo, Texas. The facility operated as a transformer repair and scrapping facility from the 1930s until 2003. Both soil and groundwater contamination existed at the site. Entergy subsidiaries sent transformers to this facility. Entergy Arkansas, Entergy Louisiana, and Entergy Texas responded to an information request from the TCEQ. Entergy Louisiana and Entergy Texas joined a group of PRPs responding to site conditions in cooperation with the State of Texas, creating cost allocation models based on review of SESCO documents and employee interviews, and investigating contribution actions against other PRPs. Entergy Louisiana and Entergy Texas have agreed to contribute to the remediation of contaminated soil and groundwater at the site in a measure proportionate to those companies' involvement at the site. Current estimates, although variable depending on ultimate remediation design and performance, indicate that Entergy's total share of remediation costs likely will be approximately $1.5 million to $2 million. Groundwater monitoring wells at the site were plugged and abandoned in December 2019 following receipt of a certificate of completion issued by the TCEQ. Site decommissioning activities are complete and final disposition of the property will be determined at a later time.

Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy Texas

The EPA notified Entergy that the EPA believes Entergy is a PRP concerning PCB contamination at the F.J. Doyle Salvage facility in Leonard, Texas. The facility operated as a scrap salvage business during the 1970s to the 1990s. In May 2018 the EPA investigated the site surface and sub-surface soils and, in November 2018 the EPA conducted a removal action, including disposal of PCB contaminated soils. Entergy responded to the EPA's information requests in May and July 2019. In November 2020 the EPA sent Entergy and other PRPs a demand

letter seeking reimbursement for response costs totaling $4 million expended at the site. The demand letter is being evaluated and liability and PRP allocation of response costs are yet to be determined.

Entergy Texas

In December 2016 a transformer inside the Hartburg, Texas Substation had an internal fault resulting in a release of approximately 15,000 gallons of non-PCB mineral oil. Cleanup ensued immediately; however, rain caused much of the oil to spread across the substation yard and into a nearby wetland. The TCEQ and the National Response Center were immediately notified, and the TCEQ responded to the site approximately two hours after the cleanup was initiated. The remediation liability is estimated at $2.2 million; however, this number could fluctuate depending on the remediation extent and wetland mitigation requirements. In July 2017, Entergy entered into the Voluntary Cleanup Program with the TCEQ. In November 2017, additional soil sampling was completed in the wetland area and, in February 2018, a site summary report of findings was submitted to the TCEQ. The TCEQ responded in June 2018 and requested an ecological exclusion criteria checklist/Tier II screening-level ecological risk assessment, and additional site assessment, additional soil samples, groundwater samples, and some additional diagrams and maps. In October 2018, Entergy submitted the requested information to the TCEQ. In January 2019 the TCEQ responded with another request for information. In March 2019, Entergy submitted the requested information to the TCEQ. In August 2019 the TCEQ responded with a request for additional information including an Affected Property Assessment Report (APAR) and water well survey. The TCEQ has agreed that the necessity of the water well survey is dependent on the results of the groundwater resampling that will occur. Groundwater sampling was completed in December 2019 and results were submitted to the TCEQ for review. Based on the groundwater sampling results, the TCEQ confirmed in February 2020 that a water well survey is not necessary and requested the APAR and an Ecological Risk Assessment by August 2020. Due to COVID-19 delays, the TCEQ extended the APAR and Ecological Risk Assessment submittal dates to December 2020, which Entergy timely met.

Litigation

Entergy uses legal and appropriate means to contest litigation threatened or filed against it, but certain states in which Entergy operates have proven to be unusually litigious environments. Judges and juries in Louisiana, Mississippi, and Texas have demonstrated a willingness to grant large verdicts, including punitive damages, to plaintiffs in personal injury, property damage, and business tort cases. The litigation environment in these states poses a significant business risk to Entergy.

Asbestos Litigation (Entergy Arkansas, Entergy Louisiana, Entergy New Orleans, and Entergy Texas)

See Note 8 to the financial statements for a discussion of this litigation.

Employment and Labor-related Proceedings (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

See Note 8 to the financial statements for a discussion of these proceedings.

Human Capital

Employees

Employees are an integral part of Entergy's commitment to serving customers. As of December 31, 2020, Entergy subsidiaries employed 13,400 people.

Utility:	
Entergy Arkansas	1,244
Entergy Louisiana	1,654
Entergy Mississippi	750
Entergy New Orleans	303
Entergy Texas	658
System Energy	—
Entergy Operations	3,529
Entergy Services	3,859
Entergy Nuclear Operations	1,356
Other subsidiaries	47
Total Entergy	13,400

Approximately 3,900 employees are represented by the International Brotherhood of Electrical Workers, the Utility Workers Union of America, the International Brotherhood of Teamsters, the United Government Security Officers of America, and the International Union, Security, Police, and Fire Professionals of America.

Below is the breakdown of Entergy's employees by gender and race/ethnicity:

Gender (%)	2020	2019
Female	21	20
Male	79	80
	100	100

Race/Ethnicity (%)	2020	2019
White	78	79
Black/African American	15	15
Hispanic/Latino	3	2
Asian	2	2
Other	2	2
	100	100

Entergy's Approach to Human Resources

Entergy's people and culture enable its success; that is why acquiring, retaining, and developing talent are important components of Entergy's human resources strategy. Entergy focuses on an approach that includes, among other things, governance and oversight; safety; organizational health, including diversity, inclusion and belonging; and talent management.

Governance and Oversight

Ensuring that workplace processes support the desired culture and strategy begins with the Board of Directors and the Office of the Chief Executive. The Personnel Committee establishes priorities and reviews performance on a range of topics. It oversees Entergy's incentive plan design and administers its executive compensation plans to incentivize the behaviors and outcomes that support achievement of Entergy's corporate objectives. Annually, it reviews executive performance, development and succession plans to align a high performing executive team with Entergy's priorities. The Personnel Committee also oversees Entergy's performance through regular briefings on a wide variety of human resources topics including Entergy's safety culture and performance; organizational health; and diversity, inclusion, and belonging initiatives and performance.

Other committees of the Board oversee other key aspects of Entergy's culture. For example, the Audit Committee reviews reports on ethics and compliance training and performance, as well as regular reports on calls made to Entergy's ethics line and related investigations. To maximize the sharing of information and facilitate the participation of all Board members in these discussions, the Board schedules its regular committee meetings in a manner such that all directors can attend.

The Office of the Chief Executive, which includes the Senior Vice President and Chief Human Resources Officer, ensures annual business plans are designed to support Entergy's talent objectives, reviews workforce-related metrics, and regularly discusses the development, succession planning, and performance of their direct reports and other company officers.

Safety

Entergy's safety objective is: Everyone Safe. All Day. Every Day. While the COVID-19 pandemic and historical hurricane season presented significant challenges, Entergy's safety strategy and commitment to excellence showed results in 2020. Entergy employees achieved a total recordable incident rate of 0.40 in 2020 compared to 0.56 in 2019 and 0.48 in 2018. The recordable incident rate equals the number of recordable incidents per 100 full-time equivalents. Recordable incidents include fatalities, lost-time accidents, restricted-duty accidents, and medical attentions and is not inclusive of potential work-related COVID-19 cases. This marked improvement in total recordable incident rate placed Entergy in top-decile in safety performance when benchmarked amongst peers within the Edison Electric Institute.

Organizational Health, including Diversity, Inclusion and Belonging

Entergy believes that organizational health fosters an engaged and productive culture that positions Entergy to deliver sustainable value to its stakeholders. Entergy measures its progress through an organizational health survey coordinated by an external third party. Since initially administering the survey in 2014, Entergy improved from an initial score of 49 (fourth quartile) to a score in 2020 of 72 (near top quartile). In addition to significantly improved scores, initial employee participation of 66 percent in 2014 rose to and remains at 90 percent in 2018-2020.

Entergy believes that a culture focused on diversity, inclusion, and belonging drives foundational engagement. Entergy is committed to developing and retaining a workforce that reflects the rich diversity of the communities it serves. In 2019, Entergy embarked on a three-year phased approach to enhance inclusion for individuals and teams. Among other actions, the primary focus of its 2020 actions was taking a stand against social injustice, reinforcing expectations, training and leading by example, starting at the top of the organization and cascading through management ranks.

Talent Management

Entergy's focus on talent management is organized in three areas: developing and attracting a diverse pool of talent, equipping its leaders to develop the organization, and building premier utility capability through employee performance management and succession programs. Entergy believes that developing a diverse pool of local talent equipped with the skills needed, today and in the future, and reflecting the communities Entergy serves will give it a long-term competitive advantage. The focus of Entergy's leadership development programs is to equip managers with the skills needed to effectively develop their teams and improve the leader-employee relationship. Entergy's talent development infrastructure, which includes a combination of business function-specific and enterprise-wide learning and development programs, is designed to ensure Entergy has qualified staff with the skills, experiences, and behaviors needed to perform today and prepare for the future. Entergy strives to achieve its strategic priorities by aligning and enhancing team and individual performance with business objectives, effectively deploying talent through succession planning, and managing workforce transitions.

Availability of SEC filings and other information on Entergy's website

Entergy electronically files reports with the SEC, including annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, proxies, and amendments to such reports. The SEC maintains an internet site that contains reports, proxy and information statements, and other information regarding registrants that file electronically with the SEC at http://www.sec.gov. Copies of the reports that Entergy files with the SEC can be obtained at the SEC's website.

Entergy uses its website, http://www.entergy.com, as a routine channel for distribution of important information, including news releases, analyst presentations and financial information. Filings made with the SEC are posted and available without charge on Entergy's website as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC. These filings include annual and quarterly reports on Forms 10-K and 10-Q (including related filings in Inline XBRL format) and current reports on Form 8-K; proxy statements; and any amendments to those reports or statements. All such postings and filings are available on Entergy's Investor Relations website free of charge. Entergy is providing the address to its internet site solely for the information of investors and does not intend the address to be an active link. The contents of the website are not incorporated into this report.

RISK FACTORS

See "**RISK FACTOR SUMMARY**" in Part I Item 1 for a summary of Entergy's and the Registrant Subsidiaries' risk factors.

Investors should review carefully the following risk factors and the other information in this Form 10-K. The risks that Entergy faces are not limited to those in this section. There may be additional risks and uncertainties (either currently unknown or not currently believed to be material) that could adversely affect Entergy's financial condition, results of operations, and liquidity. See "**FORWARD-LOOKING INFORMATION**."

Utility Regulatory Risks

(Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

The impacts of the COVID-19 pandemic and responsive measures taken on Entergy's and its Utility operating companies' business, results of operations, and financial condition are highly uncertain and cannot be predicted.

In December 2019 a novel strain of coronavirus was reported to have surfaced in Wuhan, China. Since then, COVID-19 has spread throughout most countries in the world, including the United States. Public health officials in the United States have both recommended and mandated wearing of masks, precautions to mitigate the spread of COVID-19, including prohibitions on congregating in heavily-populated areas, mandated closure or limitations on the functions of non-essential business, and shelter-in-place orders or similar measures, including throughout Entergy's service areas. While some of these mitigation measures have been lifted, it is unclear how long certain forms of mitigation measures will remain in place, whether they will be reinstated in the future, and how they will ultimately impact the general economy, Entergy's customers, and its operations.

Entergy and its Utility operating companies have experienced a decline in commercial and industrial sales and an increase in arrearages and bad debt expense due to non-payment by customers, and expect such reduced levels of sales and increased arrearages and bad debt expense to continue, the extent and duration of which management cannot predict. The Utility operating companies temporarily suspended disconnecting customers for non-payment of bills, and the suspension remains in place at Entergy Arkansas, has been re-instituted at Entergy New Orleans, and could be re-instituted at the other Utility operating companies should their regulators mandate. While they are working with regulators to ensure ultimate recovery for those and other COVID-19 related costs, the amount, method, and timing of such recovery is unknown. Entergy and its Registrant Subsidiaries also could experience, and in some cases have experienced, among other challenges, supply chain, vendor, and contractor disruptions; delays in completion of capital or other construction projects, maintenance, and other operations activities, including prolonged or delayed outages; delays in regulatory proceedings; workforce availability, health or safety issues; increased storm recovery costs; increased cybersecurity risks as a result of many employees telecommuting; increased late or uncollectible customer payments; volatility in the credit or capital markets (and any related increased cost of capital or any inability to access the capital markets or draw on available credit facilities); or other adverse impacts on their ability to execute on business strategies and initiatives.

A sustained or further economic decline could adversely impact Entergy's and the Utility operating companies' liquidity and cash flows, including through declining sales, reduced revenues, delays in receipts of customer payments, or increased bad debt expense. The Utility operating companies also may experience regulatory outcomes that require them to postpone planned investment and otherwise reduce costs due to the impact of the COVID-19 pandemic on their customers. In addition, if the COVID-19 pandemic continues to create disruptions or turmoil in the credit or financial markets, or adversely impacts Entergy's credit metrics or ratings, such developments could adversely affect its ability to access capital on favorable terms and continue to meet its

liquidity needs, or cause a decrease in the value of its defined benefit pension trust funds, as well as its nuclear decommissioning trust funds, all of which are highly uncertain and cannot be predicted.

Entergy cannot predict the extent or duration of the outbreak, the impact of new variants of COVID-19, the timing, availability, distribution or effectiveness of a vaccine, anti-viral or other treatments for COVID-19, governmental responsive measures, or the extent of the effects or ultimate impacts on the global, national or local economy, the capital markets, or its customers, suppliers, operations, financial condition, results of operations, or cash flows.

The terms and conditions of service, including electric and gas rates, of the Utility operating companies and System Energy are determined through regulatory approval proceedings that can be lengthy and subject to appeal, potentially resulting in delays in effecting rate changes, lengthy litigation and uncertainty as to ultimate results.

The Utility operating companies are regulated on a cost-of-service and rate of return basis and are subject to statutes and regulatory commission rules and procedures. The rates that the Utility operating companies and System Energy charge reflect their capital expenditures, operations and maintenance costs, allowed rates of return, financing costs, and related costs of service. These rates significantly influence the financial condition, results of operations, and liquidity of Entergy and each of the Utility operating companies and System Energy. These rates are determined in regulatory proceedings and are subject to periodic regulatory review and adjustment, including adjustment upon the initiative of a regulator or affected stakeholders.

In addition, regulators may initiate proceedings to investigate the prudence of costs in the Utility operating companies' and System Energy's base rates and examine, among other things, the reasonableness or prudence of the companies' operation and maintenance practices, level of expenditures (including storm costs and costs associated with capital projects), allowed rates of return and rate base, proposed resource acquisitions, and previously incurred capital expenditures that the operating companies seek to place in rates. The regulators may disallow costs subject to their jurisdiction found not to have been prudently incurred or found not to have been incurred in compliance with applicable tariffs, creating some risk to the ultimate recovery of those costs. Regulatory proceedings relating to rates and other matters typically involve multiple parties seeking to limit or reduce rates. Traditional base rate proceedings, as opposed to formula rate plans, generally have long timelines, are primarily based on historical costs, and may or may not be limited in scope or duration by statute. The length of these base rate proceedings can cause the Utility operating companies and System Energy to experience regulatory lag in recovering costs through rates, such that the Utility operating companies may not fully recover all costs during the rate effective period and the Utility operating companies may, therefore, earn less than their allowed returns. Decisions are typically subject to appeal, potentially leading to additional uncertainty associated with rate case proceedings.

The Utility operating companies have large customer and stakeholder bases and, as a result, could be the subject of public criticism or adverse publicity focused on issues including the operation of their assets and infrastructure or the quality of their service. Criticism or adverse publicity of this nature could render legislatures and other governing bodies, public service commissions and other regulatory authorities, and government officials less likely to view the applicable operating company in a favorable light and could potentially negatively affect legislative or regulatory processes or outcomes, as well as lead to increased regulatory oversight or more stringent legislative or regulatory requirements.

The base rates of Entergy Texas are established largely in traditional base rate case proceedings. Between base rate proceedings, Entergy Texas has available rate riders to recover the revenue requirements associated with certain incremental costs. These riders include a distribution cost recovery factor rider mechanism for the recovery of distribution-related capital investment and certain non-fuel MISO charges, a transmission cost recovery factor rider mechanism for the recovery of transmission-related capital investments, a generation cost recovery rider mechanism for the recovery of generation-related capital investments, and a fixed fuel factor mechanism for the recovery of MISO fuel and energy-related costs. Entergy Texas also is required to make a filing every three years,

at a minimum, reconciling its fuel and purchased power costs and fuel factor revenues. In the course of this reconciliation, the PUCT determines whether eligible fuel and fuel-related expenses and revenues are necessary and reasonable, and makes a prudence finding for each of the fuel-related contracts for the reconciliation period. Entergy Texas also is required to file full base rate case proceedings every four years and within eighteen months of utilizing its generation cost recovery rider for investments above $200 million.

Between base rate cases, Entergy Arkansas and Entergy Mississippi are able to adjust base rates annually through formula rate plans that utilize a forward test year (Entergy Arkansas) or forward-looking features (Entergy Mississippi). In response to Entergy Arkansas's application for a general change in rates in 2015, the APSC approved the formula rate plan tariff proposed by Entergy Arkansas including its use of a projected year test period and an initial five-year term. The initial five-year term expires in 2021. Entergy Arkansas has requested APSC approval of the extension of the formula rate plan tariff for an additional five years through 2026. If Entergy Arkansas's formula rate plan were terminated or not extended beyond the initial term, Entergy Arkansas could file an application for a general change in rates that may include a request for continued regulation under a formula rate review mechanism. If Entergy Mississippi's formula rate plan is terminated, it would revert to the more traditional rate case environment or seek approval of a new formula rate plan. Entergy Arkansas and Entergy Mississippi recover fuel and purchased energy and certain non-fuel costs through other APSC-approved and MPSC-approved tariffs, respectively.

Entergy Louisiana historically sets electric base rates annually through a formula rate plan using an historic test year. The form of the formula rate plan, on a combined basis, was approved in connection with the business combination of Entergy Louisiana and Entergy Gulf States Louisiana and largely followed the formula rate plans that were approved by the LPSC in connection with the full electric base rate cases filed by those companies in February 2013. The formula rate plan was most recently extended through the test year 2019; certain modifications were made in that extension, including a decrease to the allowed return on equity and the addition of a transmission cost recovery mechanism. The formula rate plan continues to include exceptions from the rate cap and sharing requirements for certain large capital investment projects, including acquisition or construction of generating facilities and purchase power agreements approved by the LPSC and as noted, for certain transmission investment, among other items. MISO fuel and energy-related costs are recoverable in Entergy Louisiana's fuel adjustment clause. Entergy Louisiana has a pending request to extend its formula rate plan with certain modifications, including implementation of a distribution investment recovery mechanism and use of end of period rate base. In the event that the electric formula rate plan is not renewed or extended, Entergy Louisiana would revert to the more traditional rate case environment.

Entergy New Orleans previously operated under a formula rate plan that ended with the 2011 test year. Based on a settlement agreement approved by the City Council, with limited exceptions, the base rates of Entergy New Orleans were frozen until rates were implemented in connection with the base rate case filed by Entergy New Orleans in 2018. In November 2019 the City Council issued a resolution resolving the rate case, with rates to become effective retroactive to August 2019. The resolution allows Entergy New Orleans to implement a three-year formula rate plan, beginning with the 2019 test year as adjusted for forward-looking known and measurable changes. In November 2020 the City Council issued a resolution approving a settlement of the 2018 rate case. As part of this settlement, Entergy New Orleans agreed to postpone the filing of its first test year formula rate plan to 2021 and, in return, to be provided an additional test year for the three-year cycle. See Note 2 to the financial statements for further discussion.

The rates of System Energy are established by the FERC, and the costs allowed to be charged pursuant to these rates are, in turn, passed through to the participating Utility operating companies through the Unit Power Sales Agreement, which has monthly billings that reflect the current operating costs of, and investment in, Grand Gulf. Retail regulators and other parties may seek to initiate proceedings at FERC to investigate the prudence of costs included in the rates charged under the Unit Power Sales Agreement and examine, among other things, the

reasonableness or prudence of the operation and maintenance practices, level of expenditures, allowed rates of return and rate base, and previously incurred capital expenditures. The Unit Power Sales Agreement is currently the subject of several litigation proceedings at the FERC, including a challenge with respect to System Energy's uncertain tax positions, sale leaseback arrangement, authorized return on equity and capital structure, and a separate request for FERC to initiate a broader investigation of rates under the Unit Power Sales Agreement. Entergy cannot predict the outcome of any of these proceedings nor can it predict whether any outcome could have a material effect on Entergy's or System Energy's results of operations, financial condition or liquidity. See Note 2 to the financial statements for further discussion of the proceedings. System Energy has received FERC acceptance for billing protocols to provide retail regulators with information regarding rates billed under the Unit Power Sales Agreement.

The Utility operating companies and System Energy, and the energy industry as a whole, have experienced a period of rising costs and investments, and an upward trend in spending, especially with respect to infrastructure investments, which is likely to continue in the foreseeable future and could result in more frequent rate cases and requests for, and the continuation of, cost recovery mechanisms. For information regarding rate case proceedings and formula rate plans applicable to the Utility operating companies, see Note 2 to the financial statements.

Changes to state or federal legislation or regulation affecting electric generation, electric and natural gas transmission, distribution, and related activities could adversely affect Entergy and the Utility operating companies' financial position, results of operations, or cash flows and their utility businesses.

If legislative and regulatory structures evolve in a manner that erodes the Utility operating companies' exclusive rights to serve their regulated customers, they could lose customers and sales and their results of operations, financial position, or cash flows could be materially affected. Additionally, technological advances in energy efficiency and distributed energy resources are reducing the costs of these technologies and together with ongoing state and federal subsidies, the increasing penetration of these technologies could result in reduced sales by the Utility operating companies. Such loss of sales could put upward pressure on rates, resulting in adverse regulatory actions to mitigate such effects on rates. Entergy and the Utility operating companies cannot predict if or when they may be subject to changes in legislation or regulation, or the extent and timing of reductions of the cost of distributed energy resources, nor can they predict the impact of these changes on their results of operations, financial position, or cash flows.

The Utility operating companies recover fuel, purchased power, and associated costs through rate mechanisms that are subject to risks of delay or disallowance in regulatory proceedings.

The Utility operating companies recover their fuel, purchased power, and associated costs from their customers through rate mechanisms subject to periodic regulatory review and adjustment. Because regulatory review can result in the disallowance of incurred costs found not to have been prudently incurred, including the cost of replacement power purchased when generators experience outages or when planned outages are extended, with the possibility of refunds to ratepayers, there exists some risk to the ultimate recovery of those costs, particularly when there are substantial or sudden increases in such costs. Regulators also may initiate proceedings to investigate the continued usage or the adequacy and operation of the fuel and purchased power recovery clauses of the Utility operating companies and, therefore, there can be no assurance that existing recovery mechanisms will remain unchanged or in effect at all.

The Utility operating companies' cash flows can be negatively affected by the time delays between when gas, power, or other commodities are purchased and the ultimate recovery from customers of the costs in rates. On occasion, when the level of incurred costs for fuel and purchased power rises very dramatically, some of the Utility operating companies may agree to defer recovery of a portion of that period's fuel and purchased power costs for recovery at a later date, which could increase the near-term working capital and borrowing requirements of those companies. For a description of fuel and purchased power recovery mechanisms and information regarding the regulatory proceedings for fuel and purchased power costs recovery, see Note 2 to the financial statements.

There remains uncertainty regarding the effect of the termination of the System Agreement on the Utility operating companies.

The Utility operating companies historically engaged in the coordinated planning, construction, and operation of generating resources and bulk transmission facilities under the terms of the System Agreement, which is a rate schedule that had been approved by the FERC. The System Agreement terminated in its entirety on August 31, 2016.

There remains uncertainty regarding the long-term effect of the termination of the System Agreement on the Utility operating companies because of the significant effect of the agreement on the generation and transmission functions of the Utility operating companies and the significant period of time (over 30 years) that it had been in existence. In the absence of the System Agreement, there remains uncertainty around the effectiveness of governance processes and the potential absence of federal authority to resolve certain issues among the Utility operating companies and their retail regulators.

In addition, although the System Agreement terminated in its entirety in August 2016, there are a few outstanding System Agreement proceedings at the FERC and at the D.C. Circuit that may require future adjustments, including challenges to the level and timing of payments made by Entergy Arkansas under the System Agreement. The outcome and timing of these FERC proceedings and resulting recovery and impact on rates cannot be predicted at this time.

For further information regarding the regulatory proceedings relating to the System Agreement, see Note 2 to the financial statements.

The Utility operating companies are subject to economic risks associated with participation in the MISO markets and the allocation of transmission upgrade costs. The operation of the Utility operating companies' transmission system pursuant to the MISO RTO tariff and their participation in the MISO RTO's wholesale markets may be adversely affected by regulatory or market design changes, as well as liability under, or any future inability to comply with, existing or future regulations or requirements.

On December 19, 2013, the Utility operating companies integrated into the MISO RTO. MISO maintains functional control over the combined transmission systems of its members and administers wholesale energy and ancillary services markets for market participants in the MISO region, including the Utility operating companies. The Utility operating companies sell capacity, energy, and ancillary services on a bilateral basis to certain wholesale customers and offer available electricity production of their generating facilities into the MISO day-ahead and real-time energy markets pursuant to the MISO tariff and market rules. The Utility operating companies are subject to economic risks associated with participation in the MISO markets. MISO tariff rules and system conditions, including transmission congestion, could affect the Utility operating companies' ability to sell capacity, energy, and/or ancillary services in certain regions and/or the economic value of such sales, or the cost of serving the Utility operating companies' respective loads, and MISO market rules may change in ways that cause additional risk.

The Utility operating companies participate in the MISO regional transmission planning process and are subject to risks associated with planning decisions that MISO makes in the exercise of control over the planning of the Utility operating companies' transmission assets that are under MISO's functional control. The Utility operating companies pay transmission rates that reflect the cost of transmission projects that the Utility operating companies do not own, which could increase cash or financing needs. In addition to the cash and financing-related risks arising from the potential additional cost allocation to the Utility operating companies from transmission projects of others, there is a risk that the Utility operating companies' business and financial position could be harmed as a result of lost investment opportunities and other effects that flow from an increased number of competitive projects being approved and constructed that are interconnected with their transmission systems. Further, the terms and conditions of the MISO tariff, including provisions related to the design and implementation of wholesale markets, the

allocation of transmission upgrade costs, the MISO-wide allowed base rate of return on equity, and any required MISO-related charges and credits are subject to regulation by the FERC. The operation of the Utility operating companies' transmission system pursuant to the MISO tariff and their participation in the MISO wholesale markets may be adversely affected by regulatory or market design changes, as well as liability under, or any future inability to comply with, existing or future regulations or requirements. In addition, orders from each of the Utility operating companies' respective retail regulators generally require that the Utility operating companies make periodic filings, or generally allow the retail regulator to direct the making of such filings, setting forth the results of analysis of the costs and benefits realized from MISO membership as well as the projected costs and benefits of continued membership in MISO and/or requesting approval of their continued membership in MISO. These filings have been submitted periodically by each of the Utility operating companies as required by their respective retail regulators, and the outcome of the resulting proceedings may affect the Utility operating companies' continued membership in MISO.

(Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas)

A delay or failure in recovering amounts for storm restoration costs incurred as a result of severe weather (including from Hurricane Laura, Hurricane Delta, and Hurricane Zeta), or the impact on customer bills of permitted storm cost recovery, could have material effects on Entergy and its Utility operating companies.

Entergy's and its Utility operating companies' results of operations, liquidity, and financial condition can be materially affected by the destructive effects of severe weather. Severe weather can also result in significant outages for the customers of the Utility operating companies and, therefore, reduced revenues for the Utility operating companies during the period of the outages. A delay or failure in recovering amounts for storm restoration costs incurred or revenues lost as a result of severe weather could have a material effect on Entergy and those Utility operating companies affected by severe weather. In addition, the recovery of major storm restoration costs from customers could effectively limit our ability to make planned capital or other investments due to the impact of such storm cost recovery on customer bills.

In August and October 2020, Hurricane Laura, Hurricane Delta, and Hurricane Zeta caused significant damage to portions of the Utility's service territories in Louisiana, including New Orleans, Texas, and to a lesser extent, in Arkansas and Mississippi. The storms resulted in widespread power outages, significant damage to distribution and transmission infrastructure, and the loss of sales during the outages. Additionally, as a result of Hurricane Laura's extensive damage to the grid infrastructure serving the impacted area, large portions of the underlying transmission system required nearly a complete rebuild. Total restoration costs for the repair and/or replacement of the electrical system damaged by Hurricane Laura, Hurricane Delta, and Hurricane Zeta are currently estimated to be approximately $2.4 billion. Because Entergy has not gone through the regulatory process regarding these storm costs, there is an element of risk, and Entergy is unable to predict with certainty the degree of success it may have in its recovery initiatives, the amount of restoration costs that it may ultimately recover, or the timing of such recovery.

Nuclear Operating, Shutdown, and Regulatory Risks

(Entergy Corporation, Entergy Arkansas, Entergy Louisiana, and System Energy)

Certain of the Utility operating companies, System Energy, and Entergy Wholesale Commodities must consistently operate their nuclear power plants at high capacity factors in order to be successful, and lower capacity factors could materially affect Entergy's and their results of operations, financial condition, and liquidity.

Nuclear capacity factors significantly affect the results of operations of certain Utility operating companies, System Energy, and Entergy Wholesale Commodities. Nuclear plant operations involve substantial fixed operating

costs. Consequently, to be successful, a plant owner must consistently operate its nuclear power plants at high capacity factors, consistent with safety requirements. For the Utility operating companies that own nuclear plants, lower capacity factors can increase production costs by requiring the affected companies to generate additional energy, sometimes at higher costs, from their owned or contractually controlled facilities or purchase additional energy in the spot or forward markets in order to satisfy their supply needs. For the Entergy Wholesale Commodities nuclear plants, lower capacity factors directly affect revenues and cash flow from operations. Entergy Wholesale Commodities' forward sales are comprised of various hedge products, many of which have some degree of operational-contingent price risk. Certain unit-contingent contracts guarantee specified minimum capacity factors. In the event plants with these contracts were operating below the guaranteed capacity factors, Entergy would be subject to price risk for the undelivered power. Further, Entergy Wholesale Commodities' nuclear forward sales contracts can also be on a firm LD basis, which subjects Entergy to increasing price risk as capacity factors decrease. Many of these firm hedge products have damages risk.

Certain of the Utility operating companies and System Energy periodically shut down their nuclear power plants to replenish fuel. Plant maintenance and upgrades are often scheduled during such refueling outages. If refueling outages last longer than anticipated or if unplanned outages arise, Entergy's and their results of operations, financial condition, and liquidity could be materially affected.

Outages at nuclear power plants to replenish fuel require the plant to be "turned off." Refueling outages generally are planned to occur once every 18 to 24 months. Plant maintenance and upgrades are often scheduled during such planned outages, which typically extends the planned outage duration. When refueling outages last longer than anticipated or a plant experiences unplanned outages, capacity factors decrease, and maintenance costs may increase.

Certain of the Utility operating companies and System Energy face risks related to the purchase of uranium fuel (and its conversion, enrichment, and fabrication). These risks could materially affect Entergy's and their results of operations, financial condition, and liquidity.

Based upon currently planned fuel cycles, Entergy's nuclear units have a diversified portfolio of contracts and inventory that provides substantially adequate nuclear fuel materials and conversion and enrichment services at what Entergy believes are reasonably predictable prices through 2020 and beyond. Entergy's ability to purchase nuclear fuel at reasonably predictable prices, however, depends upon the performance reliability of uranium miners. While there are a number of possible alternate suppliers that may be accessed to mitigate any supplier performance failure, the pricing of any such alternate uranium supply from the market will be dependent upon the market for uranium supply at that time. Entergy buys uranium from a diversified mix of sellers located in a diversified mix of countries, and from time to time purchases from nearly all qualified reliable major market participants worldwide that sell into the U.S. Market prices for nuclear fuel have been extremely volatile from time to time in the past and may be subject to increased volatility due to the imposition of tariffs, domestic purchase requirements or limitations on importation of uranium or uranium products from foreign countries, or shifting trade arrangements between countries. Although Entergy's nuclear fuel contract portfolio provides a degree of hedging against market risks for several years, costs for nuclear fuel in the future cannot be predicted with certainty due to normal inherent market uncertainties, and price changes could materially affect the liquidity, financial condition, and results of operations of certain of the Utility operating companies and System Energy.

Entergy's ability to assure nuclear fuel supply also depends upon the performance and reliability of conversion, enrichment, and fabrication services providers. These service providers are fewer in number than uranium suppliers. For conversion and enrichment services, Entergy diversifies its supply by supplier and country and may take special measures to ensure a reliable supply of enriched uranium for fabrication into nuclear fuel. For fabrication services, each plant is dependent upon the performance of the fabricator of that plant's nuclear fuel; therefore, Entergy relies upon additional monitoring, inspection, and oversight of the fabrication process to assure reliability and quality of its nuclear fuel. Certain of the suppliers and service providers are located in or dependent upon countries, such as Russia, in which international sanctions or tariffs could further restrict the ability of such

suppliers to continue to supply fuel or provide such services at acceptable prices or at all. The inability of such suppliers or service providers to perform such obligations could materially affect the liquidity, financial condition, and results of operations of certain of the Utility operating companies and System Energy.

Entergy Arkansas, Entergy Louisiana, System Energy, and the Entergy Wholesale Commodities business face the risk that the NRC will change or modify its regulations, suspend or revoke their licenses, or increase oversight of their nuclear plants, which could materially affect Entergy's and their results of operations, financial condition, and liquidity.

Under the Atomic Energy Act and Energy Reorganization Act, the NRC regulates the operation of nuclear power plants. The NRC may modify, suspend, or revoke licenses, shut down a nuclear facility and impose civil penalties for failure to comply with the Atomic Energy Act, related regulations, or the terms of the licenses for nuclear facilities. Interested parties may also intervene which could result in prolonged proceedings. A change in the Atomic Energy Act, other applicable statutes, or the applicable regulations or licenses, or the NRC's interpretation thereof, may require a substantial increase in capital expenditures or may result in increased operating or decommissioning costs and could materially affect the results of operations, liquidity, or financial condition of Entergy (through Entergy Wholesale Commodities), its Utility operating companies, or System Energy. A change in the classification of a plant owned by one of these companies under the NRC's Reactor Oversight Process, which is the NRC's program to collect information about plant performance, assess the information for its safety significance, and provide for appropriate licensee and NRC response, also could cause the owner of the plant to incur material additional costs as a result of the increased oversight activity and potential response costs associated with the change in classification. For additional information concerning the current classification of the plants owned by Entergy Arkansas, Entergy Louisiana, System Energy, and the Entergy Wholesale Commodities business, see "**Regulation of Entergy's Business - Regulation of the Nuclear Power Industry** - NRC Reactor Oversight Process" in Part I, Item 1.

Events at nuclear plants owned by one of these companies, as well as those owned by others, may lead to a change in laws or regulations or the terms of the applicable licenses, or the NRC's interpretation thereof, or may cause the NRC to increase oversight activity or initiate actions to modify, suspend, or revoke licenses, shut down a nuclear facility, or impose civil penalties. As a result, if an incident were to occur at any nuclear generating unit, whether an Entergy nuclear generating unit or not, it could materially affect the financial condition, results of operations, and liquidity of Entergy, certain of the Utility operating companies, System Energy, or Entergy Wholesale Commodities.

Certain of the Utility operating companies, System Energy, and Entergy Wholesale Commodities are exposed to risks and costs related to operating and maintaining their nuclear power plants, and their failure to maintain operational efficiency at their nuclear power plants could materially affect Entergy's and their results of operations, financial condition, and liquidity.

The nuclear generating units owned by certain of the Utility operating companies, System Energy, and the Entergy Wholesale Commodities business began commercial operations in the 1970s-1980s. Older equipment may require more capital expenditures to keep each of these nuclear power plants operating safely and efficiently. This equipment is also likely to require periodic upgrading and improvement. Any unexpected failure, including failure associated with breakdowns, forced outages, or any unanticipated capital expenditures, could result in increased costs, some of which costs may not be fully recoverable by the Utility operating companies and System Energy in regulatory proceedings should there be a determination of imprudence. Operations at any of the nuclear generating units owned and operated by Entergy's subsidiaries could degrade to the point where the affected unit needs to be shut down or operated at less than full capacity. If this were to happen, identifying and correcting the causes may require significant time and expense. A decision may be made to close a unit rather than incur the expense of restarting it or returning the unit to full capacity. For the Utility operating companies and System Energy, this could result in certain costs being stranded and potentially not fully recoverable in regulatory proceedings. For Entergy Wholesale Commodities, this could result in lost revenue and increased fuel and purchased power expense to meet

supply commitments and penalties for failure to perform under their contracts with customers. In addition, the operation and maintenance of Entergy's nuclear facilities require the commitment of substantial human resources that can result in increased costs.

The nuclear industry continues to address susceptibility to the effects of stress corrosion cracking and other corrosion mechanisms on certain materials within plant systems. The issue is applicable at all nuclear units to varying degrees and is managed in accordance with industry standard practices and guidelines that include in-service examinations, replacements, and mitigation strategies. Developments in the industry or identification of issues at the nuclear units could require unanticipated remediation efforts that cannot be quantified in advance.

Moreover, Entergy is becoming more dependent on fewer suppliers for key parts of Entergy's nuclear power plants that may need to be replaced or refurbished, and in some cases, parts are no longer available and have to be reverse-engineered for replacement. In addition, certain major parts have long lead-times to manufacture if an unplanned replacement is needed. This dependence on a reduced number of suppliers and long lead-times on certain major parts for unplanned replacements could result in delays in obtaining qualified replacement parts and, therefore, greater expense for Entergy.

The costs associated with the storage of the spent nuclear fuel of certain of the Utility operating companies, System Energy, and the owners of the Entergy Wholesale Commodities nuclear power plants, as well as the costs of and their ability to fully decommission their nuclear power plants, could be significantly affected by the timing of the opening of a spent nuclear fuel disposal facility, as well as interim storage and transportation requirements.

Certain of the Utility operating companies, System Energy, and the owners of the Entergy Wholesale Commodities nuclear plants incur costs for the on-site storage of spent nuclear fuel. The approval of a license for a national repository for the disposal of spent nuclear fuel, such as the one proposed for Yucca Mountain, Nevada, or any interim storage facility, and the timing of such facility opening, will significantly affect the costs associated with on-site storage of spent nuclear fuel. For example, while the DOE is required by law to proceed with the licensing of Yucca Mountain and, after the license is granted by the NRC, to construct the repository and commence the receipt of spent fuel, the NRC licensing of the Yucca Mountain repository is effectively at a standstill. These actions are prolonging the time before spent fuel is removed from Entergy's plant sites. Because the DOE has not accomplished its objectives, it is in non-compliance with the Nuclear Waste Policy Act of 1982 and has breached its spent fuel disposal contracts, and Entergy has sued the DOE for such breach. Furthermore, Entergy is uncertain as to when the DOE will commence acceptance of spent fuel from its facilities for storage or disposal. As a result, continuing future expenditures will be required to increase spent fuel storage capacity at the companies' nuclear sites and maintenance costs on existing storage facilities, including aging management of fuel storage casks, may increase. The costs of on-site storage are also affected by regulatory requirements for such storage. In addition, the availability of a repository or other off-site storage facility for spent nuclear fuel may affect the ability to fully decommission the nuclear units and the costs relating to decommissioning. For further information regarding spent fuel storage, see the "**Critical Accounting Estimates – Nuclear Decommissioning Costs** – Spent Fuel Disposal" section of Management's Financial Discussion and Analysis for Entergy, Entergy Arkansas, Entergy Louisiana, and System Energy and Note 8 to the financial statements.

Certain of the Utility operating companies, System Energy, and the Entergy Wholesale Commodities nuclear plant owners may be required to pay substantial retrospective premiums imposed under the Price-Anderson Act in the event of a nuclear incident, and losses not covered by insurance could have a material effect on Entergy's and their results of operations, financial condition, or liquidity.

Accidents and other unforeseen problems at nuclear power plants have occurred both in the United States and elsewhere. The Price-Anderson Act limits each reactor owner's public liability (off-site) for a single nuclear incident to the payment of retrospective premiums into a secondary insurance pool, which is referred to as Secondary Financial Protection, up to approximately $137.6 million per reactor. With 97 reactors currently

participating, this translates to a total public liability cap of approximately $14 billion per incident. The limit is subject to change to account for the effects of inflation, a change in the primary limit of insurance coverage, and changes in the number of licensed reactors. As required by the Price-Anderson Act, the Utility operating companies, System Energy, and Entergy Wholesale Commodities carry the maximum available amount of primary nuclear off-site liability insurance with American Nuclear Insurers, which is $450 million for each operating site. Claims for any nuclear incident exceeding that amount are covered under Secondary Financial Protection. As a result, in the event of a nuclear incident that causes damages (off-site) in excess of the primary insurance coverage, each owner of a nuclear plant reactor, including Entergy's Utility operating companies, System Energy, and the Entergy Wholesale Commodities plant owners, regardless of fault or proximity to the incident, will be required to pay a retrospective premium, equal to its proportionate share of the loss in excess of the primary insurance level, up to a maximum of approximately $137.6 million per reactor per incident (Entergy's maximum total contingent obligation per incident is $1.101 billion). The retrospective premium payment is currently limited to approximately $21 million per year per incident per reactor until the aggregate public liability for each licensee is paid up to the $137.6 million cap.

NEIL is a utility industry mutual insurance company, owned by its members, including the Utility operating companies, System Energy, and the owners of the Entergy Wholesale Commodities plants. All member plants could be subject to an annual assessment (retrospective premium of up to 10 times current annual premium for all policies) should the NEIL surplus (reserve) be significantly depleted due to insured losses. As of December 31, 2020, the maximum annual assessment amounts total $104 million for the Utility plants. Retrospective premium insurance available through NEIL's reinsurance treaty can cover the potential assessments and the Entergy Wholesale Commodities plants currently maintain the retrospective premium insurance to cover those potential assessments.

As an owner of nuclear power plants, Entergy participates in industry self-insurance programs and could be liable to fund claims should a plant owned by a different company experience a major event. Any resulting liability from a nuclear accident may exceed the applicable primary insurance coverage and require contribution of additional funds through the industry-wide program that could significantly affect the results of operations, financial condition, or liquidity of Entergy, certain of the Utility operating companies, System Energy, or the Entergy Wholesale Commodities subsidiaries.

The decommissioning trust fund assets for the nuclear power plants owned by the Utility operating companies, System Energy, and the Entergy Wholesale Commodities nuclear plant owners may not be adequate to meet decommissioning obligations if market performance and other changes decrease the value of assets in the decommissioning trusts, if one or more of Entergy's nuclear power plants is retired earlier than the anticipated shutdown date, if the plants cost more to decommission than estimated, or if current regulatory requirements change, which then could require significant additional funding.

Owners of nuclear generating plants have an obligation to decommission those plants. Certain of the Utility operating companies, System Energy, and owners of the Entergy Wholesale Commodities nuclear power plants maintain decommissioning trust funds for this purpose. Certain of the Utility operating companies collect funds from their customers, which are deposited into the trusts covering the units operated for or on behalf of those companies. Those rate collections, as adjusted from time to time by rate regulators, are generally based upon operating license lives and trust fund balances as well as estimated trust fund earnings and decommissioning costs. Assets in these trust funds are subject to market fluctuations, will yield uncertain returns that may fall below projected return rates, and may result in losses resulting from the recognition of impairments of the value of certain securities held in these trust funds.

Under NRC regulations, nuclear plant owners are permitted to project the NRC-required decommissioning amount, based on an NRC formula or a site-specific estimate, and the amount that will be available in each nuclear power plant's decommissioning trusts combined with any other decommissioning financial assurances in place. The projections are made based on the operating license expiration date and the mid-point of the subsequent

decommissioning process, or the anticipated actual completion of decommissioning if a site-specific estimate is used. If the projected amount of each individual plant's decommissioning trusts exceeds the NRC-required decommissioning amount, then its NRC license termination decommissioning obligations are considered to be funded in accordance with NRC regulations. If the projected costs do not sufficiently reflect the actual costs required to decommission these nuclear power plants, or funding is otherwise inadequate, or if the formula, formula inputs, or site-specific estimate is changed to require increased funding, additional resources or commitments would be required. Furthermore, depending upon the level of funding available in the trust funds, the NRC may not permit the trust funds to be used to pay for related costs such as the management of spent nuclear fuel that are not included in the NRC's formula. The NRC may also require a plan for the provision of separate funding for spent fuel management costs. In addition to NRC requirements, there are other decommissioning-related obligations for certain of the Entergy Wholesale Commodities nuclear power plants, which management believes it will be able to satisfy.

Further, federal or state regulatory changes, including mandated increases in decommissioning funding or changes in the methods or standards for decommissioning operations, may also increase the funding requirements of, or accelerate the timing for funding of, the obligations related to the decommissioning of the Utility operating companies, System Energy, or Entergy Wholesale Commodities nuclear power plants or may restrict the decommissioning-related costs that can be paid from the decommissioning trusts. Such changes also could result in the need for additional contributions to decommissioning trusts, or the posting of parent guarantees, letters of credit, or other surety mechanisms. As a result, under any of these circumstances, Entergy's results of operations, liquidity, and financial condition could be materially affected.

An early plant shutdown (either generally or relative to current expectations), poor investment results, or higher than anticipated decommissioning costs (including as a result of changing regulatory requirements) could cause trust fund assets to be insufficient to meet the decommissioning obligations, with the result that the Utility operating companies, System Energy, or the Entergy Wholesale Commodities nuclear plant owners may be required to provide significant additional funds or credit support to satisfy regulatory requirements for decommissioning, which, with respect to the Utility operating companies, may not be recoverable from customers in a timely fashion or at all.

For further information regarding nuclear decommissioning costs, management's decision to exit the merchant power business, the impairment charges that resulted from such decision, and the planned sales of Palisades and Indian Point Energy Center (which, in each case, will include the transfer of the associated decommissioning trusts), see the "**Critical Accounting Estimates - Nuclear Decommissioning Costs**" section of Management's Financial Discussion and Analysis for Entergy, Entergy Arkansas, Entergy Louisiana, and System Energy, the "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" section of Management's Financial Discussion and Analysis for Entergy Corporation and Subsidiaries, and Notes 9 and 14 to the financial statements.

New or existing safety concerns regarding operating nuclear power plants and nuclear fuel could lead to restrictions upon the operation and decommissioning of Entergy's nuclear power plants.

New and existing concerns are being expressed in public forums about the safety of nuclear generating units and nuclear fuel. These concerns have led to, and may continue to lead to, various proposals to Federal regulators and governing bodies in some localities where Entergy's subsidiaries own nuclear generating units for legislative and regulatory changes that might lead to the shutdown of nuclear units, additional requirements or restrictions related to spent nuclear fuel on-site storage and eventual disposal, or other adverse effects on owning, operating, and decommissioning nuclear generating units. Entergy vigorously responds to these concerns and proposals. If any of the existing proposals, or any proposals that may arise in the future with respect to legislative and regulatory changes, become effective, they could have a material effect on Entergy's results of operations and financial condition.

(Entergy Corporation)

Entergy Wholesale Commodities nuclear power plants are exposed to price risk.

Entergy and its subsidiaries do not have a regulator-authorized rate of return on their capital investments in non-utility businesses. As a result, the sale of capacity and energy from the Entergy Wholesale Commodities nuclear power plants, unless otherwise contracted, is subject to the fluctuation of market power prices. In order to reduce future price risk to desired levels, Entergy Wholesale Commodities utilizes contracts that are unit-contingent and Firm LD and various products such as forward sales, options, and collars. As of December 31, 2020, Entergy Wholesale Commodities' nuclear power generation plants had sold forward 98% in 2021 and 99% in 2022 of its generation portfolio's planned energy output, reflecting the planned shutdown and sale of the remaining Entergy Wholesale Commodities nuclear power plants by mid-2022.

Market conditions such as product cost, market liquidity, and other portfolio considerations influence the product and contractual mix. The obligations under unit-contingent agreements depend on a generating asset that is operating; if the generation asset is not operating, the seller generally is not liable for damages. For some unit-contingent obligations, however, there is also a guarantee of availability that provides for the payment to the power purchaser of contract damages, if incurred, in the event the unit owner fails to deliver power as a result of the failure of the specified generation unit to generate power at or above a specified availability threshold. Firm LD sales transactions may be exposed to substantial operational price risk, a portion of which may be capped through the use of risk management products, to the extent that the plants do not run as expected and market prices exceed contract prices.

Market prices may fluctuate substantially, sometimes over relatively short periods of time, and at other times experience sustained increases or decreases. Demand for electricity and its fuel stock can fluctuate dramatically, creating periods of substantial under- or over-supply. During periods of over-supply, prices might be depressed. Also, from time to time there may be political pressure, or pressure from regulatory authorities with jurisdiction over wholesale and retail energy commodity and transportation rates, to impose price limitations, credit requirements, bidding rules, and other mechanisms to address volatility and other issues in these markets.

The effects of sustained low natural gas prices and power market structure challenges have resulted in lower market prices for electricity in the power regions where the Entergy Wholesale Commodities nuclear power plants are located. In addition, currently the market design under which the plants operate does not adequately compensate merchant nuclear plants for their environmental and fuel diversity benefits in the region. These conditions were primary factors leading to Entergy's decision to shut down (or sell) Entergy Wholesale Commodities' nuclear power plants before the end of their operating licenses.

The price that different counterparties offer for various products including forward sales is influenced both by market conditions as well as the contract terms such as damage provisions, credit support requirements, and the number of available counterparties interested in contracting for the desired forward period. Depending on differences between market factors at the time of contracting versus current conditions, Entergy Wholesale Commodities' contract portfolio may have average contract prices above or below current market prices, including at the expiration of the contracts, which may significantly affect Entergy Wholesale Commodities' results of operations, financial condition, or liquidity. New hedges are generally layered into on a rolling forward basis, which tends to drive hedge over-performance to market in a falling price environment, and hedge underperformance to market in a rising price environment; however, hedge timing, product choice, and hedging costs will also affect these results. See the "**Market and Credit Risk Sensitive Instruments**" section of Management's Financial Discussion and Analysis for Entergy Corporation and Subsidiaries. Since Entergy Wholesale Commodities has announced the closure (or sale) of its nuclear plants, Entergy Wholesale Commodities may enter into fewer forward sales contracts for output from such plants.

The Entergy Wholesale Commodities business is subject to substantial governmental regulation and may be adversely affected by legislative, regulatory, or market design changes, as well as liability under, or any future inability to comply with, existing or future regulations or requirements.

The Entergy Wholesale Commodities business is subject to extensive regulation under federal, state, and local laws. Compliance with the requirements under these various regulatory regimes may cause the Entergy Wholesale Commodities business to incur significant additional costs, and failure to comply with such requirements could result in the shutdown of the non-complying facility, the imposition of liens, fines, and/or civil or criminal liability.

Public utilities under the Federal Power Act are required to obtain FERC acceptance of their rate schedules for wholesale sales of electricity. Each of the owners of the Entergy Wholesale Commodities nuclear power plants that generates electricity, as well as Entergy Nuclear Power Marketing, LLC, is a "public utility" under the Federal Power Act by virtue of making wholesale sales of electric energy and/or owning wholesale electric transmission facilities. The FERC has granted these generating and power marketing companies the authority to sell electricity at market-based rates. The FERC's orders that grant the Entergy Wholesale Commodities' generating and power marketing companies market-based rate authority reserve the right to revoke or revise that authority if the FERC subsequently determines that the Entergy Wholesale Commodities business can exercise market power in transmission or generation, create barriers to entry, or engage in abusive affiliate transactions. In addition, the Entergy Wholesale Commodities' market-based sales are subject to certain market behavior rules, and if any of its generating and power marketing companies were deemed to have violated one of those rules, they would be subject to potential disgorgement of profits associated with the violation and/or suspension or revocation of their market-based rate authority and potential penalties of up to $1.29 million per day per violation. If the Entergy Wholesale Commodities' generating or power marketing companies were to lose their market-based rate authority, such companies would be required to obtain the FERC's acceptance of a cost-of-service rate schedule and could become subject to the accounting, record-keeping, and reporting requirements that are imposed on utilities with cost-based rate schedules. This could have an adverse effect on the rates the Entergy Wholesale Commodities business charges for power from its facilities.

The Entergy Wholesale Commodities business is also affected by legislative and regulatory changes, as well as changes to market design, market rules, tariffs, cost allocations, and bidding rules imposed by the existing Independent System Operators. The Independent System Operators that oversee most of the wholesale power markets may impose, and in the future may continue to impose, mitigation, including price limitations, offer caps and other mechanisms, to address some of the volatility and the potential exercise of market power in these markets. These types of price limitations and other regulatory mechanisms may have an adverse effect on the profitability of the Entergy Wholesale Commodities business' generation facilities that sell energy and capacity into the wholesale power markets. For further information regarding federal, state, and local laws and regulation applicable to the Entergy Wholesale Commodities business, see the "**Regulation of Entergy's Business**" section in Part I, Item 1.

The regulatory environment applicable to the electric power industry is subject to changes as a result of restructuring initiatives at both the state and federal levels. Entergy cannot predict the future design of the wholesale power markets or the ultimate effect that the changing regulatory environment will have on the Entergy Wholesale Commodities business. In addition, in some of these markets, interested parties have proposed material market design changes, including the elimination of a single clearing price mechanism, have raised claims that the competitive marketplace is not working because energy prices in wholesale markets exceed the marginal cost of operating nuclear power plants, and have made proposals to re-regulate the markets, impose a generation tax, or require divestitures by generating companies to reduce their market share. Other proposals to re-regulate may be made and legislative or other attention to the electric power market restructuring process may delay or reverse the deregulation process, which could require material changes to business planning models. If competitive restructuring of the electric power markets is reversed, modified, discontinued, or delayed, the Entergy Wholesale Commodities business' results of operations, financial condition, and liquidity could be materially affected.

The power plants owned by the Entergy Wholesale Commodities business are subject to impairment charges in certain circumstances, which could have a material effect on Entergy's results of operations, financial condition, or liquidity.

Entergy reviews long-lived assets held in all of its business segments whenever events or changes in circumstances indicate that recoverability of these assets is uncertain. Generally, the determination of recoverability is based on the undiscounted net cash flows expected to result from the operations of such assets. Projected net cash flows depend on the expected operating life of the assets, the future operating costs associated with the assets, the efficiency and availability of the assets and generating units, and the future market and price for energy and capacity over the remaining life of the assets. In particular, the remaining assets of the Entergy Wholesale Commodities business are subject to further impairment in connection with the closure and sale of its nuclear power plants. Moreover, prior to the closure and sale of these plants, the failure of the Entergy Wholesale Commodities business to achieve forecasted operating results and cash flows, an unfavorable change in forecasted operating results or cash flows, a reduction in the expected remaining useful life of a unit, or a decline in observable industry market multiples could all result in potential additional impairment charges for the affected assets.

If Entergy concludes that any of its nuclear power plants is unlikely to operate through its planned shutdown date, which conclusion would be based on a variety of factors, such a conclusion could result in a further impairment of part or all of the carrying value of the plant. Any impairment charge taken by Entergy with respect to its long-lived assets, including the remaining power plants owned by the Entergy Wholesale Commodities business, would likely be material in the quarter that the charge is taken and could otherwise have a material effect on Entergy's results of operations, financial condition, or liquidity. For further information regarding evaluating long-lived assets for impairment, see the "**Critical Accounting Estimates - Impairment of Long-lived Assets**" section of Management's Financial Discussion and Analysis for Entergy Corporation and Subsidiaries and for further discussion of the impairment charges, see Note 14 to the financial statements.

General Business

(Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas)

Entergy and the Utility operating companies depend on access to the capital markets and, at times, may face potential liquidity constraints, which could make it more difficult to handle future contingencies such as natural disasters or substantial increases in gas and fuel prices. Disruptions in the capital and credit markets may adversely affect Entergy's and its subsidiaries' ability to meet liquidity needs, access capital and operate and grow their businesses, and the cost of capital.

Entergy's business is capital intensive and dependent upon its ability to access capital at reasonable rates and other terms. At times there are also spikes in the price for natural gas and other commodities that increase the liquidity requirements of the Utility operating companies and Entergy Wholesale Commodities. In addition, Entergy's and the Utility operating companies' liquidity needs could significantly increase in the event of a hurricane or other weather-related or unforeseen disaster similar to that experienced in Entergy's service territory with Hurricane Katrina and Hurricane Rita in 2005, Hurricane Gustav and Hurricane Ike in 2008, Hurricane Isaac in 2012, and Hurricane Laura, Hurricane Delta, and Hurricane Zeta in 2020. The occurrence of one or more contingencies, including a delay in regulatory recovery of fuel or purchased power costs or storm restoration costs, an acceleration of payments or decreased credit lines, less cash flow from operations than expected, changes in regulation or governmental policy (including tax and trade policy), or other unknown events, could cause the financing needs of Entergy and its subsidiaries to increase. In addition, accessing the debt capital markets more frequently in these situations may result in an increase in leverage. Material leverage increases could negatively affect the credit ratings of Entergy and the Utility operating companies, which in turn could negatively affect access to the capital markets.

The inability to raise capital on favorable terms, particularly during times of high interest rates, and uncertainty or reduced liquidity in the capital markets, could negatively affect Entergy and its subsidiaries' ability to maintain and to expand their businesses. Access to capital markets could be restricted and/or borrowing costs could be increased due to certain sources of debt and equity capital being unwilling to invest in companies that experience extreme weather events, that rely on fossil fuels or offerings to fund fossil fuel projects, or due to risks related to climate change. Events beyond Entergy's control may create uncertainty that could increase its cost of capital or impair its ability to access the capital markets, including the ability to draw on its bank credit facilities. Entergy and its subsidiaries are unable to predict the degree of success they will have in renewing or replacing their credit facilities as they come up for renewal. Moreover, the size, terms, and covenants of any new credit facilities may not be comparable to, and may be more restrictive than, existing facilities. If Entergy and its subsidiaries are unable to access the credit and capital markets on terms that are reasonable, they may have to delay raising capital, issue shorter-term securities and/or bear an unfavorable cost of capital, which, in turn, could impact their ability to grow their businesses, decrease earnings, significantly reduce financial flexibility and/or limit Entergy Corporation's ability to sustain its current common stock dividend level.

(Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

A downgrade in Entergy Corporation's or its subsidiaries' credit ratings could negatively affect Entergy Corporation's and its subsidiaries' ability to access capital and/or could require Entergy Corporation or its subsidiaries to post collateral, accelerate certain payments, or repay certain indebtedness.

There are a number of factors that rating agencies evaluate to arrive at credit ratings for each of Entergy Corporation and the Registrant Subsidiaries, including each Registrant's regulatory framework, ability to recover costs and earn returns, diversification and financial strength and liquidity. If one or more rating agencies downgrade Entergy Corporation's, any of the Utility operating companies', or System Energy's ratings, particularly below investment grade, borrowing costs would increase, the potential pool of investors and funding sources would likely decrease, and cash or letter of credit collateral demands may be triggered by the terms of a number of commodity contracts, leases, and other agreements.

Most of Entergy Corporation's and its subsidiaries' suppliers and counterparties require sufficient creditworthiness to enter into transactions. If Entergy Corporation's or its subsidiaries' ratings decline, particularly below investment grade, or if certain counterparties believe Entergy Corporation or the Utility operating companies are losing creditworthiness and demand adequate assurance under fuel, gas, and purchased power contracts, the counterparties may require posting of collateral in cash or letters of credit, prepayment for fuel, gas or purchased power or accelerated payment, or counterparties may decline business with Entergy Corporation or its subsidiaries. At December 31, 2020 based on power prices at that time, Entergy had liquidity exposure of $62 million under the guarantees in place supporting Entergy Wholesale Commodities transactions and $6 million of posted cash collateral. In the event of a decrease in Entergy Corporation's credit rating to below investment grade, based on power prices as of December 31, 2020, Entergy would have been required to provide approximately $30 million of additional cash or letters of credit under some of the agreements. As of December 31, 2020, the liquidity exposure associated with Entergy Wholesale Commodities assurance requirements, including return of previously posted collateral from counterparties, would increase by $22 million for a $1 per MMBtu increase in gas prices in both the short- and long-term markets.

Recent U.S. tax legislation may materially adversely affect Entergy's financial condition, results of operations, and cash flows.

The Tax Cuts and Jobs Act of 2017 and CARES Act of 2020 significantly changed the U.S. Internal Revenue Code, including taxation of U.S. corporations, by, among other things, reducing the federal corporate income tax rate, limiting interest deductions, and altering the expensing of capital expenditures. The interpretive

guidance issued by the IRS and state tax authorities may be inconsistent with Entergy's own interpretation and the legislation could be subject to amendments, which could lessen or increase certain impacts of the legislation.

As further described in Note 3 to the financial statements, as a result of amortization of accumulated deferred income taxes and payment of such amounts to customers in 2019, Entergy's net regulatory liability for income taxes balance is $1.6 billion as of December 31, 2020. Depending on the outcome of IRS examinations or tax positions and elections that Entergy may make, Entergy and the Registrant Subsidiaries may be required to record additional charges or credits to income tax expense. Further, there may be other material effects resulting from the legislation that have not been identified.

See Note 3 to the financial statements for discussion of the effects of the Tax Cuts and Jobs Act on 2018, 2019 and 2020 results of operations and financial condition, the provisions of the Tax Cuts and Jobs Act, and the uncertainties associated with accounting for the Tax Cuts and Jobs Act, and Note 2 to the financial statements for discussion of the regulatory proceedings that have considered the effects of the Tax Cuts and Jobs Act.

Changes in taxation as well as the inherent difficulty in quantifying potential tax effects of business decisions could negatively impact Entergy's, the Utility operating companies', and System Energy's results of operations, financial condition, and liquidity.

Entergy and its subsidiaries make judgments regarding the potential tax effects of various transactions and results of operations to estimate their obligations to taxing authorities. These tax obligations include income, franchise, real estate, sales and use, and employment-related taxes. These judgments include provisions for potential adverse outcomes regarding tax positions that have been taken. Entergy and its subsidiaries also estimate their ability to utilize tax benefits, including those in the form of carryforwards for which the benefits have already been reflected in the financial statements. Changes in federal, state, or local tax laws, adverse tax audit results or adverse tax rulings on positions taken by Entergy and its subsidiaries could negatively affect Entergy's, the Utility operating companies', and System Energy's results of operations, financial condition, and liquidity. For further information regarding Entergy's income taxes, see Note 3 to the financial statements.

Entergy and its subsidiaries' ability to successfully execute on their business strategies, including their ability to complete strategic transactions, is subject to significant risks, and, as a result, they may be unable to achieve some or all of the anticipated results of such strategies, which could materially affect their future prospects, results of operations, and benefits that they anticipate from such transactions.

Entergy and its subsidiaries' future prospects and results of operations significantly depend on their ability to successfully implement their business strategies, which are subject to business, regulatory, economic, and other risks and uncertainties, many of which are beyond their control. As a result, Entergy and its subsidiaries may be unable to fully achieve the anticipated results of such strategies.

Additionally, Entergy and its subsidiaries have pursued and may continue to pursue strategic transactions including merger, acquisition, divestiture, joint venture, restructuring, or other strategic transactions. For example, Entergy has entered into an agreement to sell its equity interests in the subsidiary that owns the Palisades Nuclear Plant and the decommissioned Big Rock Point Nuclear Power Plant and an agreement to sell the equity interests of Indian Point 1, Indian Point 2, and Indian Point 3, in each case after each of the plants has been shut down and defueled. Also, a significant portion of Entergy's utility business over the next several years includes the construction and/or purchase of a variety of generating units. These transactions and plans are or may become subject to regulatory approval and other material conditions or contingencies. The failure to complete these transactions or plans or any future strategic transaction successfully or on a timely basis could have an adverse effect on Entergy's or its subsidiaries' financial condition or results of operations and the market's perception of Entergy's ability to execute its strategy. Further, these transactions, and any completed or future strategic transactions, involve substantial risks, including the following:

- acquired businesses or assets may not produce revenues, earnings, or cash flow at anticipated levels;
- acquired businesses or assets could have environmental, permitting, or other problems for which contractual protections prove inadequate;
- Entergy and/or its subsidiaries may assume liabilities that were not disclosed to them, that exceed their estimates, or for which their rights to indemnification from the seller are limited;
- Entergy may experience issues integrating businesses into its internal controls over financial reporting;
- the disposition of a business, including Entergy's planned exit from the merchant power business, could divert management's attention from other business concerns;
- Entergy and/or its subsidiaries may be unable to obtain the necessary regulatory or governmental approvals to close a transaction, such approvals may be granted subject to terms that are unacceptable, or Entergy or its subsidiaries otherwise may be unable to achieve anticipated regulatory treatment of any such transaction or acquired business or assets; and
- Entergy or its subsidiaries otherwise may be unable to achieve the full strategic and financial benefits that they anticipate from the transaction, or such benefits may be delayed or may not occur at all.

Entergy and its subsidiaries may not be successful in managing these or any other significant risks that they may encounter in acquiring or divesting a business, or engaging in other strategic transactions, which could have a material effect on their business, financial condition or results of operations.

The completion of capital projects, including the construction of power generation facilities, and other capital improvements involve substantial risks. Should such efforts be unsuccessful, the financial condition, results of operations, or liquidity of Entergy and the Utility operating companies could be materially affected.

Entergy's and the Utility operating companies' ability to complete capital projects, including the construction of power generation facilities, or make other capital improvements, in a timely manner and within budget is contingent upon many variables and subject to substantial risks. These variables include, but are not limited to, project management expertise, escalating costs for materials, labor, and environmental compliance, and reliance on suppliers for timely and satisfactory performance. Delays in obtaining permits, shortages in materials and qualified labor, levels of public support or opposition, suppliers and contractors not performing as expected or required under their contracts and/or experiencing financial problems that inhibit their ability to fulfill their obligations under contracts, changes in the scope and timing of projects, poor quality initial cost estimates from contractors, the inability to raise capital on favorable terms, changes in commodity prices affecting revenue, fuel costs, or materials costs, downward changes in the economy, changes in law or regulation, including environmental compliance requirements, and other events beyond the control of the Utility operating companies or the Entergy Wholesale Commodities business may occur that may materially affect the schedule, cost, and performance of these projects. If these projects or other capital improvements are significantly delayed or become subject to cost overruns or cancellation, Entergy and the Utility operating companies could incur additional costs and termination payments, or face increased risk of potential write-off of the investment in the project. In addition, the Utility operating companies could be exposed to higher costs and market volatility, which could affect cash flow and cost recovery, should their respective regulators decline to approve the construction of the project or new generation needed to meet the reliability needs of customers at the lowest reasonable cost.

For further information regarding capital expenditure plans and other uses of capital in connection with capital projects, including the potential construction and/or purchase of additional generation supply sources within the Utility operating companies' service territory, and as to the Entergy Wholesale Commodities business, see the "**Capital Expenditure Plans and Other Uses of Capital**" section of Management's Financial Discussion and Analysis for Entergy and each of the Registrant Subsidiaries.

Failure to attract, retain and manage an appropriately qualified workforce could negatively affect Entergy or its subsidiaries' results of operations.

We rely on a large and changing workforce of team members, including employees, contractors and temporary staffing. Certain events, such as an aging workforce, mismatching of skill sets, failing to appropriately anticipate future workforce needs, or the unavailability of contract resources may lead to operating challenges and increased costs. The challenges include lack of resources, loss of knowledge base, and the time required for skill development. In this case, costs, including costs for contractors to replace employees, productivity costs, and safety costs, may increase. Failure to hire and adequately train replacement employees, or the future availability and cost of contract labor may adversely affect the ability to manage and operate the business, especially considering the workforce needs associated with nuclear generation facilities and new skills required to operate a modernized, technology-enabled power grid. If Entergy and its subsidiaries are unable to successfully attract, retain, and manage an appropriately qualified workforce, their results of operations, financial position, and cash flows could be negatively affected.

The Utility operating companies, System Energy, and the Entergy Wholesale Commodities business may incur substantial costs to fulfill their obligations related to environmental and other matters.

The businesses in which the Utility operating companies, System Energy, and the Entergy Wholesale Commodities business operate are subject to extensive environmental regulation by local, state, and federal authorities. These laws and regulations affect the manner in which the Utility operating companies, System Energy, and the Entergy Wholesale Commodities business conduct their operations and make capital expenditures. These laws and regulations also affect how the Utility operating companies, System Energy, and the Entergy Wholesale Commodities business manage air emissions, discharges to water, wetlands impacts, solid and hazardous waste storage and disposal, cooling and service water intake, the protection of threatened and endangered species, certain migratory birds and eagles, hazardous materials transportation, and similar matters. Federal, state, and local authorities continually revise these laws and regulations, and the laws and regulations are subject to judicial interpretation and to the permitting and enforcement discretion vested in the implementing agencies. Developing and implementing plans for facility compliance with these requirements can lead to capital, personnel, and operation and maintenance expenditures. Violations of these requirements can subject the Utility operating companies, System Energy, and the Entergy Wholesale Commodities business to enforcement actions, capital expenditures to bring existing facilities into compliance, additional operating costs or operating restrictions to achieve compliance, remediation and clean-up costs, civil penalties, and exposure to third parties' claims for alleged health or property damages or for violations of applicable permits or standards. In addition, the Utility operating companies, System Energy, and the Entergy Wholesale Commodities business potentially are subject to liability under these laws for the costs of remediation of environmental contamination of property now or formerly owned or operated by the Utility operating companies, System Energy, and Entergy Wholesale Commodities and of property contaminated by hazardous substances they generate. The Utility operating companies currently are involved in proceedings relating to sites where hazardous substances have been released and may be subject to additional proceedings in the future. The Utility operating companies, System Energy, and the Entergy Wholesale Commodities business have incurred and expect to incur significant costs related to environmental compliance.

Emissions of nitrogen and sulfur oxides, mercury, particulates, greenhouse gases, and other regulated air emissions from generating plants potentially are subject to increased regulation, controls, and mitigation expenses. In addition, existing air regulations and programs promulgated by the EPA often are challenged legally, or are revised or withdrawn by the EPA, sometimes resulting in large-scale changes to anticipated regulatory regimes and the resulting need to shift course, both operationally and economically, depending on the nature of the changes. Risks relating to global climate change, initiatives to compel greenhouse gas emission reductions, and water availability issues are discussed below.

Entergy and its subsidiaries may not be able to obtain or maintain all required environmental regulatory approvals. If there is a delay in obtaining any required environmental regulatory approvals, or if Entergy and its subsidiaries fail to obtain, maintain, or comply with any such approval, the operation of its facilities could be

stopped or become subject to additional costs. For further information regarding environmental regulation and environmental matters, see the "**Regulation of Entergy's Business – Environmental Regulation**" section of Part I, Item 1.

The Utility operating companies, System Energy, and the Entergy Wholesale Commodities business may incur substantial costs related to reliability standards.

Entergy's business is subject to extensive and mandatory reliability standards. Such standards, which are established by the NERC, the SERC, and other regional enforcement entities, are approved by the FERC and frequently are reviewed, amended, and supplemented. Failure to comply with such standards could result in the imposition of fines or civil penalties, and potential exposure to third party claims for alleged violations of such standards. The standards, as well as the laws and regulations that govern them, are subject to judicial interpretation and to the enforcement discretion vested in the implementing agencies. In addition to exposure to civil penalties and fines, the Utility operating companies have incurred and expect to incur significant costs related to compliance with new and existing reliability standards, including costs associated with the Utility operating companies' transmission system and generation assets. In addition, the retail regulators of the Utility operating companies possess the jurisdiction, and in some cases have exercised such jurisdiction, to impose standards governing the reliable operation of the Utility operating companies' distribution systems, including penalties if these standards are not met. The changes to the reliability standards applicable to the electric power industry are ongoing, and Entergy cannot predict the ultimate effect that the reliability standards will have on its Utility and Entergy Wholesale Commodities businesses.

(Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas)

Weather, economic conditions, technological developments, and other factors may have a material impact on electricity and gas usage and otherwise materially affect the Utility operating companies' results of operations and system reliability.

Temperatures above normal levels in the summer tend to increase electric cooling demand and revenues, and temperatures below normal levels in the winter tend to increase electric and gas heating demand and revenues. As a corollary, mild temperatures in either season tend to decrease energy usage and resulting revenues. Higher consumption levels coupled with seasonal pricing differentials typically cause the Utility operating companies to report higher revenues in the third quarter of the fiscal year than in the other quarters. Extreme weather conditions including hurricanes or tropical storms, flooding events, or ice storms may stress the Utility operating companies' generation facilities and transmission and distribution systems, resulting in increased maintenance and capital costs (and potential increased financing needs), limits on their ability to meet peak customer demand, increased regulatory oversight, and reduced customer satisfaction. These extreme conditions could have a material effect on the Utility operating companies' financial condition, results of operations, and liquidity.

Entergy's electricity sales volumes are affected by a number of factors including weather and economic conditions, trends in energy efficiency, new technologies, and self-generation alternatives, including the willingness and ability of large industrial customers to develop co-generation facilities that greatly reduce their grid demand. Some of these factors are inherently cyclical or temporary in nature, such as the weather or economic conditions, and rarely have a long-lasting effect on Entergy's operating results. Others, such as the organic turnover of appliances and their replacement with more efficient ones, adoption of newer technologies including smart thermostats, new building codes, distributed energy resources, energy storage, demand side management, and rooftop solar are having a more permanent effect by reducing sales growth rates from historical norms. As a result of these emerging efficiencies and technologies, the Utility operating companies may lose customers or experience lower average use per customer in the residential and commercial classes, and continuing advances have the potential to further limit sales growth in the future. The Utility operating companies also may face competition from other companies offering products and services to Entergy's customers. Electricity sales to industrial

customers, in particular, benefit from steady economic growth and favorable commodity markets; however, industrial sales are sensitive to changes in conditions in the markets in which its customers operate. Negative changes in any of these or other factors, particularly sustained economic downturns or sluggishness, have the potential to result in slower sales growth or sales declines and increased bad debt expense, which could materially affect Entergy's and the Utility operating companies' results of operations, financial condition, and liquidity.

The effects of climate change, environmental and regulatory obligations intended to compel greenhouse gas emission reductions or increase clean or renewable energy requirements or to place a price on greenhouse gas emissions, or achieving voluntary climate commitments could materially affect the financial condition, results of operations, and liquidity of Entergy, the Utility operating companies, System Energy, and the Entergy Wholesale Commodities business.

In an effort to address climate change concerns, some federal, state, and local authorities are calling for additional laws and regulations aimed at known or suspected causes of climate change. For example, in response to the United States Supreme Court's 2007 decision holding that the EPA has authority to regulate emissions of CO_2 and other "greenhouse gases" under the Clean Air Act, the EPA, various environmental interest groups, and other organizations focused considerable attention on CO_2 emissions from power generation facilities and their potential role in climate change. Since that ruling, the EPA has promulgated regulations controlling greenhouse gas emissions from certain vehicles, and from new, existing, and significantly modified stationary sources of emissions, including electric generating units. As examples of state action, in the Northeast, the Regional Greenhouse Gas Initiative establishes a cap on CO_2 emissions from electric power plants and requires generators to purchase emission permits to cover their CO_2 emissions, and a similar program has been developed in California. In Louisiana, the Office of the Governor announced the creation of a Climate Initiatives Task Force and issued an executive order that established a path to net-zero emissions by 2050 while the City Council of New Orleans passed a renewable and clean portfolio standard that sets a goal of net-zero emissions by 2040 and absolute zero emissions by 2050. The impact that continued changes in the governmental response to climate change risk will have on existing and pending environmental laws and regulations related to greenhouse gas emissions is currently unclear.

Developing and implementing plans for compliance with greenhouse gas emissions reduction, clean/renewable energy requirements, or for achieving voluntary climate commitments can lead to additional capital, personnel, and operation and maintenance expenditures and could significantly affect the economic position of existing facilities and proposed projects. The operations of low or non-emitting generating units (such as nuclear units) at lower than expected capacity factors could require increased generation from higher emitting units, thus increasing the company's greenhouse gas emission rate. Moreover, long-term planning to meet environmental requirements can be negatively impacted and costs may increase to the extent laws and regulations change prior to full implementation. These requirements could, in turn, lead to changes in the planning or operations of balancing authorities or organized markets in areas where the Utility operating companies, System Energy, or Entergy Wholesale Commodities do business. Violations of such requirements may subject Entergy Wholesale Commodities and the Utility operating companies to enforcement actions, capital expenditures to bring existing facilities into compliance, additional operating costs or operating restrictions to achieve compliance, civil penalties, and exposure to third parties' claims for alleged health or property damages or for violations of applicable permits or standards. To the extent Entergy believes any of these costs are recoverable in rates, however, additional material rate increases for customers could be resisted by Entergy's regulators and, in extreme cases, Entergy's regulators might attempt to deny or defer timely recovery of these costs. Future changes in regulation or policies governing the emission of CO_2 and other greenhouse gases or mix of generation sources could (i) result in significant additional costs to Entergy's utility operating companies, their suppliers or customers, (ii) make some of Entergy's electric generating units uneconomical to maintain or operate, (iii) result in the early retirement of generation facilities and stranded costs if Entergy's utility operating companies are unable to fully recover the costs and investment in generation and (iv) could increase the difficulty that Entergy and its utility operating companies have with obtaining or maintaining required environmental regulatory approvals, each of which could materially affect the financial condition, results of operations, and liquidity of Entergy and its subsidiaries. In addition, lawsuits have occurred or are reasonably expected against emitters of greenhouse gases alleging that these

companies are liable for personal injuries and property damage caused by climate change. These lawsuits may seek injunctive relief, monetary compensation, and punitive damages.

In addition to the regulatory and financial risks associated with climate change discussed above, potential physical risks from climate change include an increase in sea level, wind and storm surge damages, wildfires, wetland and barrier island erosion, risks of flooding and changes in weather conditions, (such as increases in precipitation, drought, or changes in average temperatures), and potential increased impacts of extreme weather conditions or storms. Entergy subsidiaries own assets in, and serve, communities that are at risk from sea level rise, changes in weather conditions, storms, and loss of the protection offered by coastal wetlands. A significant portion of the nation's oil and gas infrastructure is located in these areas and susceptible to storm damage that could be aggravated by the physical impacts of climate change, which could give rise to fuel supply interruptions and price spikes. Entergy and its subsidiaries also face the risk that climate change could impact the availability and quality of water supply necessary for operations.

These and other physical changes could result in changes in customer demand, increased costs associated with repairing and maintaining generation facilities and transmission and distribution systems resulting in increased maintenance and capital costs (and potential increased financing needs), limits on the Entergy System's ability to meet peak customer demand, more frequent and longer lasting outages, increased regulatory oversight, and lower customer satisfaction. Also, to the extent that climate change adversely impacts the economic health of a region or results in energy conservation or demand side management programs, it may adversely impact customer demand and revenues. Such physical or operational risks could have a material effect on Entergy's, Entergy Wholesale Commodities', System Energy's, and the Utility operating companies' financial condition, results of operations, and liquidity.

In September 2020, Entergy voluntarily committed to achieving net zero carbon emissions by 2050. Technology research and development, innovation, and advancement are critical to Entergy's ability to achieve this commitment. Moreover, Entergy cannot predict the ultimate impact of achieving this objective, or the various implementation aspects, on its system reliability, or its results of operations, financial condition or liquidity.

Continued and future availability and quality of water for cooling, process, and sanitary uses could materially affect the financial condition, results of operations, and liquidity of the Utility operating companies, System Energy, and the Entergy Wholesale Commodities business.

Water is a vital natural resource that is also critical to the Utility operating companies', System Energy's, and Entergy Wholesale Commodities' business operations. Entergy's facilities use water for cooling, boiler make-up, sanitary uses, potable supply, and many other uses. Entergy's Utility operating companies also own and/or operate hydroelectric facilities. Accordingly, water availability and quality are critical to Entergy's business operations. Impacts to water availability or quality could negatively impact both operations and revenues.

Entergy secures water through various mechanisms (ground water wells, surface waters intakes, municipal supply, etc.) and operates under the provisions and conditions set forth by the provider and/or regulatory authorities. Entergy also obtains and operates in substantial compliance with water discharge permits issued under various provisions of the Clean Water Act and/or state water pollution control provisions. Regulations and authorizations for both water intake and use and for waste discharge can become more stringent in times of water shortages, low flows in rivers, low lake levels, low groundwater aquifer volumes, and similar conditions. The increased use of water by industry, agriculture, and the population at large, population growth, and the potential impacts of climate change on water resources may cause water use restrictions that affect Entergy and its subsidiaries.

Entergy and its subsidiaries may not be adequately hedged against changes in commodity prices, which could materially affect Entergy's and its subsidiaries' results of operations, financial condition, and liquidity.

To manage near-term financial exposure related to commodity price fluctuations, Entergy and its subsidiaries, including the Utility operating companies and the Entergy Wholesale Commodities business, may enter into contracts to hedge portions of their purchase and sale commitments, fuel requirements, and inventories of natural gas, uranium and its conversion and enrichment, coal, refined products, and other commodities, within established risk management guidelines. As part of this strategy, Entergy and its subsidiaries may utilize fixed- and variable-price forward physical purchase and sales contracts, futures, financial swaps, and option contracts traded in the over-the-counter markets or on exchanges. However, Entergy and its subsidiaries normally cover only a portion of the exposure of their assets and positions to market price volatility, and the coverage will vary over time. In addition, Entergy also elects to leave certain volumes during certain years unhedged. To the extent Entergy and its subsidiaries have unhedged positions, fluctuating commodity prices can materially affect Entergy's and its subsidiaries' results of operations and financial position.

Although Entergy and its subsidiaries devote a considerable effort to these risk management strategies, they cannot eliminate all the risks associated with these activities. As a result of these and other factors, Entergy and its subsidiaries cannot predict with precision the impact that risk management decisions may have on their business, results of operations, or financial position.

Entergy's over-the-counter financial derivatives are subject to rules implementing the Dodd-Frank Wall Street Reform and Consumer Protection Act that are designed to promote transparency, mitigate systemic risk, and protect against market abuse. Entergy cannot predict the impact any proposed or not fully-implemented final rules will have on its ability to hedge its commodity price risk or on over-the-counter derivatives markets as a whole, but such rules and regulations could have a material effect on Entergy's risk exposure, as well as reduce market liquidity and further increase the cost of hedging activities.

Entergy has guaranteed or indemnified the performance of a portion of the obligations relating to hedging and risk management activities. Reductions in Entergy's or its subsidiaries' credit quality or changes in the market prices of energy commodities could increase the cash or letter of credit collateral required to be posted in connection with hedging and risk management activities, which could materially affect Entergy's or its subsidiaries' liquidity and financial position.

The Utility operating companies and the Entergy Wholesale Commodities business are exposed to the risk that counterparties may not meet their obligations, which may materially affect the Utility operating companies and Entergy Wholesale Commodities.

The hedging and risk management practices of the Utility operating companies and the Entergy Wholesale Commodities business are exposed to the risk that counterparties that owe Entergy and its subsidiaries money, energy, or other commodities will not perform their obligations. Currently, some hedging agreements contain provisions that require the counterparties to provide credit support to secure all or part of their obligations to Entergy or its subsidiaries. If the counterparties to these arrangements fail to perform, Entergy or its subsidiaries may enforce and recover the proceeds from the credit support provided and acquire alternative hedging arrangements, which credit support may not always be adequate to cover the related obligations. In such event, Entergy and its subsidiaries might incur losses in addition to amounts, if any, already paid to the counterparties. In addition, the credit commitments of Entergy's lenders under its bank facilities may not be honored for a variety of reasons, including unexpected periods of financial distress affecting such lenders, which could materially affect the adequacy of its liquidity sources.

Market performance and other changes may decrease the value of benefit plan assets, which then could require additional funding and result in increased benefit plan costs.

The performance of the capital markets affects the values of the assets held in trust under Entergy's pension and postretirement benefit plans. A decline in the market value of the assets may increase the funding requirements relating to Entergy's benefit plan liabilities and also result in higher benefit costs. As the value of the assets decreases, the "expected return on assets" component of benefit costs decreases, resulting in higher benefits costs. Additionally, asset losses are incorporated into benefit costs over time, thus increasing benefits costs. Volatility in the capital markets has affected the market value of these assets, which may affect Entergy's planned levels of contributions in the future. Additionally, changes in interest rates affect the liabilities under Entergy's pension and postretirement benefit plans; as interest rates decrease, the liabilities increase, potentially requiring additional funding and recognition of higher liability carrying costs. The funding requirements of the obligations related to the pension benefit plans can also increase as a result of changes in, among other factors, retirement rates, life expectancy assumptions, or Federal regulations. For further information regarding Entergy's pension and other postretirement benefit plans, refer to the "**Critical Accounting Estimates – Qualified Pension and Other Postretirement Benefits**" section of Management's Financial Discussion and Analysis for Entergy and each of its Registrant Subsidiaries and Note 11 to the financial statements.

The litigation environment in the states in which certain Entergy subsidiaries operate poses a significant risk to those businesses.

Entergy and its subsidiaries are involved in the ordinary course of business in a number of lawsuits involving employment, commercial, asbestos, hazardous material and ratepayer matters, and injuries and damages issues, among other matters. The states in which the Utility operating companies operate have proven to be unusually litigious environments. Judges and juries in these states have demonstrated a willingness to grant large verdicts, including punitive damages, to plaintiffs in personal injury, property damage, and business tort cases. Entergy and its subsidiaries use legal and appropriate means to contest litigation threatened or filed against them, but the litigation environment in these states poses a significant business risk.

Terrorist attacks, cyber attacks, system failures or data breaches of Entergy's and its subsidiaries' or our suppliers' technology systems may adversely affect Entergy's results of operations.

Entergy and its subsidiaries operate in a business that requires evolving information technology systems that include sophisticated data collection, processing systems, software, network infrastructure, and other technologies that are becoming more complex and may be subject to mandatory and prescriptive reliability and security standards. The functionality of Entergy's technology systems depends on its own and its suppliers' and their contractors' technology. Suppliers' and their contractors' technology systems to which Entergy is connected directly or indirectly support a variety of business processes and activities to store sensitive data, including (i) intellectual property, (ii) proprietary business information, (iii) personally identifiable information of customers and employees, and (iv) data with respect to invoicing and the collection of payments, accounting, procurement, and supply chain activities. Any significant failure or malfunction of such information technology systems could result in loss of data or disruptions of operations.

There have been attacks and threats of attacks on energy infrastructure by cyber actors, including those associated with foreign governments. As an operator of critical infrastructure, Entergy and its subsidiaries face heightened risk of an act or threat of terrorism, cyber attacks, and data breaches, whether as a direct or indirect act against one of Entergy's generation, transmission or distribution facilities, operations centers, infrastructure, or information technology systems used to manage, monitor, and transport power to customers and perform day-to-day business functions. An actual act could affect Entergy's ability to operate, including its ability to operate the information technology systems and network infrastructure on which it relies to conduct business.

Given the rapid technological advancements of existing and emerging threats, Entergy's technology systems remain inherently vulnerable despite implementations and enhancements of the multiple layers of security

and controls. If Entergy's or its subsidiaries' technology systems were compromised and unable to detect or recover in a timely fashion to a normal state of operations, Entergy or its subsidiaries could be unable to perform critical business functions that are essential to the company's well-being and could result in a loss of its confidential, sensitive, and proprietary information, including personal information of its customers, employees, suppliers, and others in Entergy's care.

Any such attacks, failures or data breaches could have a material effect on Entergy's and the Utility operating companies' business, financial condition, results of operations or reputation. Although we purchase insurance coverage for cyber-attacks or data breaches, such insurance may not be adequate to cover all losses that might arise in connection with these events. Such events may also expose Entergy to an increased risk of litigation (and associated damages and fines).

(Entergy New Orleans)

The effect of higher purchased gas cost charges to customers taking gas service may adversely affect Entergy New Orleans's results of operations and liquidity.

Gas rates charged to retail gas customers are comprised primarily of purchased gas cost charges, which provide no return or profit to Entergy New Orleans, and distribution charges, which provide a return or profit to the utility. Distribution charges recover fixed costs on a volumetric basis and, thus, are affected by the amount of gas sold to customers. When purchased gas cost charges increase due to higher gas procurement costs, customer usage may decrease, especially in weaker economic times, resulting in lower distribution charges for Entergy New Orleans, which could adversely affect results of operations. Purchased gas cost charges, which comprise most of a customer's bill and may be adjusted monthly, represent gas commodity costs that Entergy New Orleans recovers from its customers. Entergy New Orleans's cash flows can be affected by differences between the time period when gas is purchased and the time when ultimate recovery from customers occurs.

(System Energy)

System Energy owns and, through an affiliate, operates a single nuclear generating facility, and it is dependent on sales to affiliated companies for all of its revenues. Certain contractual arrangements relating to System Energy, the affiliated companies, and these revenues are the subject of ongoing litigation and regulatory proceedings.

System Energy's operating revenues are derived from the allocation of the capacity, energy, and related costs associated with its 90% ownership/leasehold interest in Grand Gulf. Charges under the Unit Power Sales Agreement are paid by the Utility operating companies as consideration for their respective entitlements to receive capacity and energy. The useful economic life of Grand Gulf is finite and is limited by the terms of its operating license, which expires in November 2044. System Energy's financial condition depends both on the receipt of payments from the Utility operating companies under the Unit Power Sales Agreement and on the continued commercial operation of Grand Gulf. The Unit Power Sales Agreement is currently the subject of several litigation proceedings at the FERC, including a challenge with respect to System Energy's uncertain tax positions, sale leaseback arrangement, authorized return on equity and capital structure, and a request in a separate proceeding for FERC to initiate a broader investigation of rates under the Unit Power Sales Agreement. The LPSC has also authorized the filing of a prudence complaint at the FERC relating to Grand Gulf operations. Entergy cannot predict the outcome of any of these proceedings nor can it predict whether any outcome could have a material effect on Entergy's or System Energy's results of operations, financial condition or liquidity. See Note 2 to the financial statements for further discussion of the proceedings. The Utility operating companies have agreed to implement certain protocols for providing retail regulators with information regarding rates billed under the Unit Power Sales Agreement.

For information regarding the Unit Power Sales Agreement, the sale and leaseback transactions and certain other agreements relating to the Entergy System companies' support of System Energy, see Notes 5 and 8 to the

financial statements and the "**Utility** - System Energy and Related Agreements" section of Part I, Item 1.

(Entergy Corporation)

As a holding company, Entergy Corporation depends on cash distributions from its subsidiaries to meet its debt service and other financial obligations and to pay dividends on its common stock.

Entergy Corporation is a holding company with no material revenue generating operations of its own or material assets other than the stock of its subsidiaries. Accordingly, all of its operations are conducted by its subsidiaries. Entergy Corporation's ability to satisfy its financial obligations, including the payment of interest and principal on its outstanding debt, and to pay dividends on its common stock depends on the payment to it of dividends or distributions by its subsidiaries. The subsidiaries of Entergy Corporation are separate and distinct legal entities and have no obligation, contingent or otherwise, to pay any dividends or make distributions to Entergy Corporation. The ability of such subsidiaries to make payments of dividends or distributions to Entergy Corporation depends on their results of operations and cash flows and other items affecting retained earnings, and on any applicable legal, regulatory, or contractual limitations on subsidiaries' ability to pay such dividends or distributions. Prior to providing funds to Entergy Corporation, such subsidiaries have financial and regulatory obligations that must be satisfied, including among others, debt service and, in the case of Entergy Utility Holding Company and Entergy Texas, dividends and distributions on preferred securities. Any distributions from the Registrant Subsidiaries other than Entergy Texas and System Energy are paid directly to Entergy Utility Holding Company and are therefore subject to prior payment of distributions on its preferred securities.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

The COVID-19 Pandemic

See "**The COVID-19 Pandemic**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the COVID-19 pandemic.

February 2021 Winter Storms

See the "**February 2021 Winter Storms**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the February 2021 winter storms. Entergy Arkansas's preliminary estimate for the cost of mobilizing crews and restoring power is approximately $10 million. Natural gas purchases for Entergy Arkansas for February 1st through 25th, 2021 are approximately $105 million compared to natural gas purchases for February 2020 of $10 million.

Results of Operations

2020 Compared to 2019

Net Income

Net income decreased $17.7 million primarily due to lower volume/weather, a formula rate plan provision recorded in 2020 to reflect the 2019 historical year netting adjustment, and higher depreciation and amortization expenses, partially offset by higher retail electric price and lower other operation and maintenance expenses. See Note 2 to the financial statements for discussion of the 2019 historical year netting adjustment.

Operating Revenues

Following is an analysis of the change in operating revenues comparing 2020 to 2019:

	Amount
	(In Millions)
2019 operating revenues	$2,259.6
Fuel, rider, and other revenues that do not significantly affect net income	(278.5)
Volume/weather	(72.2)
Retail electric price	57.4
Return of unprotected excess accumulated deferred income taxes to customers	118.2
2020 operating revenues	**$2,084.5**

Entergy Arkansas's results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not affect net income. "Fuel, rider, and other revenues that do not significantly affect net income" includes the revenue variance associated with these items.

The volume/weather variance is primarily due to a decrease of 1,069 GWh, or 5%, in billed electricity usage, including decreased commercial and industrial usage as a result of the COVID-19 pandemic, and the effect of less favorable weather on residential and commercial sales, partially offset by an increase in residential usage as a

result of the COVID-19 pandemic. See "**The COVID-19 Pandemic**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the COVID-19 pandemic.

The retail electric price variance is primarily due to the $56.5 million annual formula rate plan increase related to the 2020 projected test year included in the 2019 formula rate plan filing effective with the first billing cycle of January 2020. See Note 2 to the financial statements for further discussion of the formula rate plan filing.

The return of unprotected excess accumulated deferred income taxes to customers resulted from the return of unprotected excess accumulated deferred income taxes through a tax adjustment rider beginning in April 2018. In 2020, $8.1 million was returned to customers as compared to $126.3 million in 2019. There is no effect on net income as the reduction in operating revenues in each period was offset by a reduction in income tax expense. See Note 2 to the financial statements for further discussion of regulatory activity regarding the Tax Cuts and Jobs Act.

Other Income Statement Variances

Nuclear refueling outage expenses decreased primarily due to the amortization of lower costs associated with the most recent outages as compared to previous outages.

Other operation and maintenance expenses decreased primarily due to:

- a decrease of $18.3 million in nuclear generation expenses primarily due to lower nuclear labor costs, including contract labor, in part as a result of the COVID-19 pandemic;
- a decrease of $13.2 million in non-nuclear generation expenses primarily due to lower long-term service agreement expenses;
- an $11.2 million write-off in 2019 of specific costs related to the potential construction of scrubbers at the White Bluff plant. See Note 2 to the financial statements for discussion of the write-off;
- higher nuclear insurance refunds of $7.8 million;
- a decrease of $5.9 million primarily due to contract costs in 2019 related to initiatives to explore new customer products and services; and
- a decrease of $5.8 million in energy efficiency costs.

The decrease was partially offset by the effects of recording in 2019 a final judgment to resolve claims in the ANO damages case against the DOE related to spent nuclear fuel storage costs. The damages awarded include the reimbursement of approximately $11.9 million of spent nuclear fuel storage costs previously recorded as other operation and maintenance expense. See Note 8 to the financial statements for discussion of the spent nuclear fuel litigation.

Depreciation and amortization expenses increased primarily due to additions to plant in service.

Other income increased primarily due to changes in decommissioning trust fund investment activity.

Other regulatory credits - net for 2020 includes a provision of $43.5 million to reflect the 2019 historical year netting adjustment included in the APSC's December 2020 order in the 2020 formula rate plan proceeding. See Note 2 to the financial statements for discussion of the 2020 formula rate plan proceeding.

The effective income tax rates were 16.3% for 2020 and (21.6%) for 2019. The difference in the effective income tax rate versus the federal statutory rate of 21% for 2019 was primarily due to the amortization of excess accumulated deferred income taxes. See Notes 2 and 3 to the financial statements for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act. See Note 3 to the financial statements for a reconciliation of the federal statutory rate of 21% to the effective income tax rates.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Results of Operations**" in Item 7 of Entergy Arkansas's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of results of operations for 2019 compared to 2018.

Liquidity and Capital Resources

Cash Flow

Cash flows for the years ended December 31, 2020, 2019, and 2018 were as follows:

	2020	2019	2018
		(In Thousands)	
Cash and cash equivalents at beginning of period	$3,519	$119	$6,216
Net cash provided by (used in):			
Operating activities	659,818	677,766	211,825
Investing activities	(795,709)	(676,293)	(688,727)
Financing activities	324,500	1,927	470,805
Net increase (decrease) in cash and cash equivalents	188,609	3,400	(6,097)
Cash and cash equivalents at end of period	$192,128	$3,519	$119

2020 Compared to 2019

Operating Activities

Net cash flow provided by operating activities decreased $17.9 million in 2020 primarily due to:

- the timing of recovery of fuel and purchased power costs;
- lower collections of receivables from customers, in part due to the COVID-19 pandemic; and
- the timing of payments to vendors.

The decrease was partially offset by:

- a decrease in the return of unprotected excess accumulated deferred income taxes to customers in 2020 as compared to 2019. See Note 2 to the financial statements for further discussion of regulatory activity regarding the Tax Cuts and Jobs Act;
- $25 million in proceeds received from the DOE in 2020 resulting from litigation regarding spent nuclear fuel storage costs that were previously expensed. See Note 8 to the financial statements for discussion of the spent nuclear fuel litigation; and
- a decrease of $15.8 million in pension contributions in 2020. See "**Critical Accounting Estimates**" below and Note 11 to the financial statements for a discussion of qualified pension and other postretirement benefits funding.

Investing Activities

Net cash flow used in investing activities increased $119.4 million in 2020 primarily due to:

- an increase of $79.5 million in storm spending;
- an increase of $47.3 million in non-nuclear generation construction expenditures primarily due to increased spending on various projects in 2020;
- an increase of $39.4 million in nuclear construction expenditures primarily as a result of work performed in 2020 on various ANO 2 outage projects;
- an increase of $38.5 million as a result of fluctuations in nuclear fuel activity because of variations from year to year in the timing and pricing of fuel reload requirements in the Utility business, material and service deliveries, and the timing of cash payments during the nuclear fuel cycle; and
- an increase of $30.3 million in distribution construction expenditures primarily due to investment in the reliability and infrastructure of Entergy Arkansas's distribution system, including increased spending on advanced metering infrastructure.

The increase was partially offset by:

- a decrease of $56 million in transmission construction expenditures primarily due to a lower scope of work performed in 2020 as compared to 2019; and
- $55 million in proceeds received from the DOE in 2020 resulting from litigation regarding spent nuclear fuel storage costs that were previously capitalized. See Note 8 to the financial statements for discussion of the spent nuclear fuel litigation.

Financing Activities

Net cash flow provided by financing activities increased $322.6 million in 2020 primarily due to:

- issuances of $100 million of 4.0% Series mortgage bonds in March 2020 and $675 million of 2.65% Series mortgage bonds in September 2020;
- money pool activity;
- a decrease of $41.6 million in net long-term repayments in 2020 on the Entergy Arkansas nuclear fuel company variable interest entity credit facility; and
- a decrease of $20 million in common equity distributions in 2020 in order to maintain Entergy Arkansas's capital structure.

The increase was partially offset by:

- the issuance of $350 million of 4.20% Series mortgage bonds in March 2019;
- the repayment in October 2020 of $200 million of 4.90% Series mortgage bonds due December 2052; and
- the repayment in October 2020 of $125 million of 4.75% Series mortgage bonds due June 2063.

Decreases in Entergy Arkansas's payable to the money pool are a use of cash flow, and Entergy Arkansas's payable to the money pool decreased by $21.6 million in 2020 compared to decreasing by $161.1 million in 2019. The money pool is an inter-company borrowing arrangement designed to reduce the Utility subsidiaries' need for external short-term borrowings.

See Note 5 to the financial statements for further details of long-term debt.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources - Cash Flow**" in Item 7 of Entergy Arkansas's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of operating, investing, and financing cash flow activities for 2019 compared to 2018.

Capital Structure

Entergy Arkansas's debt to capital ratio is shown in the following table. The increase in the debt to capital ratio is primarily due to the net issuances of long-term debt in 2020.

	December 31, 2020	December 31, 2019
Debt to capital	54.8 %	53.0 %
Effect of excluding the securitization bonds	— %	— %
Debt to capital, excluding securitization bonds (a)	54.8 %	53.0 %
Effect of subtracting cash	(1.2 %)	— %
Net debt to net capital, excluding securitization bonds (a)	53.6 %	53.0 %

(a) Calculation excludes the securitization bonds, which are non-recourse to Entergy Arkansas.

Net debt consists of debt less cash and cash equivalents. Debt consists of short-term borrowings, finance lease obligations, and long-term debt, including the currently maturing portion. Capital consists of debt and equity. Net capital consists of capital less cash and cash equivalents. Entergy Arkansas uses the debt to capital ratios excluding securitization bonds in analyzing its financial condition and believes they provide useful information to its investors and creditors in evaluating Entergy Arkansas's financial condition because the securitization bonds, which have been repaid as of December 31, 2020, were non-recourse to Entergy Arkansas, as more fully described in Note 5 to the financial statements. Entergy Arkansas also uses the net debt to net capital ratio excluding securitization bonds in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy Arkansas's financial condition because net debt indicates Entergy Arkansas's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Entergy Arkansas seeks to optimize its capital structure in accordance with its regulatory requirements and to control its cost of capital while also maintaining equity capitalization at a level consistent with investment-grade debt ratings. To the extent that operating cash flows are in excess of planned investments, cash may be used to reduce outstanding debt or may be paid as a distribution, or both, in appropriate amounts to maintain the capital structure. To the extent that operating cash flows are insufficient to support planned investments, Entergy Arkansas may issue incremental debt or reduce distributions, or both, to maintain its capital structure. In addition, in certain infrequent circumstances, such as financing of large transactions that would materially alter the capital structure if financed entirely with debt and reducing distributions, Entergy Arkansas may receive equity contributions to maintain its capital structure.

Uses of Capital

Entergy Arkansas requires capital resources for:

- construction and other capital investments;
- debt maturities or retirements;
- working capital purposes, including the financing of fuel and purchased power costs; and
- distribution and interest payments.

Following are the amounts of Entergy Arkansas's planned construction and other capital investments.

	2021	2022	2023
	(In Millions)		
Planned construction and capital investment:			
Generation	$340	$355	$430
Transmission	40	45	190
Distribution	95	255	420
Utility Support	105	80	75
Total	$580	$735	$1,115

Following are the amounts of Entergy Arkansas's existing debt and lease obligations (includes estimated interest payments) and other purchase obligations.

	2021	2022-2023	2024-2025	After 2025	Total
			(In Millions)		
Long-term debt (a)	$611	$543	$581	$4,713	$6,448
Operating leases (b)	$14	$21	$15	$11	$61
Finance leases (b)	$3	$5	$3	$2	$13
Purchase obligations (c)	$452	$618	$509	$3,882	$5,461

(a) Includes estimated interest payments. Long-term debt is discussed in Note 5 to the financial statements.
(b) Lease obligations are discussed in Note 10 to the financial statements.
(c) Purchase obligations represent the minimum purchase obligation or cancellation charge for contractual obligations to purchase goods or services. For Entergy Arkansas, almost all of the total consists of unconditional fuel and purchased power obligations, including its obligations under the Unit Power Sales Agreement, which are discussed in Note 8 to the financial statements.

In addition to the contractual obligations given above, Entergy Arkansas currently expects to contribute approximately $66.6 million to its qualified pension plans and approximately $517 thousand to its other postretirement health care and life insurance plans in 2021, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021. See "**Critical Accounting Estimates – Qualified Pension and Other Postretirement Benefits**" below for a discussion of qualified pension and other postretirement benefits funding.

Also in addition to the contractual obligations, Entergy Arkansas has $252 million of unrecognized tax benefits and interest net of unused tax attributes for which the timing of payments beyond 12 months cannot be reasonably estimated due to uncertainties in the timing of effective settlement of tax positions. See Note 3 to the financial statements for additional information regarding unrecognized tax benefits.

In addition to routine capital spending to maintain operations, the planned capital investment estimate for Entergy Arkansas includes specific investments in renewables such as the Searcy Solar Facility, Walnut Bend Solar Facility, and West Memphis Solar Facility; transmission projects to enhance reliability, reduce congestion, and enable economic growth; distribution spending to enhance reliability and improve service to customers, including advanced meters and related investments; resource planning, including potential generation and renewables projects; system improvements; investments in ANO 1 and 2; software and security; and other investments. Estimated capital expenditures are subject to periodic review and modification and may vary based on the ongoing effects of regulatory constraints and requirements, environmental compliance, business opportunities, market volatility, economic trends, business restructuring, changes in project plans, and the ability to access capital. Management provides more information on long-term debt maturities in Note 5 to the financial statements.

As a wholly-owned subsidiary of Entergy Utility Holding Company, LLC, Entergy Arkansas pays distributions from its earnings at a percentage determined monthly.

Renewables

Searcy Solar Facility

In March 2019, Entergy Arkansas announced that it signed an agreement for the purchase of an approximately 100 MW solar energy facility that will be sited on approximately 800 acres in White County near Searcy, Arkansas. The purchase is contingent upon, among other things, obtaining necessary approvals from applicable federal and state regulatory and permitting agencies. The project is being constructed by a subsidiary of NextEra Energy Resources. Entergy Arkansas will purchase the facility upon mechanical completion and after the other purchase contingencies have been met. Closing is expected to occur by the end of 2021. In May 2019, Entergy Arkansas filed a petition with the APSC seeking a finding that the transaction is in the public interest and requesting all necessary approvals. In September 2019 other parties filed testimony largely supporting the resource acquisition but disputing Entergy Arkansas's proposed method of cost recovery. Entergy Arkansas filed its rebuttal testimony in October 2019. In February 2020, Entergy Arkansas, the Attorney General, and the APSC general staff filed a partial settlement agreement asking the APSC to approve, based on the record in the proceeding, all issues except certain issues that are submitted to the APSC for determination. In April 2020 the APSC issued an order approving Entergy Arkansas's acquisition of the Searcy Solar facility as being in the public interest, but declined to approve Entergy Arkansas's preferred cost recovery rider mechanism, finding instead, based on the particular facts and circumstances presented, that the formula rate plan rider was a sufficient recovery mechanism for this resource.

Walnut Bend Solar Facility

In October 2020, Entergy Arkansas filed a petition with the APSC seeking a finding that the purchase of the 100 MW Walnut Bend Solar Facility is in the public interest. Entergy Arkansas requested a decision by the APSC by June 15, 2021 and primarily requests cost recovery through the formula rate plan rider. A procedural schedule was established with a hearing scheduled in April 2021. Closing is expected to occur in 2022.

West Memphis Solar Facility

In January 2021, Entergy Arkansas filed a petition with the APSC seeking a finding that the purchase of the 180 MW West Memphis Solar Facility is in the public interest. Entergy Arkansas requested a decision by the APSC by September 7, 2021 and primarily requests cost recovery through the formula rate plan rider. Closing is expected to occur in 2023.

Sources of Capital

Entergy Arkansas's sources to meet its capital requirements include:

- internally generated funds;
- cash on hand;
- debt or preferred membership interest issuances, including debt issuances to refund or retire currently outstanding or maturing indebtedness;
- capital contributions; and
- bank financing under new or existing facilities.

Entergy Arkansas may refinance, redeem, or otherwise retire debt prior to maturity, to the extent market conditions and interest rates are favorable.

All debt and common and preferred membership interest issuances by Entergy Arkansas require prior regulatory approval. Debt issuances are also subject to issuance tests set forth in Entergy Arkansas's bond indentures and other agreements. Entergy Arkansas has sufficient capacity under these tests to meet its foreseeable capital needs.

Entergy Arkansas's receivables from or (payables to) the money pool were as follows as of December 31 for each of the following years.

2020	2019	2018	2017
	(In Thousands)		
$3,110	($21,634)	($182,738)	($166,137)

See Note 4 to the financial statements for a description of the money pool.

Entergy Arkansas has a credit facility in the amount of $150 million scheduled to expire in September 2024. Entergy Arkansas also has a $25 million credit facility scheduled to expire in April 2021. The $150 million credit facility includes fronting commitments for the issuance of letters of credit against $5 million of the borrowing capacity of the facility. As of December 31, 2020, there were no cash borrowings and no letters of credit outstanding under the credit facilities. In addition, Entergy Arkansas is a party to an uncommitted letter of credit facility as a means to post collateral to support its obligations to MISO. As of December 31, 2020, a $1 million letter of credit was outstanding under Entergy Arkansas's uncommitted letter of credit facility. See Note 4 to the financial statements for further discussion of the credit facilities.

The Entergy Arkansas nuclear fuel company variable interest entity has a credit facility in the amount of $80 million scheduled to expire in September 2022. As of December 31, 2020, $12.2 million in loans were outstanding under the credit facility for the Entergy Arkansas nuclear fuel company variable interest entity. See Note 4 to the financial statements for further discussion of the nuclear fuel company variable interest entity credit facility.

Entergy Arkansas obtained authorization from the FERC through July 2022 for short-term borrowings not to exceed an aggregate amount of $250 million at any time outstanding and borrowings by its nuclear fuel company variable interest entity. See Note 4 to the financial statements for further discussion of Entergy Arkansas's short-term borrowing limits. The long-term securities issuances of Entergy Arkansas are limited to amounts authorized by the FERC. The APSC has concurrent jurisdiction over Entergy Arkansas's first mortgage bond/secured issuances. Entergy Arkansas has obtained long-term financing authorization from the FERC that extends through July 2022. Entergy Arkansas has obtained first mortgage bond/secured financing authorization from the APSC that extends through December 2022.

State and Local Rate Regulation and Fuel-Cost Recovery

Retail Rates

2018 Formula Rate Plan Filing

In July 2018, Entergy Arkansas filed with the APSC its 2018 formula rate plan filing to set its formula rate for the 2019 calendar year. The filing showed Entergy Arkansas's projected earned return on common equity for the twelve months ended December 31, 2019 test period to be below the formula rate plan bandwidth. Additionally, the filing included the first netting adjustment under the current formula rate plan for the historical test year 2017, reflecting the change in formula rate plan revenues associated with actual 2017 results when compared to the allowed rate of return on equity. The filing included a projected $73.4 million revenue deficiency for 2019 and a $95.6 million revenue deficiency for the 2017 historical test year, for a total revenue requirement of $169 million for this filing. By operation of the formula rate plan, Entergy Arkansas's recovery of the revenue requirement is

subject to a four percent annual revenue constraint. Because Entergy Arkansas's revenue requirement in this filing exceeded the constraint, the resulting increase was limited to four percent of total revenue, which originally was $65.4 million but was increased to $66.7 million based upon the APSC staff's updated calculation of 2018 revenue. In October 2018, Entergy Arkansas and the parties to the proceeding filed joint motions to approve a partial settlement agreement as to certain factual issues and agreed to brief contested legal issues. In November 2018 the APSC held a hearing and was briefed on a contested legal issue. In December 2018 the APSC issued a decision related to the initial legal brief, approved the partial settlement agreement and $66.7 million revenue requirement increase, as well as Entergy Arkansas's formula rate plan, with updated rates going into effect for the first billing cycle of January 2019.

2019 Formula Rate Plan Filing

In July 2019, Entergy Arkansas filed with the APSC its 2019 formula rate plan filing to set its formula rate for the 2020 calendar year. The filing contained an evaluation of Entergy Arkansas's earnings for the projected year 2020 and a netting adjustment for the historical year 2018. The total proposed formula rate plan rider revenue change designed to produce a target rate of return on common equity of 9.75% is $15.3 million, which is based upon a deficiency of approximately $61.9 million for the 2020 projected year, netted with a credit of approximately $46.6 million in the 2018 historical year netting adjustment. During 2018 Entergy Arkansas experienced higher-than expected sales volume, and actual costs were lower than forecasted. These changes, coupled with a reduced income tax rate resulting from the Tax Cuts and Jobs Act, resulted in the credit for the historical year netting adjustment. In the fourth quarter 2018, Entergy Arkansas recorded a provision of $35.1 million that reflected the estimate of the historical year netting adjustment that was expected to be included in the 2019 filing. In 2019, Entergy Arkansas recorded additional provisions totaling $11.5 million to reflect the updated estimate of the historical year netting adjustment included in the 2019 filing. In October 2019 other parties in the proceeding filed their errors and objections requesting certain adjustments to Entergy Arkansas's filing that would reduce or eliminate Entergy Arkansas's proposed revenue change. Entergy Arkansas filed its response addressing the requested adjustments in October 2019. In its response, Entergy Arkansas accepted certain of the adjustments recommended by the General Staff of the APSC that would reduce the proposed formula rate plan rider revenue change to $14 million. Entergy Arkansas disputed the remaining adjustments proposed by the parties. In October 2019, Entergy Arkansas filed a unanimous settlement agreement with the other parties in the proceeding seeking APSC approval of a revised total formula rate plan rider revenue change of $10.1 million. In its July 2019 formula rate plan filing, Entergy Arkansas proposed to recover an $11.2 million regulatory asset, amortized over five years, associated with specific costs related to the potential construction of scrubbers at the White Bluff plant. Although Entergy Arkansas does not concede that the regulatory asset lacks merit, for purposes of reaching a settlement on the total formula rate plan rider amount, Entergy Arkansas agreed not to include the White Bluff scrubber regulatory asset cost in the 2019 formula rate plan filing or future filings. Entergy Arkansas recorded a write-off in 2019 of the $11.2 million White Bluff scrubber regulatory asset. In December 2019 the APSC approved the settlement as being in the public interest and approved Entergy Arkansas's compliance tariff effective with the first billing cycle of January 2020.

2020 Formula Rate Plan Filing

In July 2020, Entergy Arkansas filed with the APSC its 2020 formula rate plan filing to set its formula rate for the 2021 calendar year. The filing contained an evaluation of Entergy Arkansas's earnings for the projected year 2021, as amended through subsequent filings in the proceeding, and a netting adjustment for the historical year 2019. The filing showed that Entergy Arkansas's earned rate of return on common equity for the 2021 projected year is 8.22% resulting in a revenue deficiency of $64.3 million. The earned rate of return on common equity for the 2019 historical year was 9.07% resulting in a $23.9 million netting adjustment. The total proposed revenue change for the 2021 projected year and 2019 historical year netting adjustment was $88.2 million. By operation of the formula rate plan, Entergy Arkansas's recovery of the revenue requirement is subject to a four percent annual revenue constraint. Because Entergy Arkansas's revenue requirement in this filing exceeded the constraint, the resulting increase was limited to $74.3 million. In October 2020 other parties in the proceeding filed their errors

and objections recommending certain adjustments, and Entergy Arkansas filed responsive testimony disputing these adjustments. As part of the formula rate plan tariff the calculation for the revenue constraint was updated based on actual revenues which had the effect of reducing the initially-proposed $74.3 million revenue requirement increase to $72.6 million. In October 2020, Entergy Arkansas filed with the APSC a unanimous settlement agreement reached with the other parties that resolved all but one issue. As a result of the settlement agreement, Entergy Arkansas's requested revenue increase was $68.4 million, including a $44.5 million increase for the projected 2021 year and a $23.9 million netting adjustment. The remaining issue litigated concerned the methodology used to calculate the netting adjustment within the formula rate plan. In December 2020 the APSC issued an order rejecting the netting adjustment method used by Entergy Arkansas. Applying the approach ordered by the APSC changed the netting adjustment for the 2019 historical year from a $23.9 million deficiency to $43.5 million excess. Overall, the decision reduced Entergy Arkansas's revenue adjustment for 2021 to $1 million. In December 2020, Entergy Arkansas filed a petition for rehearing of the APSC's decision, and in January 2021 the APSC granted further consideration of Entergy Arkansas's petition. Based on the progress of the proceeding to date, in December 2020, Entergy Arkansas recorded a regulatory liability of $43.5 million to reflect the netting adjustment for 2019, as included in the APSC's December 2020 order, which would be returned to customers in 2021. Also with the formula rate plan filing, Entergy Arkansas is requesting an extension of the formula rate plan rider for a second five-year term. Decisions by the APSC on the netting adjustment rehearing and the extension are expected in March 2021.

Internal Restructuring

In November 2017, Entergy Arkansas filed an application with the APSC seeking authorization to undertake a restructuring that would result in the transfer of substantially all of the assets and operations of Entergy Arkansas to a new entity, which would ultimately be owned by an existing Entergy subsidiary holding company. In July 2018, Entergy Arkansas filed a settlement, reached by all parties in the APSC proceeding, resolving all issues. The APSC approved the settlement agreement and restructuring in August 2018. Pursuant to the settlement agreement, Entergy Arkansas will credit retail customers $39.6 million over six years, beginning in 2019. Entergy Arkansas also received the required FERC and NRC approvals.

In November 2018, Entergy Arkansas undertook a multi-step restructuring, including the following:

- Entergy Arkansas, Inc. redeemed its outstanding preferred stock at the aggregate redemption price of approximately $32.7 million.
- Entergy Arkansas, Inc. converted from an Arkansas corporation to a Texas corporation.
- Under the Texas Business Organizations Code (TXBOC), Entergy Arkansas, Inc. allocated substantially all of its assets to a new subsidiary, Entergy Arkansas Power, LLC, a Texas limited liability company (Entergy Arkansas Power), and Entergy Arkansas Power assumed substantially all of the liabilities of Entergy Arkansas, Inc., in a transaction regarded as a merger under the TXBOC. Entergy Arkansas, Inc. remained in existence and held the membership interests in Entergy Arkansas Power.
- Entergy Arkansas, Inc. contributed the membership interests in Entergy Arkansas Power to an affiliate (Entergy Utility Holding Company, LLC, a Texas limited liability company and subsidiary of Entergy Corporation). As a result of the contribution, Entergy Arkansas Power is a wholly-owned subsidiary of Entergy Utility Holding Company, LLC.

In December 2018, Entergy Arkansas, Inc. changed its name to Entergy Utility Property, Inc., and Entergy Arkansas Power then changed its name to Entergy Arkansas, LLC. Entergy Arkansas, LLC holds substantially all of the assets, and assumed substantially all of the liabilities, of Entergy Arkansas, Inc. The transaction was accounted for as a transaction between entities under common control.

Production Cost Allocation Rider

The APSC approved a production cost allocation rider for recovery from customers of the retail portion of the costs allocated to Entergy Arkansas as a result of the System Agreement proceedings, which are discussed in the "**System Agreement Cost Equalization Proceedings**" section in Note 2 to the financial statements.

Energy Cost Recovery Rider

Entergy Arkansas's retail rates include an energy cost recovery rider to recover fuel and purchased energy costs in monthly customer bills. The rider utilizes the prior calendar-year energy costs and projected energy sales for the twelve-month period commencing on April 1 of each year to develop an energy cost rate, which is redetermined annually and includes a true-up adjustment reflecting the over- or under-recovery, including carrying charges, of the energy costs for the prior calendar year. The energy cost recovery rider tariff also allows an interim rate request depending upon the level of over- or under-recovery of fuel and purchased energy costs.

In January 2014, Entergy Arkansas filed a motion with the APSC relating to its upcoming energy cost rate redetermination filing that was made in March 2014. In that motion, Entergy Arkansas requested that the APSC authorize Entergy Arkansas to exclude from the redetermination of its 2014 energy cost rate $65.9 million of incremental fuel and replacement energy costs incurred in 2013 as a result of the ANO stator incident. Entergy Arkansas requested that the APSC authorize Entergy Arkansas to retain that amount in its deferred fuel balance, with recovery to be reviewed in a later period after more information was available regarding various claims associated with the ANO stator incident. In February 2014 the APSC approved Entergy Arkansas's request to retain that amount in its deferred fuel balance. In July 2017, Entergy Arkansas filed for a change in rates pursuant to its formula rate plan rider. In that proceeding, the APSC approved a settlement agreement agreed upon by the parties, including a provision that requires Entergy Arkansas to initiate a regulatory proceeding for the purpose of recovering funds currently withheld from rates and related to the stator incident, including the $65.9 million of deferred fuel and purchased energy costs previously noted, subject to certain timelines and conditions set forth in the settlement agreement. See the "**ANO Damage, Outage, and NRC Reviews**" section in Note 8 to the financial statements for further discussion of the ANO stator incident.

In March 2017, Entergy Arkansas filed its annual redetermination of its energy cost rate pursuant to the energy cost recovery rider, which reflected an increase in the rate from $0.01164 per kWh to $0.01547 per kWh. The APSC staff filed testimony in March 2017 recommending that the redetermined rate be implemented with the first billing cycle of April 2017 under the normal operation of the tariff. Accordingly, the redetermined rate went into effect on March 31, 2017 pursuant to the tariff. In July 2017 the Arkansas Attorney General requested additional information to support certain of the costs included in Entergy Arkansas's 2017 energy cost rate redetermination.

In March 2018, Entergy Arkansas filed its annual redetermination of its energy cost rate pursuant to the energy cost recovery rider, which reflected an increase in the rate from $0.01547 per kWh to $0.01882 per kWh. The Arkansas Attorney General filed a response to Entergy Arkansas's annual redetermination filing requesting that the APSC suspend the proposed tariff to investigate the amount of the redetermination or, alternatively, to allow recovery subject to refund. Among the reasons the Attorney General cited for suspension were questions pertaining to how Entergy Arkansas forecasted sales and potential implications of the Tax Act. Entergy Arkansas replied to the Attorney General's filing and stated that, to the extent there are questions pertaining to its load forecasting or the operation of the energy cost recovery rider, those issues exceed the scope of the instant rate redetermination. Entergy Arkansas also stated that potential effects of the Tax Act are appropriately considered in the APSC's separate proceeding regarding potential implications of the tax law. The APSC general staff filed a reply to the Attorney General's filing and agreed that Entergy Arkansas's filing complied with the terms of the energy cost recovery rider. The redetermined rate became effective with the first billing cycle of April 2018. Subsequently in April 2018 the APSC issued an order declining to suspend Entergy Arkansas's energy cost recovery rider rate and declining to require further investigation at that time of the issues suggested by the Attorney General in the

proceeding. Following a period of discovery, the Attorney General filed a supplemental response in October 2018 raising new issues with Entergy Arkansas's March 2018 rate redetermination and asserting that $45.7 million of the increase should be collected subject to refund pending further investigation. Entergy Arkansas filed to dismiss the Attorney General's supplemental response, the APSC general staff filed a motion to strike the Attorney General's filing, and the Attorney General filed a supplemental response disputing Entergy Arkansas and the APSC staff's filing. Applicable APSC rules and processes authorize its general staff to initiate periodic audits of Entergy Arkansas's energy cost recovery rider. In late-2018 the APSC general staff notified Entergy Arkansas it has initiated an audit of the 2017 fuel costs. The time in which the audit will be complete is uncertain at this time.

In March 2019, Entergy Arkansas filed its annual redetermination of its energy cost rate pursuant to the energy cost recovery rider, which reflected a decrease from $0.01882 per kWh to $0.01462 per kWh and became effective with the first billing cycle in April 2019. In March 2019 the Arkansas Attorney General filed a response to Entergy Arkansas's annual adjustment and included with its filing a motion for investigation of alleged overcharges to customers in connection with the FERC's October 2018 order in the opportunity sales proceeding. Entergy Arkansas filed its response to the Attorney General's motion in April 2019 in which Entergy Arkansas stated its intent to initiate a proceeding to address recovery issues related to the October 2018 FERC order. In May 2019, Entergy Arkansas initiated the opportunity sales recovery proceeding, discussed below, and requested that the APSC establish that proceeding as the single designated proceeding in which interested parties may assert claims related to the appropriate retail rate treatment of the FERC October 2018 order and related FERC orders in the opportunity sales proceeding. In June 2019 the APSC granted Entergy Arkansas's request and also denied the Attorney General's motion in the energy cost recovery proceeding seeking an investigation into Entergy Arkansas's annual energy cost recovery rider adjustment and referred the evaluation of such matters to the opportunity sales recovery proceeding.

In March 2020, Entergy Arkansas filed its annual redetermination of its energy cost rate pursuant to the energy cost recovery rider, which reflected a decrease from $0.01462 per kWh to $0.01052 per kWh. The redetermined rate became effective with the first billing cycle in April 2020 through the normal operation of the tariff.

Opportunity Sales Proceeding

In June 2009 the LPSC filed a complaint requesting that the FERC determine that certain of Entergy Arkansas's sales of electric energy to third parties: (a) violated the provisions of the System Agreement that allocated the energy generated by Entergy System resources; (b) imprudently denied the Entergy System and its ultimate consumers the benefits of low-cost Entergy System generating capacity; and (c) violated the provision of the System Agreement that prohibited sales to third parties by individual companies absent an offer of a right-of-first-refusal to other Utility operating companies. The LPSC's complaint challenged sales made beginning in 2002 and requested refunds. In July 2009 the Utility operating companies filed a response to the complaint arguing among other things that the System Agreement contemplates that the Utility operating companies may make sales to third parties for their own account, subject to the requirement that those sales be included in the load (or load shape) for the applicable Utility operating company. The FERC subsequently ordered a hearing in the proceeding.

After a hearing, the ALJ issued an initial decision in December 2010. The ALJ found that the System Agreement allowed for Entergy Arkansas to make the sales to third parties but concluded that the sales should be accounted for in the same manner as joint account sales. The ALJ concluded that "shareholders" should make refunds of the damages to the Utility operating companies, along with interest. Entergy disagreed with several aspects of the ALJ's initial decision and in January 2011 filed with the FERC exceptions to the decision.

The FERC issued a decision in June 2012 and held that, while the System Agreement is ambiguous, it does provide authority for individual Utility operating companies to make opportunity sales for their own account and Entergy Arkansas made and priced these sales in good faith. The FERC found, however, that the System Agreement does not provide authority for an individual Utility operating company to allocate the energy associated

with such opportunity sales as part of its load but provides a different allocation authority. The FERC further found that the after-the-fact accounting methodology used to allocate the energy used to supply the sales was inconsistent with the System Agreement. The FERC in its decision established further hearing procedures to quantify the effect of repricing the opportunity sales in accordance with the FERC's June 2012 decision. The hearing was held in May 2013 and the ALJ issued an initial decision in August 2013. The LPSC, the APSC, the City Council, and FERC staff filed briefs on exceptions and/or briefs opposing exceptions. Entergy filed a brief on exceptions requesting that the FERC reverse the initial decision and a brief opposing certain exceptions taken by the LPSC and FERC staff.

In April 2016 the FERC issued orders addressing requests for rehearing filed in July 2012 and the ALJ's August 2013 initial decision. The first order denied Entergy's request for rehearing and affirmed the FERC's earlier rulings that Entergy's original methodology for allocating energy costs to the opportunity sales was incorrect and, as a result, Entergy Arkansas must make payments to the other Utility operating companies to put them in the same position that they would have been in absent the incorrect allocation. The FERC clarified that interest should be included with the payments. The second order affirmed in part, and reversed in part, the rulings in the ALJ's August 2013 initial decision regarding the methodology that should be used to calculate the payments Entergy Arkansas is to make to the other Utility operating companies. The FERC affirmed the ALJ's ruling that a full re-run of intra-system bills should be performed but required that methodology be modified so that the sales have the same priority for purposes of energy allocation as joint account sales. The FERC reversed the ALJ's decision that any payments by Entergy Arkansas should be reduced by 20%. The FERC also reversed the ALJ's decision that adjustments to other System Agreement service schedules and excess bandwidth payments should not be taken into account when calculating the payments to be made by Entergy Arkansas. The FERC held that such adjustments and excess bandwidth payments should be taken into account but ordered further proceedings before an ALJ to address whether a cap on any reduction due to bandwidth payments was necessary and to implement the other adjustments to the calculation methodology.

In May 2016, Entergy Services filed a request for rehearing of the FERC's April 2016 order arguing that payments made by Entergy Arkansas should be reduced as a result of the timing of the LPSC's approval of certain contracts. Entergy Services also filed a request for clarification and/or rehearing of the FERC's April 2016 order addressing the ALJ's August 2013 initial decision. The APSC and the LPSC also filed requests for rehearing of the FERC's April 2016 order. In September 2017 the FERC issued an order denying the request for rehearing on the issue of whether any payments by Entergy Arkansas to the other Utility operating companies should be reduced due to the timing of the LPSC's approval of Entergy Arkansas's wholesale baseload contract with Entergy Louisiana. In November 2017 the FERC issued an order denying all of the remaining requests for rehearing of the April 2016 order. In November 2017, Entergy Services filed a petition for review in the D.C. Circuit of the FERC's orders in the first two phases of the opportunity sales case. In December 2017 the D.C. Circuit granted Entergy Services' request to hold the appeal in abeyance pending final resolution of the related proceeding before the FERC. In January 2018 the APSC and the LPSC filed separate petitions for review in the D.C. Circuit, and the D.C. Circuit consolidated the appeals with Entergy Services' appeal.

The hearing required by the FERC's April 2016 order was held in May 2017. In July 2017 the ALJ issued an initial decision addressing whether a cap on any reduction due to bandwidth payments was necessary and whether to implement the other adjustments to the calculation methodology. In August 2017 the Utility operating companies, the LPSC, the APSC, and FERC staff filed individual briefs on exceptions challenging various aspects of the initial decision. In September 2017 the Utility operating companies, the LPSC, the APSC, the MPSC, the City Council, and FERC staff filed separate briefs opposing exceptions taken by various parties.

Based on testimony previously submitted in the case and its assessment of the April 2016 FERC orders, in the first quarter 2016, Entergy Arkansas recorded a liability of $87 million, which included interest, for its estimated increased costs and payment to the other Utility operating companies, and a deferred fuel regulatory asset of $75 million. Following its assessment of the course of the proceedings, including the FERC's denial of rehearing in

November 2017 described above, in the fourth quarter 2017, Entergy Arkansas recorded an additional liability of $35 million and a regulatory asset of $31 million.

In October 2018 the FERC issued an order addressing the ALJ's July 2017 initial decision. The FERC reversed the ALJ's decision to cap the reduction in Entergy Arkansas's payment to account for the increased bandwidth payments that Entergy Arkansas made to the other operating companies. The FERC also reversed the ALJ's decision that Grand Gulf sales from January through September 2000 should be included in the calculation of Entergy Arkansas's payment. The FERC affirmed on other grounds the ALJ's rejection of the LPSC's claim that certain joint account sales should be accounted for as part of the calculation of Entergy Arkansas's payment. In November 2018 the LPSC requested rehearing of the FERC's October 2018 decision. In December 2019 the FERC denied the LPSC's request for rehearing. In January 2020 the LPSC appealed the December 2019 decision to the D.C. Circuit.

In December 2018, Entergy made a compliance filing in response to the FERC's October 2018 order. The compliance filing provided a final calculation of Entergy Arkansas's payments to the other Utility operating companies, including interest. No protests were filed in response to the December 2018 compliance filing. The December 2018 compliance filing is pending FERC action. Refunds and interest in the following amounts were paid by Entergy Arkansas to the other operating companies in December 2018:

	Total refunds including interest Payment/(Receipt)		
	(In Millions)		
	Principal	Interest	Total
Entergy Arkansas	$68	$67	$135
Entergy Louisiana	($30)	($29)	($59)
Entergy Mississippi	($18)	($18)	($36)
Entergy New Orleans	($3)	($4)	($7)
Entergy Texas	($17)	($16)	($33)

Entergy Arkansas previously recognized a regulatory asset with a balance of $116 million as of December 31, 2018 for a portion of the payments due as a result of this proceeding.

As described above, the FERC's opportunity sales orders have been appealed to the D.C. Circuit. In February 2020 all of the appeals were consolidated and in April 2020 the D.C. Circuit established a briefing schedule. Briefing was completed in September 2020 and oral argument was heard in December 2020.

In February 2019 the LPSC filed a new complaint relating to two issues that were raised in the opportunity sales proceeding, but that, in its October 2018 order, the FERC held were outside the scope of the proceeding. In March 2019, Entergy Services filed an answer and motion to dismiss the new complaint. In November 2019 the FERC issued an order denying the LPSC's complaint. The order concluded that the settlement agreement approved by the FERC in December 2015 terminating the System Agreement barred the LPSC's new complaint. In December 2019 the LPSC requested rehearing of the FERC's November 2019 order, and in July 2020 the FERC issued an order dismissing the LPSC's request for rehearing. In September 2020 the LPSC appealed to the D.C. Circuit the FERC's orders dismissing the new opportunity sales complaint. In November 2020 the D.C. Circuit issued an order establishing that briefing will occur in January 2021 through April 2021.

In May 2019, Entergy Arkansas filed an application and supporting testimony with the APSC requesting approval of a special rider tariff to recover the costs of these payments from its retail customers over a 24-month period. The application requested that the APSC approve the rider to take effect within 30 days or, if suspended by the APSC as allowed by commission rule, approve the rider to take effect in the first billing cycle of the first month occurring 30 days after issuance of the APSC's order approving the rider. In June 2019 the APSC suspended

Entergy Arkansas's tariff and granted Entergy Arkansas's motion asking the APSC to establish the proceeding as the single designated proceeding in which interested parties may assert claims related to the appropriate retail rate treatment of the FERC's October 2018 order and related FERC orders in the opportunity sales proceeding. In January 2020 the APSC adopted a procedural schedule with a hearing in April 2020. In January 2020 the Attorney General and Arkansas Electric Energy Consumers, Inc. filed a joint motion seeking to dismiss Entergy Arkansas's application alleging that the APSC, in a prior proceeding, ruled on the issues addressed in the application and determined that Entergy Arkansas's requested relief violates the filed rate doctrine and the prohibition against retroactive ratemaking. Entergy Arkansas responded to the joint motion in February 2020 rebutting these arguments, including demonstrating that the claims in this proceeding differ substantially from those the APSC addressed previously and that the payment resulting from a FERC tariff violation for which Entergy Arkansas seeks retail cost recovery in this proceeding differs materially from the refunds resulting from a FERC tariff amendment that the APSC previously rejected on filed rate doctrine and the retroactive ratemaking grounds. In addition, in January 2020 the Attorney General and Arkansas Electric Energy Consumers, Inc. filed testimony opposing the recovery by Entergy Arkansas of the opportunity sales payment but also claiming that certain components of the payment should be segregated and refunded to customers. In March 2020, Entergy Arkansas filed rebuttal testimony.

In July 2020 the APSC issued a decision finding that Entergy Arkansas's application is not in the public interest. The order also directed Entergy Arkansas to refund to its retail customers within 30 days of the order the FERC-determined over-collection of $13.7 million, plus interest, associated with a recalculated bandwidth remedy. In addition to these primary findings, the order also denied the Attorney General's request for Entergy Arkansas to prepare a compliance filing detailing all of the retail impacts from the opportunity sales and denied a request by the Arkansas Electric Energy Consumers to recalculate all costs using the revised responsibility ratio. Entergy Arkansas filed a motion for temporary stay of the 30-day requirement to allow Entergy Arkansas a reasonable opportunity to seek rehearing of the APSC order, but in July 2020 the APSC denied Entergy Arkansas's request for a stay and directed Entergy Arkansas to refund to its retail customers the component of the total FERC-determined opportunity sales payment that was associated with increased bandwidth remedy payments of $13.7 million, plus interest. The refunds were issued in the August 2020 billing cycle. While the APSC denied Entergy Arkansas's stay request, Entergy Arkansas believes its actions were prudent and, therefore, the costs, including the $13.7 million, plus interest, are recoverable. In July 2020, Entergy Arkansas requested rehearing of the APSC order, which rehearing was denied by the APSC in August 2020. In September 2020, Entergy Arkansas filed a complaint in the U. S. District Court for the Eastern District of Arkansas challenging the APSC's order denying Entergy Arkansas's request to recover the costs of these payments. In October 2020 the APSC filed a motion to dismiss Entergy Arkansas's complaint, to which Entergy Arkansas responded. Also in December 2020, Entergy Arkansas and the APSC held a pre-trial conference, and filed a report with the court in January 2021. The court scheduled a hearing for February 26, 2021 regarding issues addressed in the pre-trial conference report.

Net Metering Legislation

An Arkansas law was enacted effective July 2019 that, among other things, expands the definition of a "net metering customer" to include two additional types of customers: (1) customers that lease net metering facilities, subject to certain leasing arrangements, and (2) government entities or other entities exempt from state and federal income taxes that enter into a service contract for a net metering facility. The latter provision would allow eligible entities, many of whom are small and large general service customers, to purchase renewable energy directly from third party providers and receive bill credits for these purchases. The APSC was given authority under this law to address certain matters, such as cost shifting and the appropriate compensation for net metered energy and has initiated proceedings for this purpose. Because of the size and number of customers eligible under this new law, there is a risk of loss of load and the shifting of costs to customers. A hearing was held in December 2019, with utilities, cooperatives, the Arkansas Attorney General, industrial customers, and Entergy Arkansas advocating the need for establishment of a reasonable rate structure that takes into account impacts to non-net metering customers; an additional hearing was conducted in February 2020 for purposes of public comment only. The APSC issued an order in June 2020, and in July 2020 several parties, including Entergy Arkansas, filed for rehearing on multiple

grounds, including for the reasons that it imposes an unreasonable rate structure and allows facilities to net meter that do not meet the statutory definition of net metering facilities. After granting the rehearing requests, the APSC issued an order in September 2020 largely upholding its June 2020 order. In October 2020, Entergy Arkansas and several other parties filed an appeal of the APSC's September 2020 order.

Separately, as directed by the APSC general staff, the APSC opened a proceeding to compel utilities to amend their net metering tariffs to incorporate the provisions of the legislation that the APSC general staff considered "black letter law." Entergy Arkansas, the Arkansas Attorney General, and other intervenors opposed this directive pending the development of the rules for implementation that are being considered in the separate net metering rulemaking docket. Nevertheless, reserving its rights, Entergy Arkansas has complied with the directive to amend its tariffs. Asserting procedural and due process violations, in January 2020, Entergy Arkansas and the Arkansas Attorney General separately appealed certain APSC orders in the proceeding.

COVID-19 Orders

In April 2020, in light of the COVID-19 pandemic, the APSC issued an order requiring utilities, to the extent they had not already done so, to suspend service disconnections during the remaining pendency of the Arkansas Governor's emergency declaration or until the APSC rescinds the directive. The order also authorizes utilities to establish a regulatory asset to record costs resulting from the suspension of service disconnections, directs that in future proceedings the APSC will consider whether the request for recovery of these regulatory assets is reasonable and necessary, and requires utilities to track and report the costs and any savings directly attributable to suspension of disconnects. In May 2020 the APSC approved Entergy Arkansas expanding deferred payment agreements to assist customers during the COVID-19 pandemic. Quarterly reporting began in August 2020 and the APSC ordered additional reporting in October 2020 regarding utilities' transitional plans for ending the moratorium on service disconnects. In February 2021 the APSC issued an order finding that it is not in the public interest to immediately lift the moratorium on service disconnects, but to announce a target date of May 3, 2021. In March 2021 the APSC will issue an order either confirming the lifting of the moratorium on service disconnects or extending the moratorium. As of December 31, 2020, Entergy Arkansas recorded a regulatory asset of $10.5 million for costs associated with the COVID-19 pandemic.

Federal Regulation

See the "**Rate, Cost-recovery, and Other Regulation – Federal Regulation**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis and Note 2 to the financial statements for a discussion of federal regulation.

Nuclear Matters

Entergy Arkansas owns and, through an affiliate, operates the ANO 1 and ANO 2 nuclear power plants. Entergy Arkansas is, therefore, subject to the risks related to owning and operating nuclear plants. These include risks related to: the use, storage, and handling and disposal of high-level and low-level radioactive materials; the substantial financial requirements, both for capital investments and operational needs, to position Entergy's nuclear fleet to meet its operational goals; the performance and capacity factors of these nuclear plants including the financial requirements to address emerging issues like stress corrosion cracking of certain materials within the plant systems; regulatory requirements and potential future regulatory changes, including changes affecting the regulations governing nuclear plant ownership, operations, license amendments, and decommissioning; the availability of interim or permanent sites for the disposal of spent nuclear fuel and nuclear waste, including the fees charged for such disposal; the sufficiency of nuclear decommissioning trust fund assets and earnings to complete decommissioning of each site when required; and limitations on the amounts and types of insurance commercially available for losses in connection with nuclear plant operations and catastrophic events such as a nuclear accident. In the event of an unanticipated early shutdown of either ANO 1 or ANO 2, Entergy Arkansas may be required to

file with the APSC a rate mechanism to provide additional funds or credit support to satisfy regulatory requirements for decommissioning. ANO 1's operating license expires in 2034 and ANO 2's operating license expires in 2038.

Environmental Risks

Entergy Arkansas's facilities and operations are subject to regulation by various governmental authorities having jurisdiction over air quality, water quality, control of toxic substances and hazardous and solid wastes, and other environmental matters. Management believes that Entergy Arkansas is in substantial compliance with environmental regulations currently applicable to its facilities and operations, with reference to possible exceptions noted in "**Regulation of Entergy's Business - Environmental Regulation**" in Part I, Item 1. Because environmental regulations are subject to change, future compliance costs cannot be precisely estimated.

Critical Accounting Estimates

The preparation of Entergy Arkansas's financial statements in conformity with generally accepted accounting principles requires management to apply appropriate accounting policies and to make estimates and judgments that can have a significant effect on reported financial position, results of operations, and cash flows. Management has identified the following accounting policies and estimates as critical because they are based on assumptions and measurements that involve a high degree of uncertainty, and the potential for future changes in the assumptions and measurements that could produce estimates that would have a material effect on the presentation of Entergy Arkansas's financial position or results of operations.

In the first quarter 2019, Entergy Arkansas recorded a revision to its estimated decommissioning cost liabilities for ANO 1 and ANO 2 as a result of a revised decommissioning cost study. The revised estimates resulted in a $126.2 million increase in its decommissioning cost liabilities, along with corresponding increases in the related asset retirement cost assets that will be depreciated over the remaining lives of the units.

Nuclear Decommissioning Costs

See "**Nuclear Decommissioning Costs**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the estimates inherent in accounting for nuclear decommissioning costs.

Utility Regulatory Accounting

See "**Utility Regulatory Accounting**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of accounting for the effects of rate regulation.

Impairment of Long-lived Assets

See "**Impairment of Long-lived Assets**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the estimates associated with the impairment of long-lived assets.

Taxation and Uncertain Tax Positions

See "**Taxation and Uncertain Tax Positions**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion.

Qualified Pension and Other Postretirement Benefits

Entergy Arkansas's qualified pension and other postretirement reported costs, as described in Note 11 to the financial statements, are impacted by numerous factors including the provisions of the plans, changing employee demographics, and various actuarial calculations, assumptions, and accounting mechanisms. See the "**Qualified Pension and Other Postretirement Benefits**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion. Because of the complexity of these calculations, the long-term nature of these obligations, and the importance of the assumptions utilized, Entergy's estimate of these costs is a critical accounting estimate.

Costs and Sensitivities

The following chart reflects the sensitivity of qualified pension cost and qualified projected benefit obligation to changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Qualified Pension Cost	Impact on 2020 Qualified Projected Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$2,406	$46,791
Rate of return on plan assets	(0.25%)	$2,914	$—
Rate of increase in compensation	0.25%	$1,838	$8,922

The following chart reflects the sensitivity of postretirement benefit cost and accumulated postretirement benefit obligation to changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Postretirement Benefit Cost	Impact on 2020 Accumulated Postretirement Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$174	$6,576
Health care cost trend	0.25%	$225	$4,516

Each fluctuation above assumes that the other components of the calculation are held constant.

Costs and Employer Contributions

Total qualified pension cost for Entergy Arkansas in 2020 was $81.7 million, including $21.1 million in settlement costs. Entergy Arkansas anticipates 2021 qualified pension cost to be $61.6 million. Entergy Arkansas contributed $60 million to its qualified pension plans in 2020 and estimates pension contributions will be approximately $66.6 million in 2021, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021.

Total other postretirement health care and life insurance benefit income for Entergy Arkansas in 2020 was $10.1 million. Entergy Arkansas expects 2021 postretirement health care and life insurance benefit income of approximately $11.1 million. Entergy Arkansas contributed $2.2 million to its other postretirement plans in 2020 and estimates 2021 contributions will be approximately $517 thousand.

Other Contingencies

See "**Other Contingencies**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the estimates associated with environmental, litigation, and other risks.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements for a discussion of new accounting pronouncements.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the member and Board of Directors of
Entergy Arkansas, LLC and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Entergy Arkansas, LLC and Subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of income, cash flows and changes in member's equity (pages 332 through 336 and applicable items in pages 51 through 238), for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Rate and Regulatory Matters —Entergy Arkansas, LLC and Subsidiaries — Refer to Note 2 to the financial statements

Critical Audit Matter Description

The Company is subject to rate regulation by the Arkansas Public Service Commission (the "APSC"), which has jurisdiction with respect to the rates of electric companies in Arkansas, and to wholesale rate regulation by the Federal Energy Regulatory Commission ("FERC"). Management has determined it meets the requirements under accounting principles generally accepted in the United States of America to prepare its financial statements applying the specialized rules to account for the effects of cost-based rate regulation. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures, such as property, plant, and equipment;

regulatory assets and liabilities; income taxes; operating revenues; operation and maintenance expense; and depreciation and amortization expense.

The Company's rates are subject to regulatory rate-setting processes and annual earnings oversight. Because the APSC and the FERC set the rates the Company is allowed to charge customers based on allowable costs, including a reasonable return on equity, the Company applies accounting standards that require the financial statements to reflect the effects of rate regulation, including the recording of regulatory assets and liabilities. The Company assesses whether the regulatory assets and regulatory liabilities continue to meet the criteria for probable future recovery or settlement at each balance sheet date and when regulatory events occur. This assessment includes consideration of recent rate orders, historical regulatory treatment for similar costs, and factors such as changes in applicable regulatory and political environments. While the Company has indicated it expects to recover costs from customers through regulated rates, there is a risk that the APSC and the FERC will not approve: (1) full recovery of the costs of providing utility service, or (2) full recovery of amounts invested in the utility business and a reasonable return on that investment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about impacted account balances and disclosures and the high degree of subjectivity involved in assessing the impact of future regulatory orders on the financial statements. Management judgments include assessing the likelihood of recovery in future rates of incurred costs, including costs related to the Opportunity Sales Proceeding and refunds to customers. Auditing management's judgments regarding the outcome of future decisions by the APSC and the FERC, involved especially subjective judgment and specialized knowledge of accounting for rate regulation and the rate setting process.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertainty of future decisions by the APSC and the FERC included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of (1) the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets, and (2) a refund or a future reduction in rates that should be reported as regulatory liabilities. We also tested the effectiveness of management's controls over the initial recognition of amounts as property, plant, and equipment; regulatory assets or liabilities; and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or of a future reduction in rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the APSC and the FERC for the Company and other public utilities, regulatory statutes, interpretations, procedural memorandums, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the APSC's and the FERC's treatment of similar costs under similar circumstances. We evaluated the external information and compared to management's recorded regulatory asset and liability balances for completeness.
- For regulatory matters in process, including the Opportunity Sales Proceeding, we inspected the Company's filings with the APSC and the FERC, including the annual formula rate plan filing, and considered the filings with the APSC and the FERC by intervenors that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We obtained an analysis from management and support from internal and external legal counsel, as appropriate, regarding probability of recovery for regulatory assets or refund or future reduction in rates for regulatory liabilities not yet addressed in a regulatory order, including the Opportunity Sales Proceeding, to assess management's assertion that amounts are probable of recovery or a future reduction in rates.

/s/ DELOITTE & TOUCHE LLP

New Orleans, Louisiana
February 26, 2021

We have served as the Company's auditor since 2001.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
CONSOLIDATED INCOME STATEMENTS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING REVENUES			
Electric	$2,084,494	$2,259,594	$2,060,643
OPERATING EXPENSES			
Operation and Maintenance:			
Fuel, fuel-related expenses, and gas purchased for resale	271,896	458,907	517,245
Purchased power	187,690	204,640	252,390
Nuclear refueling outage expenses	55,737	68,769	77,915
Other operation and maintenance	669,518	720,217	724,831
Decommissioning	73,319	68,030	60,420
Taxes other than income taxes	121,057	115,869	104,771
Depreciation and amortization	338,029	307,351	292,649
Other regulatory credits - net	(35,310)	(11,186)	(14,807)
TOTAL	1,681,936	1,932,597	2,015,414
OPERATING INCOME	402,558	326,997	45,229
OTHER INCOME			
Allowance for equity funds used during construction	15,019	15,499	16,557
Interest and investment income	35,579	26,020	25,406
Miscellaneous - net	(21,908)	(18,566)	(14,874)
TOTAL	28,690	22,953	27,089
INTEREST EXPENSE			
Interest expense	144,834	140,087	124,459
Allowance for borrowed funds used during construction	(6,595)	(6,332)	(7,781)
TOTAL	138,239	133,755	116,678
INCOME (LOSS) BEFORE INCOME TAXES	293,009	216,195	(44,360)
Income taxes	47,777	(46,769)	(297,067)
NET INCOME	245,232	262,964	252,707
Preferred dividend requirements	—	—	1,249
EARNINGS APPLICABLE TO COMMON EQUITY	$245,232	$262,964	$251,458

See Notes to Financial Statements.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING ACTIVITIES			
Net income	$245,232	$262,964	$252,707
Adjustments to reconcile net income to net cash flow provided by operating activities:			
Depreciation, amortization, and decommissioning, including nuclear fuel amortization	490,457	465,299	443,698
Deferred income taxes, investment tax credits, and non-current taxes accrued	87,019	94,368	129,524
Changes in assets and liabilities:			
Receivables	(24,507)	(58,077)	4,294
Fuel inventory	(10,066)	(10,597)	6,210
Accounts payable	(22,773)	3,059	(126,405)
Prepaid taxes and taxes accrued	6	24,942	9,568
Interest accrued	(43)	3,895	678
Deferred fuel costs	(1,186)	72,560	43,869
Other working capital accounts	(11,061)	18,783	(30,118)
Provisions for estimated losses	6,289	14,901	14,250
Other regulatory assets	(165,534)	(131,873)	32,460
Other regulatory liabilities	106,878	39,293	(341,682)
Pension and other postretirement liabilities	42,576	5,831	(40,157)
Other assets and liabilities	(83,469)	(127,582)	(187,071)
Net cash flow provided by operating activities	659,818	677,766	211,825
INVESTING ACTIVITIES			
Construction expenditures	(775,595)	(641,525)	(660,044)
Allowance for equity funds used during construction	15,019	15,306	17,013
Nuclear fuel purchases	(100,678)	(54,344)	(99,417)
Proceeds from sale of nuclear fuel	30,638	22,782	54,810
Proceeds from nuclear decommissioning trust fund sales	321,360	317,377	300,801
Investment in nuclear decommissioning trust funds	(336,392)	(336,519)	(315,163)
Payment for purchase of assets	(5,988)	—	—
Changes in money pool receivable - net	(3,110)	—	—
Litigation proceeds for reimbursement of spent nuclear fuel storage costs	55,001	—	—
Insurance proceeds	—	—	14,790
Other	4,036	630	(1,517)
Net cash flow used in investing activities	(795,709)	(676,293)	(688,727)
FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	1,071,121	834,038	958,434
Retirement of long-term debt	(632,175)	(548,952)	(690,488)
Capital contribution from parent	—	—	350,000
Redemption of preferred stock	—	—	(32,660)
Change in money pool payable - net	(21,634)	(161,104)	16,601
Changes in short-term borrowings - net	—	—	(49,974)
Distributions/dividends paid:			
Common equity	(95,000)	(115,000)	(91,751)
Preferred stock	—	—	(1,606)
Other	2,188	(7,055)	12,249
Net cash flow provided by financing activities	324,500	1,927	470,805
Net increase (decrease) in cash and cash equivalents	188,609	3,400	(6,097)
Cash and cash equivalents at beginning of period	3,519	119	6,216
Cash and cash equivalents at end of period	$192,128	$3,519	$119
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid (received) during the period for:			
Interest - net of amount capitalized	$140,735	$131,134	$118,731
Income taxes	($21,971)	($33,989)	$44,393

See Notes to Financial Statements.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
ASSETS

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$24,108	$3,519
Temporary cash investments	168,020	—
Total cash and cash equivalents	192,128	3,519
Securitization recovery trust account	—	4,036
Accounts receivable:		
Customer	183,719	117,679
Allowance for doubtful accounts	(18,334)	(1,169)
Associated companies	34,216	29,178
Other	35,845	117,653
Accrued unbilled revenues	109,000	108,489
Total accounts receivable	344,446	371,830
Fuel inventory - at average cost	43,811	33,745
Materials and supplies - at average cost	237,640	211,320
Deferred nuclear refueling outage costs	32,692	48,875
Prepayments and other	13,296	14,096
TOTAL	864,013	687,421
OTHER PROPERTY AND INVESTMENTS		
Decommissioning trust funds	1,273,921	1,101,283
Other	341	345
TOTAL	1,274,262	1,101,628
UTILITY PLANT		
Electric	12,905,322	12,293,483
Construction work in progress	234,213	197,775
Nuclear fuel	163,044	195,547
TOTAL UTILITY PLANT	13,302,579	12,686,805
Less - accumulated depreciation and amortization	5,255,355	5,019,826
UTILITY PLANT - NET	8,047,224	7,666,979
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets (includes securitization property of $— as of December 31, 2020 and $1,706 as of December 31, 2019)	1,832,384	1,666,850
Deferred fuel costs	68,220	67,690
Other	14,028	15,065
TOTAL	1,914,632	1,749,605
TOTAL ASSETS	$12,100,131	$11,205,633

See Notes to Financial Statements.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
LIABILITIES AND EQUITY

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT LIABILITIES		
Currently maturing long-term debt	$485,000	$—
Accounts payable:		
Associated companies	59,448	111,785
Other	208,591	202,201
Customer deposits	98,506	101,411
Taxes accrued	81,837	81,831
Interest accrued	22,745	22,788
Deferred fuel costs	53,065	53,721
Current portion of unprotected excess accumulated deferred income taxes	—	9,296
Other	40,628	38,760
TOTAL	1,049,820	621,793
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	1,286,123	1,183,126
Accumulated deferred investment tax credits	30,500	31,701
Regulatory liability for income taxes - net	467,031	478,174
Other regulatory liabilities	686,872	559,555
Decommissioning	1,314,160	1,242,616
Accumulated provisions	70,169	63,880
Pension and other postretirement liabilities	361,682	319,075
Long-term debt (includes securitization bonds of $— as of December 31, 2020 and $6,772 as of December 31, 2019)	3,482,507	3,517,208
Other	75,098	62,568
TOTAL	7,774,142	7,457,903
Commitments and Contingencies		
EQUITY		
Member's equity	3,276,169	3,125,937
TOTAL	3,276,169	3,125,937
TOTAL LIABILITIES AND EQUITY	$12,100,131	$11,205,633

See Notes to Financial Statements.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN MEMBER'S EQUITY
For the Years Ended December 31, 2020, 2019, and 2018

	Member's Equity (In Thousands)
Balance at December 31, 2017	$2,376,754
Net income	252,707
Capital contributions from parent	350,000
Common equity distributions	(91,751)
Non-cash contribution from parent	94,335
Preferred stock dividends	(1,249)
Other	2,307
Balance at December 31, 2018	$2,983,103
Net income	262,964
Common equity distributions	(115,000)
Other	(5,130)
Balance at December 31, 2019	$3,125,937
Net income	245,232
Common equity distributions	(95,000)
Balance at December 31, 2020	$3,276,169

See Notes to Financial Statements.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
SELECTED FINANCIAL DATA - FIVE-YEAR COMPARISON

	2020	2019	2018	2017	2016
			(In Thousands)		
Operating revenues	$2,084,494	$2,259,594	$2,060,643	$2,139,919	$2,086,608
Net income	$245,232	$262,964	$252,707	$139,844	$167,212
Total assets	$12,100,131	$11,205,633	$10,401,596	$10,134,029	$9,606,117
Long-term obligations (a)	$3,482,507	$3,517,208	$3,225,759	$2,983,749	$2,746,435

(a) Includes long-term debt (excluding currently maturing debt) and preferred stock without sinking fund.

	2020	2019	2018	2017	2016
			(Dollars In Millions)		
Electric Operating Revenues:					
Residential	$841	$795	$807	$768	$789
Commercial	466	539	426	495	495
Industrial	462	521	434	472	446
Governmental	18	21	17	19	18
Total billed retail	1,787	1,876	1,684	1,754	1,748
Sales for resale:					
Associated companies	105	118	104	128	49
Non-associated companies	68	140	145	121	118
Other	124	126	128	137	172
Total	$2,084	$2,260	$2,061	$2,140	$2,087
Billed Electric Energy Sales (GWh):					
Residential	7,584	7,996	8,248	7,298	7,618
Commercial	5,356	5,822	5,967	5,825	5,988
Industrial	7,586	7,759	8,071	7,528	6,795
Governmental	223	241	239	237	237
Total retail	20,749	21,818	22,525	20,888	20,638
Sales for resale:					
Associated companies	1,659	2,180	1,773	1,782	1,609
Non-associated companies	4,198	7,206	6,447	6,549	7,115
Total	26,606	31,204	30,745	29,219	29,362

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

The COVID-19 Pandemic

See "**The COVID-19 Pandemic**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the COVID-19 pandemic.

Hurricane Laura, Hurricane Delta, and Hurricane Zeta

In August 2020 and October 2020, Hurricane Laura, Hurricane Delta, and Hurricane Zeta caused significant damage to portions of Entergy Louisiana's service area. The storms resulted in widespread outages, significant damage to distribution and transmission infrastructure, and the loss of sales during the outages. Additionally, as a result of Hurricane Laura's extensive damage to the grid infrastructure serving the impacted area, large portions of the underlying transmission system required nearly a complete rebuild. Total restoration costs for the repair and/or replacement of Entergy Louisiana's electric facilities damaged by Hurricane Laura, Hurricane Delta, and Hurricane Zeta are currently estimated to be approximately $2.0 billion, including approximately $1.67 billion in capital costs and approximately $330 million in non-capital costs. This estimate includes all costs to restore power and repair or replace the damages from the hurricanes, except for the cost to repair or replace damage incurred to an Entergy Louisiana transmission line in southeast Louisiana, and the amount of that cost could be significant. The restoration plan for this transmission line and the related cost estimate is still being evaluated. Also, Entergy Louisiana's revenues were adversely affected in 2020, primarily due to power outages resulting from the hurricanes. Entergy Louisiana is considering all reasonable avenues to recover storm-related costs from Hurricane Laura, Hurricane Delta, and Hurricane Zeta, including securitization. Storm cost recovery or financing will be subject to review by applicable regulatory authorities.

Entergy Louisiana recorded accounts payable and corresponding construction work in progress and regulatory assets for the estimated costs incurred that were necessary to return customers to service. Entergy Louisiana recorded the regulatory assets in accordance with its accounting policies and based on the historic treatment of such costs in its service area because management believes that recovery through some form of regulatory mechanism is probable. There are well established mechanisms and precedent for addressing these catastrophic events and providing for recovery of prudently incurred storm costs in accordance with applicable regulatory and legal principles. Because Entergy Louisiana has not gone through the regulatory process regarding these storm costs, there is an element of risk, and Entergy is unable to predict with certainty the degree of success it may have in its recovery initiatives, the amount of restoration costs that it may ultimately recover, or the timing of such recovery.

In October 2020, Entergy Louisiana filed an application at the LPSC seeking approval of certain ratemaking adjustments to facilitate issuance of shorter-term bonds to provide interim financing for restoration costs associated with Hurricane Laura, Hurricane Delta, and Hurricane Zeta. Subsequently, Entergy Louisiana and the LPSC staff filed a joint motion seeking approval to exclude from the derivation of Entergy Louisiana's capital structure and cost rate of debt for ratemaking purposes, including the allowance for funds used during construction, shorter-term debt up to $1.1 billion issued by Entergy Louisiana to fund costs associated with Hurricane Laura, Hurricane Delta, and Hurricane Zeta costs on an interim basis. In November 2020 the LPSC issued an order approving the joint motion, and Entergy Louisiana issued $1.1 billion of 0.62% Series mortgage bonds due November 2023. Also in November 2020, Entergy Louisiana drew $257 million from its funded storm reserves.

In December 2020, Entergy Louisiana provided the LPSC with notification that it intends to initiate a storm cost recovery proceeding in the near future, which will permit the LPSC to retain any outside consultants and counsel needed to review the storm cost recovery application. In February 2021 the LPSC voted to retain outside counsel and consultants to assist in the review of Entergy Louisiana's upcoming storm cost recovery application, which is expected to be filed in March 2021.

February 2021 Winter Storms

See the "**February 2021 Winter Storms**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the February 2021 winter storms. Entergy Louisiana's preliminary estimate for the cost of mobilizing crews and restoring power is approximately $50 million to $60 million. Natural gas purchases for Entergy Louisiana for February 1st through 25th, 2021 are approximately $190 million compared to natural gas purchases for February 2020 of $39 million.

Results of Operations

2020 Compared to 2019

Net Income

Net income increased $390.8 million primarily due to the $382.8 million reduction in deferred income tax expense related to the basis of assets contributed in the 2015 Entergy Louisiana and Entergy Gulf States Louisiana business combination as a result of the resolution of the 2014-2015 IRS audit in the fourth quarter 2020 and the $58 million reduction in income tax expense resulting from an IRS settlement in the first quarter 2020 related to the uncertain tax position regarding the Hurricane Isaac Louisiana Act 55 financing, which also resulted in a $29 million ($21 million net-of-tax) regulatory charge to reflect Entergy Louisiana's agreement to share the savings with customers. Also contributing to the increase were higher retail electric price, lower other operation and maintenance expenses, and a lower effective income tax rate. The increase was partially offset by higher depreciation and amortization expenses, lower volume/weather, lower other income, higher interest expense, and higher taxes other than income taxes. See Note 3 to the financial statements for further discussion of the tax audit resolution and the tax settlement.

Operating Revenues

Following is an analysis of the change in operating revenues comparing 2020 to 2019:

	Amount
	(In Millions)
2019 operating revenues	$4,285.2
Fuel, rider, and other revenues that do not significantly affect net income	(330.3)
Volume/weather	(68.8)
Return of unprotected excess accumulated deferred income taxes to customers	7.5
Retail electric price	176.3
2020 operating revenues	**$4,069.9**

Entergy Louisiana's results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not affect net income. "Fuel, rider, and other revenues that do not significantly affect net income" includes the revenue variance associated with these items.

The volume/weather variance is primarily due to decreased commercial and industrial usage as a result of the COVID-19 pandemic, the effects of Hurricane Laura, Hurricane Delta, and Hurricane Zeta on sales, and the effect of less favorable weather on residential sales, partially offset by increased residential usage as a result of the COVID-19 pandemic. The decrease in industrial usage is partially offset by an increase in demand from expansion projects, primarily in the transportation and chemicals industries. See "**The COVID-19 Pandemic**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the

COVID-19 pandemic. See "**Hurricane Laura, Hurricane Delta, and Hurricane Zeta**" above for discussion of the storms.

The return of unprotected excess accumulated deferred income taxes to customers resulted from the return of unprotected excess accumulated deferred income taxes through changes in the formula rate plan effective May 2018. In 2020, $31.1 million was returned to customers as compared to $38.6 million in 2019. There was no effect on net income as the reduction in operating revenues was offset by a reduction in income tax expense. See Note 2 to the financial statements for further discussion of regulatory activity regarding the Tax Cuts and Jobs Act.

The retail electric price variance is primarily due to an increase in formula rate plan revenues effective June 2019 due to the inclusion of the first-year revenue requirement for the J. Wayne Leonard Power Station (formerly St. Charles Power Station) and effective April 2020 due to the inclusion of the first-year revenue requirement for the Lake Charles Power Station and increases in formula rate plan revenues effective September 2019 and September 2020. See Note 2 to the financial statements for further discussion of the formula rate plan proceedings.

Other Income Statement Variances

Other operation and maintenance expenses decreased primarily due to:

- a decrease of $10.2 million in nuclear generation expenses primarily due to a lower scope of work performed in 2020 as compared to 2019, in part as a result of the COVID-19 pandemic;
- a decrease of $9.5 million primarily due to contract costs in 2019 related to initiatives to explore new customer products and services;
- a decrease of $6.8 million in loss provisions;
- higher nuclear insurance refunds of $5.9 million;
- a decrease of $5.8 million in energy efficiency costs due to the timing of recovery from customers; and
- a decrease of $4.3 million in non-nuclear generation expenses primarily due to a lower scope of work performed during plant outages in 2020 as compared to the same period in 2019, partially offset by increases resulting from the J. Wayne Leonard Power Station (formerly St. Charles Power Station) and the Lake Charles Power Station being placed in service.

The decrease was partially offset by:

- an increase of $4.1 million in compensation and benefits costs primarily due to an increase in net periodic pension and other postretirement benefits costs as a result of a decrease in the discount rate used to value the benefit liabilities. See "**Critical Accounting Estimates**" below and Note 11 to the financial statements for further discussion of pension and other postretirement benefit costs; and
- several individually insignificant items.

Taxes other than income taxes increased primarily due to increases in ad valorem taxes resulting from higher property assessments.

Depreciation and amortization expenses increased primarily due to additions to plant in service, including the J. Wayne Leonard Power Station (formerly St. Charles Power Station), which was placed into service in May 2019 and the Lake Charles Power Station, which was placed in service in March 2020.

Other regulatory charges (credits) include regulatory charges of $32.6 million recorded in the fourth quarter 2020 due to a settlement with the IRS related to the uncertain tax position regarding Hurricane Katrina and Hurricane Rita Louisiana Act 55 financing because the savings will be shared with customers and $29 million recorded in the first quarter 2020 due to a settlement with the IRS related to the uncertain tax position regarding Hurricane Isaac Louisiana Act 55 financing because the savings will be shared with customers. See Note 3 to the financial statements for further discussion of the settlements and savings obligations.

Other income decreased primarily due to:

- a decrease in the allowance for equity funds used during construction due to higher construction work in progress in 2019, including the J. Wayne Leonard Power Station (formerly St. Charles Power Station) and the Lake Charles Power Station projects; and
- changes in decommissioning trust fund activity.

Interest expense increased primarily due to:

- the issuances of $300 million of 4.20% Series mortgage bonds and $350 million of 2.90% Series mortgage bonds, each in March 2020;
- the issuance of $525 million of 4.20% Series mortgage bonds in March 2019; and
- a decrease in the allowance for borrowed funds used during construction due to higher construction work in progress in 2019, including the J. Wayne Leonard Power Station (formerly St. Charles Power Station) and Lake Charles Power Station projects.

The effective income tax rates were (54.6%) for 2020 and 15% for 2019. The difference in the effective income tax rate versus the federal statutory rate of 21% for 2020 was primarily due to completion of the 2014-2015 IRS audit effectively settling the tax positions for those years. The difference in the effective income tax rate versus the federal statutory rate of 21% for 2019 was primarily due to the amortization of excess accumulated deferred income taxes. See Notes 2 and 3 to the financial statements for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act. See Note 3 to the financial statements for a reconciliation of the federal statutory rates of 21% to the effective income tax rates.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS** - **Results of Operations**" in Item 7 of Entergy Louisiana's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of results of operations for 2019 compared to 2018.

Liquidity and Capital Resources

Cash Flow

Cash flows for the years ended December 31, 2020, 2019, and 2018 were as follows:

	2020	2019	2018
		(In Thousands)	
Cash and cash equivalents at beginning of period	$2,006	$43,364	$35,907
Net cash provided by (used in):			
Operating activities	1,072,986	1,236,002	1,395,204
Investing activities	(1,944,671)	(1,653,634)	(1,878,208)
Financing activities	1,597,699	376,274	490,461
Net increase (decrease) in cash and cash equivalents	726,014	(41,358)	7,457
Cash and cash equivalents at end of period	$728,020	$2,006	$43,364

2020 Compared to 2019

Operating Activities

Net cash flow provided by operating activities decreased $163 million in 2020 primarily due to:

- an increase of $186.1 million in storm spending in 2020, primarily due to Hurricane Laura, Hurricane Delta, and Hurricane Zeta restoration efforts. See "**Hurricane Laura, Hurricane Delta, and Hurricane Zeta**" above for discussion of storm restoration efforts;
- lower collections of receivables from customers, in part due to the COVID-19 pandemic;
- the timing of recovery of fuel and purchased power costs; and
- an increase of $21.5 million in interest paid.

The decrease was partially offset by:

- a decrease in $43.7 million in spending on nuclear refueling outages;
- the timing of payments to vendors; and
- income tax refunds of $14.7 million in 2020 compared to $15.3 million in income tax payments in 2019. Entergy Louisiana had income tax refunds in 2020 and income tax payments in 2019 in accordance with an intercompany tax allocation agreement. Entergy Louisiana had income tax refunds in 2020 as a result of a refund of an overpayment on a prior year state income tax return.

Investing Activities

Net cash flow used in investing activities increased $291 million in 2020 primarily due to:

- an increase of $709.7 million in storm spending 2020, primarily due to Hurricane Laura, Hurricane Delta, and Hurricane Zeta restoration efforts, See "**Hurricane Laura, Hurricane Delta, and Hurricane Zeta**" above for discussion of storm restoration efforts;
- the purchase of Washington Parish Energy Center in November 2020 for approximately $222 million. See Note 14 to the financial statements for further discussion of the Washington Parish Energy Center purchase;
- an increase of $16.7 million in distribution construction expenditures primarily due to investment in the reliability and infrastructure of Entergy Louisiana's distribution system, including increased spending on advanced metering infrastructure; and
- money pool activity.

The increase was partially offset by:

- an increase of $302.2 million in net receipts from storm reserve escrow accounts;
- a decrease of $207.8 million in non-nuclear generation construction expenditures due to higher spending in 2019 on the Lake Charles Power Station and J. Wayne Leonard Power Station (formerly St. Charles Power Station) projects;
- a decrease of $133.1 million in transmission construction expenditures primarily due to a lower scope of work performed on various projects in 2020 as compared to 2019;
- a decrease of $89.5 million in nuclear construction expenditures primarily due to a lower scope of work performed on various nuclear projects in 2020 as compared to 2019; and
- a decrease of $26.1 million as a result of fluctuations in nuclear fuel activity because of variations from year to year in the timing and pricing of fuel reload requirements in the Utility business, material, and service deliveries, and the timing of cash payments during the nuclear fuel cycle.

Increases in Entergy Louisiana's receivable from the money pool are a use of cash flow, and Entergy Louisiana's receivable from the money pool increased by $13.4 million in 2020 compared to decreasing by $46.8

million in 2019. The money pool is an inter-company borrowing arrangement designed to reduce the Utility subsidiaries' need for external short-term borrowings.

Financing Activities

Net cash flow provided by financing activities increased $1,221.4 million in 2020 primarily due to:

- the issuance of $1.1 billion of 0.62% Series mortgage bonds in November 2020;
- the issuance of $350 million of 2.90% Series mortgage bonds and $300 million of 4.20% Series mortgage bonds, each in March 2020;
- the issuance of $300 million of 2.90% Series mortgage bonds and $300 million of 1.60% Series mortgage bonds, each in November 2020; and
- a decrease of $186.5 million in common equity distributions in 2020 primarily due to upcoming capital expenditures.

The increase was partially offset by:

- the issuance of $525 million of 4.20% Series mortgage bonds in March 2019;
- the repayment in August 2020 of $250 million of 3.95% Series mortgage bonds due October 2020;
- the repayment in December 2020 of $200 million of 5.25% Series mortgage bonds due July 2052;
- money pool activity;
- the repayment in December 2020 of $100 million of 4.70% Series mortgage bonds due June 2063; and
- net repayments of long-term borrowings of $62 million in 2020 on the nuclear fuel company variable interest entities' credit facilities.

Decreases in Entergy Louisiana's payable to the money pool are a use of cash flow, and Entergy Louisiana's payable to the money pool decreased by $82.8 million in 2020 compared to increasing by $82.8 million in 2019.

See Note 5 to the financial statements for details of long-term debt.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources - Cash Flow**" in Item 7 of Entergy Louisiana's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of operating, investing, and financing cash flow activities for 2019 compared to 2018.

Capital Structure

Entergy Louisiana's debt to capital ratio is shown in the following table. The increase in the debt to capital ratio for Entergy Louisiana is primarily due to the net issuances of long-term debt in 2020.

	December 31, 2020	December 31, 2019
Debt to capital	54.8 %	53.4 %
Effect of excluding securitization bonds	0.0 %	(0.1 %)
Debt to capital, excluding securitization bonds (a)	54.8 %	53.3 %
Effect of subtracting cash	(2.1 %)	(0.1 %)
Net debt to net capital, excluding securitization bonds (a)	52.7 %	53.2 %

(a) Calculation excludes the securitization bonds, which are non-recourse to Entergy Louisiana.

Net debt consists of debt less cash and cash equivalents. Debt consists of short-term borrowings, finance lease obligations, and long-term debt, including the currently maturing portion. Capital consists of debt and common equity. Net capital consists of capital less cash and cash equivalents. Entergy Louisiana uses the debt to capital ratios excluding securitization bonds in analyzing its financial condition and believes they provide useful information to its investors and creditors in evaluating Entergy Louisiana's financial condition because the securitization bonds are non-recourse to Entergy Louisiana, as more fully described in Note 5 to the financial statements. Entergy Louisiana also uses the net debt to net capital ratio excluding securitization bonds in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy Louisiana's financial condition because net debt indicates Entergy Louisiana's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Entergy Louisiana seeks to optimize its capital structure in accordance with its regulatory requirements and to control its cost of capital while also maintaining equity capitalization at a level consistent with investment-grade debt ratings. To the extent that operating cash flows are in excess of planned investments, cash may be used to reduce outstanding debt or may be paid as a distribution, or both, in appropriate amounts to maintain the capital structure. To the extent that operating cash flows are insufficient to support planned investments, Entergy Louisiana may issue incremental debt or reduce distributions, or both, to maintain its capital structure. In addition, in certain infrequent circumstances, such as financing of large transactions that would materially alter the capital structure if financed entirely with debt and reducing distributions, Entergy Louisiana may receive equity contributions to maintain its capital structure.

Uses of Capital

Entergy Louisiana requires capital resources for:

- construction and other capital investments;
- debt maturities or retirements;
- working capital purposes, including the financing of fuel and purchased power costs; and
- distribution and interest payments.

Following are the amounts of Entergy Louisiana's planned construction and other capital investments.

	2021	2022	2023
		(In Millions)	
Planned construction and capital investment:			
Generation	$365	$460	$785
Transmission	425	340	230
Distribution	540	485	500
Utility Support	160	130	115
Total	$1,490	$1,415	$1,630

In addition to the planned spending in the table above, Entergy Louisiana also expects to pay for $845 million of capital investments in 2021 related to Hurricane Laura, Hurricane Delta, and Hurricane Zeta restoration work that have been accrued as of December 31, 2020.

Following are the amounts of Entergy Louisiana's existing debt and lease obligations (includes estimated interest payments) and other purchase obligations.

	2021	2022-2023	2024-2025	After 2025	Total
			(In Millions)		
Long-term debt (a)	$557	$2,294	$1,495	$9,506	$13,852
Operating leases (b)	$13	$19	$10	$4	$46
Finance leases (b)	$4	$7	$4	$2	$17
Purchase obligations (c)	$687	$1,463	$1,472	$4,838	$8,460

(a) Includes estimated interest payments. Long-term debt is discussed in Note 5 to the financial statements.
(b) Lease obligations are discussed in Note 10 to the financial statements.
(c) Purchase obligations represent the minimum purchase obligation or cancellation charge for contractual obligations to purchase goods or services. For Entergy Louisiana, almost all of the total consists of unconditional fuel and purchased power obligations, including its obligations under the Vidalia purchased power agreement and the Unit Power Sales Agreement, both of which are discussed in Note 8 to the financial statements.

In addition to the contractual obligations given above, Entergy Louisiana currently expects to contribute approximately $59.9 million to its qualified pension plans and approximately $15.6 million to its other postretirement health care and life insurance plans in 2021, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021. See "**Critical Accounting Estimates - Qualified Pension and Other Postretirement Benefits**" below for a discussion of qualified pension and other postretirement benefits funding.

In addition to routine capital spending to maintain operations, the planned capital investment estimate for Entergy Louisiana includes specific investments such as transmission projects to enhance reliability, reduce congestion, and enable economic growth; distribution spending to maintain reliability and improve service to customers, including advanced meters and related investments; resource planning, including potential generation and renewables projects; system improvements; investments in River Bend and Waterford 3; software and security; and other investments. Estimated capital expenditures are subject to periodic review and modification and may vary based on the ongoing effects of regulatory constraints and requirements, environmental compliance, business opportunities, market volatility, economic trends, business restructuring, changes in project plans, and the ability to access capital.

As a wholly-owned subsidiary of Entergy Utility Holding Company, LLC, Entergy Louisiana pays distributions from its earnings at a percentage determined monthly.

Sources of Capital

Entergy Louisiana's sources to meet its capital requirements include:

- internally generated funds;
- cash on hand;
- storm reserve escrow accounts;
- debt or preferred membership interest issuances, including debt issuances to refund or retire currently outstanding or maturing indebtedness;
- capital contributions; and
- bank financing under new or existing facilities.

Entergy Louisiana may refinance, redeem, or otherwise retire debt prior to maturity, to the extent market conditions and interest rates are favorable.

All debt and common and preferred membership interest issuances by Entergy Louisiana require prior regulatory approval. Debt issuances are also subject to issuance tests set forth in its bond indentures and other agreements. Entergy Louisiana has sufficient capacity under these tests to meet its foreseeable capital needs.

Entergy Louisiana's receivables from or (payables to) the money pool were as follows as of December 31 for each of the following years.

2020	2019	2018	2017
	(In Thousands)		
$13,426	($82,826)	$46,843	$11,173

See Note 4 to the financial statements for a description of the money pool.

Entergy Louisiana has a credit facility in the amount of $350 million scheduled to expire in September 2024. The credit facility includes fronting commitments for the issuance of letters of credit against $15 million of the borrowing capacity of the facility. As of December 31, 2020, there were no cash borrowings and no letters of credit outstanding under the credit facility. In addition, Entergy Louisiana is a party to an uncommitted letter of credit facility as a means to post collateral to support its obligations to MISO. As of December 31, 2020, $2.2 million in letters of credit were outstanding under Entergy Louisiana's uncommitted letter of credit facility. See Note 4 to the financial statements for additional discussion of the credit facilities.

The Entergy Louisiana nuclear fuel company variable interest entities have two separate credit facilities, each in the amount of $105 million and scheduled to expire in September 2022. As of December 31, 2020, $18.9 million of loans were outstanding under the credit facility for the Entergy Louisiana River Bend nuclear fuel company variable interest entity. As of December 31, 2020, $39.3 million in loans were outstanding under the Entergy Louisiana Waterford nuclear fuel company variable interest entity credit facility. See Note 4 to the financial statements for additional discussion of the nuclear fuel company variable interest entity credit facilities.

Entergy Louisiana obtained authorizations from the FERC through July 2022 for the following:

- short-term borrowings not to exceed an aggregate amount of $450 million at any time outstanding;
- long-term borrowings and security issuances; and
- borrowings by its nuclear fuel company variable interest entities.

See Note 4 to the financial statements for further discussion of Entergy Louisiana's short-term borrowing limits.

Hurricane Isaac

In June 2014 the LPSC voted to approve a series of orders which (i) quantified $290.8 million of Hurricane Isaac system restoration costs as prudently incurred; (ii) determined $290 million as the level of storm reserves to be re-established; (iii) authorized Entergy Louisiana to utilize Louisiana Act 55 financing for Hurricane Isaac system restoration costs; and (iv) granted other requested relief associated with storm reserves and Act 55 financing of Hurricane Isaac system restoration costs. Entergy Louisiana committed to pass on to customers a minimum of $30.8 million of customer benefits through annual customer credits of approximately $6.2 million for five years. Approvals for the Act 55 financings were obtained from the Louisiana Utilities Restoration Corporation and the Louisiana State Bond Commission. See Note 2 to the financial statements for a discussion of the August 2014 issuance of bonds under Act 55 of the Louisiana Legislature.

Little Gypsy Repowering Project

In April 2007, Entergy Louisiana announced that it intended to pursue the solid fuel repowering of a 538 MW unit at its Little Gypsy plant. In March 2009 the LPSC voted in favor of a motion directing Entergy Louisiana

to temporarily suspend the repowering project and, based upon an analysis of the project's economic viability, to make a recommendation regarding whether to proceed with the project. This action was based upon a number of factors including the recent decline in natural gas prices, as well as environmental concerns, the unknown costs of carbon legislation and changes in the capital/financial markets. In April 2009, Entergy Louisiana complied with the LPSC's directive and recommended that the project be suspended for an extended period of time of three years or more. In May 2009 the LPSC issued an order declaring that Entergy Louisiana's decision to place the Little Gypsy project into a longer-term suspension of three years or more is in the public interest and prudent.

In October 2009, Entergy Louisiana made a filing with the LPSC seeking permission to cancel the Little Gypsy repowering project and seeking project cost recovery over a five-year period. In June 2010 and August 2010, the LPSC staff and intervenors filed testimony. The LPSC staff (1) agreed that it was prudent to move the project from long-term suspension to cancellation and that the timing of the decision to suspend on a longer-term basis was not imprudent; (2) indicated that, except for $0.8 million in compensation-related costs, the costs incurred should be deemed prudent; (3) recommended recovery from customers over ten years but stated that the LPSC may want to consider 15 years; (4) allowed for recovery of carrying costs and earning a return on project costs, but at a reduced rate approximating the cost of debt, while also acknowledging that the LPSC may consider ordering no return; and (5) indicated that Entergy Louisiana should be directed to securitize project costs, if legally feasible and in the public interest. In the third quarter 2010, in accordance with accounting standards, Entergy Louisiana determined that it was probable that the Little Gypsy repowering project would be abandoned and accordingly reclassified $199.8 million of project costs from construction work in progress to a regulatory asset. A hearing on the issues, except for cost allocation among customer classes, was held before the ALJ in November 2010. In January 2011 all parties participated in a mediation on the disputed issues, resulting in a settlement of all disputed issues, including cost recovery and cost allocation. The settlement provides for Entergy Louisiana to recover $200 million as of March 31, 2011, and carrying costs on that amount on specified terms thereafter. The settlement also provides for Entergy Louisiana to recover the approved project costs by securitization. In April 2011, Entergy Louisiana filed an application with the LPSC to authorize the securitization of the investment recovery costs associated with the project and to issue a financing order by which Entergy Louisiana could accomplish such securitization. In August 2011 the LPSC issued an order approving the settlement and also issued a financing order for the securitization. See Note 5 to the financial statements for a discussion of the September 2011 issuance of the securitization bonds.

State and Local Rate Regulation and Fuel-Cost Recovery

The rates that Entergy Louisiana charges for its services significantly influence its financial position, results of operations, and liquidity. Entergy Louisiana is regulated and the rates charged to its customers are determined in regulatory proceedings. A governmental agency, the LPSC, is primarily responsible for approval of the rates charged to customers.

Retail Rates - Electric

Filings with the LPSC

2017 Formula Rate Plan Filing

In June 2018, Entergy Louisiana filed its formula rate plan evaluation report for its 2017 calendar year operations. The 2017 test year evaluation report produced an earned return on equity of 8.16%, due in large part to revenue-neutral realignments to other recovery mechanisms. Without these realignments, the evaluation report produces an earned return on equity of 9.88% and a resulting base rider formula rate plan revenue increase of $4.8 million. Excluding the Tax Act credits provided for by the tax reform adjustment mechanisms, total formula rate plan revenues were further increased by a total of $98 million as a result of the evaluation report due to adjustments to the additional capacity and MISO cost recovery mechanisms of the formula rate plan, and implementation of the transmission recovery mechanism. In August 2018, Entergy Louisiana filed a supplemental formula rate plan

evaluation report to reflect changes from the 2016 test year formula rate plan proceedings, a decrease to the transmission recovery mechanism to reflect lower actual capital additions, and a decrease to evaluation period expenses to reflect the terms of a new power sales agreement. Based on the August 2018 update, Entergy Louisiana recognized a total decrease in formula rate plan revenue of approximately $17.6 million. Results of the updated 2017 evaluation report filing were implemented with the September 2018 billing month subject to refund and review by the LPSC staff and intervenors. In accordance with the terms of the formula rate plan, in September 2018 the LPSC staff and intervenors submitted their responses to Entergy Louisiana's original formula rate plan evaluation report and supplemental compliance updates. The LPSC staff asserted objections/reservations regarding 1) Entergy Louisiana's proposed rate adjustments associated with the return of excess accumulated deferred income taxes pursuant to the Tax Act and the treatment of accumulated deferred income taxes related to reductions of rate base; 2) Entergy Louisiana's reservation regarding treatment of a regulatory asset related to certain special orders by the LPSC; and 3) test year expenses billed from Entergy Services to Entergy Louisiana. Intervenors also objected to Entergy Louisiana's treatment of the regulatory asset related to certain special orders by the LPSC. A procedural schedule has not yet been established to resolve these issues.

Entergy Louisiana also included in its filing a presentation of an initial proposal to combine the legacy Entergy Louisiana and legacy Entergy Gulf States Louisiana residential rates, which combination, if approved, would be accomplished on a revenue-neutral basis intended not to affect the rates of other customer classes.

Commercial operation at J. Wayne Leonard Power Station (formerly St. Charles Power Station) commenced in May 2019. In May 2019, Entergy Louisiana filed an update to its 2017 formula rate plan evaluation report to include the estimated first-year revenue requirement of $109.5 million associated with the J. Wayne Leonard Power Station. The resulting interim adjustment to rates became effective with the first billing cycle of June 2019. In June 2020, Entergy Louisiana submitted information to the LPSC to review the prudence of Entergy Louisiana's management of the project. In August 2020 discovery commenced and a procedural schedule was established with a hearing in July 2021.

2018 Formula Rate Plan Filing

In May 2019, Entergy Louisiana filed its formula rate plan evaluation report for its 2018 calendar year operations. The 2018 test year evaluation report produced an earned return on common equity of 10.61% leading to a base rider formula rate plan revenue decrease of $8.9 million. While base rider formula rate plan revenue will decrease as a result of this filing, overall formula rate plan revenues will increase by approximately $118.7 million. This outcome is primarily driven by a reduction to the credits previously flowed through the tax reform adjustment mechanism and an increase in the transmission recovery mechanism, partially offset by reductions in the additional capacity mechanism revenue requirements and extraordinary cost items. The filing is subject to review by the LPSC. Resulting rates were implemented in September 2019, subject to refund.

Entergy Louisiana also included in its filing a presentation of an initial proposal to combine the legacy Entergy Louisiana and legacy Entergy Gulf States Louisiana residential rates, which combination, if approved, would be accomplished on a revenue-neutral basis intended not to affect the rates of other customer classes. Entergy Louisiana contemplates that any combination of residential rates resulting from this request would be implemented with the results of the 2019 test year formula rate plan filing.

Several parties intervened in the proceeding and the LPSC staff filed its report of objections/reservations in accordance with the applicable provisions of the formula rate plan. In its report the LPSC staff re-urged reservations with respect to the outstanding issues from the 2017 test year formula rate plan filing and disputed the inclusion of certain affiliate costs for test years 2017 and 2018. The LPSC staff objected to Entergy Louisiana's proposal to combine residential rates but proposed the setting of a status conference to establish a procedural schedule to more fully address the issue. The LPSC staff also reserved its right to object to the treatment of the sale of Willow Glen reflected in the evaluation report and to the August 2019 compliance update, which was made primarily to update the capital additions reflected in the formula rate plan's transmission recovery mechanism,

based on limited time to review it. Additionally, since the completion of certain transmission projects, the LPSC staff issued supplemental data requests addressing the prudence of Entergy Louisiana's expenditures in connection with those projects. Entergy Louisiana has responded to all such requests.

Commercial operation at Lake Charles Power Station commenced in March 2020. In March 2020, Entergy Louisiana filed an update to its 2018 formula rate plan evaluation report to include the estimated first-year revenue requirement of $108 million associated with the Lake Charles Power Station. The resulting interim adjustment to rates became effective with the first billing cycle of April 2020.

In an effort to narrow the remaining issues in formula rate plan test years 2017 and 2018, Entergy Louisiana provided notice to the parties in October 2020 that it was withdrawing its request to combine residential rates. Entergy Louisiana noted that the withdrawal is without prejudice to Entergy Louisiana's right to seek to combine residential rates in a future proceeding.

2019 Formula Rate Plan Filing

In May 2020, Entergy Louisiana filed with the LPSC its formula rate plan evaluation report for its 2019 calendar year operations. The 2019 test year evaluation report produced an earned return on common equity of 9.66%. As such, no change to base rider formula rate plan revenue is required. Although base rider formula rate plan revenue will not change as a result of this filing, overall formula rate plan revenues will increase by approximately $103 million. This outcome is driven by the removal of prior year credits associated with the sale of the Willow Glen Power Station and an increase in the transmission recovery mechanism. Also contributing to the overall change is an increase in legacy formula rate plan revenue requirements driven by legacy Entergy Louisiana capacity cost true-ups and higher annualized legacy Entergy Gulf States Louisiana revenues due to higher billing determinants, offset by reductions in MISO cost recovery mechanism and tax reform adjustment mechanism revenue requirements. In August 2020 the LPSC staff submitted a list of items for which it needs additional information to confirm the accuracy and compliance of the 2019 test year evaluation report. The LPSC staff objected to a proposed revenue neutral adjustment regarding a certain rider as being beyond the scope of permitted formula rate plan adjustments. Rates reflected in the May 2020 filing, with the exception of the revenue neutral rider adjustment, and as updated in an August 2020 filing, were implemented in September 2020, subject to refund. Entergy Louisiana is in the process of providing additional information and details on the May 2020 filing as requested by the LPSC staff.

In November 2020, Entergy Louisiana accepted ownership of the Washington Parish Energy Center and filed an update to its 2019 formula rate plan evaluation report to include the estimated first-year revenue requirement of $35 million associated with the Washington Parish Energy Center. The resulting interim adjustment to rates became effective with the first billing cycle of December 2020. In January 2021, Entergy Louisiana filed an update to its 2019 formula rate plan evaluation report to include the implementation of a scheduled step-up in its nuclear decommissioning revenue requirement and a true-up for under-collections of nuclear decommissioning expenses. The total rate adjustment would increase formula rate plan revenues by approximately $1.2 million. The resulting interim adjustment to rates became effective with the first billing cycle of February 2021.

Request for Extension and Modification of Formula Rate Plan

In May 2020, Entergy Louisiana filed with the LPSC its application for authority to extend its formula rate plan. In its application, Entergy Louisiana seeks to maintain a 9.8% return on equity, with a bandwidth of 60 basis points above and below the midpoint, with a first-year midpoint reset. Entergy Louisiana also seeks to maintain its existing additional capacity mechanism, tax reform adjustment mechanism, transmission recovery mechanism, and the MISO cost recovery mechanism. Entergy Louisiana also seeks to add a distribution cost recovery mechanism which operates in substantially the same manner as the transmission recovery mechanism, seeks to utilize end of period rate base to calculate cost of service, and requests a deferral of certain expenses incurred for outside of right-of-way vegetation programs. Settlement discussions are ongoing.

Investigation of Costs Billed by Entergy Services

In November 2018 the LPSC issued a notice of proceeding initiating an investigation into costs incurred by Entergy Services that are included in the retail rates of Entergy Louisiana. As stated in the notice of proceeding, the LPSC observed an increase in capital construction-related costs incurred by Entergy Services. Discovery was issued and included efforts to seek highly detailed information on a broad range of matters unrelated to the scope of the audit. There has been no further activity in the investigation since May 2019.

Fuel and purchased power recovery

Entergy Louisiana recovers electric fuel and purchased power costs for the billing month based upon the level of such costs incurred two months prior to the billing month. Entergy Louisiana's purchased gas adjustments include estimates for the billing month adjusted by a surcharge or credit that arises from an annual reconciliation of fuel costs incurred with fuel cost revenues billed to customers, including carrying charges.

In July 2014 the LPSC authorized its staff to initiate an audit of the fuel adjustment clause filings by Entergy Gulf States Louisiana, whose business was combined with Entergy Louisiana in 2015. The audit includes a review of the reasonableness of charges flowed through Entergy Gulf States Louisiana's fuel adjustment clause for the period from 2010 through 2013. In January 2019, the LPSC staff consultant issued its audit report. In its report, the LPSC staff consultant recommended that Entergy Louisiana refund approximately $900,000, plus interest, to customers based upon the imputation of a claim of vendor fault in servicing its nuclear plant. Entergy Louisiana recorded a provision in first quarter 2019 for the potential outcome of the audit. In August 2019, Entergy Louisiana filed direct testimony challenging the basis for the LPSC staff's recommended disallowance and providing an alternative calculation of replacement power costs should it be determined that a disallowance is appropriate. Entergy Louisiana's calculation would require no refund to customers.

In July 2014 the LPSC authorized its staff to initiate an audit of Entergy Louisiana's fuel adjustment clause filings. The audit includes a review of the reasonableness of charges flowed by Entergy Louisiana through its fuel adjustment clause for the period from 2010 through 2013. In January 2019 the LPSC staff consultant issued its audit report. In its report, the LPSC staff consultant recommended that Entergy Louisiana refund approximately $7.3 million, plus interest, to customers based upon the imputation of a claim of vendor fault in servicing its nuclear plant. Entergy Louisiana recorded a provision in the first quarter 2019 for the potential outcome of the audit. In August 2019, Entergy Louisiana filed direct testimony challenging the basis for the LPSC staff's recommended disallowance and providing an alternative calculation of replacement power costs should it be determined that a disallowance is appropriate. Entergy Louisiana's calculation would require a refund to customers of approximately $4.3 million, plus interest, as compared to the LPSC staff's recommendation of $7.3 million, plus interest. Responsive testimony was filed by the LPSC staff and intervenors in September 2019; all parties either agreed with or did not oppose Entergy Louisiana's alternative calculation of replacement power costs.

In November 2019 the pending LPSC proceedings for the 2010-2013 Entergy Louisiana and Entergy Gulf States Louisiana audits were consolidated to facilitate a settlement of both fuel audits. In December 2019 an unopposed settlement was reached that requires a refund to legacy Entergy Louisiana customers of approximately $2.3 million, including interest, and no refund to legacy Entergy Gulf States Louisiana customers. The LPSC approved the settlement in January 2020. A one-time refund was made in February 2020.

In June 2016 the LPSC issued notice of audits of Entergy Louisiana's fuel adjustment clause filings for the period 2014 through 2015 and purchased gas adjustment clause filings for the period 2012 through 2015. In recognition of the business combination that occurred in 2015, the audit notice was issued to Entergy Louisiana and also includes a review of charges to legacy Entergy Gulf States Louisiana customers prior to the business combination. The audits include a review of the reasonableness of charges flowed through Entergy Louisiana's fuel adjustment clause for the period from 2014 through 2015 and charges flowed through Entergy Louisiana's

purchased gas adjustment clause for the period from 2012 through 2015. Regarding the fuel adjustment clause filing, the LPSC staff issued a report in January 2021 that did not recommend a disallowance for the period 2014 through 2015 recoveries, but did propose various reporting requirements. Entergy Louisiana is currently reviewing the LPSC staff recommendations regarding reporting requirements. Regarding the purchased gas adjustment clause filings, the LPSC staff issued a report in February 2020 that did not recommend a disallowance for the period 2012 through 2015 recoveries. The LPSC issued an order in September 2020 accepting the LPSC staff's report.

In May 2018 the LPSC staff provided notice of audits of Entergy Louisiana's purchased gas adjustment clause filings. The audit includes a review of the reasonableness of charges flowed through Entergy Louisiana's purchased gas adjustment clause for the period from 2016 through 2017. In February 2020 the LPSC staff issued an audit report recommending a disallowance of approximately $29 thousand Entergy Louisiana submitted a letter disputing the basis of the proposed disallowance but indicated that due to the amount at issue it would not oppose the recommended refund. The LPSC staff and Entergy Louisiana submitted a joint report noting each party's position on the substantive issues in the matter and recommending resolution of the matters. The LPSC issued an order in September 2020 resolving the matter and ordering a refund of approximately $29 thousand. In January 2021 the LPSC issued a notice closing the matter.

In March 2020 the LPSC staff provided notice of an audit of Entergy Louisiana's fuel adjustment clause filings. The audit includes a review of the reasonableness of charges flowed through Entergy Louisiana's fuel adjustment clause for the period from 2016 through 2019. Discovery commenced in September 2020 and is ongoing.

COVID-19 Orders

In April 2020 the LPSC issued an order authorizing utilities to record as a regulatory asset expenses incurred from the suspension of disconnections and collection of late fees imposed by LPSC orders associated with the COVID-19 pandemic. In addition, utilities may seek future recovery, subject to LPSC review and approval, of losses and expenses incurred due to compliance with the LPSC's COVID-19 orders. The suspension of late fees and disconnects for non-pay was extended until the first billing cycle after July 16, 2020. In January 2021, Entergy Louisiana resumed disconnections for customers in all customer classes with past-due balances that have not made payment arrangements. Utilities seeking to recover the regulatory asset must formally petition the LPSC to do so, identifying the direct and indirect costs for which recovery is sought. Any such request is subject to LPSC review and approval. As of December 31, 2020, Entergy Louisiana recorded a regulatory asset of $48.8 million for costs associated with the COVID-19 pandemic.

Net Metering Rulemaking

In September 2019 the LPSC issued an order modifying its rules regarding net metering installations. Among other things, the rule provides for 2-channel billing for net metering with excess energy put to the grid being compensated at the utility's avoided cost. However, the rule does provide that net meter installations in place as of December 31, 2019 will be subject to 1:1 net metering with excess energy put to the grid being compensated at the full retail rate for a period of 15 years (through December 31, 2034), after which those installations will be subject to 2-channel billing. The rule also eliminates the existing limit on the cumulative number of net meter installations.

Industrial and Commercial Customers

Entergy Louisiana's large industrial and commercial customers continually explore ways to reduce their energy costs. In particular, cogeneration is an option available to a portion of Entergy Louisiana's industrial customer base. Entergy Louisiana responds by working with industrial and commercial customers and negotiating electric service contracts to provide competitive rates that match specific customer needs and load profiles. Entergy Louisiana actively participates in economic development, customer retention, and reclamation activities to increase industrial and commercial demand, from both new and existing customers.

Federal Regulation

See the "**Rate, Cost-recovery, and Other Regulation – Federal Regulation**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis and Note 2 to the financial statements for a discussion of federal regulation.

Nuclear Matters

Entergy Louisiana owns and, through an affiliate, operates the River Bend and Waterford 3 nuclear power plants. Entergy Louisiana is, therefore, subject to the risks related to owning and operating nuclear plants. These include risks related to: the use, storage, and handling and disposal of high-level and low-level radioactive materials; the substantial financial requirements, both for capital investments and operational needs, to position Entergy's nuclear fleet to meet its operational goals; the performance and capacity factors of these nuclear plants; regulatory requirements and potential future regulatory changes, including changes affecting the regulations governing nuclear plant ownership, operations, license amendments, and decommissioning; the availability of interim or permanent sites for the disposal of spent nuclear fuel and nuclear waste, including the fees charged for such disposal; the sufficiency of nuclear decommissioning trust fund assets and earnings to complete decommissioning of each site when required; and limitations on the amounts and types of insurance commercially available for losses in connection with nuclear plant operations and catastrophic events such as a nuclear accident. In the event of an unanticipated early shutdown of River Bend or Waterford 3, Entergy Louisiana may be required to provide additional funds or credit support to satisfy regulatory requirements for decommissioning. Waterford 3's operating license expires in 2044 and River Bend's operating license expires in 2045.

Environmental Risks

Entergy Louisiana's facilities and operations are subject to regulation by various governmental authorities having jurisdiction over air quality, water quality, control of toxic substances and hazardous and solid wastes, and other environmental matters. Management believes that Entergy Louisiana is in substantial compliance with environmental regulations currently applicable to its facilities and operations, with reference to possible exceptions noted in "**Regulation of Entergy's Business - Environmental Regulation**" in Part I, Item 1. Because environmental regulations are subject to change, future compliance costs cannot be precisely estimated.

Critical Accounting Estimates

The preparation of Entergy Louisiana's financial statements in conformity with generally accepted accounting principles requires management to apply appropriate accounting policies and to make estimates and judgments that can have a significant effect on reported financial position, results of operations, and cash flows. Management has identified the following accounting policies and estimates as critical because they are based on assumptions and measurements that involve a high degree of uncertainty, and the potential for future changes in the assumptions and measurements that could produce estimates that would have a material effect on the presentation of Entergy Louisiana's financial position or results of operations.

Nuclear Decommissioning Costs

See "**Nuclear Decommissioning Costs**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the estimates inherent in accounting for nuclear decommissioning costs.

In the second quarter 2019, Entergy Louisiana recorded a revision to its estimated decommissioning cost liability for Waterford 3 as a result of a revised decommissioning cost study. The revised estimate resulted in a $147.5 million increase in its decommissioning cost liability, along with a corresponding increase in the related asset retirement cost asset that will be depreciated over the remaining useful life of the unit.

Utility Regulatory Accounting

See "**Utility Regulatory Accounting**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of accounting for the effects of rate regulation.

Impairment of Long-lived Assets

See "**Impairment of Long-lived Assets**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the estimates associated with the impairment of long-lived assets.

Taxation and Uncertain Tax Positions

See "**Taxation and Uncertain Tax Positions**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion.

Qualified Pension and Other Postretirement Benefits

Entergy Louisiana's qualified pension and other postretirement reported costs, as described in Note 11 to the financial statements, are impacted by numerous factors including the provisions of the plans, changing employee demographics, and various actuarial calculations, assumptions, and accounting mechanisms. See the "**Qualified Pension and Other Postretirement Benefits**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion. Because of the complexity of these calculations, the long-term nature of these obligations, and the importance of the assumptions utilized, Entergy's estimate of these costs is a critical accounting estimate.

Cost Sensitivity

The following chart reflects the sensitivity of qualified pension cost and qualified projected benefit obligation to changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Qualified Pension Cost	Impact on 2020 Projected Qualified Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$3,053	$52,030
Rate of return on plan assets	(0.25%)	$3,338	$—
Rate of increase in compensation	0.25%	$2,313	$11,706

The following chart reflects the sensitivity of postretirement benefit cost and accumulated postretirement benefit obligation to changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Postretirement Benefit Cost	Impact on 2020 Accumulated postretirement Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$872	$8,226
Health care cost trend	0.25%	$964	$5,853

Each fluctuation above assumes that the other components of the calculation are held constant.

Costs and Employer Contributions

Total qualified pension cost for Entergy Louisiana in 2020 was $70.6 million, including $8.1 million in settlement costs. Entergy Louisiana anticipates 2021 qualified pension cost to be $65.1 million. Entergy Louisiana contributed $55.4 million to its qualified pension plans in 2020 and estimates pension contributions will be approximately $59.9 million in 2021, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021.

Total postretirement health care and life insurance benefit costs for Entergy Louisiana in 2020 were $5.6 million. Entergy Louisiana expects 2021 postretirement health care and life insurance benefit costs of approximately $5.4 million. Entergy Louisiana contributed $16.1 million to its other postretirement plans in 2020 and estimates that 2021 contributions will be approximately $15.6 million.

Other Contingencies

See "**Other Contingencies**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the estimates associated with environmental, litigation, and other risks.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements for a discussion of new accounting pronouncements.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the member and Board of Directors of
Entergy Louisiana, LLC and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Entergy Louisiana, LLC and Subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of income, comprehensive income, cash flows, and changes in equity (pages 357 through 362 and applicable items in pages 51 through 238), for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which they relate.

Rate and Regulatory Matters —Entergy Louisiana, LLC and Subsidiaries — Refer to Note 2 to the financial statements

Critical Audit Matter Description

The Company is subject to rate regulation by the Louisiana Public Service Commission (the "LPSC"), which has jurisdiction with respect to the rates of electric companies in Louisiana, and to wholesale rate regulation by the Federal Energy Regulatory Commission ("FERC"). Management has determined it meets the requirements under accounting principles generally accepted in the United States of America to prepare its financial statements applying

the specialized rules to account for the effects of cost-based rate regulation. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures, such as property, plant, and equipment; regulatory assets and liabilities; income taxes; operating revenues; operation and maintenance expense; and depreciation and amortization expense.

The Company's rates are subject to regulatory rate-setting processes and annual earnings oversight. Because the LPSC and the FERC set the rates the Company is allowed to charge customers based on allowable costs, including a reasonable return on equity, the Company applies accounting standards that require the financial statements to reflect the effects of rate regulation, including the recording of regulatory assets and liabilities. The Company assesses whether the regulatory assets and regulatory liabilities continue to meet the criteria for probable future recovery or settlement at each balance sheet date and when regulatory events occur. This assessment includes consideration of recent rate orders, historical regulatory treatment for similar costs, and factors such as changes in applicable regulatory and political environments. While the Company has indicated it expects to recover costs from customers through regulated rates, there is a risk that the LPSC and the FERC will not approve: (1) full recovery of the costs of providing utility service, or (2) full recovery of amounts invested in the utility business and a reasonable return on that investment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about impacted account balances and disclosures and the high degree of subjectivity involved in assessing the impact of future regulatory orders on the financial statements. Management judgments include assessing the likelihood of recovery in future rates of incurred costs and refunds to customers. Auditing management's judgments regarding the outcome of future decisions by the LPSC and the FERC, involved especially subjective judgment and specialized knowledge of accounting for rate regulation and the rate setting process.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertainty of future decisions by the LPSC and the FERC included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of (1) the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets, and (2) a refund or a future reduction in rates that should be reported as regulatory liabilities. We also tested the effectiveness of management's controls over the initial recognition of amounts as property, plant, and equipment; regulatory assets or liabilities; and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or of a future reduction in rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the LPSC and the FERC for the Company and other public utilities, regulatory statutes, interpretations, procedural memorandums, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the LPSC's and the FERC's treatment of similar costs under similar circumstances. We evaluated the external information and compared to management's recorded regulatory asset and liability balances for completeness.
- For regulatory matters in process, we inspected the Company's filings with the LPSC and the FERC, including the annual formula rate plan filing, and considered the filings with the LPSC and the FERC by intervenors that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We obtained an analysis from management and support from internal and external legal counsel, as appropriate, regarding probability of recovery for regulatory assets or refund or future reduction in rates for regulatory liabilities not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery or a future reduction in rates.

/s/ DELOITTE & TOUCHE LLP

New Orleans, Louisiana
February 26, 2021

We have served as the Company's auditor since 2001.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED INCOME STATEMENTS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING REVENUES			
Electric	$4,019,063	$4,223,027	$4,232,541
Natural gas	50,799	62,148	63,779
TOTAL	4,069,862	4,285,175	4,296,320
OPERATING EXPENSES			
Operation and Maintenance:			
Fuel, fuel-related expenses, and gas purchased for resale	700,152	845,108	915,410
Purchased power	596,480	810,462	960,272
Nuclear refueling outage expenses	55,305	54,170	51,626
Other operation and maintenance	969,630	994,637	959,185
Decommissioning	65,225	59,346	53,736
Taxes other than income taxes	208,902	194,222	183,745
Depreciation and amortization	609,931	535,791	492,179
Other regulatory charges (credits) - net	(584)	(105,203)	4,396
TOTAL	3,205,041	3,388,533	3,620,549
OPERATING INCOME	864,821	896,642	675,771
OTHER INCOME			
Allowance for equity funds used during construction	38,151	74,023	79,922
Interest and investment income	225,627	231,985	141,882
Miscellaneous - net	(116,366)	(115,427)	(27,530)
TOTAL	147,412	190,581	194,274
INTEREST EXPENSE			
Interest expense	331,352	309,493	288,658
Allowance for borrowed funds used during construction	(19,147)	(35,430)	(39,616)
TOTAL	312,205	274,063	249,042
INCOME BEFORE INCOME TAXES	700,028	813,160	621,003
Income taxes	(382,324)	121,623	(54,611)
NET INCOME	$1,082,352	$691,537	$675,614

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME

	For the Years Ended December 31,		
	2020	**2019**	**2018**
	(In Thousands)		
Net Income	$1,082,352	$691,537	$675,614
Other comprehensive income (loss)			
Pension and other postretirement liabilities			
(net of tax expense (benefit) of ($83), $3,781, and $17,743)	(235)	10,715	50,296
Other comprehensive income (loss)	(235)	10,715	50,296
Comprehensive Income	$1,082,117	$702,252	$725,910

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING ACTIVITIES			
Net income	$1,082,352	$691,537	$675,614
Adjustments to reconcile net income to net cash flow provided by operating activities:			
Depreciation, amortization, and decommissioning, including nuclear fuel amortization	783,616	685,062	662,390
Deferred income taxes, investment tax credits, and non-current taxes accrued	(356,256)	196,533	174,063
Changes in working capital:			
Receivables	(79,451)	13,942	89,701
Fuel inventory	(9,067)	(7,195)	5,310
Accounts payable	160,659	(33,375)	11,372
Prepaid taxes and taxes accrued	50,576	(38,827)	12,711
Interest accrued	4,505	4,294	7,922
Deferred fuel costs	(57,895)	24,234	(40,036)
Other working capital accounts	(76,284)	(62,536)	(5,809)
Changes in provisions for estimated losses	(295,480)	9,664	8,307
Changes in other regulatory assets	(410,855)	(210,134)	40,765
Changes in other regulatory liabilities	71,698	(35,881)	(125,185)
Changes in pension and other postretirement liabilities	12,199	35,162	(106,269)
Other	192,669	(36,478)	(15,652)
Net cash flow provided by operating activities	1,072,986	1,236,002	1,395,204
INVESTING ACTIVITIES			
Construction expenditures	(1,960,787)	(1,673,194)	(1,805,641)
Allowance for equity funds used during construction	38,151	74,023	79,922
Nuclear fuel purchases	(92,831)	(85,984)	(111,329)
Proceeds from the sale of nuclear fuel	44,511	11,596	53,603
Payments to storm reserve escrow account	(1,488)	(6,353)	(4,770)
Receipts from storm reserve escrow account	297,363	—	4
Changes in securitization account	951	(32)	(1,655)
Proceeds from nuclear decommissioning trust fund sales	347,021	412,559	1,055,690
Investment in nuclear decommissioning trust funds	(372,227)	(442,501)	(1,097,204)
Changes in money pool receivable - net	(13,426)	46,843	(35,672)
Proceeds from sale of assets	—	—	11,987
Payment for purchase of assets	(236,999)	—	(26,623)
Insurance proceeds	—	7,040	3,480
Litigation proceeds for reimbursement of spent nuclear fuel storage costs	5,090	2,369	—
Net cash flow used in investing activities	(1,944,671)	(1,653,634)	(1,878,208)
FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	3,675,083	2,691,133	2,319,799
Retirement of long-term debt	(1,962,635)	(2,199,053)	(1,664,354)
Change in money pool payable - net	(82,826)	82,826	—
Changes in short-term borrowings - net	—	—	(43,540)
Distributions paid:			
Common equity	(21,500)	(208,000)	(128,000)
Other	(10,423)	9,368	6,556
Net cash flow provided by financing activities	1,597,699	376,274	490,461
Net increase (decrease) in cash and cash equivalents	726,014	(41,358)	7,457
Cash and cash equivalents at beginning of period	2,006	43,364	35,907
Cash and cash equivalents at end of period	$728,020	$2,006	$43,364
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid (received) during the period for:			
Interest - net of amount capitalized	$318,352	$296,842	$272,335
Income taxes	($14,714)	$15,272	($105,157)

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
ASSETS

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$1,303	$488
Temporary cash investments	726,717	1,518
Total cash and cash equivalents	728,020	2,006
Accounts receivable:		
Customer	317,905	194,869
Allowance for doubtful accounts	(45,693)	(1,902)
Associated companies	81,624	77,212
Other	41,760	42,179
Accrued unbilled revenues	178,840	169,201
Total accounts receivable	574,436	481,559
Deferred fuel costs	2,250	—
Fuel inventory	50,680	41,613
Materials and supplies - at average cost	437,933	354,020
Deferred nuclear refueling outage costs	48,407	56,743
Prepaid taxes	—	7,959
Prepayments and other	36,813	37,837
TOTAL	1,878,539	981,737
OTHER PROPERTY AND INVESTMENTS		
Investment in affiliate preferred membership interests	1,390,587	1,390,587
Decommissioning trust funds	1,794,042	1,563,812
Storm reserve escrow account	—	295,875
Non-utility property - at cost (less accumulated depreciation)	323,110	312,896
Other	13,399	13,476
TOTAL	3,521,138	3,576,646
UTILITY PLANT		
Electric	25,619,789	22,620,365
Natural gas	262,744	235,678
Construction work in progress	667,281	1,383,603
Nuclear fuel	210,128	267,779
TOTAL UTILITY PLANT	26,759,942	24,507,425
Less - accumulated depreciation and amortization	9,372,224	9,118,524
UTILITY PLANT - NET	17,387,718	15,388,901
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets (includes securitization property of $5,088 as of December 31, 2020 and $27,596 as of December 31, 2019)	1,726,066	1,315,211
Deferred fuel costs	168,122	168,122
Other	23,924	33,491
TOTAL	1,918,112	1,516,824
TOTAL ASSETS	$24,705,507	$21,464,108

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
LIABILITIES AND EQUITY

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT LIABILITIES		
Currently maturing long-term debt	$240,000	$320,002
Accounts payable:		
Associated companies	103,148	187,615
Other	1,450,008	357,206
Customer deposits	152,612	153,097
Taxes accrued	42,617	—
Interest accrued	92,249	87,744
Deferred fuel costs	—	55,645
Current portion of unprotected excess accumulated deferred income taxes	31,138	31,138
Other	62,968	64,668
TOTAL	2,174,740	1,257,115
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	2,138,522	2,464,513
Accumulated deferred investment tax credits	107,317	112,128
Regulatory liability for income taxes - net	447,628	500,083
Other regulatory liabilities	918,293	794,140
Decommissioning	1,573,307	1,497,349
Accumulated provisions	24,939	320,419
Pension and other postretirement liabilities	692,728	677,619
Long-term debt (includes securitization bonds of $10,278 as of December 31, 2020 and $33,220 as of December 31, 2019)	8,787,451	6,983,667
Other	382,894	459,957
TOTAL	15,073,079	13,809,875
Commitments and Contingencies		
EQUITY		
Member's equity	7,453,361	6,392,556
Accumulated other comprehensive income	4,327	4,562
TOTAL	7,457,688	6,397,118
TOTAL LIABILITIES AND EQUITY	$24,705,507	$21,464,108

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
For the Years Ended December 31, 2020, 2019, and 2018

	Common Equity		
	Member's Equity	Accumulated Other Comprehensive Income (Loss)	Total
	(In Thousands)		
Balance at December 31, 2017	$5,355,204	($46,400)	$5,308,804
Net income	675,614	—	675,614
Other comprehensive income	—	50,296	50,296
Distributions declared on common equity	(128,000)	—	(128,000)
Reclassification pursuant to ASU 2018-02	6,262	(10,049)	(3,787)
Other	(9)	—	(9)
Balance at December 31, 2018	$5,909,071	($6,153)	$5,902,918
Net income	691,537	—	691,537
Other comprehensive income	—	10,715	10,715
Distributions declared on common equity	(208,000)	—	(208,000)
Other	(52)	—	(52)
Balance at December 31, 2019	$6,392,556	$4,562	$6,397,118
Net income	1,082,352	—	1,082,352
Other comprehensive loss	—	(235)	(235)
Distributions declared on common equity	(21,500)	—	(21,500)
Other	(47)	—	(47)
Balance at December 31, 2020	$7,453,361	$4,327	$7,457,688

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
SELECTED FINANCIAL DATA - FIVE-YEAR COMPARISON

	2020	2019	2018	2017	2016
			(In Thousands)		
Operating revenues	$4,069,862	$4,285,175	$4,296,320	$4,300,550	$4,177,048
Net income	$1,082,352	$691,537	$675,614	$316,347	$622,047
Total assets	$24,705,507	$21,464,108	$19,651,815	$18,448,864	$17,701,271
Long-term obligations (a)	$8,787,451	$6,983,667	$6,805,766	$5,469,069	$5,612,593

(a) Includes long-term debt (excluding currently maturing debt).

	2020	2019	2018	2017	2016
			(Dollars In Millions)		
Electric Operating Revenues:					
Residential	$1,270	$1,271	$1,244	$1,198	$1,196
Commercial	887	947	941	956	930
Industrial	1,314	1,451	1,462	1,534	1,350
Governmental	69	71	69	69	67
Total billed retail	3,540	3,740	3,716	3,757	3,543
Sales for resale:					
Associated companies	276	273	295	278	368
Non-associated companies	58	60	62	64	50
Other	145	150	160	147	165
Total	$4,019	$4,223	$4,233	$4,246	$4,126
Billed Electric Energy Sales (GWh):					
Residential	13,771	14,046	14,494	13,357	13,810
Commercial	10,465	11,353	11,578	11,342	11,478
Industrial	28,881	29,801	29,255	29,754	28,517
Governmental	779	827	823	790	794
Total retail	53,896	56,027	56,150	55,243	54,599
Sales for resale:					
Associated companies	5,585	4,813	5,498	4,793	7,345
Non-associated companies	2,365	1,924	1,762	1,711	1,690
Total	61,846	62,764	63,410	61,747	63,634

ENTERGY MISSISSIPPI, LLC

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

The COVID-19 Pandemic

See "**The COVID-19" Pandemic** section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the COVID-19 pandemic.

February 2021 Winter Storms

See the "**February 2021 Winter Storms**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the February 2021 winter storms. Entergy Mississippi's preliminary estimate for the cost of mobilizing crews and restoring power is approximately $50 million to $60 million. Natural gas purchases for Entergy Mississippi for February 1st through 25th, 2021 are approximately $45 million compared to natural gas purchases for February 2020 of $14 million.

Results of Operations

2020 Compared to 2019

Net Income

Net income increased $20.7 million primarily due to higher retail electric price, partially offset by higher depreciation and amortization expenses, higher other operation and maintenance expenses, and lower volume/weather.

Operating Revenues

Following is an analysis of the change in operating revenues comparing 2020 to 2019.

	Amount
	(In Millions)
2019 operating revenues	$1,323.0
Fuel, rider, and other revenues that do not significantly affect net income	(153.2)
Volume/weather	(17.6)
Retail electric price	95.7
2020 operating revenues	**1,247.9**

Entergy Mississippi's results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not affect net income. "Fuel, rider, and other revenues that do not significantly affect net income" includes the revenue variance associated with these items.

The volume/weather variance is primarily due to decreased commercial and industrial usage as a result of the COVID-19 pandemic and the effect of less favorable weather on residential sales, partially offset by increased residential usage as a result of the COVID-19 pandemic. See "**The COVID-19 Pandemic**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the COVID-19 pandemic.

The retail electric price variance is primarily due to:

- increases in the formula rate plan rates effective with the first billing cycles of July 2019 and April 2020 and an interim capacity rate adjustment to the formula rate plan effective January 2020 to recover non-fuel related costs of acquiring and operating the Choctaw Generating Station; and
- the implementation of a vegetation management rider effective with the April 2020 billing cycle.

See Note 2 to the financial statements for further discussion of the formula rate plan filings and the vegetation management rider.

Other Income Statement Variances

Other operation and maintenance expenses increased primarily due to:

- an increase of $13.5 million in non-nuclear generation expenses primarily due to an increase in costs after the purchase of the Choctaw Generating Station in October 2019, partially offset by a decrease of $11.1 million primarily due to a lower scope of work performed during plant outages in 2020 as compared to the same period in 2019, including a delay in plant outages as a result of the COVID-19 pandemic;
- an increase of $8.1 million in storm damage provisions. See Note 2 to the financial statements for a discussion of storm cost recovery;
- an increase of $4.7 million in distribution operations costs due to a higher scope of work, including contract costs in 2020 as compared to the same period in 2019;
- an increase of $2.5 million in energy efficiency costs due to the timing of recovery from customers; and
- several individually insignificant items.

The increase was partially offset by a decrease of $3.7 million primarily due to contract costs in 2019 related to initiatives to explore new customer products and services.

Depreciation and amortization expenses increased primarily as a result of higher depreciation rates effective July 2019, as approved by the MPSC, and additions to plant in service, including the Choctaw Generating Station, which was purchased in October 2019.

The effective income tax rates were 16.2% for 2020 and 20.5% for 2019. See Note 3 to the financial statements for a reconciliation of the federal statutory rates of 21% to the effective income tax rates.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Results of Operations**" in Item 7 of Entergy Mississippi's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of results of operations for 2019 compared to 2018.

Liquidity and Capital Resources

Cash Flow

Cash flows for the years ended December 31, 2020, 2019, and 2018 were as follows:

	2020	2019	2018
		(In Thousands)	
Cash and cash equivalents at beginning of period	$51,601	$36,954	$6,096
Net cash provided by (used in):			
Operating activities	300,314	339,952	418,382
Investing activities	(530,762)	(733,684)	(419,453)
Financing activities	178,865	408,379	31,929
Net increase (decrease) in cash and cash equivalents	(51,583)	14,647	30,858
Cash and cash equivalents at end of period	$18	$51,601	$36,954

2020 Compared to 2019

Operating Activities

Net cash flow provided by operating activities decreased $39.6 million in 2020 primarily due to:

- the timing of recovery of fuel and purchased power;
- lower collections of receivables from customers, in part due to the COVID-19 pandemic; and
- an increase of $10.3 million in storm spending in 2020.

The decrease was partially offset by the timing of payments to vendors and a decrease of $8.2 million in pension contributions in 2020. See "**Critical Accounting Estimates**" below and Note 11 to the financial statements for a discussion of qualified pension and other postretirement benefits funding.

Investing Activities

Net cash flow used in investing activities decreased $202.9 million in 2020 primarily due to:

- the purchase of the Choctaw Generating Station in October 2019 for approximately $305 million. See Note 14 to the financial statements for further discussion of the Choctaw Generating Station purchase; and
- money pool activity.

The decrease was partially offset by:

- an increase of $47.3 million in storm spending in 2020;
- an increase of $40.9 million in distribution construction expenditures primarily due to investment in the reliability and infrastructure of Entergy Mississippi's distribution system, including increased spending on advanced metering infrastructure;
- an increase of $25.8 million in non-nuclear construction expenditures primarily due to increased expenditures after the purchase of the Choctaw Generating Station in October 2019 and higher long-term service agreement expenses;
- $24.6 million in plant upgrades for Choctaw Generating Station in March 2020; and

- an increase of $22.4 million in transmission construction expenditures primarily due to a higher scope of work performed in 2020 as compared to 2019.

Decreases in Entergy Mississippi's receivable from the money pool are a source of cash flow, and Entergy Mississippi's receivable from the money pool decreased by $44.7 million in 2020 compared to increasing by $3.3 million in 2019. The money pool is an inter-company borrowing arrangement designed to reduce the Utility subsidiaries' need for external short-term borrowings.

Financing Activities

Net cash flow provided by financing activities decreased $229.5 million in 2020 primarily due to:

- the issuance of $170 million of 3.5% Series mortgage bonds in 2020 compared to the issuance of $435 million of 3.85% Series mortgage bonds in 2019; and
- a capital contribution of $130 million in October 2019 in anticipation of the purchase of the Choctaw Generating Station.

The decrease was partially offset by the repayment, at maturity, of $150 million of 6.64% Series mortgage bonds in July 2019 and money pool activity.

Increases in Entergy Mississippi's payable to the money pool are a source of cash flow, and Entergy Mississippi's payable to the money pool increased $16.5 million in 2020.

See Note 5 to the financial statements for details on long-term debt.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources - Cash Flow**" in Item 7 of Entergy Mississippi's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of operating, investing, and financing cash flow activities for 2019 compared to 2018.

Capital Structure

Entergy Mississippi's debt to capital ratio is shown in the following table.

	December 31, 2020	December 31, 2019
Debt to capital	51.7 %	51.2 %
Effect of subtracting cash	— %	(0.8 %)
Net debt to net capital	51.7 %	50.4 %

Net debt consists of debt less cash and cash equivalents. Debt consists of short-term borrowings, finance lease obligations, and long-term debt, including the currently maturing portion. Capital consists of debt and equity. Net capital consists of capital less cash and cash equivalents. Entergy Mississippi uses the debt to capital ratio in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy Mississippi's financial condition. Entergy Mississippi uses the net debt to net capital ratio in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy Mississippi's financial condition because net debt indicates Entergy Mississippi's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Entergy Mississippi seeks to optimize its capital structure in accordance with its regulatory requirements and to control its cost of capital while also maintaining equity capitalization at a level consistent with investment-grade debt ratings. To the extent that operating cash flows are in excess of planned investments, cash may be used to reduce outstanding debt or may be paid as a distribution, or both, in appropriate amounts to maintain the capital structure. To the extent that operating cash flows are insufficient to support planned investments, Entergy Mississippi may issue incremental debt or reduce distributions, or both, to maintain its capital structure. In addition, in certain infrequent circumstances, such as financing of large transactions that would materially alter the capital structure if financed entirely with debt and reducing distributions, Entergy Mississippi may receive equity contributions to maintain its capital structure.

Uses of Capital

Entergy Mississippi requires capital resources for:

- construction and other capital investments;
- debt maturities or retirements;
- working capital purposes, including the financing of fuel and purchased power costs; and
- distributions and interest payments.

Following are the amounts of Entergy Mississippi's planned construction and other capital investments.

	2021	2022	2023
	(In Millions)		
Planned construction and capital investment:			
Generation	$180	$140	$180
Transmission	120	75	55
Distribution	210	200	225
Utility Support	80	85	30
Total	$590	$500	$490

Following are the amounts of Entergy Mississippi's existing debt obligations and lease obligations (includes estimated interest payments) and other purchase obligations.

	2021	2022-2023	2024-2025	After 2025	Total
			(In Millions)		
Long-term debt (a)	$65	$376	$209	$2,575	$3,225
Operating leases (b)	$6	$8	$2	$2	$18
Finance leases (b)	$2	$3	$2	$1	$8
Purchase obligations (c)	$223	$434	$412	$3,779	$4,848

(a) Includes estimated interest payments. Long-term debt is discussed in Note 5 to the financial statements.
(b) Lease obligations are discussed in Note 10 to the financial statements.
(c) Purchase obligations represent the minimum purchase obligation or cancellation charge for contractual obligations to purchase goods or services. For Entergy Mississippi, almost all of the total consists of unconditional fuel and purchased power obligations, including its obligations under the Unit Power Sales Agreement, which is discussed in Note 8 to the financial statements.

In addition to the contractual obligations given above, Entergy Mississippi currently expects to contribute approximately $13.7 million to its qualified pension plans and approximately $130 thousand to other postretirement health care and life insurance plans in 2021, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021. See

"**Critical Accounting Estimates – Qualified Pension and Other Postretirement Benefits**" below for a discussion of qualified pension and other postretirement benefits funding.

Also, in addition to the contractual obligations, Entergy Mississippi has $84 million of unrecognized tax benefits and interest net of unused tax attributes for which the timing of payments beyond 12 months cannot be reasonably estimated due to uncertainties in the timing of effective settlement of tax positions. See Note 3 to the financial statements for additional information regarding unrecognized tax benefits.

In addition to routine capital spending to maintain operations, the planned capital investment estimate for Entergy Mississippi includes amounts associated with specific investments such as the Sunflower Solar Facility; transmission projects to enhance reliability, reduce congestion, and enable economic growth; distribution spending to enhance reliability and improve service to customers, including advanced meters and related investments; resource planning, including potential generation and renewables projects; system improvements; software and security; and other investments. Estimated capital expenditures are subject to periodic review and modification and may vary based on the ongoing effects of regulatory constraints and requirements, environmental compliance, business opportunities, market volatility, economic trends, business restructuring, changes in project plans, and the ability to access capital.

As a wholly-owned subsidiary of Entergy Utility Holding Company, LLC, Entergy Mississippi pays distributions from its earnings at a percentage determined monthly.

Sunflower Solar Facility

In November 2018, Entergy Mississippi announced that it signed an agreement for the purchase of an approximately 100 MW solar photovoltaic facility that will be sited on approximately 1,000 acres in Sunflower County, Mississippi. The estimated base purchase price is approximately $138.4 million. The estimated total investment, including the base purchase price and other related costs, for Entergy Mississippi to acquire the Sunflower Solar Facility is approximately $153.2 million. The purchase is contingent upon, among other things, obtaining necessary approvals, including full cost recovery, from applicable federal and state regulatory and permitting agencies. The project is being built by Sunflower County Solar Project, LLC, an indirect subsidiary of Recurrent Energy, LLC. Entergy Mississippi will purchase the facility upon mechanical completion and after the other purchase contingencies have been met. In December 2018, Entergy Mississippi filed a joint petition with Sunflower Solar Project with the MPSC for Sunflower Solar Project to construct and for Entergy Mississippi to acquire and thereafter own, operate, improve, and maintain the solar facility. Entergy Mississippi proposed revisions to its formula rate plan that would provide for a mechanism, the interim capacity rate adjustment mechanism, in the formula rate plan to recover the non-fuel related costs of additional owned capacity acquired by Entergy Mississippi, including the annual ownership costs of the Sunflower Solar Facility. In December 2019 the MPSC approved Entergy Mississippi's proposed revisions to its formula rate plan to provide for an interim capacity rate adjustment mechanism. Recovery through the interim capacity rate adjustment requires MPSC approval for each new resource. In August 2019 consultants retained by the Mississippi Public Utilities Staff filed a report expressing concerns regarding the project economics. In March 2020, Entergy Mississippi filed supplemental testimony addressing questions and observations raised by the consultants retained by the Mississippi Public Utilities Staff and proposing an alternative structure for the transaction that would reduce its cost. A hearing before the MPSC was held in March 2020. In April 2020 the MPSC issued an order approving certification of the Sunflower Solar Facility and its recovery through the interim capacity rate adjustment mechanism, subject to certain conditions including: (i) that Entergy Mississippi pursue a partnership structure through which the partnership would acquire and own the facility under the build-own-transfer agreement and (ii) that if Entergy Mississippi does not consummate the partnership structure under the terms of the order, there will be a cap of $136 million on the level of recoverable costs. Closing is targeted to occur by the end of 2021.

Sources of Capital

Entergy Mississippi's sources to meet its capital requirements include:

- internally generated funds;
- cash on hand;
- storm reserve escrow accounts;
- debt or preferred membership interest issuances, including debt issuances to refund or retire currently outstanding or maturing indebtedness;
- capital contributions; and
- bank financing under new or existing facilities.

Entergy Mississippi may refinance, redeem, or otherwise retire debt prior to maturity, to the extent market conditions and interest rates are favorable.

All debt and preferred membership interest issuances by Entergy Mississippi require prior regulatory approval. Debt issuances are also subject to issuance tests set forth in its bond indenture and other agreements. Entergy Mississippi has sufficient capacity under these tests to meet its foreseeable capital needs.

Entergy Mississippi's receivables from or (payables to) the money pool were as follows as of December 31 for each of the following years.

2020	2019	2018	2017
	(In Thousands)		
($16,516)	$44,693	$41,380	$1,633

See Note 4 to the financial statements for a description of the money pool.

Entergy Mississippi has three separate credit facilities in the aggregate amount of $82.5 million scheduled to expire in April 2021. No borrowings were outstanding under the credit facilities as of December 31, 2020. In addition, Entergy Mississippi is a party to an uncommitted letter of credit facility primarily as a means to post collateral to support its obligations to MISO. As of December 31, 2020, $1 million of MISO letters of credit and $1 million of non-MISO letters of credit were outstanding under this facility. See Note 4 to the financial statements for additional discussion of the credit facilities.

Entergy Mississippi obtained authorization from the FERC through July 2022 for short-term borrowings not to exceed an aggregate amount of $175 million at any time outstanding and long-term borrowings and security issuances. See Note 4 to the financial statements for further discussion of Entergy Mississippi's short-term borrowing limits.

Entergy Mississippi has $33 million in its storm reserve escrow account at December 31, 2020.

State and Local Rate Regulation and Fuel-Cost Recovery

The rates that Entergy Mississippi charges for electricity significantly influence its financial position, results of operations, and liquidity. Entergy Mississippi is regulated and the rates charged to its customers are determined in regulatory proceedings. A governmental agency, the MPSC, is primarily responsible for approval of the rates charged to customers.

Formula Rate Plan Filings

In October 2018, Entergy Mississippi proposed revisions to its formula rate plan that would provide for a mechanism in the formula rate plan, the interim capacity rate adjustment mechanism, to recover the non-fuel related costs of additional owned capacity acquired by Entergy Mississippi, including the non-fuel annual ownership costs of the Choctaw Generating Station, as well as to allow similar cost recovery treatment for other future capacity acquisitions, such as the Sunflower Solar Facility, that are approved by the MPSC. In December 2019 the MPSC approved Entergy Mississippi's proposed revisions to its formula rate plan to provide for an interim capacity rate adjustment mechanism to recover the $59 million first-year annual revenue requirement associated with the non-fuel ownership costs of the Choctaw Generating Station, which Entergy Mississippi began billing in January 2020. The MPSC must approve recovery through the interim capacity rate adjustment for each new resource. In addition, the MPSC approved revisions to the formula rate plan which allows Entergy Mississippi to begin billing rate adjustments effective April 1 of the filing year on a temporary basis subject to refund or credit to customers, subject to final MPSC order. The MPSC also authorized Entergy Mississippi to remove vegetation management costs from the formula rate plan and recover these costs through the establishment of a vegetation management rider. Effective with the April 2020 billing cycle, Entergy Mississippi implemented a rider to recover $22 million in vegetation management costs.

In March 2019, Entergy Mississippi submitted its formula rate plan 2019 test year filing and 2018 look-back filing showing Entergy Mississippi's earned return for the historical 2018 calendar year to be above the formula rate plan bandwidth and projected earned return for the 2019 calendar year to be below the formula rate plan bandwidth. The 2019 test year filing shows a $36.8 million rate increase is necessary to reset Entergy Mississippi's earned return on common equity to the specified point of adjustment of 6.94% return on rate base, within the formula rate plan bandwidth. The 2018 look-back filing compares actual 2018 results to the approved benchmark return on rate base and shows a $10.1 million interim decrease in formula rate plan revenues is necessary. In the fourth quarter 2018, Entergy Mississippi recorded a provision of $9.3 million that reflected the estimate of the difference between the 2018 expected earned rate of return on rate base and an established performance-adjusted benchmark rate of return under the formula rate plan performance-adjusted bandwidth mechanism. In the first quarter 2019, Entergy Mississippi recorded a $0.8 million increase in the provision to reflect the amount shown in the look-back filing. In June 2019, Entergy Mississippi and the Mississippi Public Utilities Staff entered into a joint stipulation that confirmed that the 2019 test year filing showed that a $32.8 million rate increase is necessary to reset Entergy Mississippi's earned return on common equity to the specified point of adjustment of 6.93% return on rate base, within the formula rate plan bandwidth. Additionally, pursuant to the joint stipulation, Entergy Mississippi's 2018 look-back filing reflected an earned return on rate base of 7.81% in calendar year 2018 which is above the look-back benchmark return on rate base of 7.13%, resulting in an $11 million decrease in formula rate plan revenues on an interim basis through May 2020. In the second quarter 2019, Entergy Mississippi recorded an additional $0.9 million increase in the provision to reflect the $11 million shown in the look-back filing. In June 2019 the MPSC approved the joint stipulation with rates effective for the first billing cycle of July 2019.

In March 2020, Entergy Mississippi submitted its formula rate plan 2020 test year filing and 2019 look-back filing showing Entergy Mississippi's earned return for the historical 2019 calendar year to be below the formula rate plan bandwidth and projected earned return for the 2020 calendar year to be below the formula rate plan bandwidth. The 2020 test year filing shows a $24.6 million rate increase is necessary to reset Entergy Mississippi's earned return on common equity to the specified point of adjustment of 6.51% return on rate base, within the formula rate plan bandwidth. The 2019 look-back filing compares actual 2019 results to the approved benchmark return on rate base and reflects the need for a $7.3 million interim increase in formula rate plan revenues. In accordance with the MPSC-approved revisions to the formula rate plan, Entergy Mississippi implemented a $24.3 million interim rate increase, reflecting a cap equal to 2% of 2019 retail revenues, effective with the April 2020 billing cycle, subject to refund. In June 2020, Entergy Mississippi and the Mississippi Public Utilities Staff entered into a joint stipulation that confirmed that the 2020 test year filing showed that a $23.8 million rate increase is necessary to reset Entergy Mississippi's earned return on common equity to the specified point of

adjustment of 6.51% return on rate base, within the formula rate plan bandwidth. Pursuant to the joint stipulation, Entergy Mississippi's 2019 look-back filing reflected an earned return on rate base of 6.75% in calendar year 2019, which is within the look-back bandwidth. As a result, there is no change in formula rate plan revenues in the 2019 look-back filing. In June 2020 the MPSC approved the joint stipulation with rates effective for the first billing cycle of July 2020. In the June 2020 order the MPSC directed Entergy Mississippi to submit revisions to its formula rate plan to realign recovery of costs from its energy efficiency cost recovery rider to its formula rate plan. In November 2020 the MPSC approved Entergy Mississippi's revisions to its formula rate plan providing for the realignment of energy efficiency costs to its formula rate plan, the deferral of energy efficiency expenditures into a regulatory asset, and the elimination of its energy efficiency cost recovery rider effective with the January 2022 billing cycle.

COVID-19 Order

In March 2020 the MPSC issued an order suspending disconnections for a period of sixty days. The MPSC extended the order on disconnections through May 26, 2020. In April 2020 the MPSC issued an order authorizing utilities to defer incremental costs and expenses associated with COVID-19 compliance and to seek future recovery through rates of the prudently incurred incremental costs and expenses. In December 2020, Entergy Mississippi resumed disconnections for commercial, industrial, and governmental customers with past-due balances that have not made payment arrangements. In January 2021, Entergy Mississippi resumed disconnecting service for residential customers with past-due balances that have not made arrangements. As of December 31, 2020, Entergy Mississippi recorded a regulatory asset of $19.2 million for costs associated with the COVID-19 pandemic.

Internal Restructuring

In March 2018, Entergy Mississippi filed an application with the MPSC seeking authorization to undertake a restructuring that would result in the transfer of substantially all of the assets and operations of Entergy Mississippi to a new entity, which would ultimately be held by an existing Entergy subsidiary holding company. In September 2018, Entergy Mississippi and the Mississippi Public Utilities Staff entered into and filed a joint stipulation regarding the restructuring filing. In September 2018 the MPSC issued an order accepting the stipulation in its entirety and approving the restructuring and credits of $27 million to retail customers over six years, consisting of annual payments of $4.5 million for the years 2019-2024. Entergy Mississippi also received the required FERC approval.

In November 2018, Entergy Mississippi undertook a multi-step restructuring, including the following:

- Entergy Mississippi, Inc. redeemed its outstanding preferred stock, at the aggregate redemption price of approximately $21.2 million.
- Entergy Mississippi, Inc. converted from a Mississippi corporation to a Texas corporation.
- Under the Texas Business Organizations Code (TXBOC), Entergy Mississippi, Inc. allocated substantially all of its assets to a new subsidiary, Entergy Mississippi Power and Light, LLC, a Texas limited liability company (Entergy Mississippi Power and Light), and Entergy Mississippi Power and Light assumed substantially all of the liabilities of Entergy Mississippi, Inc., in a transaction regarded as a merger under the TXBOC. Entergy Mississippi, Inc. remained in existence and held the membership interests in Entergy Mississippi Power and Light.
- Entergy Mississippi, Inc. contributed the membership interests in Entergy Mississippi Power and Light to an affiliate (Entergy Utility Holding Company, LLC, a Texas limited liability company and subsidiary of Entergy Corporation). As a result of the contribution, Entergy Mississippi Power and Light is a wholly-owned subsidiary of Entergy Utility Holding Company, LLC.

In December 2018, Entergy Mississippi, Inc. changed its name to Entergy Utility Enterprises, Inc., and Entergy Mississippi Power and Light then changed its name to Entergy Mississippi, LLC. Entergy Mississippi, LLC holds substantially all of the assets, and assumed substantially all of the liabilities, of Entergy Mississippi, Inc. The restructuring was accounted for as a transaction between entities under common control.

In December 2018, Entergy Mississippi filed its notice of intent to implement the restructuring credit rider to allow Entergy Mississippi to return credits of $27 million to retail customers over six years. In January 2019 the MPSC approved the proposed restructuring credit adjustment factor, which is effective for bills rendered beginning February 2019.

Fuel and Purchased Power Cost Recovery

Entergy Mississippi's rate schedules include an energy cost recovery rider that is adjusted annually to reflect accumulated over- or under-recoveries. Entergy Mississippi's fuel cost recoveries are subject to annual audits conducted pursuant to the authority of the MPSC.

In January 2017 the MPSC certified to the Mississippi Legislature the audit reports of its independent auditors for the fuel year ending September 30, 2016. In November 2017 the Mississippi Public Utilities Staff separately engaged a consultant to review the September 2016 outage at the Grand Gulf Nuclear Station and to review ongoing operations at Grand Gulf. This engagement continues, and subsequently, was expanded to include all outages at Grand Gulf that occurred through 2019.

In November 2017, Entergy Mississippi filed its annual redetermination of the annual factor to be applied under the energy cost recovery rider. The calculation of the annual factor included an under-recovery of approximately $61.5 million as of September 30, 2017. In January 2018 the MPSC approved the proposed energy cost factors effective for February 2018 bills.

In November 2018, Entergy Mississippi filed its annual redetermination of the annual factor to be applied under the energy cost recovery rider. The calculation of the annual factor included an under-recovery of approximately $57 million as of September 30, 2018. In January 2019 the MPSC approved the proposed energy cost factor effective for February 2019 bills.

In November 2019, Entergy Mississippi filed its annual redetermination of the annual factor to be applied under the energy cost recovery rider. The calculation included $39.6 million of prior over-recovery flowing back to customers beginning September 2020. Entergy Mississippi's balance in its deferred fuel account did not decrease as expected after implementation of the new factor. In an effort to assist customers during the COVID-19 pandemic, in May 2020, Entergy Mississippi requested an interim adjustment to the energy cost recovery rider to credit approximately $50 million from the over-recovered balance in the deferred fuel account to customers over four consecutive billing months. The MPSC approved this interim adjustment in May 2020 effective for June through September 2020 bills.

In November 2020, Entergy Mississippi filed its annual redetermination of the annual factor to be applied under the energy cost recovery rider. The calculation of the annual factor included an over-recovery of approximately $24.4 million as of September 30, 2020. In January 2021 the MPSC approved the proposed energy cost factor effective for February 2021 bills.

Storm Cost Recovery Filings with Retail Regulators

Entergy Mississippi has approval from the MPSC to collect a storm damage provision of $1.75 million per month. If Entergy Mississippi's accumulated storm damage provision balance exceeds $15 million, the collection of the storm damage provision ceases until such time that the accumulated storm damage provision becomes less than $10 million. Entergy Mississippi's storm damage provision balance has been less than $10 million since May 2019, and Entergy Mississippi has been billing the monthly storm damage provision since July 2019.

Federal Regulation

See the "**Rate, Cost-recovery, and Other Regulation – Federal Regulation**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis and Note 2 to the financial statements for a discussion of federal regulation.

Nuclear Matters

See the "**Nuclear Matters**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of nuclear matters.

Environmental Risks

Entergy Mississippi's facilities and operations are subject to regulation by various governmental authorities having jurisdiction over air quality, water quality, control of toxic substances and hazardous and solid wastes, and other environmental matters. Management believes that Entergy Mississippi is in substantial compliance with environmental regulations currently applicable to its facilities and operations, with reference to possible exceptions noted in "**Regulation of Entergy's Business - Environmental Regulation**" in Part I, Item 1. Because environmental regulations are subject to change, future compliance costs cannot be precisely estimated.

Critical Accounting Estimates

The preparation of Entergy Mississippi's financial statements in conformity with generally accepted accounting principles requires management to apply appropriate accounting policies and to make estimates and judgments that can have a significant effect on reported financial position, results of operations, and cash flows. Management has identified the following accounting policies and estimates as critical because they are based on assumptions and measurements that involve a high degree of uncertainty, and there is the potential for future changes in the assumptions and measurements that could produce estimates that would have a material impact on the presentation of Entergy Mississippi's financial position or results of operations.

Utility Regulatory Accounting

See "**Utility Regulatory Accounting**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of accounting for the effects of rate regulation.

Impairment of Long-lived Assets

See "**Impairment of Long-lived Assets**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the estimates associated with the impairment of long-lived assets.

Taxation and Uncertain Tax Positions

See "**Taxation and Uncertain Tax Positions**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion.

Qualified Pension and Other Postretirement Benefits

Entergy Mississippi's qualified pension and other postretirement reported costs, as described in Note 11 to the financial statements, are impacted by numerous factors including the provisions of the plans, changing employee demographics, and various actuarial calculations, assumptions, and accounting mechanisms. See the "**Qualified**

Pension and Other Postretirement Benefits" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion. Because of the complexity of these calculations, the long-term nature of these obligations, and the importance of the assumptions utilized, Entergy's estimate of these costs is a critical accounting estimate.

Cost Sensitivity

The following chart reflects the sensitivity of qualified pension cost and qualified projected benefit obligation to changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Qualified Pension Cost	Impact on 2020 Projected Qualified Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$654	$12,777
Rate of return on plan assets	(0.25%)	$828	$—
Rate of increase in compensation	0.25%	$533	$2,720

The following chart reflects the sensitivity of postretirement benefit cost and accumulated postretirement benefit obligation to changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Postretirement Benefit Cost	Impact on 2020 Accumulated Postretirement Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$59	$1,970
Health care cost trend	0.25%	$73	$1,402

Each fluctuation above assumes that the other components of the calculation are held constant.

Costs and Employer Contributions

Total qualified pension cost for Entergy Mississippi in 2020 was $20.2 million, including $3.4 million in settlement costs. Entergy Mississippi anticipates 2021 qualified pension cost to be $19.6 million. Entergy Mississippi contributed $12.6 million to its qualified pension plans in 2020 and estimates 2021 pension contributions will be approximately $13.7 million, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021.

Total postretirement health care and life insurance benefit income for Entergy Mississippi in 2020 was $3.6 million. Entergy Mississippi expects 2021 postretirement health care and life insurance benefit income of approximately $4.7 million. Entergy Mississippi contributed $343 thousand to its other postretirement plans in 2020 and estimates that 2021 contributions will be approximately $130 thousand.

Other Contingencies

See "**Other Contingencies**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the estimates associated with environmental, litigation, and other risks.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements for a discussion of new accounting pronouncements.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the member and Board of Directors of
Entergy Mississippi, LLC

Opinion on the Financial Statements

We have audited the accompanying balance sheets of Entergy Mississippi, LLC (the "Company") as of December 31, 2020 and 2019, the related statements of income, cash flows and changes in member's equity (pages 379 through 384 and applicable items in pages 51 through 238), for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Rate and Regulatory Matters —Entergy Mississippi, LLC — Refer to Note 2 to the financial statements

Critical Audit Matter Description

The Company is subject to rate regulation by the Mississippi Public Service Commission (the "MPSC"), which has jurisdiction with respect to the rates of electric companies in Mississippi, and to wholesale rate regulation by the Federal Energy Regulatory Commission ("FERC"). Management has determined it meets the requirements under accounting principles generally accepted in the United States of America to prepare its financial statements applying the specialized rules to account for the effects of cost-based rate regulation. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures, such as property, plant, and equipment;

regulatory assets and liabilities; income taxes; operating revenues; operation and maintenance expense; and depreciation and amortization expense.

The Company's rates are subject to regulatory rate-setting processes and annual earnings oversight. Because the MPSC and the FERC set the rates the Company is allowed to charge customers based on allowable costs, including a reasonable return on equity, the Company applies accounting standards that require the financial statements to reflect the effects of rate regulation, including the recording of regulatory assets and liabilities. The Company assesses whether the regulatory assets and regulatory liabilities continue to meet the criteria for probable future recovery or settlement at each balance sheet date and when regulatory events occur. This assessment includes consideration of recent rate orders, historical regulatory treatment for similar costs, and factors such as changes in applicable regulatory and political environments. While the Company has indicated it expects to recover costs from customers through regulated rates, there is a risk that the MPSC and the FERC will not approve: (1) full recovery of the costs of providing utility service, or (2) full recovery of amounts invested in the utility business and a reasonable return on that investment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about impacted account balances and disclosures and the high degree of subjectivity involved in assessing the impact of future regulatory orders on the financial statements. Management judgments include assessing the likelihood of recovery in future rates of incurred costs and refunds to customers. Auditing management's judgments regarding the outcome of future decisions by the MPSC and the FERC, involved especially subjective judgment and specialized knowledge of accounting for rate regulation and the rate setting process.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertainty of future decisions by the MPSC and the FERC included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of (1) the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets, and (2) a refund or a future reduction in rates that should be reported as regulatory liabilities. We also tested the effectiveness of management's controls over the initial recognition of amounts as property, plant, and equipment; regulatory assets or liabilities; and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or of a future reduction in rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the MPSC and the FERC for the Company and other public utilities, regulatory statutes, interpretations, procedural memorandums, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the MPSC's and FERC's treatment of similar costs under similar circumstances. We evaluated the external information and compared to management's recorded regulatory asset and liability balances for completeness.
- For regulatory matters in process, we inspected the Company's filings with the MPSC and the FERC, including the annual formula rate plan filing, and considered the filings with the MPSC and the FERC by intervenors that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We obtained an analysis from management and support from internal and external legal counsel, as appropriate, regarding probability of recovery for regulatory assets or refund or future reduction in rates for regulatory liabilities not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery or a future reduction in rates.

/s/ DELOITTE & TOUCHE LLP

New Orleans, Louisiana
February 26, 2021

We have served as the Company's auditor since 2001.

ENTERGY MISSISSIPPI, LLC
INCOME STATEMENTS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING REVENUES			
Electric	$1,247,854	$1,323,043	$1,335,112
OPERATING EXPENSES			
Operation and Maintenance:			
Fuel, fuel-related expenses, and gas purchased for resale	187,087	277,425	260,198
Purchased power	240,471	284,492	364,575
Other operation and maintenance	288,543	266,175	261,613
Taxes other than income taxes	101,525	105,318	101,999
Depreciation and amortization	209,252	170,886	152,577
Other regulatory charges (credits) - net	(15,219)	14,993	147,704
TOTAL	1,011,659	1,119,289	1,288,666
OPERATING INCOME	236,195	203,754	46,446
OTHER INCOME (DEDUCTIONS)			
Allowance for equity funds used during construction	6,726	8,356	8,710
Interest and investment income	272	1,412	135
Miscellaneous - net	(9,253)	(4,478)	(2,732)
TOTAL	(2,255)	5,290	6,113
INTEREST EXPENSE			
Interest expense	68,945	61,785	55,905
Allowance for borrowed funds used during construction	(2,778)	(3,532)	(3,651)
TOTAL	66,167	58,253	52,254
INCOME BEFORE INCOME TAXES	167,773	150,791	305
Income taxes	27,190	30,866	(125,773)
NET INCOME	140,583	119,925	126,078
Preferred dividend requirements and other	—	—	834
EARNINGS APPLICABLE TO COMMON EQUITY	$140,583	$119,925	$125,244

See Notes to Financial Statements.

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ENTERGY MISSISSIPPI, LLC
STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING ACTIVITIES			
Net income	$140,583	$119,925	$126,078
Adjustments to reconcile net income to net cash flow provided by operating activities:			
Depreciation and amortization	209,252	170,886	152,577
Deferred income taxes, investment tax credits, and non-current taxes accrued	36,827	32,547	56,502
Changes in assets and liabilities:			
Receivables	(1,889)	(17,245)	37,762
Fuel inventory	(1,978)	(3,208)	33,675
Accounts payable	22,794	(226)	(7,472)
Taxes accrued	17,423	13,109	(5,291)
Interest accrued	1,989	(1,331)	(2,670)
Deferred fuel costs	(55,711)	78,418	24,428
Other working capital accounts	630	(5,557)	(9,902)
Provisions for estimated losses	(3,517)	(1,121)	6,378
Other regulatory assets	(89,369)	(34,923)	54,860
Other regulatory liabilities	(18,672)	(21,524)	(131,856)
Pension and other postretirement liabilities	11,319	6,534	(8,405)
Other assets and liabilities	30,633	3,668	91,718
Net cash flow provided by operating activities	300,314	339,952	418,382
INVESTING ACTIVITIES			
Construction expenditures	(555,287)	(432,600)	(387,293)
Allowance for equity funds used during construction	6,726	8,356	8,710
Changes in money pool receivable - net	44,692	(3,313)	(39,747)
Payment for purchase of plant or assets	(28,612)	(305,472)	—
Other	1,719	(655)	(1,123)
Net cash flow used in investing activities	(530,762)	(733,684)	(419,453)
FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	165,385	437,153	54,449
Retirement of long-term debt	—	(150,000)	—
Changes in money pool payable - net	16,516	—	—
Redemption of preferred stock	—	—	(21,208)
Capital contributions from parent	—	130,000	—
Distributions/dividends paid:			
Common equity	(10,000)	—	(10,000)
Preferred stock	—	—	(993)
Other	6,964	(8,774)	9,681
Net cash flow provided by financing activities	178,865	408,379	31,929
Net increase (decrease) in cash and cash equivalents	(51,583)	14,647	30,858
Cash and cash equivalents at beginning of period	51,601	36,954	6,096
Cash and cash equivalents at end of period	$18	$51,601	$36,954
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid (received) during the period for:			
Interest - net of amount capitalized	$64,536	$60,533	$56,037
Income taxes	($8,084)	($12,204)	($19,118)

See Notes to Financial Statements.

ENTERGY MISSISSIPPI, LLC
BALANCE SHEETS
ASSETS

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$11	$11
Temporary cash investments	7	51,590
Total cash and cash equivalents	18	51,601
Accounts receivable:		
Customer	105,732	92,050
Allowance for doubtful accounts	(19,527)	(636)
Associated companies	2,740	49,257
Other	11,821	14,986
Accrued unbilled revenues	59,514	47,426
Total accounts receivable	160,280	203,083
Fuel inventory - at average cost	17,117	15,139
Materials and supplies - at average cost	59,542	57,972
Prepayments and other	4,876	7,149
TOTAL	241,833	334,944
OTHER PROPERTY AND INVESTMENTS		
Non-utility property - at cost (less accumulated depreciation)	4,543	4,560
Escrow accounts	64,635	80,201
TOTAL	69,178	84,761
UTILITY PLANT		
Electric	6,084,730	5,672,589
Construction work in progress	134,854	88,373
TOTAL UTILITY PLANT	6,219,584	5,760,962
Less - accumulated depreciation and amortization	2,005,087	1,894,000
UTILITY PLANT - NET	4,214,497	3,866,962
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets	467,341	377,972
Other	14,413	10,105
TOTAL	481,754	388,077
TOTAL ASSETS	$5,007,262	$4,674,744

See Notes to Financial Statements.

ENTERGY MISSISSIPPI, LLC
BALANCE SHEETS
LIABILITIES AND EQUITY

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT LIABILITIES		
Accounts payable:		
Associated companies	$61,727	$48,090
Other	117,629	94,729
Customer deposits	86,200	85,938
Taxes accrued	108,084	90,661
Interest accrued	20,889	18,900
Deferred fuel costs	14,691	70,402
Other	34,270	32,667
TOTAL	443,490	441,387
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	646,674	594,832
Accumulated deferred investment tax credits	9,062	9,602
Regulatory liability for income taxes - net	224,000	236,988
Other regulatory liabilities	15,828	21,512
Asset retirement cost liabilities	9,762	9,727
Accumulated provisions	46,504	50,021
Pension and other postretirement liabilities	110,901	99,406
Long-term debt	1,780,577	1,614,129
Other	47,730	54,989
TOTAL	2,891,038	2,691,206
Commitments and Contingencies		
EQUITY		
Member's equity	1,672,734	1,542,151
TOTAL	1,672,734	1,542,151
TOTAL LIABILITIES AND EQUITY	$5,007,262	$4,674,744

See Notes to Financial Statements.

ENTERGY MISSISSIPPI, LLC
STATEMENTS OF CHANGES IN MEMBER'S EQUITY
For the Years Ended December 31, 2020, 2019, and 2018

	Member's Equity (In Thousands)
Balance at December 31, 2017	$1,177,870
Net income	126,078
Common equity distributions	(10,000)
Preferred stock dividends	(834)
Other	(888)
Balance at December 31, 2018	$1,292,226
Net income	119,925
Capital contribution from parent	130,000
Balance at December 31, 2019	$1,542,151
Net income	140,583
Common equity distributions	(10,000)
Balance at December 31, 2020	$1,672,734

See Notes to Financial Statements.

ENTERGY MISSISSIPPI, LLC
SELECTED FINANCIAL DATA - FIVE-YEAR COMPARISON

	2020	2019	2018	2017	2016
			(In Thousands)		
Operating revenues	$1,247,854	$1,323,043	$1,335,112	$1,198,229	$1,094,649
Net income	$140,583	$119,925	$126,078	$110,032	$109,184
Total assets	$5,007,262	$4,674,744	$3,946,804	$3,879,375	$3,602,140
Long-term obligations (a)	$1,780,577	$1,614,129	$1,175,750	$1,290,503	$1,141,924

(a) Includes long-term debt (excluding currently maturing debt), non-current capital lease obligations, and preferred stock without sinking fund.

	2020	2019	2018	2017	2016
			(Dollars In Millions)		
Electric Operating Revenues:					
Residential	$523	$562	$579	$502	$459
Commercial	396	444	462	423	374
Industrial	145	165	175	159	134
Governmental	42	44	44	41	38
Total billed retail	1,106	1,215	1,260	1,125	1,005
Sales for resale:					
Associated companies	—	—	1	—	1
Non-associated companies	78	39	25	18	30
Other	64	69	49	55	59
Total	$1,248	$1,323	$1,335	$1,198	$1,095
Billed Electric Energy Sales (GWh):					
Residential	5,378	5,659	5,829	5,308	5,617
Commercial	4,283	4,698	4,865	4,783	4,894
Industrial	2,343	2,443	2,559	2,536	2,493
Governmental	398	436	438	421	439
Total retail	12,402	13,236	13,691	13,048	13,443
Sales for resale:					
Non-associated companies	4,316	1,776	1,060	857	1,021
Total	16,718	15,012	14,751	13,905	14,464

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

The COVID-19 Pandemic

See "**The COVID-19 Pandemic**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the COVID-19 pandemic.

Hurricane Zeta

In October 2020, Hurricane Zeta caused significant damage to Entergy New Orleans's service area. The storm resulted in widespread power outages, significant damage to distribution and transmission infrastructure, and the loss of sales during the power outages. Total restoration costs for the repair and/or replacement of Entergy New Orleans's electric facilities damaged by Hurricane Zeta are currently estimated to be approximately $40 million, including approximately $30 million in capital costs and approximately $10 million in non-capital costs. Entergy New Orleans is considering all available avenues to recover storm-related costs from Hurricane Zeta, including accessing funded storm reserve escrows and securitization. Storm cost recovery or financing will be subject to review by applicable regulatory authorities.

Entergy New Orleans recorded accounts payable and corresponding construction work in progress and regulatory assets for the estimated costs incurred that were necessary to return customers to service. Entergy New Orleans recorded the regulatory assets in accordance with its accounting policies and based on the historic treatment of such costs in its service area because management believes that recovery through some form of regulatory mechanism is probable. There are well established mechanisms and precedent for addressing these catastrophic events and providing for recovery of prudently incurred storm costs in accordance with applicable regulatory and legal principles. Because Entergy New Orleans has not gone through the regulatory process regarding these storm costs, there is an element of risk, and Entergy New Orleans is unable to predict with certainty the degree of success it may have in its recovery initiatives, the amount of restoration costs that it may ultimately recover, or the timing of such recovery.

February 2021 Winter Storms

See the "**February 2021 Winter Storms**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the February 2021 winter storms. Entergy New Orleans's preliminary estimate for the cost of mobilizing crews and restoring power is approximately $1 million. Natural gas purchases for Entergy New Orleans for February 1st through 25th, 2021 are approximately $15 million compared to natural gas purchases for February 2020 of $7 million.

Results of Operations

2020 Compared to 2019

Net Income

Net income decreased $3.3 million primarily due to lower volume/weather, lower retail electric price, and higher interest expense, partially offset by a lower effective income tax rate.

Operating Revenues

Following is an analysis of the change in operating revenues comparing 2020 to 2019.

	Amount (In Millions)
2019 operating revenues	$686.2
Fuel, rider, and other revenues that do not significantly affect net income	(32.5)
Volume/weather	(12.5)
Retail electric price	(7.4)
2020 operating revenues	**$633.8**

Entergy New Orleans's results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not affect net income. "Fuel, rider, and other revenues that do not significantly affect net income" includes the revenue variance associated with these items.

The volume/weather variance is primarily due to a decrease of 374 GWh, or 6.4%, in billed electricity usage, including the effect of decreased commercial and governmental usage as a result of the COVID-19 pandemic and the effect of less favorable weather on residential and commercial sales, partially offset by an increase in residential usage as a result of the COVID-19 pandemic. See "**The COVID-19 Pandemic**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the COVID-19 pandemic.

The retail electric price variance is primarily due to the effects of a rate reduction implemented with April 2020 bills that was effective August 2019 in accordance with the City Council resolution and related agreement in principle reached in the 2018 base rate case. See Note 2 to the financial statements for further discussion of the rate case.

Other Income Statement Variances

Other operation and maintenance expenses increased primarily due to:

- an increase of $4.9 million primarily due to the 2019 deferral of costs related to the 2018 rate case and a system conversion for Algiers customers as a result of the 2018 combined rate case resolution approved by the City Council. See Note 2 to the financial statements for further discussion of the rate case resolution; and
- an increase of $3.8 million in energy efficiency costs.

The increase was partially offset by:

- a decrease of $2.4 million in gas operations costs primarily due to the deferral in 2020 of certain gas infrastructure replacement program costs as a result of the 2018 combined rate case resolution. See Note 2 to the financial statements for further discussion of the rate case resolution; and
- a decrease of $2.2 million primarily due to contract costs in 2019 related to initiatives to explore new customer products and services.

Depreciation and amortization expenses increased primarily due to additions to plant in service.

Other regulatory charges - net include regulatory credits recorded in the first quarter 2020 to reflect compliance with terms of the 2018 combined rate case resolution approved by the City Council in February 2020. See Note 2 to the financial statements for further discussion of the rate case resolution.

Interest expense increased primarily due to the issuance of:

- a $70 million term loan at 3.0% in December 2019;
- $78 million of 3.00% Series mortgage bonds in March 2020; and
- $62 million of 3.75% Series mortgage bonds in March 2020.

The effective income tax rates were (9.3%) for 2020 and 0.4% for 2019. The difference in the effective income tax rate versus the federal statutory rate of 21% for 2020 was primarily due to the amortization of excess accumulated deferred income taxes and the completion of the 2014-2015 IRS audit effectively settling the tax positions for those years. The difference in the effective income tax rate versus the federal statutory rate of 21% for 2019 was primarily due to the amortization of excess accumulated deferred income taxes. See Notes 2 and 3 to the financial statements for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act. See Note 3 to the financial statements for a reconciliation of the federal statutory rate of 21% to the effective income tax rates.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Results of Operations**" in Item 7 of Entergy New Orleans's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of results of operations for 2019 compared to 2018.

Liquidity and Capital Resources

Cash Flow

Cash flows for the years ended December 31, 2020, 2019, and 2018 were as follows:

	2020	2019	2018
		(In Thousands)	
Cash and cash equivalents at beginning of period	$6,017	$19,677	$32,741
Net cash provided by (used in):			
Operating activities	64,024	115,604	171,778
Investing activities	(220,845)	(204,310)	(207,616)
Financing activities	150,830	75,046	22,774
Net decrease in cash and cash equivalents	(5,991)	(13,660)	(13,064)
Cash and cash equivalents at end of period	$26	$6,017	$19,677

2020 Compared to 2019

Operating Activities

Net cash flow provided by operating activities decreased $51.6 million in 2020 primarily due to:

- lower collections of receivables from customers, in part due to the COVID-19 pandemic;
- the timing of recovery of fuel and purchased power costs; and

- income tax payments of $3.4 million made in 2020 compared to income tax refunds of $5.3 million received in 2019, each in accordance with an intercompany income tax allocation agreement. The income tax refunds resulted from the utilization of Entergy New Orleans's net operating loss.

The decrease was partially offset by the timing of payments to vendors.

Investing Activities

Net cash flow used in investing activities increased $16.5 million in 2020 primarily due to:

- an increase of $12.4 million in distribution construction expenditures primarily due to investment in the reliability and infrastructure of Entergy New Orleans's distribution system, including increased spending on advanced metering infrastructure;
- money pool activity;
- an increase of $10.8 million in storm spending in 2020, primarily due to Hurricane Zeta restoration efforts. See "**Hurricane Zeta**" above for discussion of hurricane restoration efforts; and
- an increase of $5.1 million in facilities construction expenditures primarily due to a higher scope of work performed in 2020.

The increase was partially offset by:

- a decrease of $16.2 million in non-nuclear generation construction expenditures primarily due to lower spending in 2020 on the New Orleans Power Station project, partially offset by higher spending in 2020 on the New Orleans Solar Station project; and
- a decrease of $7.5 million in transmission construction expenditures primarily due to lower spending in 2020 on the New Orleans Power Station project.

Decreases in Entergy New Orleans's receivable from the money pool are a source of cash flow, and Entergy New Orleans's receivable from the money pool decreased $5.2 million in 2020 compared to decreasing $16.8 million in 2019. The money pool is an inter-company borrowing arrangement designed to reduce the Utility subsidiaries' need for external short-term borrowings.

Financing Activities

Net cash flow provided by financing activities increased $75.8 million primarily due to a capital contribution received from Entergy Corporation of $60 million in November 2020 in order to maintain Entergy New Orleans's capital structure and money pool activity.

Increases in Entergy New Orleans's payable to the money pool are a source of cash flow, and Entergy New Orleans's payable to the money pool increased $10.2 million in 2020.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources - Cash Flow**" in Item 7 of Entergy New Orleans's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of operating, investing, and financing cash flow activities for 2019 compared to 2018.

Capital Structure

Entergy New Orleans's debt to capital ratio is shown in the following table. The decrease in the debt to capital ratio is primarily due to an increase in equity resulting from a $60 million capital contribution received from Entergy Corporation in 2020 and net income, partially offset by the net issuance of long-term debt in 2020.

	December 31, 2020	December 31, 2019
Debt to capital	51.5 %	53.1 %
Effect of excluding securitization bonds	(1.6 %)	(2.4 %)
Debt to capital, excluding securitization bonds (a)	49.9 %	50.7 %
Effect of subtracting cash	— %	(0.3 %)
Net debt to net capital, excluding securitization bonds (a)	49.9 %	50.4 %

(a) Calculation excludes the securitization bonds, which are non-recourse to Entergy New Orleans.

Net debt consists of debt less cash and cash equivalents. Debt consists of short-term borrowings, finance lease obligations, long-term debt, including the currently maturing portion, and the long-term payable due to an associated company. Capital consists of debt and equity. Net capital consists of capital less cash and cash equivalents. Entergy New Orleans uses the debt to capital ratios excluding securitization bonds in analyzing its financial condition and believes they provide useful information to its investors and creditors in evaluating Entergy New Orleans's financial condition because the securitization bonds are non-recourse to Entergy New Orleans, as more fully described in Note 5 to the financial statements. Entergy New Orleans also uses the net debt to net capital ratio excluding securitization bonds in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy New Orleans's financial condition because net debt indicates Entergy New Orleans's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Entergy New Orleans seeks to optimize its capital structure in accordance with its regulatory requirements and to control its cost of capital while also maintaining equity capitalization at a level consistent with investment-grade debt ratings. To the extent that operating cash flows are in excess of planned investments, cash may be used to reduce outstanding debt or may be paid as a distribution, or both, in appropriate amounts to maintain the capital structure. To the extent that operating cash flows are insufficient to support planned investments, Entergy New Orleans may issue incremental debt or reduce distributions, or both, to maintain its capital structure. In addition, in certain infrequent circumstances, such as financing of large transactions that would materially alter the capital structure if financed entirely with debt and reducing distributions, Entergy New Orleans may receive equity contributions to maintain its capital structure.

Uses of Capital

Entergy New Orleans requires capital resources for:

- construction and other capital investments;
- working capital purposes, including the financing of fuel and purchased power costs;
- debt maturities or retirements; and
- distribution and interest payments.

Following are the amounts of Entergy New Orleans's planned construction and other capital investments.

	2021	2022	2023
	(In Millions)		
Planned construction and capital investment:			
Generation	$10	$15	$5
Transmission	20	25	20
Distribution	90	125	120
Utility Support	20	15	10
Total	$140	$180	$155

In addition to the planned spending in the table above, Entergy New Orleans also expects to pay for $25 million of capital investments in 2021 related to Hurricane Zeta restoration work that have been accrued as of December 31, 2020.

Following are the amounts of Entergy New Orleans's existing debt and lease obligations (includes estimated interest payments) and other purchase obligations.

	2021	2022-2023	2024-2025	After 2025	Total
			(In Millions)		
Long-term debt (a)	$37	$240	$119	$686	$1,082
Operating leases (b)	$2	$2	$1	$1	$6
Finance leases (b)	$1	$1	$1	$1	$4
Purchase obligations (c)	$217	$438	$419	$3,287	$4,361

(a) Includes estimated interest payments. Long-term debt is discussed in Note 5 to the financial statements.
(b) Lease obligations are discussed in Note 10 to the financial statements.
(c) Purchase obligations represent the minimum purchase obligation or cancellation charge for contractual obligations to purchase goods or services. For Entergy New Orleans, almost all of the total consists of unconditional fuel and purchased power obligations, including its obligations under the Unit Power Sales Agreement, which is discussed in Note 8 to the financial statements.

In addition to the contractual obligations given above, Entergy New Orleans currently expects to contribute approximately $5.4 million to its qualified pension plan and approximately $175 thousand to other postretirement health care and life insurance plans in 2021, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021. See "**Critical Accounting Estimates - Qualified Pension and Other Postretirement Benefits**" below for a discussion of qualified pension and other postretirement benefits funding.

Also in addition to the contractual obligations, Entergy New Orleans has $187.6 million of unrecognized tax benefits and interest net of unused tax attributes and payments for which the timing of payments beyond 12 months cannot be reasonably estimated due to uncertainties in the timing of effective settlement of tax positions. See Note 3 to the financial statements for additional information regarding unrecognized tax benefits.

In addition to routine capital spending to maintain operations, the planned capital investment estimate for Entergy New Orleans includes transmission projects to enhance reliability, reduce congestion, and enable economic growth; distribution spending to enhance reliability and improve service to customers, including advanced meters and related investments; resource planning, including potential generation and renewables projects; system improvements; software and security; and other investments. Estimated capital expenditures are subject to periodic review and modification and may vary based on the ongoing effects of regulatory constraints and requirements, environmental compliance, business opportunities, market volatility, economic trends, business restructuring,

changes in project plans, and the ability to access capital. Management provides more information on long-term debt and preferred stock maturities in Notes 5 and 6 to the financial statements.

As a wholly-owned subsidiary of Entergy Utility Holding Company, LLC, Entergy New Orleans pays distributions from its earnings at a percentage determined monthly.

Gas Infrastructure Rebuild Plan

In September 2016, Entergy New Orleans submitted to the City Council a request for authorization for Entergy New Orleans to proceed with annual incremental capital funding of $12.5 million for its gas infrastructure rebuild plan, which would replace all of Entergy New Orleans's low pressure cast iron, steel, and vintage plastic pipe over a ten-year period commencing in 2017. Entergy New Orleans also proposed that recovery of the investment to fund its gas infrastructure replacement plan be determined in connection with its next base rate case. The City Council authorized Entergy New Orleans to proceed with its replacement plans and established a schedule for proceedings in advance of the rate case intended to provide an opportunity for evaluation of the gas infrastructure plan that would best serve the public interest and the effect on customers of the approval of any such plan. In the course of that proceeding, the City Council's advisors submitted pre-filed testimony recommending that Entergy New Orleans be allowed to continue with its condition-based approach to gas pipeline replacement to replace approximately 238 miles of low pressure pipe at a rate of approximately 25 miles per year. The City Council's advisors also recommended that Entergy New Orleans be required to adhere to certain reporting requirements and recognized the need to address the sustained level of investment in gas infrastructure on customer bills. In September 2017, Entergy New Orleans filed rebuttal testimony suggesting that its recovery of future investment and customer effects would be addressed in the rate case that Entergy New Orleans was required to file in July 2018. The procedural schedule was suspended in order to allow for resolution in the rate case proceeding. As a result of the rate case, the City Council approved the planned gas rebuild expenditures through 2019, but rejected Entergy New Orleans's proposed gas infrastructure rider. In April 2020, Entergy New Orleans submitted its gas infrastructure rebuild plan to the City Council, which maintained the previously proposed timeline and cost estimates, but included measures to spread out the cost impact to customers of the program.

Renewables

In July 2018, Entergy New Orleans filed an application with the City Council requesting approval of three utility-scale solar projects totaling 90 MW. If approved, the resource additions will allow Entergy New Orleans to make significant progress towards meeting its voluntary commitment to the City Council to add up to 100 MW of renewable energy resources. The three projects include constructing a self-build solar plant in Orleans Parish with an output of 20 MW, acquiring a 50 MW solar facility in Washington Parish through a build-own-transfer acquisition, and procuring 20 MW of solar power from a project to be built in St. James Parish through a power purchase agreement. In December 2018 the City Council advisors requested that Entergy New Orleans pursue alternative deal structures for the Washington Parish project and attempt to reduce costs for the 20 MW New Orleans Solar Station. As a result of settlement discussions, in March 2019, Entergy New Orleans revised its application to convert the build-own transfer acquisition of the 50 MW facility in Washington Parish to a power purchase agreement. In June 2019 the parties to the proceeding executed a stipulated settlement term sheet, which recommends that the City Council approve Entergy New Orleans's revised application as to all three projects. In July 2019 the City Council approved the stipulated settlement. Commercial operation of the 20 MW New Orleans Solar Station commenced in December 2020. Entergy New Orleans expects to begin receiving power under the 50 MW Iris Solar and the 20 MW St. James Solar power purchase agreements by third quarter 2021.

Sources of Capital

Entergy New Orleans's sources to meet its capital requirements include:

- internally generated funds;

- cash on hand;
- storm reserve escrow accounts;
- debt and preferred membership interest issuances, including debt issuances to refund or retire currently outstanding or maturing indebtedness;
- capital contributions; and
- bank financing under new or existing facilities.

Entergy New Orleans may refinance, redeem, or otherwise retire debt prior to maturity, to the extent market conditions and interest rates are favorable.

All debt and common and preferred membership interest issuances by Entergy New Orleans require prior regulatory approval. Debt issuances are also subject to issuance tests set forth in its bond indentures and other agreements. Entergy New Orleans has sufficient capacity under these tests to meet its foreseeable capital needs.

Entergy New Orleans's receivables from or (payables to) the money pool were as follows as of December 31 for each of the following years.

2020	2019	2018	2017
	(In Thousands)		
($10,190)	$5,191	$22,016	$12,723

See Note 4 to the financial statements for a description of the money pool.

Entergy New Orleans has a credit facility in the amount of $25 million scheduled to expire in November 2021. The credit facility includes fronting commitments for the issuance of letters of credit against $10 million of the borrowing capacity of the facility. As of December 31, 2020, there were no cash borrowings and an $0.8 million letter of credit outstanding under the facility. In addition, Entergy New Orleans is a party to an uncommitted letter of credit facility as a means to post collateral to support its obligations to MISO. As of December 31, 2020, a $1 million letter of credit was outstanding under Entergy New Orleans's letter of credit facility. See Note 4 to the financial statements for additional discussion of the credit facilities.

Entergy New Orleans obtained authorization from the FERC through July 2022 for short-term borrowings not to exceed an aggregate amount of $150 million at any time outstanding and long-term borrowings and securities issuances. See Note 4 to the financial statements for further discussion of Entergy New Orleans's short-term borrowing limits. The long-term securities issuances of Entergy New Orleans are limited to amounts authorized not only by the FERC, but also by the City Council, and the current City Council authorization extends through July 2022.

State and Local Rate Regulation

The rates that Entergy New Orleans charges for electricity and natural gas significantly influence its financial position, results of operations, and liquidity. Entergy New Orleans is regulated and the rates charged to its customers are determined in regulatory proceedings. A governmental agency, the City Council, is primarily responsible for approval of the rates charged to customers.

Retail Rates

Energy Efficiency

In December 2019, Entergy New Orleans filed an application with the City Council seeking approval of an implementation plan for the Energy Smart program from April 2020 through December 2022. Entergy New Orleans proposed to recover the costs of the program through mechanisms previously approved by the City Council

or through the energy efficiency cost recovery rider, which was approved in the 2018 combined rate case resolution. In January 2020 the City Council's advisors recommended that, beginning with Program Year 10, the City Council allow Entergy New Orleans to earn a utility performance incentive of 7% of Energy Smart costs for each year in which Entergy New Orleans achieves 100% of the City Council's savings targets for Energy Smart. In February 2020 the City Council approved Entergy New Orleans's application.

2018 Base Rate Case

In September 2018, Entergy New Orleans filed an electric and gas base rate case with the City Council. The filing requested a 10.5% return on equity for electric operations with opportunity to earn a 10.75% return on equity through a performance adder provision of the electric formula rate plan in subsequent years under a formula rate plan and requested a 10.75% return on equity for gas operations. The proposed electric rates in the revised filing reflect a net reduction of $20.3 million. The reduction in electric rates includes a base rate increase of $135.2 million, of which $131.5 million is associated with moving costs currently collected through fuel and other riders into base rates, plus a request for an advanced metering surcharge to recover $7.1 million associated with advanced metering infrastructure, offset by a net decrease of $31.1 million related to fuel and other riders. The filing also included a proposed gas rate decrease of $142 thousand. Entergy New Orleans's rates reflected the inclusion of federal income tax reductions due to the Tax Act and the provisions of a previously-approved agreement in principle determining how the benefits of the Tax Act would flow. Entergy New Orleans included cost of service studies for electric and gas operations for the twelve months ended December 31, 2017 and the projected twelve months ending December 31, 2018. In addition, Entergy New Orleans included capital additions expected to be placed into service for the period through December 31, 2019. Entergy New Orleans based its request for a change in rates on the projected twelve months ending December 31, 2018.

The filing's major provisions included: (1) a new electric rate structure, which realigns the revenue requirement associated with capacity and long-term service agreement expense from certain existing riders to base revenue, provides for the recovery of the cost of advanced metering infrastructure, and partially blends rates for Entergy New Orleans's customers residing in Algiers with customers residing in the remainder of Orleans Parish through a three-year phase-in; (2) contemporaneous cost recovery riders for investments in energy efficiency/demand response, incremental changes in capacity/long-term service agreement costs, grid modernization investment, and gas infrastructure replacement investment; and (3) formula rate plans for both electric and gas operations. In February 2019 the City Council's advisors and several intervenors filed testimony in response to Entergy New Orleans's application. The City Council's advisors recommended, among other things, overall rate reductions of approximately $33 million in electric rates and $3.8 million in gas rates. Certain intervenors recommended overall rate reductions of up to approximately $49 million in electric rates and $5 million in gas rates. An evidentiary hearing was held in June 2019, and the record and post-hearing briefs were submitted in July 2019.

In October 2019 the City Council's Utility Committee approved a resolution for a change in electric and gas rates for consideration by the full City Council that included a 9.35% return on common equity, an equity ratio of the lesser of 50% or Entergy New Orleans's actual equity ratio, and a total reduction in revenues that Entergy New Orleans initially estimated to be approximately $39 million ($36 million electric; $3 million gas). At its November 7, 2019 meeting, the full City Council approved the resolution that had previously been approved by the City Council's Utility Committee. Based on the approved resolution, in the fourth quarter 2019 Entergy New Orleans recorded an accrual of $10 million that reflects the estimate of the revenue billed in 2019 to be refunded to customers in 2020 based on an August 2019 effective date for the rate decrease. Entergy New Orleans also recorded a total of $12 million in regulatory assets for rate case costs and information technology costs associated with integrating Algiers customers with Entergy New Orleans's legacy system and records. Entergy New Orleans will also be allowed to recover $10 million of retired general plant costs over a 20-year period.

The resolution directed Entergy New Orleans to submit a compliance filing within 30 days of the date of the resolution to facilitate the eventual implementation of rates, including all necessary calculations and conforming rate schedules and riders. The electric formula rate plan rider includes, among other things, 1) a provision for

forward-looking adjustments to include known and measurable changes realized up to 12 months after the evaluation period; 2) a decoupling mechanism; and 3) recognition that Entergy New Orleans is authorized to make an in-service adjustment to the formula rate plan to include the non-fuel cost of the New Orleans Power Station in rates, unless the two pending appeals in the New Orleans Power Station proceeding have not concluded. Under this circumstance, Entergy New Orleans shall be permitted to defer the New Orleans Power Station non-fuel costs, including the cost of capital, until Entergy New Orleans commences non-fuel cost recovery. After taking into account the requirements for submission of the compliance filing, the total annual revenue requirement reduction required by the resolution was refined to approximately $45 million ($42 million electric, including $29 million in rider reductions; $3 million gas). In January 2020 the City Council's advisors found that the rates calculated by Entergy New Orleans and reflected in the December 2019 compliance filing should be implemented, except with respect to the City Council-approved energy efficiency cost recovery rider, which rider calculation should take into account events to be determined by the City Council in the future. Also in response to the resolution, Entergy New Orleans filed timely a petition for appeal and judicial review and for stay of or injunctive relief alleging that the resolution is unlawful in failing to produce just and reasonable rates. A hearing on the requested injunction was scheduled in Civil District Court for February 2020, but by joint motion of the City Council and Entergy New Orleans, the Civil District Court issued an order for a limited remand to the City Council to consider a potential agreement in principle/stipulation at its February 20, 2020 meeting. On February 17, 2020, Entergy New Orleans filed with the City Council an agreement in principle between Entergy New Orleans and the City Council's advisors. On February 20, 2020, the City Council voted to approve the proposed agreement in principle and issued a resolution modifying the required treatment of certain accumulated deferred income taxes. As a result of the agreement in principle, the total annual revenue requirement reduction will be approximately $45 million ($42 million electric, including $29 million in rider reductions; and $3 million gas). Entergy New Orleans fully implemented the new rates in April 2020. In January 2021, pursuant to the agreement in principle approved by the City Council in October 2020, Entergy New Orleans filed with Civil District Court a motion seeking to dismiss its petition for judicial review of the City Council's resolution in the 2018 combined rate case.

Commercial operation of the New Orleans Power Station commenced in May 2020. In accordance with the City Council resolution issued in the 2018 base rate case proceeding, Entergy New Orleans had been deferring the New Orleans Power Station non-fuel costs pending the conclusion of the appellate proceedings. In October 2020 the Louisiana Supreme Court denied all writ applications relating to the New Orleans Power Station. With those denials, Entergy New Orleans began recovering New Orleans Power Station costs in rates in November 2020. As of December 31, 2020 the regulatory asset for the deferral of New Orleans Power Station non-fuel costs was $5 million. Entergy New Orleans is recovering the costs over a five-year period that began in November 2020. In December 2020 the Alliance for Affordable Energy and Sierra Club filed a joint motion with the City Council to institute a prudence review to investigate the costs of the New Orleans Power Station. On January 28, 2021, the City Council passed a resolution giving parties 30 days to respond to the motion. Entergy New Orleans plans to respond to the motion.

2020 Formula Rate Plan Filing

Entergy New Orleans's first annual filing under the three-year formula rate plan approved by the City Council in November 2019 was originally due to be filed in April 2020. The authorized return on equity under the approved three-year formula rate plan is 9.35% for both electric and gas operations. The City Council approved several extensions of the deadline to allow additional time to assess the effects of the COVID-19 pandemic on the New Orleans community, Entergy New Orleans customers, and Entergy New Orleans itself. In October 2020 the City Council approved an agreement in principle filed by Entergy New Orleans that results in Entergy New Orleans foregoing its 2020 formula rate plan filing and shifting the three-year formula rate plan to filings in 2021, 2022, and 2023. Key provisions of the agreement in principle include: changing the lower of actual equity ratio or 50% equity ratio approved in the rate case to a hypothetical capital structure of 51% equity and 49% debt for the duration of the three-year formula rate plan; changing the 2% depreciation rate for the New Orleans Power Station approved in the rate case to 3%; retention of over-recovery of $2.2 million in rider revenues; recovery of $1.4 million of certain rate

case expenses outside of the earnings band; recovery of the New Orleans Solar Station costs upon commercial operation; and Entergy New Orleans's dismissal of its 2018 rate case appeal.

COVID-19 Orders

In March 2020, Entergy New Orleans voluntarily suspended customer disconnections for non-payment of utility bills through May 2020. Subsequently, the City Council ordered that the moratorium be extended to August 1, 2020. In May 2020 the City Council issued an accounting order authorizing Entergy New Orleans to establish a regulatory asset for incremental COVID-19-related expenses. In January 2021, Entergy New Orleans resumed disconnecting service to commercial and small business customers with past-due balances that have not made payment arrangements. In February 2021 the City Council adopted a resolution suspending residential customer disconnections for non-payment of utility bills and suspending the assessment and accumulation of late fees on residential customers with past-due balances through May 15, 2021. As of December 31, 2020, Entergy New Orleans recorded a regulatory asset of $14.3 million for costs associated with the COVID-19 pandemic.

In June 2020 the City Council established the City Council Cares Program and directed Entergy New Orleans to use the approximately $7 million refund received from the Entergy Arkansas opportunity sales FERC proceeding, currently being held in escrow, and approximately $15 million of non-securitized storm reserves to fund this program, which is intended to provide temporary bill relief to customers who become unemployed during the COVID-19 pandemic. The program became effective July 1, 2020, and offers qualifying residential customers bill credits of $100 per month for up to four months, for a maximum of $400 in residential customer bill credits. As of December 31, 2020, credits of $3.4 million have been applied to customer bills under the City Council Cares Program.

Fuel and Purchased Power Cost Recovery

Entergy New Orleans's electric rate schedules include a fuel adjustment tariff designed to reflect no more than targeted fuel and purchased power costs, adjusted by a surcharge or credit for deferred fuel expense arising from the monthly reconciliation of actual fuel and purchased power costs incurred with fuel cost revenues billed to customers, including carrying charges.

Entergy New Orleans's gas rate schedules include a purchased gas adjustment to reflect estimated gas costs for the billing month, adjusted by a surcharge or credit similar to that included in the electric fuel adjustment clause, including carrying charges.

Show Cause Order

In July 2016 the City Council approved the issuance of a show cause order, which directed Entergy New Orleans to make a filing on or before September 29, 2016 to demonstrate the reasonableness of its actions or positions with regard to certain issues in four existing dockets that relate to Entergy New Orleans's: (i) storm hardening proposal; (ii) 2015 integrated resource plan; (iii) gas infrastructure rebuild proposal; and (iv) proposed sizing of the New Orleans Power Station and its community outreach prior to the filing. In September 2016, Entergy New Orleans filed its response to the City Council's show cause order. The City Council has not established any further procedural schedule with regard to this proceeding.

Reliability Investigation

In August 2017 the City Council established a docket to investigate the reliability of the Entergy New Orleans distribution system and to consider implementing certain reliability standards and possible financial penalties for not meeting any such standards. In April 2018 the City Council adopted a resolution directing Entergy New Orleans to demonstrate that it has been prudent in the management and maintenance of the reliability of its distribution system. The resolution also called for Entergy New Orleans to file a revised reliability plan addressing

the current state of its distribution system and proposing remedial measures for increasing reliability. In June 2018, Entergy New Orleans filed its response to the City Council's resolution regarding the prudence of its management and maintenance of the reliability of its distribution system. In July 2018, Entergy New Orleans filed its revised reliability plan discussing the various reliability programs that it uses to improve distribution system reliability and discussing generally the positive effect that advanced meter deployment and grid modernization can have on future reliability. Entergy New Orleans has retained a national consulting firm with expertise in distribution system reliability to conduct a review of Entergy New Orleans's distribution system reliability-related practices and procedures and to provide recommendations for improving distribution system reliability. The report was filed with the City Council in October 2018. The City Council also approved a resolution that opens a prudence investigation into whether Entergy New Orleans was imprudent for not acting sooner to address outages in New Orleans and whether fines should be imposed. In January 2019, Entergy New Orleans filed testimony in response to the prudence investigation and asserting that it had been prudent in managing system reliability. In April 2019 the City Council advisors filed comments and testimony asserting that Entergy New Orleans did not act prudently in maintaining and improving its distribution system reliability in recent years and recommending that a financial penalty in the range of $1.5 million to $2 million should be assessed. Entergy New Orleans disagrees with the recommendation and submitted rebuttal testimony and rebuttal comments in June 2019. In November 2019 the City Council passed a resolution that penalized Entergy New Orleans $1 million for alleged imprudence in the maintenance of its distribution system. In December 2019, Entergy New Orleans filed suit in Louisiana state court seeking judicial review of the City Council's resolution. Although the City Council evidentiary record has been lodged with the Civil District count, the court has not yet established a briefing schedule.

Renewable Portfolio Standard Rulemaking

In March 2019 the City Council initiated a rulemaking proceeding to consider whether to establish a renewable portfolio standard. The rulemaking will consider, among other issues, whether to adopt a renewable portfolio standard, whether such standard should be voluntary or mandatory, what kinds of technologies should qualify for inclusion in the rules, what level, if any, of renewable generation should be required, and whether penalties are an appropriate component of the proposed rules. Parties to the proceeding submitted initial comments in June 2019 and reply comments in July 2019. Entergy New Orleans recommends that the City Council adopt a voluntary clean energy standard of 70% of generation being clean energy by 2030, as so defined, which, in addition to renewable generation, would include nuclear, beneficial electrification, and demand-side management as compliant technologies. Several other industry leaders, academic researchers, and environmental advocates filed comments also supporting a clean energy standard. Other parties, including many representatives of the solar and wind industry, are recommending mandatory, renewables-only requirements of up to 100% renewable resources by 2040. In September 2019 the City Council advisors issued a report and recommendations, which also put forth three alternative rules for comment from the parties. Comments were submitted in October 2019 and replies were filed in November 2019. In March 2020 the City Council's Utility Committee recommended a resolution for approval by the City Council that directed the City Council advisors to work toward development of a rule for enacting a Renewable and Clean Portfolio Standard. The four components of the Renewable and Clean Portfolio Standard that the City Council expressed a desire to implement are: (1) a mandatory requirement that Entergy New Orleans achieve 100% net zero carbon emissions by 2040; (2) reliance on renewable energy credits purchased without the associated energy for compliance with the standard being phased out over the ten-year period from 2040 to 2050; (3) no carbon-emitting resources in the portfolio of resources Entergy New Orleans uses to serve New Orleans by 2050; and (4) a mechanism to limit costs in any one plan year to no more than one percent of plan year total utility retail sales revenues. The City Council adopted the Utility Committee resolution in April 2020. The first technical meeting of the parties occurred in June 2020; a second technical meeting occurred in July 2020. In August 2020 the City Council advisors issued a final draft of the rules for review and comment from the parties before final rules are proposed for consideration by the City Council. Entergy New Orleans filed comments in September and October 2020. A City Council decision is expected in the first quarter 2021.

Federal Regulation

See the "**Rate, Cost-recovery, and Other Regulation – Federal Regulation**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis and Note 2 to the financial statements for a discussion of federal regulation.

Nuclear Matters

See the "**Nuclear Matters**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of nuclear matters.

Environmental Risks

Entergy New Orleans's facilities and operations are subject to regulation by various governmental authorities having jurisdiction over air quality, water quality, control of toxic substances and hazardous solid wastes, and other environmental matters. Management believes that Entergy New Orleans is in substantial compliance with environmental regulations currently applicable to its facilities and operations, with reference to possible exceptions noted in "**Regulation of Entergy's Business - Environmental Regulation**" in Part I, Item 1. Because environmental regulations are subject to change, future compliance costs cannot be precisely estimated.

Critical Accounting Estimates

The preparation of Entergy New Orleans's financial statements in conformity with generally accepted accounting principles requires management to apply appropriate accounting policies and to make estimates and judgments that can have a significant effect on reported financial position, results of operations, and cash flows. Management has identified the following accounting policies and estimates as critical because they are based on assumptions and measurements that involve a high degree of uncertainty, and there is the potential for future changes in the assumptions and measurements that could produce estimates that would have a material impact on the presentation of Entergy New Orleans's financial position or results of operations.

Utility Regulatory Accounting

See "**Utility Regulatory Accounting**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of accounting for the effects of rate regulation.

Impairment of Long-lived Assets

See "**Impairment of Long-lived Assets**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the estimates associated with the impairment of long-lived assets.

Taxation and Uncertain Tax Positions

See "**Taxation and Uncertain Tax Positions**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion.

Qualified Pension and Other Postretirement Benefits

Entergy New Orleans's qualified pension and other postretirement reported costs, as described in Note 11 to the financial statements, are impacted by numerous factors including the provisions of the plans, changing employee demographics, and various actuarial calculations, assumptions, and accounting mechanisms. See the "**Qualified Pension and Other Postretirement Benefits**" in the "**Critical Accounting Estimates**" section of Entergy

Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion. Because of the complexity of these calculations, the long-term nature of these obligations, and the importance of the assumptions utilized, Entergy's estimate of these costs is a critical accounting estimate.

Cost Sensitivity

The following chart reflects the sensitivity of qualified pension cost and qualified projected benefit obligation to changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Qualified Pension Cost	Impact on 2020 Projected Qualified Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$303	$5,858
Rate of return on plan assets	(0.25%)	$388	$—
Rate of increase in compensation	0.25%	$225	$1,060

The following chart reflects the sensitivity of postretirement benefit cost and accumulated postretirement benefit obligation to changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Postretirement Benefit Cost	Impact on 2020 Accumulated Postretirement Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$76	$893
Health care cost trend	0.25%	$82	$571

Each fluctuation above assumes that the other components of the calculation are held constant.

Costs and Employer Contributions

Total qualified pension cost for Entergy New Orleans in 2020 was $6 million. Entergy New Orleans anticipates 2021 qualified pension cost to be $5.9 million. Entergy New Orleans contributed $4.6 million to its qualified pension plans in 2020 and estimates 2021 pension contributions will be approximately $5.4 million, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021.

Total postretirement health care and life insurance benefit income for Entergy New Orleans in 2020 was $4.9 million. Entergy New Orleans expects 2021 postretirement health care and life insurance benefit income of approximately $6.4 million. Entergy New Orleans contributed $641 thousand to its other postretirement plans in 2020 and estimates 2021 contributions will be approximately $175 thousand.

Other Contingencies

See "**Other Contingencies**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the estimates associated with environmental, litigation, and other risks.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements for a discussion of new accounting pronouncements.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the member and Board of Directors of
Entergy New Orleans, LLC and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Entergy New Orleans, LLC and Subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of income, cash flows, and changes in member's equity (pages 402 through 406 and applicable items in pages 51 through 238), for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Rate and Regulatory Matters— Entergy New Orleans, LLC and Subsidiaries — Refer to Note 2 to the financial statements

Critical Audit Matter Description

The Company is subject to rate regulation by the Council of the City of New Orleans, Louisiana (the "City Council"), which has jurisdiction with respect to the rates of electric companies in the City of New Orleans, Louisiana, and to wholesale rate regulation by the Federal Energy Regulatory Commission ("FERC"). Management has determined it meets the requirements under accounting principles generally accepted in the United States of America to prepare its financial statements applying the specialized rules to account for the effects of cost-based

rate regulation. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures, such as property, plant, and equipment; regulatory assets and liabilities; income taxes; operating revenues; operation and maintenance expense; and depreciation and amortization expense.

The Company's rates are subject to regulatory rate-setting processes and annual earnings oversight. Because the City Council and the FERC set the rates the Company is allowed to charge customers based on allowable costs, including a reasonable return on equity, the Company applies accounting standards that require the financial statements to reflect the effects of rate regulation, including the recording of regulatory assets and liabilities. The Company assesses whether the regulatory assets and regulatory liabilities continue to meet the criteria for probable future recovery or settlement at each balance sheet date and when regulatory events occur. This assessment includes consideration of recent rate orders, historical regulatory treatment for similar costs, and factors such as changes in applicable regulatory and political environments. While the Company has indicated it expects to recover costs from customers through regulated rates, there is a risk that the City Council and the FERC will not approve: (1) full recovery of the costs of providing utility service, or (2) full recovery of amounts invested in the utility business and a reasonable return on that investment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about impacted account balances and disclosures and the high degree of subjectivity involved in assessing the impact of future regulatory orders on the financial statements. Management judgments include assessing the likelihood of recovery in future rates of incurred costs and refunds to customers. Auditing management's judgments regarding the outcome of future decisions by the City Council and the FERC, involved especially subjective judgment and specialized knowledge of accounting for rate regulation and the rate setting process.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertainty of future decisions by the City Council and the FERC included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of (1) the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets, and (2) a refund or a future reduction in rates that should be reported as regulatory liabilities. We also tested the effectiveness of management's controls over the initial recognition of amounts as property, plant, and equipment; regulatory assets or liabilities; and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or of a future reduction in rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the City Council and the FERC for the Company and other public utilities, regulatory statutes, interpretations, procedural memorandums, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the City Council's and the FERC's treatment of similar costs under similar circumstances. We evaluated the external information and compared to management's recorded regulatory asset and liability balances for completeness.
- For regulatory matters in process, we inspected the Company's filings with the City Council and the FERC, including the base rate case filing, and considered the filings with the City Council and the FERC by intervenors that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We obtained an analysis from management and support from internal and external legal counsel, as appropriate, regarding probability of recovery for regulatory assets or refund or future reduction in rates for regulatory liabilities not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery or a future reduction in rates.

/s/ DELOITTE & TOUCHE LLP

New Orleans, Louisiana
February 26, 2021

We have served as the Company's auditor since 2001.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
CONSOLIDATED INCOME STATEMENTS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING REVENUES			
Electric	$560,632	$594,417	$624,733
Natural gas	73,209	91,806	92,657
TOTAL	633,841	686,223	717,390
OPERATING EXPENSES			
Operation and Maintenance:			
Fuel, fuel-related expenses, and gas purchased for resale	76,781	105,217	114,787
Purchased power	243,572	258,306	270,634
Other operation and maintenance	125,756	121,057	124,293
Taxes other than income taxes	57,454	55,270	56,141
Depreciation and amortization	64,012	56,072	55,930
Other regulatory charges - net	1,854	21,616	21,413
TOTAL	569,429	617,538	643,198
OPERATING INCOME	64,412	68,685	74,192
OTHER INCOME (DEDUCTIONS)			
Allowance for equity funds used during construction	6,339	9,941	5,941
Interest and investment income	120	428	604
Miscellaneous - net	316	(6,038)	(10,444)
TOTAL	6,775	4,331	(3,899)
INTEREST EXPENSE			
Interest expense	29,105	24,463	21,772
Allowance for borrowed funds used during construction	(3,049)	(4,262)	(2,195)
TOTAL	26,056	20,201	19,577
INCOME BEFORE INCOME TAXES	45,131	52,815	50,716
Income taxes	(4,207)	186	(2,436)
NET INCOME	$49,338	$52,629	$53,152

See Notes to Financial Statements.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING ACTIVITIES			
Net income	$49,338	$52,629	$53,152
Adjustments to reconcile net income to net cash flow provided by operating activities:			
Depreciation and amortization	64,012	56,072	55,930
Deferred income taxes, investment tax credits, and non-current taxes accrued	3,938	21,350	24,548
Changes in assets and liabilities:			
Receivables	(12,003)	(9,372)	15,724
Fuel inventory	(58)	(387)	357
Accounts payable	5,582	(5,571)	(385)
Taxes accrued	398	234	30,547
Interest accrued	1,179	550	879
Deferred fuel costs	(7,048)	3,630	(6,486)
Other working capital accounts	(13,156)	5,021	4,146
Provisions for estimated losses	1,356	1,948	1,511
Other regulatory assets	(7,427)	(29,567)	21,637
Other regulatory liabilities	(4,728)	(22,105)	(28,459)
Pension and other postretirement liabilities	(14,063)	(14,624)	(15,134)
Other assets and liabilities	(3,296)	55,796	13,811
Net cash flow provided by operating activities	64,024	115,604	171,778
INVESTING ACTIVITIES			
Construction expenditures	(228,983)	(229,560)	(202,186)
Allowance for equity funds used during construction	6,339	9,941	5,941
Payment for purchase of assets	(1,584)	—	—
Changes in money pool receivable - net	5,191	16,825	(9,293)
Payments to storm reserve escrow account	(433)	(1,752)	(1,311)
Receipts from storm reserve escrow account	—	—	3
Changes in securitization account	(1,375)	236	(770)
Net cash flow used in investing activities	(220,845)	(204,310)	(207,616)
FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	138,925	113,876	59,234
Retirement of long-term debt	(56,593)	(35,376)	(11,042)
Repayment of long-term payable due to associated company	(1,838)	(1,979)	(2,077)
Capital contributions from parent	60,000	—	—
Changes in money pool payable - net	10,190	—	—
Common equity distributions paid	—	—	(23,750)
Other	146	(1,475)	409
Net cash flow provided by financing activities	150,830	75,046	22,774
Net decrease in cash and cash equivalents	(5,991)	(13,660)	(13,064)
Cash and cash equivalents at beginning of period	6,017	19,677	32,741
Cash and cash equivalents at end of period	$26	$6,017	$19,677
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid (received) during the period for:			
Interest - net of amount capitalized	$26,673	$22,873	$19,840
Income taxes	$3,392	($5,310)	($39,781)

See Notes to Financial Statements.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
ASSETS

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents		
Cash	$26	$26
Temporary cash investments	—	5,991
Total cash and cash equivalents	26	6,017
Securitization recovery trust account	3,364	1,989
Accounts receivable:		
Customer	70,694	48,265
Allowance for doubtful accounts	(17,430)	(3,226)
Associated companies	2,381	6,280
Other	4,248	7,378
Accrued unbilled revenues	31,069	25,453
Total accounts receivable	90,962	84,150
Deferred fuel costs	2,130	—
Fuel inventory - at average cost	1,978	1,920
Materials and supplies - at average cost	16,550	13,522
Prepayments and other	3,715	4,846
TOTAL	118,725	112,444
OTHER PROPERTY AND INVESTMENTS		
Non-utility property at cost (less accumulated depreciation)	1,016	1,016
Storm reserve escrow account	83,038	82,605
TOTAL	84,054	83,621
UTILITY PLANT		
Electric	1,821,638	1,467,215
Natural gas	348,024	311,432
Construction work in progress	12,460	201,829
TOTAL UTILITY PLANT	2,182,122	1,980,476
Less - accumulated depreciation and amortization	740,796	715,406
UTILITY PLANT - NET	1,441,326	1,265,070
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Deferred fuel costs	4,080	4,080
Other regulatory assets (includes securitization property of $35,559 as of December 31, 2020 and $49,542 as of December 31, 2019)	266,790	259,363
Other	23,931	10,720
TOTAL	294,801	274,163
TOTAL ASSETS	$1,938,906	$1,735,298

See Notes to Financial Statements.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
LIABILITIES AND EQUITY

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT LIABILITIES		
Currently maturing long-term debt	$—	$25,000
Payable due to associated company	1,618	1,838
Accounts payable:		
Associated companies	54,234	43,222
Other	60,766	43,963
Customer deposits	27,912	28,493
Taxes accrued	4,700	4,302
Interest accrued	8,095	6,916
Deferred fuel costs	—	4,918
Current portion of unprotected excess accumulated deferred income taxes	3,296	9,470
Other	5,462	15,827
TOTAL CURRENT LIABILITIES	166,083	183,949
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	338,714	354,536
Accumulated deferred investment tax credits	16,095	2,131
Regulatory liability for income taxes - net	55,675	49,090
Asset retirement cost liabilities	3,768	3,522
Accumulated provisions	89,898	88,542
Long-term debt (includes securitization bonds of $41,291 as of December 31, 2020 and $52,641 as of December 31, 2019)	629,704	521,539
Long-term payable due to associated company	10,911	12,529
Other	21,141	21,881
TOTAL NON-CURRENT LIABILITIES	1,165,906	1,053,770
Commitments and Contingencies		
EQUITY		
Member's equity	606,917	497,579
TOTAL	606,917	497,579
TOTAL LIABILITIES AND EQUITY	$1,938,906	$1,735,298

See Notes to Financial Statements.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN MEMBER'S EQUITY
For the Years Ended December 31, 2020, 2019, and 2018

	Member's Equity (In Thousands)
Balance at December 31, 2017	$415,548
Net income	53,152
Common equity distributions	(23,750)
Balance at December 31, 2018	$444,950
Net income	52,629
Balance at December 31, 2019	$497,579
Net income	49,338
Capital contributions from parent	60,000
Balance at December 31, 2020	$606,917

See Notes to Financial Statements.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
SELECTED FINANCIAL DATA - FIVE-YEAR COMPARISON

	2020	2019	2018	2017	2016
			(In Thousands)		
Operating revenues	$633,841	$686,223	$717,390	$716,070	$665,463
Net income	$49,338	$52,629	$53,152	$44,553	$48,849
Total assets	$1,938,906	$1,735,298	$1,576,588	$1,497,836	$1,494,569
Long-term obligations (a)	$640,615	$534,068	$481,725	$434,793	$466,670

(a) Includes long-term debt (including the long-term payable to associated company and excluding currently maturing debt) and preferred stock without sinking fund.

	2020	2019	2018	2017	2016
			(Dollars In Millions)		
Electric Operating Revenues:					
Residential	$244	$245	$262	$250	$231
Commercial	179	202	217	228	206
Industrial	24	32	33	36	33
Governmental	60	71	72	77	69
Total billed retail	507	550	584	591	539
Sales for resale:					
Associated companies	—	—	—	—	30
Non-associated companies	33	38	30	29	3
Other	21	6	11	12	15
Total	$561	$594	$625	$632	$587
Billed Electric Energy Sales (GWh):					
Residential	2,294	2,353	2,401	2,155	2,231
Commercial	1,975	2,215	2,270	2,248	2,268
Industrial	423	438	448	429	441
Governmental	755	815	795	790	794
Total retail	5,447	5,821	5,914	5,622	5,734
Sales for resale:					
Associated companies	—	—	—	—	1,071
Non-associated companies	1,969	1,961	1,484	1,703	141
Total	7,416	7,782	7,398	7,325	6,946

ENTERGY TEXAS, INC. AND SUBSIDIARIES

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

The COVID-19 Pandemic

See "**The COVID-19 Pandemic**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the COVID-19 pandemic.

Hurricane Laura and Hurricane Delta

In August 2020 and October 2020, Hurricane Laura and Hurricane Delta caused extensive damage to Entergy Texas's service area. The storm resulted in widespread power outages, significant damage primarily to distribution and transmission infrastructure, and the loss of sales during the power outages. Total restoration costs for the repair and/or replacement of Entergy Texas's electric facilities damaged by Hurricane Laura and Hurricane Delta are currently estimated to be approximately $300 million, including $245 million in capital costs and approximately $55 million in non-capital costs. Entergy Texas is considering all available avenues to recover storm-related costs from Hurricanes Laura and Hurricane Delta, including securitization. Storm cost recovery or financing will be subject to review by applicable regulatory authorities.

Entergy Texas recorded accounts payable and corresponding construction work in progress and regulatory assets for the estimated costs incurred that were necessary to return customers to service. Entergy Texas recorded the regulatory assets in accordance with its accounting policies and based on the historic treatment of such costs in its service area because management believes that recovery through some form of regulatory mechanism is probable. There are well established mechanisms and precedent for addressing these catastrophic events and providing for recovery of prudently incurred storm costs in accordance with applicable regulatory and legal principles. Because Entergy Texas has not gone through the regulatory process regarding these storm costs, there is an element of risk, and Entergy Texas is unable to predict with certainty the degree of success it may have in its recovery initiatives, the amount of restoration costs that it may ultimately recover, or the timing of such recovery.

February 2021 Winter Storms

See the "**February 2021 Winter Storms**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the February 2021 winter storms. Entergy Texas's preliminary estimate for the cost of mobilizing crews and restoring power is approximately $12 million. Natural gas purchases for Entergy Texas for February 1st through 25th, 2021 are approximately $155 million compared to natural gas purchases for February 2020 of $10 million.

Results of Operations

2020 Compared to 2019

Net Income

Net income increased $55.7 million primarily due to higher retail electric price, higher other income, lower other operation and maintenance expenses, a lower effective income tax rate, after excluding the effect of the return of unprotected excess accumulated deferred income taxes to customers which is offset in income taxes, and higher volume/weather. The increase was partially offset by higher depreciation and amortization expenses.

Operating Revenues

Following is an analysis of the change in operating revenue comparing 2020 to 2019.

	Amount (In Millions)
2019 operating revenues	$1,489.0
Fuel, rider, and other revenues that do not significantly affect net income	4.4
Return of unprotected excess accumulated deferred income taxes to customers	58.6
Retail electric price	28.1
Volume/weather	7.0
2020 operating revenues	**$1,587.1**

Entergy Texas's results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not affect net income. "Fuel, rider, and other revenues that do not significantly affect net income" includes the revenue variance associated with these items.

The return of unprotected excess accumulated deferred income taxes to customers resulted from the return of unprotected excess accumulated deferred income taxes through a rider effective October 2018. In 2020, $28.8 million was returned to customers as compared to $87.4 million in 2019. There is no effect on net income as the reduction in operating revenues is offset by a reduction in income tax expense. See Note 2 to the financial statements for further discussion of regulatory activity regarding the Tax Cuts and Jobs Act.

The retail electric price variance is primarily due to an increase in the transmission cost recovery factor rider effective January 2020 and an increase in the distribution cost recovery factor rider effective October 2020. See Note 2 to the financial statements for further discussion of the transmission and distribution cost recovery factor rider filings.

The volume/weather variance is primarily due to an increase in usage during the unbilled sales period and an increase in billed residential usage as a result of the COVID-19 pandemic, partially offset by the effect of less favorable weather on residential sales and decreased commercial and industrial usage as a result of the COVID-19 pandemic. The decrease in industrial usage is partially offset by an increase in demand from expansion projects, primarily in the chemicals and transportation industries. See "**The COVID-19 Pandemic**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the COVID-19 pandemic.

Other Income Statement Variances

Other operation and maintenance expenses decreased primarily due to:

- a decrease of $7.7 million in non-nuclear generation expenses primarily due to a lower scope of work performed during plant outages in 2020 as compared to the same period in 2019, including a delay in plant outages as a result of the COVID-19 pandemic; and
- a decrease of $3.7 million primarily due to contract costs in 2019 related to initiatives to explore new customer products and services.

The decrease was partially offset by $2.3 million of transaction costs incurred in connection with the purchase of the Hardin County Peaking Facility and the partial sale of Montgomery County Power Station.

Depreciation and amortization expenses increased primarily due to additions to plant in service.

Other income increased primarily due to an increase in the allowance for equity funds used during construction due to higher construction work in progress in 2020, including the Montgomery County Power Station project.

The effective income tax rates were 1.4% for 2020 and (51.1%) for 2019. The difference in the effective income tax rates versus the federal statutory rate of 21% for 2020 and 2019 was primarily due to the amortization of excess accumulated deferred income taxes. See Notes 2 and 3 to the financial statements for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act. See Note 3 to the financial statements for a reconciliation of the federal statutory rate of 21% to the effective income tax rates.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Results of Operations**" in Item 7 of Entergy Texas's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of results of operations for 2019 compared to 2018.

Liquidity and Capital Resources

Cash Flow

Cash flows for the years ended December 31, 2020, 2019, and 2018 were as follows:

	2020	2019	2018
		(In Thousands)	
Cash and cash equivalents at beginning of period	$12,929	$56	$115,513
Net cash provided by (used in):			
Operating activities	375,325	286,739	331,753
Investing activities	(848,648)	(878,280)	(395,973)
Financing activities	708,990	604,414	(51,237)
Net increase (decrease) in cash and cash equivalents	235,667	12,873	(115,457)
Cash and cash equivalents at end of period	$248,596	$12,929	$56

2020 Compared to 2019

Operating Activities

Net cash flow provided by operating activities increased $88.6 million in 2020 compared to 2019 primarily due to the timing of recovery of fuel and purchased power costs and a decrease in the return of unprotected excess accumulated deferred income taxes to customers. The increase was partially offset by lower collections of receivables from customers, in part due to the COVID-19 pandemic, and increased storm spending. See Note 2 to the financial statements for further discussion of the regulatory activity regarding the Tax Cuts and Jobs Act. See "**Hurricane Laura and Hurricane Delta**" above for discussion of hurricane restoration efforts.

Investing Activities

Net cash flow used in investing activities decreased $29.6 million in 2020 primarily due to:

- a decrease of $158.8 million in non-nuclear generation construction expenditures primarily due to the Montgomery County Power Station in 2020 as compared to 2019;
- a decrease of $9.9 million in information technology capital expenditures primarily due to decreased spending on various technology projects; and
- money pool activity.

The decrease was partially offset by:

- an increase of $93.8 million in storm spending in 2020, primarily due to Hurricane Laura and Hurricane Delta restoration efforts. See "**Hurricane Laura and Hurricane Delta**" above for discussion of hurricane restoration efforts;
- an increase of $43.9 million in distribution construction expenditures, primarily due to investment in the reliability and infrastructure of Entergy Texas's distribution system, including increased spending on advanced metering infrastructure; and
- an increase of $29.8 million in transmission construction expenditures primarily due to a higher scope of work performed in 2020 as compared to 2019.

Decreases in Entergy Texas's receivable from the money pool are a source of cash flow, and Entergy Texas's receivable from the money pool decreased by $6.6 million in 2020 compared to increasing $11.2 million in 2019. The money pool is an inter-company borrowing arrangement designed to reduce the Utility subsidiaries' need for external short-term borrowings.

Financing Activities

Net cash flow provided by financing activities increased $104.6 million from 2020 compared to 2019 primarily due to:

- the issuance of $600 million of 1.75% Series mortgage bonds in October 2020;
- the repayment, at maturity, of $500 million of 7.125% Series mortgage bonds in February 2019;
- the issuance of $175 million of 3.55% Series mortgage bonds in March 2020; and
- money pool activity.

The increase was partially offset by:

- the issuances of $300 million of 4.0% Series mortgage bonds and $400 million of 4.5% Series mortgage bonds, each in January 2019;
- the issuance of $300 million of 3.55% Series mortgage bonds in September 2019;
- the repayment of $135 million of 5.625% Series mortgage bonds in November 2020;
- the issuance of $35 million aggregate liquidation value 5.375% Series A preferred stock in September 2019; and
- the payment of $30 million of common stock dividends in 2020. No common stock dividends were paid in 2019 as a result of upcoming capital expenditures, including Montgomery County Power Station.

Decreases in Entergy Texas's payable to the money pool are a use of cash flow, and Entergy Texas's payable to the money pool decreased $22.4 million in 2019.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources - Cash Flow**" in Item 7 of Entergy Texas's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of operating, investing, and financing cash flow activities for 2019 compared to 2018.

Capital Structure

Entergy Texas's debt to capital ratio is shown in the following table. The increase in the debt to capital ratio for Entergy Texas is primarily due to the net issuance of $640 million of mortgage bonds in 2020, partially offset by the $175 million capital contribution received from Entergy Corporation in 2020 and net income in 2020.

	December 31, 2020	December 31, 2019
Debt to capital	53.7 %	51.7 %
Effect of excluding the securitization bonds	(1.3 %)	(2.8 %)
Debt to capital, excluding securitization bonds (a)	52.4 %	48.9 %
Effect of subtracting cash	(2.7 %)	(0.2 %)
Net debt to net capital, excluding securitization bonds (a)	49.7 %	48.7 %

(a) Calculation excludes the securitization bonds, which are non-recourse to Entergy Texas.

Net debt consists of debt less cash and cash equivalents. Debt consists of finance lease obligations and long-term debt, including the currently maturing portion. Capital consists of debt and equity. Net capital consists of capital less cash and cash equivalents. Entergy Texas uses the debt to capital ratios excluding securitization bonds in analyzing its financial condition and believes they provide useful information to its investors and creditors in evaluating Entergy Texas's financial condition because the securitization bonds are non-recourse to Entergy Texas, as more fully described in Note 5 to the financial statements. Entergy Texas also uses the net debt to net capital ratio excluding securitization bonds in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy Texas's financial condition because net debt indicates Entergy Texas's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Entergy Texas seeks to optimize its capital structure in accordance with its regulatory requirements and to control its cost of capital while also maintaining equity capitalization at a level consistent with investment-grade debt ratings. To the extent that operating cash flows are in excess of planned investments, cash may be used to reduce outstanding debt or may be paid as a dividend, or both, in appropriate amounts to maintain the capital structure. To the extent that operating cash flows are insufficient to support planned investments, Entergy Texas may issue incremental debt or reduce dividends, or both, to maintain its capital structure. In addition, Entergy Texas may receive equity contributions to maintain its capital structure for certain circumstances such as financing of large transactions that would materially alter the capital structure if financed entirely with debt and reduced dividends.

Uses of Capital

Entergy Texas requires capital resources for:

- construction and other capital investments;
- debt maturities or retirements;
- working capital purposes, including the financing of fuel and purchased power costs; and
- dividend and interest payments.

Following are the amounts of Entergy Texas's planned construction and other capital investments.

	2021	2022	2023
	(In Millions)		
Planned construction and capital investment:			
Generation	$95	$40	$490
Transmission	115	125	180
Distribution	245	285	295
Utility Support	55	75	50
Total	$510	$525	$1,015

In addition to the planned spending in the table above, Entergy Texas also expects to pay for $180 million of capital investments in 2021 related to Hurricane Laura and Hurricane Delta restoration work that have been accrued as of December 31, 2020.

Following are the amounts of Entergy Texas's existing debt and lease obligations (includes estimated interest payments) and other purchase obligations.

	2021	2022-2023	2024-2025	After 2025	Total
			(In Millions)		
Long-term debt (a)	$353	$207	$151	$2,163	$2,874
Operating leases (b)	$5	$7	$3	$1	$16
Finance leases (b)	$1	$2	$2	$1	$6
Purchase obligations (c)	$255	$384	$361	$294	$1,294

(a) Includes estimated interest payments. Long-term debt is discussed in Note 5 to the financial statements.
(b) Lease obligations are discussed in Note 10 to the financial statements.
(c) Purchase obligations represent the minimum purchase obligation or cancellation charge for contractual obligations to purchase goods or services. For Entergy Texas, it primarily includes unconditional fuel and purchased power obligations.

In addition to the contractual obligations given above, Entergy Texas expects to contribute approximately $7 million to its qualified pension plans and approximately $66 thousand to other postretirement health care and life insurance plans in 2021, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021. See "**Critical Accounting Estimates - Qualified Pension and Other Postretirement Benefits**" below for a discussion of qualified pension and other postretirement benefits funding.

Also in addition to the contractual obligations, Entergy Texas has $14.2 million of unrecognized tax benefits and interest net of unused tax attributes and payments for which the timing of payments beyond 12 months cannot be reasonably estimated due to uncertainties in the timing of effective settlement of tax positions. See Note 3 to the financial statements for additional information regarding unrecognized tax benefits.

In addition to routine capital spending to maintain operations, the planned capital investment estimate for Entergy Texas includes specific investments such as the Liberty County Power Station and the Hardin County Peaking Facility; transmission projects to enhance reliability, reduce congestion, and enable economic growth; distribution spending to enhance reliability and improve service to customers, including advanced meters and related investments; resource planning, including potential generation and renewables projects; system improvements; software and security; and other investments. Estimated capital expenditures are subject to periodic review and modification and may vary based on the ongoing effects of regulatory constraints and requirements,

environmental compliance, business opportunities, market volatility, economic trends, business restructuring, changes in project plans, and the ability to access capital. Management provides more information on long-term debt in Note 5 to the financial statements.

As a subsidiary, Entergy Texas dividends its earnings to Entergy Corporation at a percentage determined monthly.

Liberty County Solar Facility

In September 2020, Entergy Texas filed an application seeking PUCT approval to amend Entergy Texas's certificate of convenience and necessity to acquire the 100 MW Liberty County Solar Facility and a determination that Entergy Texas's acquisition of the facility through a tax equity partnership is in the public interest. In its preliminary order, the PUCT determined that, in considering Entergy Texas's application, it would not specifically address whether Entergy Texas's use of a tax equity partnership is in the public interest. A procedural schedule was established with a hearing on the merits scheduled in April 2021. Closing is expected to occur in 2023.

Hardin County Peaking Facility

In April 2020, Entergy Texas and East Texas Electric Cooperative, Inc. filed a joint report and application seeking PUCT approvals related to two transactions: (1) Entergy Texas's acquisition of the Hardin County Peaking Facility from East Texas Electric Cooperative, Inc.; and (2) Entergy Texas's sale of a 7.55% partial interest in the Montgomery County Power Station to East Texas Electric Cooperative, Inc. The two transactions, currently scheduled to close in April 2021 (pending PUCT approval), are interdependent. In October 2020, Entergy Texas filed an unopposed settlement agreement supporting approval of the transactions. Key provisions of the settlement include: Entergy Texas will propose to depreciate its investment in Hardin County Peaking Facility through the end of 2041; Entergy Texas's recovery of its investment in Hardin County Peaking Facility will be capped at approximately $36 million; and Entergy Texas will not seek recovery of an acquisition adjustment, if any, or transaction costs for either transaction. The settlement is currently pending before the PUCT.

Sources of Capital

Entergy Texas's sources to meet its capital requirements include:

- internally generated funds;
- cash on hand;
- debt or preferred stock issuances, including debt issuances to refund or retire currently outstanding or maturing indebtedness;
- capital contributions; and
- bank financing under new or existing facilities.

Entergy Texas may refinance, redeem, or otherwise retire debt prior to maturity, to the extent market conditions and interest and dividend rates are favorable.

All debt and common and preferred stock issuances by Entergy Texas require prior regulatory approval. Debt issuances are also subject to issuance tests set forth in its bond indenture and other agreements. Entergy Texas has sufficient capacity under these tests to meet its foreseeable capital needs.

Entergy Texas's receivables from or (payables to) the money pool were as follows as of December 31 for each of the following years.

2020	2019	2018	2017
	(In Thousands)		
$4,601	$11,181	($22,389)	$44,903

See Note 4 to the financial statements for a description of the money pool.

Entergy Texas has a credit facility in the amount of $150 million scheduled to expire in September 2024. The credit facility includes fronting commitments for the issuance of letters of credit against $30 million of the borrowing capacity of the facility. As of December 31, 2020, there were no cash borrowings and $1.3 million of letters of credit outstanding under the credit facility. In addition, Entergy Texas is a party to an uncommitted letter of credit facility as a means to post collateral to support its obligations to MISO. As of December 31, 2020, $6.2 million in letters of credit were outstanding under Entergy Texas's letter of credit facility. See Note 4 to the financial statements for additional discussion of the credit facilities.

Entergy Texas obtained authorizations from the FERC through July 2022 for short-term borrowings, not to exceed an aggregate amount of $200 million at any time outstanding, and long-term borrowings and security issuances. See Note 4 to the financial statements for further discussion of Entergy Texas's short-term borrowing limits.

State and Local Rate Regulation and Fuel-Cost Recovery

The rates that Entergy Texas charges for its services significantly influence its financial position, results of operations, and liquidity. Entergy Texas is regulated and the rates charged to its customers are determined in regulatory proceedings. The PUCT, a governmental agency, is primarily responsible for approval of the rates charged to customers.

Filings with the PUCT

2018 Rate Case

In May 2018, Entergy Texas filed a base rate case with the PUCT seeking an increase in base rates and rider rates of approximately $166 million, of which $48 million is associated with moving costs currently being collected through riders into base rates such that the total incremental revenue requirement increase is approximately $118 million. The base rate case was based on a 12-month test year ending December 31, 2017. In addition, Entergy Texas included capital additions placed into service for the period of April 1, 2013 through December 31, 2017, as well as a post-test year adjustment to include capital additions placed in service by June 30, 2018.

In October 2018 the parties filed an unopposed settlement resolving all issues in the proceeding and a motion for interim rates effective for usage on and after October 17, 2018. The unopposed settlement reflects the following terms: a base rate increase of $53.2 million (net of costs realigned from riders and including updated depreciation rates), a $25 million refund to reflect the lower federal income tax rate applicable to Entergy Texas from January 25, 2018 through the date new rates are implemented, $6 million of capitalized skylining tree hazard costs will not be recovered from customers, $242.5 million of protected excess accumulated deferred income taxes, which includes a tax gross-up, will be returned to customers through base rates under the average rate assumption method over the lives of the associated assets, and $185.2 million of unprotected excess accumulated deferred income taxes, which includes a tax gross-up, will be returned to customers through a rider. The unprotected excess accumulated deferred income taxes rider will include carrying charges and will be in effect over a period of 12 months for large customers and over a period of four years for other customers. The settlement also provides for the deferral of $24.5 million of costs associated with the remaining book value of the Neches and Sabine 2 plants, previously taken out of service, to be recovered over a ten-year period and the deferral of $20.5 million of costs associated with Hurricane Harvey to be recovered over a 12-year period, each beginning in October 2018. The settlement provides final resolution of all issues in the matter, including those related to the Tax Act. In October 2018 the ALJ granted the unopposed motion for interim rates to be effective for service rendered on or after October 17, 2018. In December 2018 the PUCT issued an order approving the unopposed settlement.

Distribution Cost Recovery Factor (DCRF) Rider

In March 2019, Entergy Texas filed with the PUCT a request to set a new DCRF rider. The proposed new DCRF rider is designed to collect approximately $3.2 million annually from Entergy Texas's retail customers based on its capital invested in distribution between January 1, 2018 and December 31, 2018. In September 2019 the PUCT issued an order approving rates, which had been effective on an interim basis since June 2019, at the level proposed in Entergy Texas's application.

In March 2020, Entergy Texas filed with the PUCT a request to amend its DCRF rider. The proposed rider is designed to collect from Entergy Texas's retail customers approximately $23.6 million annually, or $20.4 million in incremental annual DCRF revenue beyond Entergy Texas's then-effective DCRF rider, based on its capital invested in distribution between January 1, 2019 and December 31, 2019. In May and June 2020 intervenors filed testimony recommending reductions in Entergy Texas's annual revenue requirement of approximately $0.3 million and $4.1 million. The parties briefed the contested issues in this matter and a proposal for decision was issued in September 2020 recommending a $4.1 million revenue reduction related to non-Advanced Metering System meters included in the DCRF calculation. The parties filed exceptions to the proposal for decision and replies to those exceptions in September 2020. In October 2020 the PUCT issued a final order approving a $16.3 million incremental annual DCRF revenue increase.

In October 2020, Entergy Texas filed with the PUCT a request to amend its DCRF rider. The proposed rider is designed to collect from Entergy Texas's retail customers approximately $26.3 million annually, or $6.8 million in incremental annual revenues beyond Entergy Texas's currently effective DCRF rider based on its capital invested in distribution between January 1, 2020 and August 31, 2020. In February 2021 the administrative law judge with the State Office of Administrative Hearings approved Entergy Texas's agreed motion for interim rates, which will go into effect in March 2021. The administrative law judge also adopted a procedural schedule setting a hearing on the merits, if necessary, in April 2021.

Transmission Cost Recovery Factor (TCRF) Rider

In December 2018, Entergy Texas filed with the PUCT a request to set a new TCRF rider. The proposed new TCRF rider is designed to collect approximately $2.7 million annually from Entergy Texas's retail customers based on its capital invested in transmission between January 1, 2018 and September 30, 2018. In April 2019 parties filed testimony proposing a load growth adjustment, which would fully offset Entergy Texas's proposed TCRF revenue requirement. In July 2019 the PUCT granted Entergy Texas's application as filed to begin recovery of the requested $2.7 million annual revenue requirement, rejecting opposing parties' proposed adjustment; however, the PUCT found that the question of prudence of the actual investment costs should be determined in Entergy Texas's next rate case similar to the procedure used for the costs recovered through the DCRF rider. In October 2019 the PUCT issued an order on a motion for rehearing, clarifying and affirming its prior order granting Entergy Texas's application as filed. Also, in October 2019 a second motion for rehearing was filed, and Entergy Texas filed a response in opposition to the motion. The second motion for rehearing was overruled by operation of law. In December 2019, Texas Industrial Energy Consumers filed an appeal to the PUCT order in district court alleging that the PUCT erred in declining to apply a load growth adjustment.

In August 2019, Entergy Texas filed with the PUCT a request to amend its TCRF rider. The amended TCRF rider is designed to collect approximately $19.4 million annually from Entergy Texas's retail customers based on its capital invested in transmission between January 1, 2018 and June 30, 2019, which is $16.7 million in incremental annual revenue above the $2.7 million approved in the prior pending TCRF proceeding. In January 2020 the PUCT issued an order approving an unopposed settlement providing for recovery of the requested revenue requirement. Entergy Texas implemented the amended rider beginning with bills covering usage on and after January 23, 2020.

In October 2020, Entergy Texas filed with the PUCT a request to amend its TCRF rider. The proposed rider is designed to collect from Entergy Texas's retail customers approximately $51 million annually, or $31.6 million in incremental annual revenues beyond Entergy Texas's currently effective TCRF rider based on its capital invested in transmission between July 1, 2019 and August 31, 2020. A procedural schedule was established with a hearing scheduled in March 2021. In February 2021, Entergy Texas filed an agreed motion to abate the procedural schedule, noting that the parties had reached a settlement in principle, and the administrative law judge granted the motion to abate.

Generation Cost Recovery Rider

In October 2020, Entergy Texas filed an application to establish a generation cost recovery rider with an initial annual revenue requirement of approximately $91 million to begin recovering a return of and on its capital investment in the Montgomery County Power Station through August 31, 2020. In December 2020, Entergy Texas filed an unopposed settlement supporting a generation cost recovery rider with an annual revenue requirement of approximately $86 million. The settlement revenue requirement is based on a depreciation rate intended to fully depreciate Montgomery County Power Station over 38 years and the removal of certain costs from Entergy Texas's request. Under the settlement, Entergy Texas retains the right to propose a different depreciation rate and seek recovery of a majority of the costs removed from its request in its next base rate proceeding. On January 14, 2021, the PUCT approved the generation cost recovery rider settlement rates on an interim basis and abated the proceeding. Within 60 days of Montgomery County Power Station being placed in service on January 1, 2021, Entergy Texas will file to update its generation cost recovery rider to include investment in Montgomery County Power Station after August 31, 2020. The current estimated cost of Montgomery County Power Station, including transmission interconnection and network upgrades, is approximately $921 million. Of this investment, approximately $756 million is eligible to begin being recovered through the generation cost recovery rider. Entergy Texas will address recovery of the remainder of its Montgomery County Power Station investment through other rate mechanisms.

In December 2020, Entergy Texas filed an application to amend its generation cost recovery rider to reflect its acquisition of the Hardin County Peaking Facility, which is expected to close in April 2021. The initial generation cost recovery rider rates proposed in the application represent no change from the generation cost recovery rider rates to be established in Entergy Texas's previous generation cost recovery rider proceeding. Once Entergy Texas has acquired the Hardin County Peaking Facility, its investment in the facility will be reflected in the updated filing to Entergy Texas's application, which will be made within 60 days of the acquisition's closing.

COVID-19 Orders

In March 2020 the PUCT authorized electric utilities to record as a regulatory asset expenses resulting from the effects of COVID-19. In future proceedings the PUCT will consider whether each utility's request for recovery of these regulatory assets is reasonable and necessary, the appropriate period of recovery, and any amount of carrying costs thereon. In March 2020 the PUCT ordered a moratorium on disconnections for nonpayment for all customer classes, but, in April 2020, revised the disconnect moratorium to apply only to residential customers. The PUCT allowed the moratorium to expire on June 13, 2020, but on July 17, 2020, the PUCT re-established the disconnect moratorium for residential customers until August 31, 2020. In January 2021, Entergy Texas resumed disconnections for customers with past-due balances that have not made payment arrangements. As of December 31, 2020, Entergy Texas recorded a regulatory asset of $12.9 million for costs associated with the COVID-19 pandemic.

Fuel and Purchased Power Cost Recovery

Entergy Texas's rate schedules include a fixed fuel factor to recover fuel and purchased power costs, including interest, not recovered in base rates. Semi-annual revisions of the fixed fuel factor are made in March

and September based on the market price of natural gas and changes in fuel mix. The amounts collected under Entergy Texas's fixed fuel factor and any interim surcharge or refund are subject to fuel reconciliation proceedings before the PUCT. A fuel reconciliation is required to be filed at least once every three years and outside of a base rate case filing.

In December 2017, Entergy Texas filed an application for a fuel refund of approximately $30.5 million for the months of May 2017 through October 2017. Also in December 2017, the PUCT's ALJ approved the refund on an interim basis. For most customers, the refunds flowed through bills January 2018 through March 2018. The fuel refund was approved by the PUCT in March 2018.

In September 2019, Entergy Texas filed an application to reconcile its fuel and purchased power costs for the period from April 2016 through March 2019. During the reconciliation period, Entergy Texas incurred approximately $1.6 billion in Texas jurisdictional eligible fuel and purchased power expenses, net of certain revenues credited to such expenses and other adjustments. Entergy Texas estimated an under-recovery balance of approximately $25.8 million, including interest, which Entergy Texas requested authority to carry over as the beginning balance for the subsequent reconciliation period beginning April 2019. In March 2020 an intervenor filed testimony proposing that the PUCT disallow: (1) $2 million in replacement power costs associated with generation outages during the reconciliation period; and (2) $24.4 million associated with the operation of the Spindletop natural gas storage facility during the reconciliation period. In April 2020, Entergy Texas filed rebuttal testimony refuting all points raised by the intervenor. In June 2020 the parties filed a stipulation and settlement agreement, which included a $1.2 million disallowance not associated with any particular issue raised by any party. The PUCT approved the settlement in August 2020.

In July 2020, Entergy Texas filed an application with the PUCT to implement an interim fuel refund of $25.5 million, including interest. Entergy Texas proposed that the interim fuel refund be implemented beginning with the first August 2020 billing cycle over a three-month period for smaller customers and in a lump sum amount in the billing month of August 2020 for transmission-level customers. The interim fuel refund was approved in July 2020, and Entergy Texas began refunds in August 2020.

In February 2021, Entergy Texas filed an application to implement a fuel refund for a cumulative over-recovery of approximately $75 million that is primarily attributable to settlements received by Entergy Texas from MISO related to Hurricane Laura. Entergy Texas planned to issue the refund over the period of March through August 2021. On February 22, 2021, Entergy Texas filed a motion to abate its fuel refund proceeding to assess how the February 2021 winter storm impacted Entergy Texas's fuel over-recovery position.

Federal Regulation

See the "**Rate, Cost-recovery, and Other Regulation – Federal Regulation**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis and Note 2 to the financial statements for a discussion of federal regulation.

Nuclear Matters

See the "**Nuclear Matters**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of nuclear matters.

Industrial and Commercial Customers

Entergy Texas's large industrial and commercial customers continually explore ways to reduce their energy costs. In particular, cogeneration is an option available to a portion of Entergy Texas's industrial customer base. Entergy Texas responds by working with industrial and commercial customers and negotiating electric service contracts to provide, under existing rate schedules, competitive rates that match specific customer needs and load

profiles. Entergy Texas actively participates in economic development, customer retention, and reclamation activities to increase industrial and commercial demand, from both new and existing customers.

Environmental Risks

Entergy Texas's facilities and operations are subject to regulation by various governmental authorities having jurisdiction over air quality, water quality, control of toxic substances and hazardous and solid wastes, and other environmental matters. Management believes that Entergy Texas is in substantial compliance with environmental regulations currently applicable to its facilities and operations, with reference to possible exceptions noted in "**Regulation of Entergy's Business - Environmental Regulation**" in Part I, Item 1. Because environmental regulations are subject to change, future compliance costs cannot be precisely estimated.

Critical Accounting Estimates

The preparation of Entergy Texas's financial statements in conformity with generally accepted accounting principles requires management to apply appropriate accounting policies and to make estimates and judgments that can have a significant effect on reported financial position, results of operations, and cash flows. Management has identified the following accounting policies and estimates as critical because they are based on assumptions and measurements that involve a high degree of uncertainty, and the potential for future changes in the assumptions and measurements that could produce estimates that would have a material effect on the presentation of Entergy Texas's financial position or results of operations.

Utility Regulatory Accounting

See "**Utility Regulatory Accounting**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of accounting for the effects of rate regulation.

Impairment of Long-lived Assets

See "**Impairment of Long-lived Assets**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the estimates associated with the impairment of long-lived assets.

Taxation and Uncertain Tax Positions

See "**Taxation and Uncertain Tax Positions**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion.

Qualified Pension and Other Postretirement Benefits

Entergy Texas's qualified pension and other postretirement reported costs, as described in Note 11 to the financial statements, are impacted by numerous factors including the provisions of the plans, changing employee demographics, and various actuarial calculations, assumptions, and accounting mechanisms. See the "**Qualified Pension and Other Postretirement Benefits**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries' Management's Financial Discussion and Analysis for further discussion. Because of the complexity of these calculations, the long-term nature of these obligations, and the importance of the assumptions utilized, Entergy's estimate of these costs is a critical accounting estimate.

Cost Sensitivity

The following chart reflects the sensitivity of qualified pension and qualified projected benefit obligation cost to changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Qualified Pension Cost	Impact on 2020 Qualified Projected Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$472	$9,960
Rate of return on plan assets	(0.25%)	$772	$—
Rate of increase in compensation	0.25%	$388	$1,916

The following chart reflects the sensitivity of postretirement benefit cost and accumulated postretirement benefit obligation changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Postretirement Benefit Cost	Impact on 2020 Accumulated Postretirement Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$49	$2,206
Health care cost trend	0.25%	$76	$1,593

Each fluctuation above assumes that the other components of the calculation are held constant.

Costs and Employer Contributions

Total qualified pension cost for Entergy Texas in 2020 was $12.4 million, including $4.3 million in settlement costs. Entergy Texas anticipates 2021 qualified pension cost to be $8.9 million. Entergy Texas contributed $5 million to its qualified pension plans in 2020 and estimates 2021 pension contributions will be approximately $7 million, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021.

Total postretirement health care and life insurance benefit income for Entergy Texas in 2020 was $8.9 million. Entergy Texas expects 2020 postretirement health care and life insurance benefit income to approximate $10.9 million. In 2020, Entergy Texas' postretirement contributions (that is, contributions to the external trusts plus claims payments) were $690 thousand. Entergy Texas estimates 2021 contributions will be approximately $66 thousand.

Other Contingencies

See "**Other Contingencies**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the estimates associated with environmental, litigation, and other risks.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements for a discussion of new accounting pronouncements.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and Board of Directors of
Entergy Texas, Inc. and Subsidiaries

Opinion on the Financial Statements

We have audited the accompanying consolidated balance sheets of Entergy Texas, Inc. and Subsidiaries (the "Company") as of December 31, 2020 and 2019, the related consolidated statements of income, cash flows, and changes in common equity (pages 423 through 428 and applicable items in pages 51 through 238), for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current-period audit of the financial statements that was communicated or required to be communicated to the audit committee and that (1) relates to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing a separate opinion on the critical audit matter or on the accounts or disclosures to which it relates.

Rate and Regulatory Matters —Entergy Texas, Inc. and Subsidiaries — Refer to Note 2 to the financial statements

Critical Audit Matter Description

The Company is subject to rate regulation by the Public Utility Commission of Texas (the "PUCT"), which has jurisdiction with respect to the rates of electric companies in Texas, and to wholesale rate regulation by the Federal Energy Regulatory Commission ("FERC"). Management has determined it meets the requirements under accounting principles generally accepted in the United States of America to prepare its financial statements applying the specialized rules to account for the effects of cost-based rate regulation. Accounting for the economics of rate

regulation impacts multiple financial statement line items and disclosures, such as property, plant, and equipment; regulatory assets and liabilities; income taxes; operating revenues; operation and maintenance expense; and depreciation and amortization expense.

The Company's rates are subject to regulatory rate-setting processes and annual earnings oversight. Because the PUCT and the FERC set the rates the Company is allowed to charge customers based on allowable costs, including a reasonable return on equity, the Company applies accounting standards that require the financial statements to reflect the effects of rate regulation, including the recording of regulatory assets and liabilities. The Company assesses whether the regulatory assets and regulatory liabilities continue to meet the criteria for probable future recovery or settlement at each balance sheet date and when regulatory events occur. This assessment includes consideration of recent rate orders, historical regulatory treatment for similar costs, and factors such as changes in applicable regulatory and political environments. While the Company has indicated it expects to recover costs from customers through regulated rates, there is a risk that the PUCT and the FERC will not approve: (1) full recovery of the costs of providing utility service, or (2) full recovery of amounts invested in the utility business and a reasonable return on that investment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about impacted account balances and disclosures and the high degree of subjectivity involved in assessing the impact of future regulatory orders on the financial statements. Management judgments include assessing the likelihood of recovery in future rates of incurred costs and refunds to customers. Auditing management's judgments regarding the outcome of future decisions by the PUCT and the FERC, involved especially subjective judgment and specialized knowledge of accounting for rate regulation and the rate setting process.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertainty of future decisions by the PUCT and the FERC included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of (1) the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets, and (2) a refund or a future reduction in rates that should be reported as regulatory liabilities. We also tested the effectiveness of management's controls over the initial recognition of amounts as property, plant, and equipment; regulatory assets or liabilities; and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or of a future reduction in rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the PUCT and the FERC for the Company and other public utilities, regulatory statutes, interpretations, procedural memorandums, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the PUCT's and the FERC's treatment of similar costs under similar circumstances. We evaluated the external information and compared to management's recorded regulatory asset and liability balances for completeness.
- For regulatory matters in process, we inspected the Company's filings with the PUCT and the FERC, including the base rate case filing, and considered the filings with the PUCT and the FERC by intervenors that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We obtained an analysis from management and support from internal and external legal counsel, as appropriate, regarding probability of recovery for regulatory assets or refund or future reduction in rates for regulatory liabilities not yet addressed in a regulatory order to assess management's assertion that amounts are probable of recovery or a future reduction in rates.

/s/ DELOITTE & TOUCHE LLP

New Orleans, Louisiana
February 26, 2021

We have served as the Company's auditor since 2001.

ENTERGY TEXAS, INC. AND SUBSIDIARIES
CONSOLIDATED INCOME STATEMENTS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING REVENUES			
Electric	$1,587,125	$1,488,955	$1,605,902
OPERATING EXPENSES			
Operation and Maintenance:			
Fuel, fuel-related expenses, and gas purchased for resale	238,428	162,544	204,830
Purchased power	510,633	602,563	614,012
Other operation and maintenance	250,170	258,924	238,400
Taxes other than income taxes	72,909	76,366	82,033
Depreciation and amortization	177,738	153,286	128,534
Other regulatory charges - net	90,398	88,770	131,667
TOTAL	1,340,276	1,342,453	1,399,476
OPERATING INCOME	246,849	146,502	206,426
OTHER INCOME			
Allowance for equity funds used during construction	44,073	28,445	9,723
Interest and investment income	1,201	3,072	2,188
Miscellaneous - net	(28)	546	(655)
TOTAL	45,246	32,063	11,256
INTEREST EXPENSE			
Interest expense	92,920	86,333	87,203
Allowance for borrowed funds used during construction	(18,940)	(13,269)	(5,513)
TOTAL	73,980	73,064	81,690
INCOME BEFORE INCOME TAXES	218,115	105,501	135,992
Income taxes	3,042	(53,896)	(26,243)
NET INCOME	215,073	159,397	162,235
Preferred dividend requirements	1,882	580	—
EARNINGS APPLICABLE TO COMMON STOCK	$213,191	$158,817	$162,235

See Notes to Financial Statements.

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ENTERGY TEXAS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING ACTIVITIES			
Net income	$215,073	$159,397	$162,235
Adjustments to reconcile net income to net cash flow provided by operating activities:			
Depreciation and amortization	177,738	153,286	128,534
Deferred income taxes, investment tax credits, and non-current taxes accrued	36,033	20,143	(39,545)
Changes in assets and liabilities:			
Receivables	(30,082)	58,445	(17,099)
Fuel inventory	(5,938)	(4,926)	64
Accounts payable	(23,692)	(33,646)	43,319
Prepaid taxes and taxes accrued	2,730	(3,805)	7,854
Interest accrued	1,864	(5,363)	(1,201)
Deferred fuel costs	72,355	(6,696)	(47,604)
Other working capital accounts	(11,837)	(13,822)	1,328
Provisions for estimated losses	274	(5,748)	3,741
Other regulatory assets	(12,065)	85,400	63,350
Other regulatory liabilities	(57,477)	(105,517)	(19,336)
Pension and other postretirement liabilities	(28,825)	(7,152)	(13,135)
Other assets and liabilities	39,174	(3,257)	59,248
Net cash flow provided by operating activities	375,325	286,739	331,753
INVESTING ACTIVITIES			
Construction expenditures	(895,857)	(898,090)	(451,988)
Allowance for equity funds used during construction	44,073	28,526	9,861
Proceeds from sale of assets	—	—	3,753
Payment for purchase of assets	(4,931)	—	—
Changes in money pool receivable - net	6,580	(11,181)	44,903
Changes in securitization account	1,487	2,465	(2,502)
Net cash flow used in investing activities	(848,648)	(878,280)	(395,973)
FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	937,725	986,019	—
Retirement of long-term debt	(367,565)	(578,593)	(74,950)
Capital contributions from parent	175,000	185,000	—
Proceeds from the issuance of preferred stock	—	33,188	—
Change in money pool payable - net	—	(22,389)	22,389
Dividends paid:			
Common stock	(30,000)	—	—
Preferred stock	(2,064)	—	—
Other	(4,106)	1,189	1,324
Net cash flow provided by (used in) financing activities	708,990	604,414	(51,237)
Net increase (decrease) in cash and cash equivalents	235,667	12,873	(115,457)
Cash and cash equivalents at beginning of period	12,929	56	115,513
Cash and cash equivalents at end of period	$248,596	$12,929	$56
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid during the period for:			
Interest - net of amount capitalized	$89,077	$89,402	$85,719
Income taxes	$2,792	$17,010	$20,787

See Notes to Financial Statements.

ENTERGY TEXAS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
ASSETS

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$26	$25
Temporary cash investments	248,570	12,904
Total cash and cash equivalents	248,596	12,929
Securitization recovery trust account	36,233	37,720
Accounts receivable:		
Customer	103,221	59,365
Allowance for doubtful accounts	(16,810)	(471)
Associated companies	18,892	24,001
Other	11,780	17,050
Accrued unbilled revenues	56,411	50,048
Total accounts receivable	173,494	149,993
Fuel inventory - at average cost	53,531	47,593
Materials and supplies - at average cost	56,227	46,056
Prepayments and other	20,165	21,012
TOTAL	588,246	315,303
OTHER PROPERTY AND INVESTMENTS		
Investments in affiliates - at equity	349	396
Non-utility property - at cost (less accumulated depreciation)	376	376
Other	19,889	20,077
TOTAL	20,614	20,849
UTILITY PLANT		
Electric	6,007,687	5,199,027
Construction work in progress	879,908	760,354
TOTAL UTILITY PLANT	6,887,595	5,959,381
Less - accumulated depreciation and amortization	1,864,494	1,770,852
UTILITY PLANT - NET	5,023,101	4,188,529
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets (includes securitization property of $78,590 as of December 31, 2020 and $160,375 as of December 31, 2019)	524,713	512,648
Other	70,397	33,393
TOTAL	595,110	546,041
TOTAL ASSETS	$6,227,071	$5,070,722

See Notes to Financial Statements.

ENTERGY TEXAS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
LIABILITIES AND EQUITY

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT LIABILITIES		
Currently maturing long-term debt	$200,000	$—
Accounts payable:		
Associated companies	55,944	58,055
Other	350,947	188,460
Customer deposits	36,282	40,232
Taxes accrued	52,438	49,708
Interest accrued	20,856	18,992
Current portion of unprotected excess accumulated deferred income taxes	29,249	26,552
Deferred fuel costs	85,356	13,001
Other	12,370	10,521
TOTAL	843,442	405,521
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	639,422	585,413
Accumulated deferred investment tax credits	9,942	10,559
Regulatory liability for income taxes - net	175,594	225,980
Other regulatory liabilities	32,297	42,085
Asset retirement cost liabilities	8,063	7,631
Accumulated provisions	8,382	8,108
Long-term debt (includes securitization bonds of $123,066 as of December 31, 2020 and $205,349 as of December 31, 2019)	2,293,708	1,922,956
Other	58,643	63,062
TOTAL	3,226,051	2,865,794
Commitments and Contingencies		
EQUITY		
Common stock, no par value, authorized 200,000,000 shares; issued and outstanding 46,525,000 shares in 2020 and 2019	49,452	49,452
Paid-in capital	955,162	780,182
Retained earnings	1,117,964	934,773
Total common shareholder's equity	2,122,578	1,764,407
Preferred stock without sinking fund	35,000	35,000
TOTAL	2,157,578	1,799,407
TOTAL LIABILITIES AND EQUITY	$6,227,071	$5,070,722

See Notes to Financial Statements.

ENTERGY TEXAS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
For the Years Ended December 31, 2020, 2019, and 2018

		Common Equity			
	Preferred Stock	Common Stock	Paid-in Capital	Retained Earnings	Total
			(In Thousands)		
Balance at December 31, 2017	$—	$49,452	$596,994	$613,721	$1,260,167
Net income	—	—	—	162,235	162,235
Balance at December 31, 2018	$—	$49,452	$596,994	$775,956	$1,422,402
Net income	—	—	—	159,397	159,397
Capital contributions from parent		—	185,000	—	185,000
Preferred stock issuance	35,000	—	(1,812)	—	33,188
Preferred stock dividends	—	—	—	(580)	(580)
Balance at December 31, 2019	$35,000	$49,452	$780,182	$934,773	$1,799,407
Net income	—	—	—	215,073	215,073
Capital contributions from parent	—	—	175,000	—	175,000
Common stock dividends	—	—	—	(30,000)	(30,000)
Preferred stock dividends	—	—	—	(1,882)	(1,882)
Other	—	—	(20)	—	(20)
Balance at December 31, 2020	$35,000	$49,452	$955,162	$1,117,964	$2,157,578

See Notes to Financial Statements.

ENTERGY TEXAS, INC. AND SUBSIDIARIES
SELECTED FINANCIAL DATA - FIVE-YEAR COMPARISON

	2020	2019	2018	2017	2016
			(In Thousands)		
Operating revenues	$1,587,125	$1,488,955	$1,605,902	$1,544,893	$1,615,619
Net income	$215,073	$159,397	$162,235	$76,173	$107,538
Total assets	$6,227,071	$5,070,722	$4,400,020	$4,279,738	$4,033,081
Long-term obligations (a)	$2,293,708	$1,922,956	$1,013,735	$1,587,150	$1,508,407

(a) Includes long-term debt (excluding currently maturing debt).

	2020	2019	2018	2017	2016
			(Dollars In Millions)		
Electric Operating Revenues:					
Residential	$672	$658	$674	$636	$613
Commercial	365	343	381	378	356
Industrial	386	373	394	384	365
Governmental	23	22	25	25	24
Total billed retail	1,446	1,396	1,474	1,423	1,358
Sales for resale:					
Associated companies	40	52	59	58	178
Non-associated companies	60	7	39	22	40
Other	41	34	34	42	40
Total	$1,587	$1,489	$1,606	$1,545	$1,616
Billed Electric Energy Sales (GWh):					
Residential	6,146	6,039	6,135	5,716	5,836
Commercial	4,386	4,667	4,747	4,548	4,570
Industrial	7,885	8,043	8,052	7,521	7,493
Governmental	260	259	286	273	283
Total retail	18,677	19,008	19,220	18,058	18,182
Sales for resale:					
Associated companies	1,203	1,472	1,516	1,534	4,625
Non-associated companies	810	343	962	729	1,086
Total	20,690	20,823	21,698	20,321	23,893

SYSTEM ENERGY RESOURCES, INC.

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

System Energy's principal asset consists of an ownership interest and a leasehold interest in Grand Gulf. The capacity and energy from its 90% interest is sold under the Unit Power Sales Agreement to its only four customers, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans. System Energy's operating revenues are derived from the allocation of the capacity, energy, and related costs associated with its 90% interest in Grand Gulf pursuant to the Unit Power Sales Agreement. Payments under the Unit Power Sales Agreement are System Energy's only source of operating revenues. As discussed in "**Complaints Against System Energy**" below, System Energy is currently involved in proceedings at the FERC commenced by the retail regulators of its customers regarding its return on equity, its capital structure, its renewal of the sale-leaseback of 11.5% of Grand Gulf, the treatment of uncertain tax positions in rate base, and the rates it charges under the Unit Power Sales Agreement.

Results of Operations

2020 Compared to 2019

Net Income

Net income remained relatively unchanged. An increase in operating revenues resulting from changes in rate base was substantially offset by higher provisions against revenue, as compared to prior year. A provision for rate refund was recorded in 2020 to reflect a one-time credit of $25.2 million provided for in the Federal Power Act section 205 filing made by System Energy in December 2020. Provisions against revenue were recorded in 2019 in connection with the return on equity complaint against System Energy. See "**Complaints Against System Energy**" below for further discussion of these items and other proceedings involving System Energy at the FERC. The one-time credit is discussed in the **Grand Gulf Sale-leaseback Renewal Complaint and Uncertain Tax Position Rate Base Issue** part of that section. The return on equity complaint is discussed in the **Return on Equity and Capital Structure Complaints** part of that section.

Income Taxes

The effective income tax rates were 17.2% for 2020 and 13.4% for 2019. See Note 3 to the financial statements for a reconciliation of the federal statutory rate of 21% to the effective income tax rates.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS** - **Results of Operations**" in Item 7 of System Energy's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of results of operations for 2019 compared to 2018.

Liquidity and Capital Resources

Cash Flow

Cash flows for the years ended December 31, 2020, 2019, and 2018 were as follows:

	2020	2019	2018
		(In Thousands)	
Cash and cash equivalents at beginning of period	$68,534	$95,685	$287,187
Net cash provided by (used in):			
Operating activities	(145,462)	300,141	101,328
Investing activities	(206,443)	(119,553)	(286,161)
Financing activities	525,840	(207,739)	(6,669)
Net increase (decrease) in cash and cash equivalents	173,935	(27,151)	(191,502)
Cash and cash equivalents at end of period	$242,469	$68,534	$95,685

2020 Compared to 2019

Operating Activities

System Energy's operating activities used $145.5 million of cash in 2020 compared to providing $300.1 million of cash in 2019 primarily due to:

- an increase of $382 million in income taxes paid in 2020. System Energy made income tax payments of $384.3 million in 2020 in accordance with an intercompany income tax allocation agreement. The 2020 income tax payments are primarily related to the resolution of the 2014-2015 IRS audit regarding the treatment of nuclear decommissioning costs included in cost of goods sold, which is discussed in Note 3 to the financial statements in **Tax Accounting Methods**;
- an increase in spending of $34.9 million on nuclear refueling outages in 2020 as compared to prior year; and
- timing of payments to vendors.

The increase in cash used was offset by proceeds of $35 million received in December 2020 from the DOE resulting from litigation regarding spent nuclear fuel storage costs that were previously expensed. See Note 8 to the financial statements for a discussion of the spent nuclear fuel litigation.

Investing Activities

Net cash flow used in investing activities increased by $86.9 million in 2020 primarily due to:

- an increase of $77.2 million as a result of fluctuations in nuclear fuel activity because of variations from year to year in the timing and pricing of fuel reload requirements, material and services deliveries, and the timing of cash payments during the nuclear fuel cycle; and
- an increase of $28 million in nuclear construction expenditures as a result of spending in 2020 on Grand Gulf outage projects.

The increase was partially offset by money pool activity and proceeds of $5.5 million received in December 2020 from the DOE resulting from litigation regarding spent nuclear fuel storage costs that were previously capitalized. See Note 8 to the financial statements for discussion of the spent nuclear fuel litigation.

Decreases in System Energy's receivable from the money pool are a source of cash flow and System Energy's receivable from the money pool decreased by $55.3 million in 2020 compared to decreasing by $47.8 million in 2019. The money pool is an inter-company borrowing arrangement designed to reduce the Utility subsidiaries' need for external short-term borrowings.

Financing Activities

System Energy's financing activities provided $525.8 million of cash in 2020 compared to using $207.7 million of cash in 2019 primarily due to the following activity:

- a $350 million capital contribution from Entergy Corporation in order to maintain System Energy's capital structure in conjunction with the tax payments discussed in "Operating Activities";
- the issuance in December 2020 of $200 million of 2.14% Series mortgage bonds;
- the issuance in October 2020 of $90 million of 2.05% Series K notes by the System Energy nuclear fuel company variable interest entity;
- a decrease in net repayments of $50.7 million of long-term borrowings in 2020 on the nuclear fuel company variable interest entity's credit facility; and
- a decrease of $43.6 million in common stock dividends and distributions in 2020 in order to maintain System Energy's capital structure.

See Note 5 to the financial statements for additional details of long-term debt.

2019 Compared to 2018

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources - Cash Flow**" in Item 7 of System Energy's Annual Report on Form 10-K for the year ended December 31, 2019, filed with the SEC on February 21, 2020, for discussion of operating, investing, and financing cash flow activities for 2019 compared to 2018.

Capital Structure

System Energy's debt to capital ratio is shown in the following table. The decrease in the debt to capital ratio is primarily due to the capital contribution from Entergy Corporation, partially offset by the issuance of long-term debt in 2020.

	December 31, 2020	December 31, 2019
Debt to capital	42.7 %	43.5 %
Effect of subtracting cash	(8.5 %)	(3.3 %)
Net debt to net capital	34.2 %	40.2 %

Net debt consists of debt less cash and cash equivalents. Debt consists of short-term borrowings and long-term debt, including the currently maturing portion. Capital consists of debt and common equity. Net capital consists of capital less cash and cash equivalents. System Energy uses the debt to capital ratio in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating System Energy's financial condition. System Energy uses the net debt to net capital ratio in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating System Energy's financial condition because net debt indicates System Energy's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

System Energy seeks to optimize its capital structure in accordance with its regulatory requirements and to control its cost of capital while also maintaining equity capitalization at a level consistent with investment-grade debt ratings. To the extent that operating cash flows are in excess of planned investments, cash may be used to reduce outstanding debt or may be paid as a dividend or a capital distribution, or a combination of the three, in appropriate amounts to maintain the capital structure. To the extent that operating cash flows are insufficient to support planned investments and other uses of cash, System Energy may issue incremental debt or reduce dividends, or both, to maintain its capital structure. In addition, System Energy may receive equity contributions to maintain its capital structure for certain circumstances that would materially alter the capital structure if financed entirely with debt and reduced dividends.

Uses of Capital

System Energy requires capital resources for:

- construction and other capital investments;
- debt maturities or retirements;
- working capital purposes, including the financing of fuel costs and tax payments; and
- dividend, distribution, and interest payments.

Following are the amounts of System Energy's planned construction and other capital investments.

	2021	2022	2023
	(In Millions)		
Planned construction and capital investment:			
Generation	$90	$145	$140
Utility Support	15	10	15
Total	$105	$155	$155

Following are the amounts of System Energy's existing debt and lease obligations (includes estimated interest payments) and other purchase obligations.

	2021	2022-2023	2024-2025	After 2025	Total
	(In Millions)				
Long-term debt (a)	$138	$444	$246	$299	$1,127
Purchase obligations (b)	$6	$53	$47	$40	$146

(a) Includes estimated interest payments. Long-term debt is discussed in Note 5 to the financial statements.
(b) Purchase obligations represent the minimum purchase obligation or cancellation charge for contractual obligations to purchase goods or services. For System Energy, it includes nuclear fuel purchase obligations.

In addition to the contractual obligations given above, System Energy expects to contribute approximately $18.7 million to its qualified pension plans and approximately $22 thousand to other postretirement health care and life insurance plans in 2021, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021. See "**Critical Accounting Estimates – Qualified Pension and Other Postretirement Benefits**" below for a discussion of qualified pension and other postretirement benefits funding.

Also in addition to the contractual obligations, System Energy has $14.2 million of unrecognized tax benefits and interest net of unused tax attributes and payments for which the timing of payments beyond 12 months cannot be reasonably estimated due to uncertainties in the timing of effective settlement of tax positions. See Note 3 to the financial statements for additional information regarding unrecognized tax benefits.

In addition to routine spending to maintain operations, the planned capital investment estimate includes specific Grand Gulf investments and initiatives.

As a wholly-owned subsidiary, System Energy dividends its earnings to Entergy Corporation at a percentage determined monthly.

Sources of Capital

System Energy's sources to meet its capital requirements include:

- internally generated funds;
- cash on hand;
- debt issuances, including debt issuances to refund or retire currently outstanding or maturing indebtedness;
- equity contributions; and
- bank financing under new or existing facilities.

System Energy may refinance, redeem, or otherwise retire debt prior to maturity, to the extent market conditions and interest rates are favorable.

All debt issuances by System Energy require prior regulatory approval. Debt issuances are also subject to issuance tests set forth in its bond indenture and other agreements. System Energy has sufficient capacity under these tests to meet its foreseeable capital needs.

System Energy's receivables from the money pool were as follows as of December 31 for each of the following years.

2020	2019	2018	2017
	(In Thousands)		
$4,004	$59,298	$107,122	$111,667

See Note 4 to the financial statements for a description of the money pool.

The System Energy nuclear fuel company variable interest entity has a credit facility in the amount of $120 million scheduled to expire in September 2022. As of December 31, 2020, no loans were outstanding under the System Energy nuclear fuel company variable interest entity credit facility. See Note 4 to the financial statements for additional discussion of the variable interest entity credit facility.

System Energy obtained authorizations from the FERC through July 14, 2022 for the following:

- short-term borrowings not to exceed an aggregate amount of $200 million at any time outstanding;
- long-term borrowings and security issuances; and
- borrowings by its nuclear fuel company variable interest entity.

See Note 4 to the financial statements for further discussion of System Energy's short-term borrowing limits.

Federal Regulation

See the "**Rate, Cost-recovery, and Other Regulation – Federal Regulation**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis and Note 2 to the financial statements for a discussion of federal regulation.

Complaints Against System Energy

Return on Equity and Capital Structure Complaints

In January 2017 the APSC and MPSC filed a complaint with the FERC against System Energy. The complaint seeks a reduction in the return on equity component of the Unit Power Sales Agreement pursuant to which System Energy sells its Grand Gulf capacity and energy to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans. Entergy Arkansas also sells some of its Grand Gulf capacity and energy to Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans under separate agreements. The current return on equity under the Unit Power Sales Agreement is 10.94%, which was established in a rate proceeding that became final in July 2001.

The APSC and MPSC complaint alleges that the return on equity is unjust and unreasonable because capital market and other considerations indicate that it is excessive. The complaint requests proceedings to investigate the return on equity and establish a lower return on equity, and also requests that the FERC establish January 23, 2017 as a refund effective date. The complaint includes return on equity analysis that purports to establish that the range of reasonable return on equity for System Energy is between 8.37% and 8.67%. System Energy answered the complaint in February 2017 and disputes that a return on equity of 8.37% to 8.67% is just and reasonable. The LPSC and the City Council intervened in the proceeding expressing support for the complaint. In September 2017 the FERC established a refund effective date of January 23, 2017 and directed the parties to engage in settlement proceedings before an ALJ. The parties have been unable to settle the return on equity issue and a FERC hearing judge was assigned in July 2018. The 15-month refund period in connection with the APSC/MPSC complaint expired on April 23, 2018.

In April 2018 the LPSC filed a complaint with the FERC against System Energy seeking an additional 15-month refund period. The LPSC complaint requests similar relief from the FERC with respect to System Energy's return on equity and also requests the FERC to investigate System Energy's capital structure. The APSC, MPSC, and City Council intervened in the proceeding, filed an answer expressing support for the complaint, and asked the FERC to consolidate this proceeding with the proceeding initiated by the complaint of the APSC and MPSC in January 2017. System Energy answered the LPSC complaint in May 2018 and also filed a motion to dismiss the complaint. In August 2018 the FERC issued an order dismissing the LPSC's request to investigate System Energy's capital structure and setting for hearing the return on equity complaint, with a refund effective date of April 27, 2018. The 15-month refund period in connection with the LPSC return on equity complaint expired on July 26, 2019.

The portion of the LPSC's complaint dealing with return on equity was subsequently consolidated with the APSC and MPSC complaint for hearing. The parties addressed an order (issued in a separate proceeding involving New England transmission owners) that proposed modifying the FERC's standard methodology for determining return on equity. In September 2018, System Energy filed a request for rehearing and the LPSC filed a request for rehearing or reconsideration of the FERC's August 2018 order. The LPSC's request referenced an amended complaint that it filed on the same day raising the same capital structure claim the FERC had earlier dismissed. The FERC initiated a new proceeding for the amended capital structure complaint, and System Energy submitted a response in October 2018. In January 2019 the FERC set the amended complaint for settlement and hearing proceedings. Settlement proceedings in the capital structure proceeding commenced in February 2019. As noted below, in June 2019 settlement discussions were terminated and the amended capital structure complaint was consolidated with the ongoing return on equity proceeding. The 15-month refund period in connection with the capital structure complaint was from September 24, 2018 to December 23, 2019.

In January 2019 the LPSC and the APSC and MPSC filed direct testimony in the return on equity proceeding. For the refund period January 23, 2017 through April 23, 2018, the LPSC argues for an authorized return on equity for System Energy of 7.81% and the APSC and MPSC argue for an authorized return on equity for System Energy of 8.24%. For the refund period April 27, 2018 through July 27, 2019, and for application on a

prospective basis, the LPSC argues for an authorized return on equity for System Energy of 7.97% and the APSC and MPSC argue for an authorized return on equity for System Energy of 8.41%. In March 2019, System Energy submitted answering testimony. For the first refund period, System Energy's testimony argues for a return on equity of 10.10% (median) or 10.70% (midpoint). For the second refund period, System Energy's testimony shows that the calculated returns on equity for the first period fall within the range of presumptively just and reasonable returns on equity, and thus the second complaint should be dismissed (and the first period return on equity used going forward). If the FERC nonetheless were to set a new return on equity for the second period (and going forward), System Energy argues the return on equity should be either 10.32% (median) or 10.69% (midpoint).

In May 2019 the FERC trial staff filed its direct and answering testimony in the return on equity proceeding. For the first refund period, the FERC trial staff calculates an authorized return on equity for System Energy of 9.89% based on the application of FERC's proposed methodology. The FERC trial staff's direct and answering testimony noted that an authorized return on equity of 9.89% for the first refund period was within the range of presumptively just and reasonable returns on equity for the second refund period, as calculated using a study period ending January 31, 2019 for the second refund period.

In June 2019, System Entergy filed testimony responding to the testimony filed by the FERC trial staff. Among other things, System Energy's testimony rebutted arguments raised by the FERC trial staff and provided updated calculations for the second refund period based on the study period ending May 31, 2019. For that refund period, System Energy's testimony shows that strict application of the return on equity methodology proposed by the FERC staff indicates that the second complaint would not be dismissed, and the new return on equity would be set at 9.65% (median) or 9.74% (midpoint). System Energy's testimony argues that these results are insufficient in light of benchmarks such as state returns on equity and treasury bond yields, and instead proposes that the calculated returns on equity for the second period should be either 9.91% (median) or 10.3% (midpoint). System Energy's testimony also argues that, under application of its proposed modified methodology, the 10.10% return on equity calculated for the first refund period would fall within the range of presumptively just and reasonable returns on equity for the second refund period.

Also in June 2019, the FERC's Chief ALJ issued an order terminating settlement discussions in the amended complaint addressing System Energy's capital structure. The ALJ consolidated the amended capital structure complaint with the ongoing return on equity proceeding and set new procedural deadlines for the consolidated hearing.

In August 2019 the LPSC and the APSC and MPSC filed rebuttal testimony in the return on equity proceeding and direct and answering testimony relating to System Energy's capital structure. The LPSC re-argues for an authorized return on equity for System Energy of 7.81% for the first refund period and 7.97% for the second refund period. The APSC and MPSC argue for an authorized return on equity for System Energy of 8.26% for the first refund period and 8.32% for the second refund period. With respect to capital structure, the LPSC proposes that the FERC establish a hypothetical capital structure for System Energy for ratemaking purposes. Specifically, the LPSC proposes that System Energy's common equity ratio be set to Entergy Corporation's equity ratio of 37% equity and 63% debt. In the alternative, the LPSC argues that the equity ratio should be no higher than 49%, the composite equity ratio of System Energy and the other Entergy operating companies who purchase under the Unit Power Sales Agreement. The APSC and MPSC recommend that 35.98% be set as the common equity ratio for System Energy. As an alternative, the APSC and MPSC propose that System Energy's common equity be set at 46.75% based on the median equity ratio of the proxy group for setting the return on equity.

In September 2019 the FERC trial staff filed its rebuttal testimony in the return on equity proceeding. For the first refund period, the FERC trial staff calculates an authorized return on equity for System Energy of 9.40% based on the application of the FERC's proposed methodology and an updated proxy group. For the second refund period, based on the study period ending May 31, 2019, the FERC trial staff rebuttal testimony argues for a return on equity of 9.63%. In September 2019 the FERC trial staff also filed direct and answering testimony relating to System Energy's capital structure. The FERC trial staff argues that the average capital structure of the proxy group used to develop System Energy's return on equity should be used to establish the capital structure. Using this

approach, the FERC trial staff calculates the average capital structure for its proposed proxy group of 46.74% common equity, and 53.26% debt.

In October 2019, System Energy filed answering testimony disputing the FERC trial staff's, the LPSC's, and the APSC's and MPSC's arguments for the use of a hypothetical capital structure and arguing that the use of System Energy's actual capital structure is just and reasonable.

In November 2019, in a proceeding that did not involve System Energy, the FERC issued an order addressing the methodology for determining the return on equity applicable to transmission owners in MISO. Thereafter, the procedural schedule in the System Energy proceeding was amended to allow the participants to file supplemental testimony addressing the order in the MISO transmission owner proceeding (Opinion No. 569).

In February 2020 the LPSC, the MPSC and APSC, and the FERC trial staff filed supplemental testimony addressing Opinion No. 569 and how it would affect the return on equity evaluation for the two complaint periods concerning System Energy. For the first refund period, based on their respective interpretations and applications of the Opinion No. 569 methodology, the LPSC argues for an authorized return on equity for System Energy of 8.44%; the MPSC and APSC argue for an authorized return on equity of 8.41%; and the FERC trial staff argues for an authorized return on equity of 9.22%. For the second refund period and on a prospective basis, based on their respective interpretations and applications of the Opinion No. 569 methodology, the LPSC argues for an authorized return on equity for System Energy of 7.89%; the MPSC and APSC argue that an authorized return on equity of 8.01% may be appropriate; and the FERC trial staff argues for an authorized return on equity of 8.66%.

In April 2020, System Energy filed supplemental answering testimony addressing Opinion No. 569. System Energy argues that the Opinion No. 569 methodology is conceptually and analytically defective for purposes of establishing just and reasonable authorized return on equity determinations and proposes an alternative approach. As its primary recommendation, System Energy continues to support the return on equity determinations in its March 2019 testimony for the first refund period and its June 2019 testimony for the second refund period. Under the Opinion No. 569 methodology, System Energy calculates a "presumptively just and reasonable range" for the authorized return on equity for the first refund period of 8.57% to 9.52%, and for the second refund period of 8.28% to 9.11%. System Energy argues that these ranges are not just and reasonable results. Under its proposed alternative methodology, System Energy calculates an authorized return on equity of 10.26% for the first refund period, which also falls within the presumptively just and reasonable range calculated for the second refund period and prospectively.

In May 2020 the FERC issued an order on rehearing of Opinion No. 569 (Opinion No. 569-A). In June 2020 the procedural schedule in the System Energy proceeding was further revised in order to allow parties to address the Opinion No. 569-A methodology. Pursuant to the revised schedule, in June 2020, the LPSC, MPSC and APSC, and the FERC trial staff filed supplemental testimony addressing Opinion No. 569-A and how it would affect the return on equity evaluation for the two complaint periods concerning System Energy. For the first refund period, based on their respective interpretations and applications of the Opinion No. 569-A methodology, the LPSC argues for an authorized return on equity for System Energy of 7.97%; the MPSC and APSC argue for an authorized return on equity of 9.24%; and the FERC trial staff argues for an authorized return on equity of 9.49%. For the second refund period and on a prospective basis, based on their respective interpretations and applications of the Opinion No. 569-A methodology, the LPSC argues for an authorized return on equity for System Energy of 7.78%; the MPSC and APSC argue that an authorized return on equity of 9.15% may be appropriate if the second complaint is not dismissed; and the FERC trial staff argues for an authorized return on equity of 9.09% if the second complaint is not dismissed.

Pursuant to the revised procedural schedule, in July 2020, System Energy filed supplemental testimony addressing Opinion No. 569-A. System Energy argues that strict application of the Opinion No. 569-A methodology produces results inconsistent with investor requirements and does not provide a sound basis on which

to evaluate System Energy's authorized return on equity. As its primary recommendation, System Energy argues for the use of a methodology that incorporates four separate financial models, including the constant growth form of the discounted cash flow model and the empirical capital asset pricing model. Based on application of its recommended methodology, System Energy argues for an authorized return on equity of 10.12% for the first refund period, which also falls within the presumptively just and reasonable range calculated for the second refund period and prospectively. Under the Opinion No. 569-A methodology, System Energy calculates an authorized return on equity of 9.44% for the first refund period, which also falls within the presumptively just and reasonable range calculated for the second refund period and prospectively.

The parties and FERC trial staff filed final rounds of testimony in August 2020. The hearing before a FERC ALJ occurred in late-September through early-October 2020, post-hearing briefing took place in November and December 2020, and the initial decision is due in March 2021. System Energy recorded a provision against revenue for the potential outcome of this proceeding.

Grand Gulf Sale-leaseback Renewal Complaint and Uncertain Tax Position Rate Base Issue

In May 2018 the LPSC filed a complaint against System Energy and Entergy Services related to System Energy's renewal of a sale-leaseback transaction originally entered into in December 1988 for an 11.5% undivided interest in Grand Gulf Unit 1. The complaint alleges that System Energy violated the filed rate and the FERC's ratemaking and accounting requirements when it included in Unit Power Sales Agreement billings the cost of capital additions associated with the sale-leaseback interest, and that System Energy is double-recovering costs by including both the lease payments and the capital additions in Unit Power Sales Agreement billings. The complaint also claims that System Energy was imprudent in entering into the sale-leaseback renewal because the Utility operating companies that purchase Grand Gulf's output from System Energy could have obtained cheaper capacity and energy in the MISO markets. The complaint further alleges that System Energy violated various other reporting and accounting requirements and should have sought prior FERC approval of the lease renewal. The complaint seeks various forms of relief from the FERC. The complaint seeks refunds for capital addition costs for all years in which they were recorded in allegedly non-formula accounts or, alternatively, the disallowance of the return on equity for the capital additions in those years plus interest. The complaint also asks that the FERC disallow and refund the lease costs of the sale-leaseback renewal on grounds of imprudence, investigate System Energy's treatment of a DOE litigation payment, and impose certain forward-looking procedural protections, including audit rights for retail regulators of the Unit Power Sales Agreement formula rates. The APSC, MPSC, and City Council intervened in the proceeding.

In June 2018, System Energy and Entergy Services filed a motion to dismiss and an answer to the LPSC complaint denying that System Energy's treatment of the sale-leaseback renewal and capital additions violated the terms of the filed rate or any other FERC ratemaking, accounting, or legal requirements or otherwise constituted double recovery. The response also argued that the complaint is inconsistent with a FERC-approved settlement to which the LPSC is a party and that explicitly authorizes System Energy to recover its lease payments. Finally, the response argued that both the capital additions and the sale-leaseback renewal were prudent investments and the LPSC complaint fails to justify any disallowance or refunds. The response also offered to submit formula rate protocols for the Unit Power Sales Agreement similar to the procedures used for reviewing transmission rates under the MISO tariff. In September 2018 the FERC issued an order setting the complaint for hearing and settlement proceedings. The FERC established a refund effective date of May 18, 2018.

In February 2019 the presiding ALJ ruled that the hearing ordered by the FERC includes the issue of whether specific subcategories of accumulated deferred income tax should be included in, or excluded from, System Energy's formula rate. In March 2019 the LPSC, MPSC, APSC and City Council filed direct testimony. The LPSC testimony sought refunds that include the renewal lease payments (approximately $17.2 million per year since July 2015), rate base reductions for accumulated deferred income tax associated with uncertain tax positions, and the cost of capital additions associated with the sale-leaseback interest, as well as interest on those amounts.

In June 2019 System Energy filed answering testimony arguing that the FERC should reject all claims for refunds. Among other things, System Energy argued that claims for refunds of the costs of lease renewal payments and capital additions should be rejected because those costs were recovered consistent with the Unit Power Sales Agreement formula rate, System Energy was not over or double recovering any costs, and ratepayers will save costs over the initial and renewal terms of the leases. System Energy argued that claims for refunds associated with liabilities arising from uncertain tax positions should be rejected because the liabilities do not provide cost-free capital, the repayment timing of the liabilities is uncertain, and the outcome of the underlying tax positions is uncertain. System Energy's testimony also challenged the refund calculations supplied by the other parties.

In August 2019 the FERC trial staff filed direct and answering testimony seeking refunds for rate base reductions for liabilities associated with uncertain tax positions. The FERC trial staff also argued that System Energy recovered $32 million more than it should have in depreciation expense for capital additions. In September 2019, System Energy filed cross-answering testimony disputing the FERC trial staff's arguments for refunds, stating that the FERC trial staff's position regarding depreciation rates for capital additions is not unreasonable, but explaining that any change in depreciation expense is only one element of a Unit Power Sales Agreement re-billing calculation. Adjustments to depreciation expense in any re-billing under the Unit Power Sales Agreement formula rate will also involve changes to accumulated depreciation, accumulated deferred income taxes, and other formula elements as needed. In October 2019 the LPSC filed rebuttal testimony increasing the amount of refunds sought for liabilities associated with uncertain tax positions. The LPSC seeks approximately $512 million plus interest, which is approximately $191 million through December 31, 2020. The FERC trial staff also filed rebuttal testimony in which it seeks refunds of a similar amount as the LPSC for the liabilities associated with uncertain tax positions. The LPSC testimony also argued that adjustments to depreciation rates should affect rate base on a prospective basis only.

A hearing was held before a FERC ALJ in November 2019. In April 2020 the ALJ issued an initial decision. Among other things, the ALJ determined that refunds were due on three main issues. First, with regard to the lease renewal payments, the ALJ determined that System Energy is recovering an unjust acquisition premium through the lease renewal payments, and that System Energy's recovery from customers through rates should be limited to the cost of service based on the remaining net book value of the leased assets, which is approximately $70 million. The ALJ found that the remedy for this issue should be the refund of lease payments (approximately $17.2 million per year since July 2015) with interest determined at the FERC quarterly interest rate, which would be offset by the addition of the net book value of the leased assets in the cost of service. The ALJ did not calculate a value for the refund expected as a result of this remedy. In addition, System Energy would no longer recover the lease payments in rates prospectively. Second, with regard to the liabilities associated with uncertain tax positions, the ALJ determined that the liabilities are accumulated deferred income taxes and System Energy's rate base should have been reduced for those liabilities. If the ALJ's initial decision is upheld, the estimated refund for this issue through December 31, 2020, is approximately $422 million, plus interest, which is approximately $110 million through December 31, 2020. The ALJ also found that System Energy should include liabilities associated with uncertain tax positions as a rate base reduction going forward. Third, with regard to the depreciation expense adjustments, the ALJ found that System Energy should correct for the error in re-billings retroactively and prospectively, but that System Energy should not be permitted to recover interest on any retroactive return on enhanced rate base resulting from such corrections. If the initial decision is affirmed on this issue, System Energy estimates refunds of approximately $19 million, which includes interest through December 31, 2020.

The ALJ initial decision is an interim step in the FERC litigation process, and an ALJ's determinations made in an initial decision are not controlling on the FERC. The ALJ in the initial decision acknowledges that these are issues of first impression before the FERC. In June 2020, System Energy, the LPSC, and the FERC trial staff filed briefs on exceptions, challenging several of the initial decision's findings. System Energy's brief on exceptions challenged the initial decision's limitations on recovery of the lease renewal payments, its proposed rate base refund for the liabilities associated with uncertain tax positions, and its proposal to asymmetrically treat interest on bill corrections for depreciation expense adjustments. The LPSC's and the FERC trial staff's briefs on

exceptions each challenged the initial decision's allowance for recovery of the cost of service associated with the lease renewal based on the remaining net book value of the leased assets, its calculation of the remaining net book value of the leased assets, and the amount of the initial decision's proposed rate base refund for the liabilities associated with uncertain tax positions. The LPSC's brief on exceptions also challenged the initial decision's proposal that depreciation expense adjustments include retroactive adjustments to rate base and its finding that section 203 of the Federal Power Act did not apply to the lease renewal. The FERC trial staff's brief on exceptions also challenged the initial decision's finding that the FERC need not institute a formal investigation into System Energy's tariff. In October 2020, System Energy, the LPSC, the MPSC, the APSC, and the City Council filed briefs opposing exceptions. System Energy opposed the exceptions filed by the LPSC and the FERC trial staff. The LPSC, MPSC, APSC, City Council, and the FERC trial staff opposed the exceptions filed by System Energy. Also in October 2020 the MPSC, APSC, and the City Council filed briefs adopting the exceptions of the LPSC and the FERC trial staff. The case is pending before the FERC, which will review the case and issue an order on the proceeding, and the FERC may accept, reject, or modify the ALJ's initial decision in whole or in part. Refunds, if any, that might be required will only become due after the FERC issues its order reviewing the initial decision.

In addition, in September 2020, the IRS issued a Notice of Proposed Adjustment (NOPA) and Entergy executed it. The NOPA memorializes the IRS's decision to adjust the 2015 consolidated federal income tax return of Entergy Corporation and certain of its subsidiaries, including System Energy, with regard to the uncertain decommissioning tax position. Pursuant to the audit resolution documented in the NOPA, the IRS allowed System Energy's inclusion of $102 million of future nuclear decommissioning costs in System Energy's cost of goods sold for the 2015 tax year, roughly 10% of the requested deduction, but disallowed the balance of the position. In September 2020, System Energy filed a motion to lodge the NOPA into the record in the FERC proceeding. In October 2020 the LPSC, the APSC, the MPSC, the City Council, and the FERC trial staff filed oppositions to System Energy's motion. As a result of the NOPA issued by the IRS in September 2020, System Energy filed, in October 2020, a new Federal Power Act section 205 filing at FERC to establish an ongoing rate base credit for the accumulated deferred income taxes resulting from the decommissioning uncertain tax position. On a prospective basis beginning with the October 2020 bill, System Energy proposes to include the accumulated deferred income taxes arising from the successful portion of the decommissioning uncertain tax position as a credit to rate base under the Unit Power Sales Agreement. In November 2020 the LPSC, APSC, MPSC, and City Council filed a protest to the filing, and System Energy responded.

In November 2020 the IRS issued a Revenue Agent's Report (RAR) for the 2014/2015 tax year and in December 2020 Entergy executed it. The RAR contained the same adjustment to the uncertain nuclear decommissioning tax position as that which the IRS had announced in the NOPA. In December 2020, System Energy filed a motion to lodge the RAR into the record in the FERC proceeding addressing the uncertain tax position rate base issue. In January 2021 the LPSC, APSC, MPSC, and City Council filed a protest to the motion.

As a result of the RAR, in December 2020, System Energy filed amendments to its new Federal Power Act section 205 filings to establish an ongoing rate base credit for the accumulated deferred income taxes resulting from the decommissioning uncertain tax position and to credit excess accumulated deferred income taxes arising from the successful portion of the decommissioning uncertain tax position. The amendments both propose the inclusion of the RAR as support for the filings. In December 2020 the LPSC, APSC, and City Council filed a protest in response to the amendments, reiterating their prior objections to the filings. In February 2021 the FERC issued an order accepting System Energy's Federal Power Act section 205 filings subject to refund, setting them for hearing, and holding the hearing in abeyance.

In December 2020, System Energy filed a new Federal Power Act section 205 filing to provide a one-time, historical credit of $25.2 million for the accumulated deferred income taxes that would have been created by the decommissioning uncertain tax position if the IRS's decision had been known in 2016. In January 2021 the LPSC, APSC, MPSC, and City Council filed a protest to the filing.

LPSC Authorization of Additional Complaints

In May 2020 the LPSC authorized its staff to file additional complaints at the FERC related to the rates charged by System Energy for Grand Gulf energy and capacity supplied to Entergy Louisiana under the Unit Power Sales Agreement. The LPSC directive notes that the initial decision issued by the presiding ALJ in the Grand Gulf sale-leaseback complaint proceeding did not address, for procedural reasons, certain rate issues raised by the LPSC and declined to order further investigation of rates charged by System Energy. The LPSC directive authorizes its staff to file complaints at the FERC "necessary to address these rate issues, to request a full investigation into the rates charged by System Energy for Grand Gulf power, and to seek rate refund, rate reduction, and such other remedies as may be necessary and appropriate to protect Louisiana ratepayers." The LPSC directive further stated that the LPSC has seen "information suggesting that the Grand Gulf plant has been significantly underperforming compared to other nuclear plants in the United States, has had several extended and unexplained outages, and has been plagued with serious safety concerns." The LPSC expressed concern that the costs paid by Entergy Louisiana's retail customers may have been detrimentally impacted, and authorized "the filing of a FERC complaint to address these performance issues and to seek appropriate refund, rate reduction, and other remedies as may be appropriate."

The first of the additional complaints was filed at the FERC by the LPSC, the APSC, the MPSC, and the City Council in September 2020. The new complaint raises two sets of rate allegations: violations of the filed rate and a corresponding request for refunds for prior periods; and elements of the Unit Power Sales Agreement are unjust and unreasonable and a corresponding request for refunds for the 15-month refund period and changes to the Unit Power Sales Agreement prospectively. Several of the filed rate allegations overlap with the previous complaints. The filed rate allegations not previously raised are that System Energy: failed to provide a rate base credit to customers for the "time value" of sale-leaseback lease payments collected from customers in advance of the time those payments were due to the owner-lessors; improperly included certain lease refinancing costs in rate base as prepayments; improperly included nuclear decommissioning outage costs in rate base; failed to include categories of accumulated deferred income taxes as a reduction to rate base; charged customers based on a higher equity ratio than would be appropriate due to excessive retained earnings; and did not correctly reflect money pool investments and imprudently invested cash into the money pool. The elements of the Unit Power Sales Agreement that the complaint alleges are unjust and unreasonable include: incentive and executive compensation, lack of an equity re-opener, lobbying, and private airplane travel. The new complaint also requests a rate investigation into the Unit Power Sales Agreement and System Energy's billing practices pursuant to section 206 of the Federal Power Act, including any issue relevant to the Unit Power Sales Agreement and its inputs. System Energy filed its answer opposing the new complaint in November 2020. In its answer, System Energy argued that all of the claims raised in the complaint should be dismissed and agreed that bill adjustment with respect to two discrete issues were justified. System Energy argued that dismissal is warranted because all claims fall into one or more of the following categories: the claims have been raised and are being litigated in another proceeding; the claims do not present a *prima facie* case and do not satisfy the threshold burden to establish a complaint proceeding; the claims are premised on a theory or request relief that is incompatible with federal law or FERC policy; the claims request relief that is inconsistent with the filed rate; the claims are barred or waived by the legal doctrine of laches; and/or the claims have been fully addressed and do not warrant further litigation. In December 2020, System Energy filed a bill adjustment report indicating that $3.4 million had been credited to customers in connection with the two discrete issues concerning the inclusion of certain accumulated deferred income taxes balances in rates. In January 2021 the complainants filed a response to System Energy's November 2020 answer, and in February 2020, System Energy filed a response to the complainant's response.

The operational prudence-related complaint has not been filed as of this date, and the LPSC directive did not set a date for the filing.

Unit Power Sales Agreement

In August 2017, System Energy submitted to the FERC proposed amendments to the Unit Power Sales

Agreement pursuant to which System Energy sells its Grand Gulf capacity and energy to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans. The filing proposes limited amendments to the Unit Power Sales Agreement to adopt (1) updated rates for use in calculating Grand Gulf plant depreciation and amortization expenses and (2) updated nuclear decommissioning cost annual revenue requirements, both of which are recovered through the Unit Power Sales Agreement rate formula. The amendments result in lower charges to the Utility operating companies that buy capacity and energy from System Energy under the Unit Power Sales Agreement. The changes were based on updated depreciation and nuclear decommissioning studies that take into account the renewal of Grand Gulf's operating license for a term through November 1, 2044.

In September 2017 the FERC accepted System Energy's proposed Unit Power Sales Agreement amendments, subject to further proceedings to consider the justness and reasonableness of the amendments. Because the amendments propose a rate decrease, the FERC also initiated an investigation under section 206 of the Federal Power Act to determine if the rate decrease should be lower than proposed. The FERC accepted the proposed amendments effective October 1, 2017, subject to refund pending the outcome of the further settlement and/or hearing proceedings, and established a refund effective date of October 11, 2017 with respect to the rate decrease. In June 2018, System Energy filed with the FERC an uncontested settlement relating to the updated depreciation rates and nuclear decommissioning cost annual revenue requirements. In August 2018 the FERC issued an order accepting the settlement. In the third quarter 2018, System Energy recorded a reduction in depreciation expense of approximately $26 million, representing the cumulative difference in depreciation expense resulting from the depreciation rates used from October 11, 2017 through September 30, 2018 and the depreciation rates included in the settlement filing accepted by the FERC.

Nuclear Matters

System Energy owns and, through an affiliate, operates Grand Gulf. System Energy is, therefore, subject to the risks related to owning and operating a nuclear plant. These include risks related to: the use, storage, and handling and disposal of high-level and low-level radioactive materials; the substantial financial requirements, both for capital investments and operational needs, to position Grand Gulf to meet its operational goals; the performance and capacity factors of Grand Gulf, including the financial requirements to address emerging issues like stress corrosion cracking of certain materials within the plant systems; regulatory requirements and potential future regulatory changes, including changes affecting the regulations governing nuclear plant ownership, operations, license renewal and amendments, and decommissioning; the availability of interim or permanent sites for the disposal of spent nuclear fuel and nuclear waste, including the fees charged for such disposal; the sufficiency of nuclear decommissioning trust fund assets and earnings to complete decommissioning of the site when required; and limitations on the amounts and types of insurance commercially available for losses in connection with nuclear plant operations and catastrophic events such as a nuclear accident. In the event of an unanticipated early shutdown of Grand Gulf, System Energy may be required to provide additional funds or credit support to satisfy regulatory requirements for decommissioning. Grand Gulf's operating license expires in 2044.

In November 2020 the NRC placed Grand Gulf in the "regulatory response column", or Column 2, of the NRC's Reactor Oversight Process Action Matrix based on the incidence of three unplanned plant scrams during the second and third quarters of 2020. Two of the scram events related to new turbine control system components that failed, and a third related to a feedwater valve positioner that failed, all of which had been replaced in a refueling outage that ended in May 2020. The NRC plans to conduct a supplemental inspection of Grand Gulf in accordance with its inspection procedures for nuclear plants in Column 2. As a consequence of two additional Grand Gulf scrams during the fourth quarter 2020, System Energy expects Grand Gulf to be placed into the "degraded cornerstone column", or Column 3, of the NRC's Reactor Oversight Process Action Matrix based on plant performance indicators for the four quarters ended December 31, 2020. This will involve an additional supplemental NRC inspection of Grand Gulf in accordance with its inspection procedures for nuclear plants in Column 3.

Environmental Risks

System Energy's facilities and operations are subject to regulation by various governmental authorities having jurisdiction over air quality, water quality, control of toxic substances and hazardous and solid wastes, and other environmental matters. Management believes that System Energy is in substantial compliance with environmental regulations currently applicable to its facilities and operations, with reference to possible exceptions noted in "**Regulation of Entergy's Business - Environmental Regulation**" in Part I, Item 1. Because environmental regulations are subject to change, future compliance costs cannot be precisely estimated.

Critical Accounting Estimates

The preparation of System Energy's financial statements in conformity with generally accepted accounting principles requires management to apply appropriate accounting policies and to make estimates and judgments that can have a significant effect on reported financial position, results of operations, and cash flows. Management has identified the following accounting policies and estimates as critical because they are based on assumptions and measurements that involve a high degree of uncertainty, and there is the potential for future changes in the assumptions and measurements that could produce estimates that would have a material impact on the presentation of System Energy's financial position or results of operations.

Nuclear Decommissioning Costs

See "**Nuclear Decommissioning Costs**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the estimates inherent in accounting for nuclear decommissioning costs.

Utility Regulatory Accounting

See "**Utility Regulatory Accounting**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of accounting for the effects of rate regulation.

Impairment of Long-lived Assets

See "**Impairment of Long-lived Assets**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for discussion of the estimates associated with the impairment of long-lived assets.

Taxation and Uncertain Tax Positions

See "**Taxation and Uncertain Tax Positions**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion.

Qualified Pension and Other Postretirement Benefits

System Energy's qualified pension and other postretirement reported costs, as described in Note 11 to the financial statements, are impacted by numerous factors including the provisions of the plans, changing employee demographics, and various actuarial calculations, assumptions, and accounting mechanisms. See the "**Qualified Pension and Other Postretirement Benefits**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for further discussion. Because of the complexity of these calculations, the long-term nature of these obligations, and the importance of the assumptions utilized, Entergy's estimate of these costs is a critical accounting estimate.

Cost Sensitivity

The following chart reflects the sensitivity of qualified pension cost and qualified projected benefit obligation to changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Qualified Pension Cost	Impact on 2020 Projected Qualified Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$727	$12,152
Rate of return on plan assets	(0.25%)	$709	$—
Rate of increase in compensation	0.25%	$464	$2,133

The following chart reflects the sensitivity of postretirement benefit cost and accumulated postretirement benefit obligation to changes in certain actuarial assumptions (dollars in thousands).

Actuarial Assumption	Change in Assumption	Impact on 2021 Postretirement Benefit Cost	Impact on 2020 Accumulated Postretirement Benefit Obligation
		Increase/(Decrease)	
Discount rate	(0.25%)	$58	$1,635
Health care cost trend	0.25%	$69	$1,202

Each fluctuation above assumes that the other components of the calculation are held constant.

Costs and Employer Contributions

Total qualified pension cost for System Energy in 2020 was $17.3 million, including $105 thousand in settlement costs. System Energy anticipates 2021 qualified pension cost to be $20 million. System Energy contributed $16.1 million to its qualified pension plans in 2020 and estimates 2021 pension contributions will approximate $18.7 million, although the 2021 required pension contributions will be known with more certainty when the January 1, 2021 valuations are completed, which is expected by April 1, 2021.

Total postretirement health care and life insurance benefit income for System Energy in 2020 was $1.5 million. System Energy expects 2021 postretirement health care and life insurance benefit income to approximate $1.3 million. System Energy contributed $1.3 million to its other postretirement plans in 2020 and expects 2021 contributions to approximate $22 thousand.

Other Contingencies

See "**Other Contingencies**" in the "**Critical Accounting Estimates**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis for a discussion of the estimates associated with environmental, litigation, and other risks.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements for a discussion of new accounting pronouncements.

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholder and Board of Directors of
System Energy Resources, Inc.

Opinion on the Financial Statements

We have audited the accompanying balance sheets of System Energy Resources, Inc. (the "Company") as of December 31, 2020 and 2019, the related statements of income, cash flows, and changes in common equity (pages 447 through 452 and applicable items in pages 51 through 238), for each of the three years in the period ended December 31, 2020, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2020 and 2019, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2020, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provide a reasonable basis for our opinion.

Critical Audit Matter

The critical audit matter communicated below is a matter arising from the current period audit of the financial statements that was communicated or required to be communicated to the audit committee and that: (1) relates to accounts or disclosures that is material to the financial statements and (2) involved our especially challenging, subjective, or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the financial statements, taken as a whole, and we are not, by communicating the critical audit matter below, providing separate opinion on the critical audit matters or on the accounts or disclosures to which they relate.

Rate and Regulatory Matters —System Energy Resources, Inc. — Refer to Notes 2 to the financial statements

Critical Audit Matter Description

The Company is subject to wholesale rate regulation by the Federal Energy Regulatory Commission ("FERC"). Management has determined it meets the requirements under accounting principles generally accepted in the United States of America to prepare its financial statements applying the specialized rules to account for the effects of cost-based rate regulation. Accounting for the economics of rate regulation impacts multiple financial statement line items and disclosures, such as property, plant, and equipment; regulatory assets and liabilities; operating revenues; operation and maintenance expense; income taxes; and depreciation and amortization expense.

The Company's rates are subject to regulatory rate-setting processes and annual earnings oversight. Because the FERC sets the rates the Company is allowed to charge customers based on allowable costs, including a reasonable return on equity, the Company applies accounting standards that require the financial statements to reflect the effects of rate regulation, including the recording of regulatory assets and liabilities. The Company assesses whether the regulatory assets and regulatory liabilities continue to meet the criteria for probable future recovery or settlement at each balance sheet date and when regulatory events occur. This assessment includes consideration of recent rate orders, historical regulatory treatment for similar costs, and factors such as changes in applicable regulatory and political environments. While the Company has indicated it expects to recover costs from customers through regulated rates, there is a risk that the FERC will not approve: (1) full recovery of the costs of providing utility service, or (2) full recovery of amounts invested in the utility business and a reasonable return on that investment.

We identified the impact of rate regulation as a critical audit matter due to the significant judgments made by management to support its assertions about impacted account balances and disclosures and the high degree of subjectivity involved in assessing the impact of future regulatory orders on the financial statements. Management judgments include assessing the (1) likelihood of recovery in future rates of incurred costs, (2) likelihood of refunds to customers, and (3) ongoing complaints filed with the FERC against the Company. Auditing management's judgments regarding the outcome of future decisions by the FERC, involved especially subjective judgment and specialized knowledge of accounting for rate regulation and the rate setting process.

How the Critical Audit Matter Was Addressed in the Audit

Our audit procedures related to the uncertainty of future decisions by the FERC included the following, among others:

- We tested the effectiveness of management's controls over the evaluation of the likelihood of (1) the recovery in future rates of costs incurred as property, plant, and equipment and deferred as regulatory assets, and (2) a refund or a future reduction in rates that should be reported as regulatory liabilities. We also tested the effectiveness of management's controls over the initial recognition of amounts as property, plant, and equipment; regulatory assets or liabilities; and the monitoring and evaluation of regulatory developments that may affect the likelihood of recovering costs in future rates or of a future reduction in rates.
- We evaluated the Company's disclosures related to the impacts of rate regulation, including the balances recorded and regulatory developments.
- We read relevant regulatory orders issued by the FERC for the Company and other public utilities, regulatory statutes, interpretations, procedural memorandums, filings made by intervenors, and other publicly available information to assess the likelihood of recovery in future rates or of a future reduction in rates based on precedents of the FERC's treatment of similar costs under similar circumstances. We evaluated the external information and compared to management's recorded regulatory asset and liability balances for completeness.
- For regulatory matters in process, we inspected the Company's filings and ongoing complaints filed with the FERC, including the Return on Equity, Capital Structure, and Grand Gulf Sale-Leaseback Renewal complaints, and considered the filings with the FERC by intervenors that may impact the Company's future rates, for any evidence that might contradict management's assertions.
- We obtained an analysis from management and support from internal and external legal counsel, as appropriate, regarding probability of recovery for regulatory assets or refund or future reduction in rates for regulatory liabilities not yet addressed in a regulatory order, including the complaints filed with the FERC against the Company, to assess management's assertion that amounts are probable of recovery or a future reduction in rates.

/s/ DELOITTE & TOUCHE LLP

New Orleans, Louisiana
February 26, 2021

We have served as the Company's auditor since 2001.

SYSTEM ENERGY RESOURCES, INC.
INCOME STATEMENTS

	For the Years Ended December 31,		
	2020	**2019**	**2018**
		(In Thousands)	
OPERATING REVENUES			
Electric	$495,458	$573,410	$456,707
OPERATING EXPENSES			
Operation and Maintenance:			
Fuel, fuel-related expenses, and gas purchased for resale	23,026	82,438	64,778
Nuclear refueling outage expenses	27,737	33,376	20,715
Other operation and maintenance	178,249	206,444	196,505
Decommissioning	37,181	35,729	34,336
Taxes other than income taxes	28,657	29,018	28,090
Depreciation and amortization	110,395	106,630	97,527
Other regulatory credits - net	(26,531)	(35,210)	(28,924)
TOTAL	378,714	458,425	413,027
OPERATING INCOME	116,744	114,985	43,680
OTHER INCOME			
Allowance for equity funds used during construction	9,122	8,709	8,750
Interest and investment income	36,478	29,488	35,985
Miscellaneous - net	(10,012)	(5,516)	(5,775)
TOTAL	35,588	32,681	38,960
INTEREST EXPENSE			
Interest expense	34,467	35,328	38,424
Allowance for borrowed funds used during construction	(1,809)	(2,131)	(2,218)
TOTAL	32,658	33,197	36,206
INCOME BEFORE INCOME TAXES	119,674	114,469	46,434
Income taxes	20,543	15,349	(47,675)
NET INCOME	$99,131	$99,120	$94,109

See Notes to Financial Statements.

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SYSTEM ENERGY RESOURCES, INC.
STATEMENTS OF CASH FLOWS

	For the Years Ended December 31,		
	2020	2019	2018
	(In Thousands)		
OPERATING ACTIVITIES			
Net income	$99,131	$99,120	$94,109
Adjustments to reconcile net income to net cash flow provided by (used in) operating activities:			
Depreciation, amortization, and decommissioning, including nuclear fuel amortization	184,429	212,170	186,719
Deferred income taxes, investment tax credits, and non-current taxes accrued	(455,732)	95	24,040
Changes in assets and liabilities:			
Receivables	13,932	(23,382)	18,169
Accounts payable	(11,587)	18,204	(7,067)
Prepaid taxes and taxes accrued	69,145	19,247	(51,999)
Interest accrued	729	(1,302)	(94)
Other working capital accounts	(34,158)	15,879	(45,415)
Other regulatory assets	(48,880)	(43,712)	(2,044)
Other regulatory liabilities	140,965	130,949	(156,802)
Pension and other postretirement liabilities	15,596	11,177	(23,235)
Other assets and liabilities	(119,032)	(138,304)	64,947
Net cash flow provided by (used in) operating activities	(145,462)	300,141	101,328
INVESTING ACTIVITIES			
Construction expenditures	(193,857)	(166,695)	(194,696)
Allowance for equity funds used during construction	9,122	8,709	8,750
Nuclear fuel purchases	(94,991)	(18,170)	(125,272)
Proceeds from the sale of nuclear fuel	25,836	26,223	30,634
Proceeds from nuclear decommissioning trust fund sales	418,943	500,384	573,561
Investment in nuclear decommissioning trust funds	(432,249)	(517,828)	(583,683)
Changes in money pool receivable - net	55,294	47,824	4,545
Litigation proceeds for reimbursement of spent nuclear fuel storage costs	5,459	—	—
Net cash flow used in investing activities	(206,443)	(119,553)	(286,161)
FINANCING ACTIVITIES			
Proceeds from the issuance of long-term debt	1,147,903	1,103,917	741,785
Retirement of long-term debt	(891,410)	(1,187,406)	(662,904)
Capital contribution from parent	350,000	—	—
Changes in short-term credit borrowings - net	—	—	(17,830)
Common stock dividends and distributions	(80,653)	(124,250)	(67,720)
Net cash flow provided by (used in) financing activities	525,840	(207,739)	(6,669)
Net increase (decrease) in cash and cash equivalents	173,935	(27,151)	(191,502)
Cash and cash equivalents at beginning of period	68,534	95,685	287,187
Cash and cash equivalents at end of period	$242,469	$68,534	$95,685
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:			
Cash paid during the period for:			
Interest - net of amount capitalized	$35,061	$21,052	$17,183
Income taxes	$384,329	$2,284	$53,956

See Notes to Financial Statements.

SYSTEM ENERGY RESOURCES, INC.
BALANCE SHEETS
ASSETS

	December 31,	
	2020	**2019**
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$26,086	$93
Temporary cash investments	216,383	68,441
Total cash and cash equivalents	242,469	68,534
Accounts receivable:		
Associated companies	57,743	121,972
Other	2,550	7,547
Total accounts receivable	60,293	129,519
Materials and supplies - at average cost	123,006	108,766
Deferred nuclear refueling outage costs	34,459	14,493
Prepayments and other	6,864	6,045
TOTAL	467,091	327,357
OTHER PROPERTY AND INVESTMENTS		
Decommissioning trust funds	1,215,868	1,054,098
TOTAL	1,215,868	1,054,098
UTILITY PLANT		
Electric	5,309,458	5,070,859
Construction work in progress	59,831	164,996
Nuclear fuel	175,005	149,574
TOTAL UTILITY PLANT	5,544,294	5,385,429
Less - accumulated depreciation and amortization	3,355,367	3,285,487
UTILITY PLANT - NET	2,188,927	2,099,942
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets	538,963	490,083
Accumulated deferred income tax	—	8,023
Other	3,119	3,192
TOTAL	542,082	501,298
TOTAL ASSETS	$4,413,968	$3,982,695

See Notes to Financial Statements.

SYSTEM ENERGY RESOURCES, INC.
BALANCE SHEETS
LIABILITIES AND EQUITY

	December 31,	
	2020	2019
	(In Thousands)	
CURRENT LIABILITIES		
Currently maturing long-term debt	$100,015	$10
Accounts payable:		
Associated companies	15,309	14,619
Other	41,313	64,144
Taxes accrued	82,977	13,832
Interest accrued	12,722	11,993
Other	4,248	3,381
TOTAL	256,584	107,979
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	359,835	821,963
Accumulated deferred investment tax credits	38,902	40,181
Regulatory liability for income taxes - net	151,829	142,845
Other regulatory liabilities	665,396	533,415
Decommissioning	968,910	931,729
Pension and other postretirement liabilities	125,412	109,816
Long-term debt	705,259	548,097
Other	61,295	34,602
TOTAL	3,076,838	3,162,648
Commitments and Contingencies		
COMMON EQUITY		
Common stock, no par value, authorized 1,000,000 shares; issued and outstanding 789,350 shares in 2020 and 2019	951,850	601,850
Retained earnings	128,696	110,218
TOTAL	1,080,546	712,068
TOTAL LIABILITIES AND EQUITY	$4,413,968	$3,982,695

See Notes to Financial Statements.

SYSTEM ENERGY RESOURCES, INC.
STATEMENTS OF CHANGES IN COMMON EQUITY
For the Years Ended December 31, 2020, 2019, and 2018

	Common Equity		
	Common Stock	Retained Earnings	Total
		(In Thousands)	
Balance at December 31, 2017	$658,350	$52,459	$710,809
Net income	—	94,109	94,109
Common stock dividends and distributions	(56,500)	(11,220)	(67,720)
Balance at December 31, 2018	$601,850	$135,348	$737,198
Net income	—	99,120	99,120
Common stock dividends and distributions	—	(124,250)	(124,250)
Balance at December 31, 2019	$601,850	$110,218	$712,068
Net income	—	99,131	99,131
Capital contribution from parent	350,000	—	350,000
Common stock dividends and distributions	—	(80,653)	(80,653)
Balance at December 31, 2020	$951,850	$128,696	$1,080,546

See Notes to Financial Statements.

SYSTEM ENERGY RESOURCES, INC.
SELECTED FINANCIAL DATA - FIVE-YEAR COMPARISON

	2020	2019	2018	2017	2016
	(Dollars In Thousands)				
Operating revenues	$495,458	$573,410	$456,707	$633,458	$548,291
Net income	$99,131	$99,120	$94,109	$78,596	$96,744
Total assets	$4,413,968	$3,982,695	$3,848,814	$3,938,887	$3,927,712
Long-term obligations (a)	$705,259	$548,097	$630,744	$466,484	$501,129
Electric energy sales (GWh)	5,849	9,940	6,264	6,675	5,384

(a) Includes long-term debt (excluding currently maturing debt).

Item 2. Properties

Information regarding the registrant's properties is included in Part I. Item 1. - Entergy's Business under the sections titled "**Utility - Property and Other Generation Resources**" and "**Entergy Wholesale Commodities - Property**" in this report.

Item 3. Legal Proceedings

Details of the registrant's material environmental regulation and proceedings and other regulatory proceedings and litigation that are pending or those terminated in the fourth quarter of 2020 are discussed in Part I. Item 1. - Entergy's Business under the sections titled "**Retail Rate Regulation**," "**Environmental Regulation**," and "**Litigation**" and "**Impairment of Long-lived Assets**" in Note 14 to the financial statements.

Item 4. Mine Safety Disclosures

Not applicable.

INFORMATION ABOUT EXECUTIVE OFFICERS OF ENTERGY CORPORATION

Executive Officers

Name	Age	Position	Period
Leo P. Denault (a)	61	Chairman of the Board and Chief Executive Officer of Entergy Corporation	2013-Present
A. Christopher Bakken, III (a)	59	Executive Vice President and Chief Nuclear Officer of Entergy Corporation, Entergy Arkansas, Entergy Louisiana, and System Energy	2016-Present
		Project Director, Hinkley Point C of EDF Energy	2009-2016
Marcus V. Brown (a)	59	Executive Vice President and General Counsel of Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy	2013-Present
Andrew S. Marsh (a)	49	Executive Vice President and Chief Financial Officer of Entergy Corporation	2013-Present
		Director of Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy	2013-Present
		Chief Financial Officer of Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy	2014-Present

Name	Age	Position	Period
Roderick K. West (a)	52	Group President Utility Operations of Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas	2017-Present
		President, Chief Executive Officer, and Director of System Energy	2017-Present
		Director of Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy	2017-Present
		President and Chief Executive Officer of Entergy New Orleans	2018
		Executive Vice President of Entergy Corporation	2010-2017
		Chief Administrative Officer of Entergy Corporation	2010-2016
Paul D. Hinnenkamp (a)	59	Executive Vice President and Chief Operating Officer of Entergy Corporation	2017-Present
		Director of Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas	2015-Present
		Senior Vice President and Chief Operating Officer of Entergy Corporation	2015-2017
		Senior Vice President, Capital Project Management and Technology of Entergy Services, Inc.	2015
Kathryn A. Collins	57	Senior Vice President and Chief Human Resources Officer, Entergy Corporation	2020-Present
		Chief Human Resources Officer, Arcosa, Inc.	2018-2020
		Vice President, Human Resources, Trinity, Inc.	2014-2018
Julie E. Harbert (a)	47	Senior Vice President, Corporate Business Services of Entergy Corporation	2019-Present
		Vice President, Shared Services of Entergy Services, Inc.	2017-2019
		Senior Vice President, Global Business Services of Philips Health Tech	2015-2017
Kimberly A. Fontan (a)	47	Senior Vice President and Chief Accounting Officer of Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy	2019-Present
		Vice President, System Planning of Entergy Services, Inc.	2017-2019
		Vice President, Regulatory Services of Entergy Services, Inc.	2015-2017
Peter S. Norgeot, Jr. (a)	55	Senior Vice President, Transformation of Entergy Corporation	2018-Present
		Senior Vice President, Power Generation of Entergy Services	2017-2018
		Vice President, Fossil Generation of Entergy Services	2015-2017

(a) In addition, this officer is an executive officer and/or director of various other wholly owned subsidiaries of Entergy Corporation and its operating companies.

Each officer of Entergy Corporation is elected yearly by the Board of Directors. Each officer's age and title are provided as of December 31, 2020.

PART II

Item 5. Market for Registrants' Common Equity and Related Stockholder Matters

Entergy Corporation

The shares of Entergy Corporation's common stock are listed on the New York Stock and Chicago Stock Exchanges under the ticker symbol ETR. As of January 31, 2021, there were 22,817 stockholders of record of Entergy Corporation.

Unregistered Sales of Equity Securities and Use of Proceeds

Issuer Purchases of Equity Securities (1)

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of a Publicly Announced Plan	Maximum $ Amount of Shares that May Yet be Purchased Under a Plan (2)
10/01/2020 - 10/31/2020	—	$—	—	$350,052,918
11/01/2020 - 11/30/2020	—	$—	—	$350,052,918
12/01/2020 - 12/31/2020	—	$—	—	$350,052,918
Total	—	$—	—	

In accordance with Entergy's stock-based compensation plans, Entergy periodically grants stock options to key employees, which may be exercised to obtain shares of Entergy's common stock. According to the plans, these shares can be newly issued shares, treasury stock, or shares purchased on the open market. Entergy's management has been authorized by the Board to repurchase on the open market shares up to an amount sufficient to fund the exercise of grants under the plans. In addition to this authority, the Board has authorized share repurchase programs to enable opportunistic purchases in response to market conditions. In October 2010 the Board granted authority for a $500 million share repurchase program. The amount of share repurchases under these programs may vary as a result of material changes in business results or capital spending or new investment opportunities. In addition, in the first quarter 2020, Entergy withheld 151,159 shares of its common stock at $126.31 per share, 79,153 shares of its common stock at $129.55 per share, 41,167 shares of its common stock at $131.52 per share, 2,269 shares of its common stock at $124.28 per share, 1,331 shares of its common stock at $123.74 per share, 1,088 shares of its common stock at $102.93 per share, 441 shares of its common stock at $132.19 per share, 71 shares of its common stock at $86.51 per share, 31 shares of its common stock at $115.90 per share, and 19 shares of its common stock at $86.74 per share to pay income taxes due upon vesting of restricted stock granted and payout of performance units as part of its long-term incentive program.

(1) See Note 12 to the financial statements for additional discussion of the stock-based compensation plans.

(2) Maximum amount of shares that may yet be repurchased relates only to the $500 million plan does not include an estimate of the amount of shares that may be purchased to fund the exercise of grants under the stock-based compensation plans.

Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy

There is no market for the common equity of the Registrant Subsidiaries. Information with respect to restrictions that limit the ability of the Registrant Subsidiaries to pay dividends or distributions is presented in Note 7 to the financial statements.

Item 6. Selected Financial Data

Refer to **"SELECTED FINANCIAL DATA - FIVE-YEAR COMPARISON OF ENTERGY CORPORATION AND SUBSIDIARIES, ENTERGY ARKANSAS, LLC AND SUBSIDIARIES, ENTERGY LOUISIANA, LLC AND SUBSIDIARIES, ENTERGY MISSISSIPPI, LLC, ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES, ENTERGY TEXAS, INC. AND SUBSIDIARIES, and SYSTEM ENERGY RESOURCES, INC."** which follow each company's financial statements in this report, for information with respect to selected financial data and certain operating statistics.

Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations

Refer to **"MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS OF ENTERGY CORPORATION AND SUBSIDIARIES, ENTERGY ARKANSAS, LLC AND SUBSIDIARIES, ENTERGY LOUISIANA, LLC AND SUBSIDIARIES, ENTERGY MISSISSIPPI, LLC, ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES, ENTERGY TEXAS, INC. AND SUBSIDIARIES, and SYSTEM ENERGY RESOURCES, INC."**

Item 7A. Quantitative and Qualitative Disclosures About Market Risk

Refer to **"MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS OF ENTERGY CORPORATION AND SUBSIDIARIES - Market and Credit Risk Sensitive Instruments."**

Item 8. Financial Statements and Supplementary Data

Refer to **"TABLE OF CONTENTS - Entergy Corporation and Subsidiaries, Entergy Arkansas, LLC and Subsidiaries, Entergy Louisiana, LLC and Subsidiaries, Entergy Mississippi, LLC, Entergy New Orleans, LLC and Subsidiaries, Entergy Texas, Inc. and Subsidiaries, and System Energy Resources, Inc."**

Item 9. Changes In and Disagreements With Accountants On Accounting and Financial Disclosure

No event that would be described in response to this item has occurred with respect to Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, or System Energy.

Item 9A. Controls and Procedures

Disclosure Controls and Procedures

As of December 31, 2020, evaluations were performed under the supervision and with the participation of Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy (individually "Registrant" and collectively the "Registrants") management, including their respective Principal Executive Officers (PEO) and Principal Financial Officers (PFO). The evaluations assessed the effectiveness of the Registrants' disclosure controls and procedures. Based on the evaluations, each PEO and PFO has concluded that, as to the Registrant or Registrants for which they serve as PEO or PFO, the Registrant's or Registrants' disclosure controls and procedures are effective to ensure that information required to be disclosed by each Registrant in reports that it files or submits under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms; and that the Registrant's or Registrants' disclosure controls and procedures are also effective in reasonably assuring that such information is accumulated and communicated to the Registrant's or Registrants' management, including their respective PEOs and PFOs, as appropriate to allow timely decisions regarding required disclosure.

Internal Control over Financial Reporting (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

The managements of Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy (individually "Registrant" and collectively the "Registrants") are responsible for establishing and maintaining adequate internal control over financial reporting for the Registrants. Each Registrant's internal control system is designed to provide reasonable assurance regarding the preparation and fair presentation of each Registrant's financial statements presented in accordance with generally accepted accounting principles.

All internal control systems, no matter how well designed, have inherent limitations. Therefore, even those systems determined to be effective can provide only reasonable assurance with respect to financial statement preparation and presentation.

Each Registrant's management assessed the effectiveness of each Registrant's internal control over financial reporting as of December 31, 2020. In making this assessment, each Registrant's management used the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission (COSO) in Internal Control - Integrated Framework. The 2013 COSO Framework was utilized for management's assessment.

Based on each management's assessment and the criteria set forth by the 2013 COSO Framework, each Registrant's management believes that each Registrant maintained effective internal control over financial reporting as of December 31, 2020.

The report of Deloitte & Touche LLP, Entergy Corporation's independent registered public accounting firm, regarding Entergy Corporation's internal control over financial reporting is included herein. The report of Deloitte & Touche LLP is not applicable to Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy because these Registrants are non-accelerated filers.

Changes in Internal Controls over Financial Reporting

Under the supervision and with the participation of each Registrant's management, including its respective PEO and PFO, each Registrant evaluated changes in internal control over financial reporting that occurred during the quarter ended December 31, 2020 and found no change that has materially affected, or is reasonably likely to materially affect, internal control over financial reporting.

Attestation Report of Registered Public Accounting Firm

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and Board of Directors of
Entergy Corporation and Subsidiaries

Opinion on Internal Control over Financial Reporting

We have audited the internal control over financial reporting of Entergy Corporation and Subsidiaries (the "Corporation") as of December 31, 2020, based on criteria established in *Internal Control —Integrated Framework (2013)* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In our opinion, the Corporation maintained, in all material respects, effective internal control over financial reporting as of December 31, 2020, based on criteria established in *Internal Control – Integrated Framework (2013)* issued by COSO.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated financial statements as of and for the year ended December 31, 2020 of the Corporation and our report dated February 26, 2021 expressed an unqualified opinion on those consolidated financial statements.

Basis for Opinion

The Corporation's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Item 9A, Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Corporation's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Corporation in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ DELOITTE & TOUCHE LLP

New Orleans, Louisiana
February 26, 2021

PART III

Item 10. Directors, Executive Officers, and Corporate Governance of the Registrants (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas)

Information required by this item concerning directors of Entergy Corporation is set forth under the heading "Proposal 1 – Election of Directors" contained in the Proxy Statement of Entergy Corporation, to be filed in connection with its Annual Meeting of Stockholders to be held May 7, 2021, and is incorporated herein by reference.

All officers and directors listed below held the specified positions with their respective companies as of the date of filing this report, unless otherwise noted.

Name	Age	Position	Period
Entergy Arkansas, LLC			
Directors			
Laura R. Landreaux	47	President and Chief Executive Officer of Entergy Arkansas	2018-Present
		Director of Entergy Arkansas	2018-Present
		Operational Finance Director of Entergy Arkansas	2017-2018
		Vice President, Regulatory Affairs of Entergy Arkansas	2014-2017
Paul D. Hinnenkamp		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Andrew S. Marsh		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Roderick K. West		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Officers			
A. Christopher Bakken, III		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Marcus V. Brown		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Leo P. Denault		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Paul D. Hinnenkamp		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Laura R. Landreaux		See information under the Entergy Arkansas Directors Section above.	
Andrew S. Marsh		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Kimberly A. Fontan		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Roderick K. West		See information under the Information about Executive Officers of Entergy Corporation in Part I.	

ENTERGY LOUISIANA, LLC			
Directors			
Phillip R. May, Jr.	58	President and Chief Executive Officer of Entergy Louisiana	2013-Present
		Director of Entergy Louisiana	2013-Present
Paul D. Hinnenkamp		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Andrew S. Marsh		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Roderick K. West		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Officers			
A. Christopher Bakken, III		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Marcus V. Brown		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Leo P. Denault		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Paul D. Hinnenkamp		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Andrew S. Marsh		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Phillip R. May, Jr.		See information under the Entergy Louisiana Directors Section above.	
Kimberly A. Fontan		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Roderick K. West		See information under the Information about Executive Officers of Entergy Corporation in Part I.	

ENTERGY MISSISSIPPI, LLC			
Directors			
Haley R. Fisackerly	55	President and Chief Executive Officer of Entergy Mississippi	2008-Present
		Director of Entergy Mississippi	2008-Present
Paul D. Hinnenkamp		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Andrew S. Marsh		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Roderick K. West		See information under the Information about Executive Officers of Entergy Corporation in Part I.	

Officers

Marcus V. Brown	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Leo P. Denault	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Haley R. Fisackerly	See information under the Entergy Mississippi Directors Section above.
Paul D. Hinnenkamp	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Andrew S. Marsh	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Kimberly A. Fontan	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Roderick K. West	See information under the Information about Executive Officers of Entergy Corporation in Part I.

ENTERGY NEW ORLEANS, LLC

Directors

David D. Ellis	52	President and Chief Executive Officer of Entergy New Orleans	2018-Present
		Director of Entergy New Orleans	2018-Present
		President and Chief Executive Officer, Global Power Technologies	2018
		Managing Director and Chairman of Comverge International, Inc.	2010-2017
Paul D. Hinnenkamp		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Andrew S. Marsh		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Roderick K. West		See information under the Information about Executive Officers of Entergy Corporation in Part I.	

Officers

Marcus V. Brown	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Leo P. Denault	See information under the Information about Executive Officers of Entergy Corporation in Part I.
David D. Ellis	See information under the Entergy New Orleans Directors Section above.
Paul D. Hinnenkamp	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Andrew S. Marsh	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Kimberly A. Fontan	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Roderick K. West	See information under the Information about Executive Officers of Entergy Corporation in Part I.

ENTERGY TEXAS, INC.

Directors			
Sallie T. Rainer	58	President and Chief Executive Officer of Entergy Texas	2012-Present
		Director of Entergy Texas	2012-Present
Paul D. Hinnenkamp		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Andrew S. Marsh		See information under the Information about Executive Officers of Entergy Corporation in Part I.	
Roderick K. West		See information under the Information about Executive Officers of Entergy Corporation in Part I.	

Officers	
Marcus V. Brown	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Leo P. Denault	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Paul D. Hinnenkamp	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Andrew S. Marsh	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Kimberly A. Fontan	See information under the Information about Executive Officers of Entergy Corporation in Part I.
Sallie T. Rainer	See information under the Entergy Texas Directors Section above.
Roderick K. West	See information under the Information about Executive Officers of Entergy Corporation in Part I.

The directors and officers of Entergy Texas are elected annually to serve by the unanimous consent of its sole common stockholder. The directors and officers of Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC and Entergy New Orleans, LLC are elected annually to serve by the unanimous consent of the sole common membership owner, Entergy Utility Holding Company, LLC. Entergy Corporation's directors are elected annually at the annual meeting of shareholders. Entergy Corporation's officers are elected at the annual organizational meeting of the Board of Directors, which immediately follows the annual meeting of shareholders. The age of each officer and director for whom information is presented above is as of December 31, 2020.

Corporate Governance Guidelines and Committee Charters

Each of the Audit, Corporate Governance, and Personnel Committees of Entergy Corporation's Board of Directors operates under a written charter. In addition, the Board has adopted Corporate Governance Guidelines. Each charter and the guidelines are available through Entergy's website (www.entergy.com) or upon written request.

Audit Committee of the Entergy Corporation Board

The following directors are members of the Audit Committee of Entergy Corporation's Board of Directors:

Patrick J. Condon (Chairman)
Philip L. Frederickson
M. Elise Hyland
Karen A. Puckett

All Audit Committee members are independent. In addition to the general independence requirements of the NYSE, all Audit Committee members must meet the heightened independence standards imposed by the SEC and NYSE. All Audit Committee members possess the level of financial literacy required by the NYSE rules and the Board has determined that Messrs. Condon and Frederickson satisfy the financial expertise requirements of the NYSE and have the requisite experience to be designated an audit committee financial expert as that term is defined by the rules of the SEC.

Code of Ethics

Effective October 2018, the Entergy Corporation Board of Directors adopted a Code of Business Conduct and Ethics that applies to members of the Entergy Corporation Board of Directors and all Entergy officers and employees. The Code of Business Conduct and Ethics includes Special Provisions Relating to Principal Executive Officer and Senior Financial Officers. It is to be read in conjunction with Entergy's omnibus code of integrity under which Entergy operates, called the Code of Entegrity, as well as system policies. All employees are expected to abide by the Codes. Non-bargaining employees are required to acknowledge annually that they understand and abide by the Code of Entegrity. The Code of Business Conduct and Ethics, including any amendments or any waivers thereto, and the Code of Entegrity are available through Entergy's website (www.entergy.com) or upon written request.

Nominations to the Entergy Corporation Board of Directors; Nominating Procedure

Shareholders wishing to recommend a candidate to the Corporate Governance Committee should do so by submitting the recommendation in writing to Entergy Corporation's Secretary at 639 Loyola Avenue, P.O. Box 61000, New Orleans, LA 70161, and it will be forwarded to the Corporate Governance Committee members for their consideration. Any recommendation should include:

- the number of shares of Entergy Corporation stock held by the shareholder;
- the name and address of the candidate;
- a brief biographical description of the candidate, including his or her occupation for at least the last five years, and a statement of the qualifications of the candidate, taking into account the qualification requirements discussed in the Proxy Statement under "Board of Directors - Identifying Director Candidates"; and
- the candidate's signed consent to be named in the Proxy Statement and a representation of such candidates' intent to serve as a director for the entire term if elected.

Once the Corporate Governance Committee receives the recommendation, it may request additional information from the candidate about the candidate's independence, qualifications, and other information that would assist the Corporate Governance Committee in evaluating the candidate, as well as certain information that must be disclosed about the candidate in the Proxy Statement, if nominated. The Corporate Governance Committee will apply the same standards in considering director candidates recommended by shareholders as it applies to other candidates.

Item 11. Executive Compensation

ENTERGY CORPORATION

Information concerning compensation earned by the directors and officers of Entergy Corporation is set forth in its Proxy Statement, to be filed in connection with the Annual Meeting of Shareholders to be held May 7, 2021, under the headings "Compensation Discussion and Analysis," "Annual Compensation Programs Risk Assessment," "Executive Compensation Tables," "Pay Ratio Disclosure," "Our 2021 Director Nominees," and "2020 Non-Employee Director Compensation," all of which information is incorporated herein by reference. References in this section to the "Company" refer to Entergy Corporation.

ENTERGY ARKANSAS, ENTERGY LOUISIANA, ENTERGY MISSISSIPPI, ENTERGY NEW ORLEANS, AND ENTERGY TEXAS

COMPENSATION DISCUSSION AND ANALYSIS

This Compensation Discussion and Analysis describes Entergy Corporation's executive compensation policies, programs, philosophy and decisions regarding the Named Executive Officers ("NEOs") for 2020. It also explains how and why the Personnel Committee of Entergy Corporation's Board of Directors arrived at the specific compensation decisions involving the NEOs in 2020 who were:

Name[(1)]	Title
A. Christopher Bakken, III	Executive Vice President, Nuclear Operations/Chief Nuclear Officer
Marcus V. Brown	Executive Vice President and General Counsel
Leo P. Denault	Chairman of the Board and Chief Executive Officer
David D. Ellis	President and Chief Executive Officer, Entergy New Orleans
Haley R. Fisackerly	President and Chief Executive Officer, Entergy Mississippi
Laura R. Landreaux	President and Chief Executive Officer, Entergy Arkansas
Andrew S. Marsh	Executive Vice President and Chief Financial Officer, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas
Phillip R. May, Jr.	President and Chief Executive Officer, Entergy Louisiana
Sallie T. Rainer	President and Chief Executive Officer, Entergy Texas
Roderick K. West	Group President, Utility Operations

(1) Messrs. Bakken, Brown, Denault, Marsh, and West hold the positions referenced above as executive officers of Entergy Corporation and are members of Entergy Corporation's Office of the Chief Executive ("OCE"). No additional compensation was paid in 2020 to any of these officers for their service as NEOs of the Utility operating companies.

Entergy Corporation's Compensation Principles and Philosophy

Entergy Corporation's executive compensation programs are based on a philosophy of pay for performance that supports its strategy and business objectives. It believes the executive pay programs:

- **Motivate** its management team to drive strong financial and operational results by linking pay to performance.
- **Attract** and retain a highly experienced, diverse and successful management team.
- **Incentivize and reward** the achievement of results that are deemed by the Personnel Committee to be consistent with the overall goals and strategic direction that the Entergy Corporation Board has approved.
- **Create** sustainable value for the benefit of all of Entergy Corporation's stakeholders, including its customers, employees, communities and owners.
- **Align** the interests of the executives and Entergy Corporation's investors in its long-term business strategy by directly tying the value of equity-based awards to Entergy Corporation's stock price performance and relative total shareholder return.

Executive Compensation Best Practices:

Entergy Corporation regularly reviews its executive compensation programs to align them with commonly viewed best practices in the market and to reflect feedback from discussions with Entergy Corporation's investors on executive compensation.

What Entergy Corporation Does
✓ Executive compensation programs are highly correlated to performance and focused on long-term value creation
✓ Double trigger for cash severance payments and equity acceleration in the event of a change in control
✓ Clawback policy
✓ Maximum payout capped at 200% of target for annual incentive awards and Long-Term Performance Unit Program for members of the OCE
✓ Rigorous goal setting aligned with externally disclosed annual and multi-year financial targets
✓ Minimum vesting periods for equity-based awards
✓ Long-term compensation mix weighted more toward performance units than service-based equity awards
✓ All long-term incentive compensation is settled in Entergy Corporation common stock
✓ Rigorous stock ownership and share retention requirements
✓ Annual Say on Pay vote
✓ Annual Compensation Risk Assessment
What Entergy Corporation Doesn't Do
× No 280G tax "gross up" payments in the event of a change in control
× No tax "gross up" payments on any executive perquisites for members of the OCE, other than relocation benefits
× No option repricing or cash buy-outs for underwater options without shareholder approval
× No agreements providing for severance payments to executive officers that exceed 2.99 times annual base salary and annual incentive awards without shareholder approval
× No unusual or excessive perquisites
× No hedging or pledging of Entergy Corporation common stock
× No fixed term employment agreements
× No new officer participation in the System Executive Retirement Plan
× No grants of supplemental service credit to newly-hired officers under any of Entergy Corporation's non-qualified retirement plans

How Entergy Corporation Makes Compensation Decisions

The Personnel Committee oversees the executive compensation programs and policies with the advice of its independent compensation consultant and support from Entergy Corporation's management team.

Personnel Committee	• The Personnel Committee is responsible for the review and approval of all aspects of the executive compensation programs and policies.
	• Among its duties, the Personnel Committee is responsible for approving the compensation for all members of the OCE, including:
	  • Annual review of the compensation elements and mix of elements for the following year;
	  • Annual review and approval of incentive program design, goals and objectives for alignment with Entergy Corporation's compensation and business strategies;
	  • Evaluation of Company and individual performance results in light of these goals and objectives;
	  • Evaluation of the competitiveness of each executive officer's total compensation package;
	  • Approval of any changes to its executive officers' compensation, including but not limited to, base salary, annual and long-term incentive award opportunities and retention programs;
	  • Evaluation of the performance of Entergy Corporation's Chairman and Chief Executive Officer; and
	  • Reporting, at least annually, to the Entergy Corporation Board of Directors on succession planning.
	• The Personnel Committee also receives reports and engages on other significant matters affecting the general employee population, including workforce diversity, inclusion and belonging, organizational health and safety.
	• The Personnel Committee has the sole authority to hire its compensation consultant, approve its compensation, determine the nature and scope of its services, evaluate its performance and terminate its engagement.

Management	• Entergy Corporation's Chief Executive Officer and Chief Human Resources Officer (CHRO) work closely with the Personnel Committee in managing the executive compensation programs and attend meetings of the Personnel Committee. Mr. Denault and the CHRO, Kathryn Collins since she joined Entergy Corporation, attended all of the Personnel Committee meetings held in 2020. • The Chief Executive Officer reviews with the committee the performance of the members of the OCE other than himself and makes recommendations to the committee regarding compensation for these executive officers.

Independent Compensation Consultant	• During 2020, Pay Governance, LLC ("Pay Governance") assisted the Personnel Committee with its responsibilities related to Entergy Corporation's executive compensation programs.
	• Pay Governance:
	  • Regularly attended meetings of the committee;
	  • Conducted studies of competitive compensation practices;
	  • Identified Entergy Corporation's market surveys and proxy peer group;
	  • Provided updates on executive compensation trends and regulatory developments;
	  • Reviewed base salary, annual incentives and long-term incentive compensation opportunities relative to competitive practices; and
	  • Developed conclusions and recommendations related to the executive compensation programs for consideration by the committee.

2021 Executive Compensation Program Enhancements

Annual Incentive Awards. Feedback from Entergy Corporation's investors has indicated that environmental, social and governance (or ESG) issues are being viewed as increasingly vital to long-term performance. In addition, investors are expecting more transparency regarding corporate ESG commitments. This echoes Entergy Corporation's own commitment to ESG and all of its critical stakeholders. Thus, Entergy Corporation conducted a comprehensive review of its incentive program in 2020 to identify and prioritize the optimal incentive metrics – including ESG goals – to use in the 2021 program. Historically, Entergy Corporation has used two financial measures to determine the Entergy Achievement Multiplier ("EAM"), which is the performance metric used to determine the maximum funding available for annual incentive awards. ESG and other performance metrics were considered in determining the allocation of incentive funds to certain workgroups and individual recipients. However, to demonstrate Entergy Corporation's strong commitment to its ESG goals, and to more explicitly link compensation to the interests of its stakeholders, the EAM will be determined based on financial and non-financial measures beginning in 2021. Specifically, a financial measure will be weighted 60%, while quantitative and qualitative non-financial measures, including ESG metrics, will account for the remaining 40%.

Financial Measure: Keeping with the committee's goal of aligning performance measures with financial results that link to externally communicated investor guidance, ETR Tax Adjusted earnings per share or ETR Tax Adjusted EPS will continue to be used as the financial measure to determine 60% of the EAM. ETR Tax Adjusted EPS is based on Entergy's Adjusted Earnings Per Share ("ETR Adjusted EPS"), which is the earnings measure that is used for external guidance. ETR Adjusted EPS adjusts Entergy Corporation's as reported (GAAP) earnings per share results to eliminate the impact of its Entergy Wholesale Commodities business, significant tax items and other non-routine items. To arrive at ETR Tax Adjusted EPS, ETR Adjusted EPS is adjusted to add back the effect of significant tax items, and to eliminate the effect of: (i) major storms, including the impact on total debt of pending securitizations, (ii) the resolution of certain unresolved regulatory litigation matters, (iii) unrealized gains or losses on equity securities, (iv) potential effects of federal income tax law changes, and (v) elective contributions to pension plans or trusts related to non-qualified postretirement benefits that deviate from original plan assumptions.

Non-Financial Measures: The following non-financial metrics will be used to determine 40% of the EAM for 2021:

Measure	Description	Rationale
Safety	Quantitative measure of serious injury and fatalities per 100 employees or contractors as defined by EEI.	• Ensures a safe and incident-free workplace is maintained for all of Entergy Corporation's employees and contractors.
Diversity, Inclusion & Belonging (DIB)	Overall qualitative assessment of DIB key performance indicators assessed in the workforce, workplace and marketplace, informed by quantitative measures; progress on DIB initiatives; and responsiveness to emergent issues.	• Reinforces the commitment to be a fair and equitable work environment that is welcoming to all and allows Entergy Corporation to attract and retain superb talent, allowing it to execute its strategy to be the Premier Utility. • Drives an engaged workforce; customer-centric service and solutions; enhancement of owner value; and community partnerships.
Environmental Stewardship	Assessment of progress toward environmental commitments through performance on key initiatives and Utility CO2 emission rate outcomes.	• Reinforces Entergy Corporation's commitment to long-term sustainability and a reduced impact on the environment. Ensures accountability for achieving its significant external commitments to reduce carbon emissions.
Customer Net Promoter Score	Utilize quantitative Residential Net Promoter Score benchmark survey process.	• Incentivizes actions that drive positive customer outcomes (as measured through customer feedback) including impacts on reliability improvements, responsiveness, continuous improvement and innovation. • Signals overall health and loyalty of Entergy Corporation's customer relationship.

Targets for each of the non-financial measures will be clearly defined and will be designed to drive employee behaviors that support all four of Entergy Corporation's stakeholders – customers, employees, communities and our owners.

Long-Term Performance Incentive Program ("LTIP"). In recent performance periods, Entergy Corporation has used two financial measures to determine awards under the LTIP – a cumulative earnings per share (EPS) measure (most recently cumulative ETR Adjusted EPS) and relative total shareholder return ("TSR"). To emphasize the importance of strong cash generation for the long-term health of its business, Entergy Corporation is replacing the EPS measure with a credit measure – adjusted FFO/Debt ratio for the 2021 – 2023 performance period. The adjusted FFO/Debt ratio is the ratio of: (i) adjusted funds from operations calculated as operating cash flow adjusted for allowance for funds used during construction, working capital and the effects of securitization revenue, and the pre-defined exclusions discussed above for the annual incentives; to (ii) total debt, excluding outstanding or pending securitization debt. The Personnel Committee decided to use this ratio because it emphasizes financial stability, noting that a financially healthy utility creates the capacity to make investments on behalf of customers, addresses the needs of communities, provides low-cost access to capital markets and promotes employee confidence. Relative TSR will continue to be used as the other performance measure for the 2021 – 2023 LTIP performance period, with relative TSR weighted 80% and the credit measure weighted 20%. Relative TSR measures Entergy Corporation's total TSR relative to the TSR of the companies in the Philadelphia Utility Index as of December 31, 2020. Targets for the LTIP performance measures will include the same exclusions that will be used to determine the annual incentive financial measure targets.

2020 Incentive Payouts

Performance measures and targets for the 2020 annual incentive awards were determined by the Personnel Committee in January 2020 and the targets and measures for the 2018 – 2020 LTIP performance cycle were

established in January 2018. In January 2021, the Personnel Committee certified the results for the EAM for the 2020 annual incentive awards and the 2018 – 2020 LTIP performance cycle. The Personnel Committee did not make any adjustments to the targets for either program for the impact of COVID-19 on Entergy Corporation and its subsidiaries.

Entergy Corporation believes the 2020 incentive pay outcomes for the NEOs demonstrate the application of its pay for performance philosophy.

Annual Incentive Awards

The Personnel Committee determined that the 2020 EAM would be based on two equally weighted performance metrics:

- ETR Tax Adjusted Earnings Per Share ("ETR Tax Adjusted EPS"): Entergy Corporation uses a single non-GAAP earnings measure for guidance and investor reporting purposes that reflects its ongoing business. This measure, Entergy Adjusted Earnings Per Share ("ETR Adjusted EPS") adjusts Entergy Corporation's as reported (GAAP) earnings per share results to eliminate the impact of its Entergy Wholesale Commodities business, significant tax items and other non-routine items. ETR Tax Adjusted EPS is based on the externally reported ETR Adjusted EPS, which is then adjusted to add back the effect of significant tax items, and to eliminate the effect of major storms, the resolution of certain unresolved regulatory litigation matters, changes in federal income tax law and unrealized gains or losses on equity securities (the "Pre-Determined Exclusions"), as well as other items the Personnel Committee may consider appropriate adjustments based on management accountability and business rationale.

- Entergy Adjusted Operating Cash Flow ("ETR Adjusted OCF"): ETR Adjusted OCF is calculated based on Entergy Corporation's as-reported (GAAP) operating cash flow, adjusted to eliminate the effect of any Pre-Determined Exclusions.

The 2020 annual incentive award targets and results determined by the Personnel Committee were:

Annual Incentive Program Performance Goals	**2020 Targets**	**2020 Results**
ETR Tax Adjusted EPS	$5.60	$6.90
ETR Adjusted OCF ($ billions)	$3.450	$3.127
EAM as a percentage of target	100%	120%
Average NEO Payout (as a percentage of target)		124%

In January 2021, the Personnel Committee determined that ETR Adjusted EPS exceeded the maximum by $1.30, but fell short of achieving its ETR Adjusted OCF target of $3.45 billion by approximately $323 million, leading to a preliminary EAM of 118%. In recognition of management's success in achieving positive outcomes in 2020 on certain strategic efforts deemed critical to Entergy Corporation's long-term success, the committee exercised its discretion to increase the EAM by 2% to 120%. Based on each NEO's individual accountabilities and accomplishments, the committee then determined individual annual incentive awards of 115% to 150% of the target opportunity for each of the NEOs.

Long-Term Performance Unit Program

In January 2018, the Personnel Committee chose relative TSR and Cumulative Adjusted Utility, Plant & Other Earnings Per Share ("Cumulative Adjusted UP&O EPS"), each weighted equally, as the performance measures for the 2018 – 2020 LTIP performance period. Cumulative Adjusted UP&O EPS adjusts Entergy Corporation's cumulative operational Utility, Parent & Other results to eliminate the impact of tax items and weather. Similar to the way targets are established for the annual incentive awards, the relative TSR and Cumulative Adjusted UP&O EPS performance measures were established by the Personnel Committee after the Board's review of Entergy Corporation's strategic plan.

The targets and results for the 2018 – 2020 LTIP performance period as determined by the Personnel Committee were:

LTIP Results	2018 - 2020 LTIP Target	2018 - 2020 LTIP Result
Relative TSR	Median	2nd Quartile
Cumulative Adjusted UP&O EPS	$15.20	$15.25
Payout (as a percentage of target)	100%	126%

What Entergy Corporation Pays and Why

Principal Executive Compensation Elements

The principal components of Entergy Corporation's 2020 executive compensation programs and the purpose of each component were:

Compensation Element	Form	Performance Metrics	Primary Purpose	Vesting Period	Subject to Clawback
Base Salary	Cash	N/A	Provides a base level of competitive cash compensation for executive talent.	N/A	N/A
Annual Incentive	Cash	ETR Tax Adjusted EPS (50%) ETR Adjusted OCF (50%)	Motivates and rewards executives for performance on key financial measures during the year.	1 year	✓
Long-Term Performance Units	Equity	Relative TSR (80%) Cumulative ETR Adjusted EPS (20%)	Focuses the executive officers on building long-term shareholder value, growing earnings and increases executives' ownership of Entergy Corporation common stock.	3 years	✓
Stock Options	Equity	N/A	Align interests of executives with long-term shareholder value, provide competitive compensation, and increase executives' ownership in Entergy Corporation common stock.	3 years	✓
Restricted Stock	Equity	N/A	Aligns interests of executives with long-term shareholder value, provides competitive compensation, retains executive talent and increases the executives' ownership in Entergy Corporation common stock.	3 years	✓

Competitive Positioning

Market Data for Compensation Comparison

Annually, the Personnel Committee reviews:

- Published and private compensation survey data compiled by Pay Governance, the Personnel Committee's independent compensation consultant;

- Both utility and general industry data to determine total cash compensation (base salary and annual incentive) for non-industry specific roles;
- Data from utility companies to determine total cash compensation for management roles that are utility-specific, such as Group President, Utility Operations; and
- Utility market data to determine long-term incentives for all positions.

How the Personnel Committee Uses the Market Data

The Personnel Committee uses this survey data to develop compensation opportunities that are designed to deliver total direct compensation ("TDC") within a targeted range of approximately the 50th percentile of the surveyed companies in the aggregate. In most cases, the committee considers its objectives to have been met if Entergy Corporation's Chief Executive Officer and the eight other executive officers (including the applicable NEOs) who constitute the OCE each has a target compensation opportunity that falls within a targeted range of 85% - 115% of the 50th percentile of the survey data. In general, compensation levels for an executive officer who is new to a position tend to be at the lower end of the competitive range, while seasoned executive officers whose experience and skill set are viewed as critical to retain would be positioned at the higher end of the competitive range. Generally, differences in the levels of TDC among the NEOs are primarily driven by the scope of their responsibilities, differences in the competitive market pay range for similar positions, performance and considerations of internal pay equity.

Proxy Peer Group

Although the survey data described above are the primary data used in benchmarking compensation, the committee uses compensation information from the companies included in the Philadelphia Utility Index to evaluate the overall reasonableness of Entergy Corporation's compensation programs and to determine relative TSR for the 2020 - 2022 LTIP performance period. The companies included in the Philadelphia Utility Index at the time the Personnel Committee approved the 2020 compensation model and framework were:

AES Corporation	El Paso Electric Co.*
Ameren Corporation	Eversource Energy
American Electric Power Co. Inc.	Exelon Corporation
American Water Works Company, Inc.	FirstEnergy Corporation
CenterPoint Energy Inc.	NextEra Energy, Inc.
Consolidated Edison Inc.	Pinnacle West Capital Corporation
Dominion Energy	Public Service Enterprise Group, Inc.
DTE Energy Company	Southern Company
Duke Energy Corporation	Xcel Energy, Inc.
Edison International	

*El Paso Electric Co. is no longer included in the Philadelphia Utility Index.

2020 Compensation Decisions

Base Salary

When setting the base salaries of the NEOs who are members of the OCE, the Personnel Committee generally targets the range of compensation paid to similarly situated executive officers of the companies included in the market data previously discussed in this Compensation Discussion and Analysis under "Competitive Positioning." For the other NEOs, their salaries are established by their immediate supervisors using the same criteria. The base salaries of the NEOs are considered annually as part of the performance review process, and upon a NEO's promotion or other change in job responsibilities. Based on this review in 2020 and after reviewing the market data above, all of the NEOs, other than Mr. Denault, received increases in their base salaries ranging from approximately 2.5% to 6.15%. In 2020, Mr. Denault did not receive an increase in his base salary. Instead, the

Personnel Committee increased Mr. Denault's TDC by increasing his long-term incentive target opportunities; thereby, increasing the portion of his compensation that is "at risk" and further aligning his interests with those of Entergy Corporation's shareholders.

The following table sets forth the 2019 and 2020 base salaries for the Named Executive Officers. Changes in base salaries for 2020 were effective in April.

Named Executive Officer	2019 Base Salary	2020 Base Salary
A. Christopher Bakken, III	$654,078	$673,700
Marcus V. Brown	$666,250	$690,000
Leo P. Denault	$1,260,000	$1,260,000
David D. Ellis	$313,388	$321,849
Haley R. Fisackerly	$376,023	$388,244
Laura R. Landreaux	$316,470	$326,755
Andrew S. Marsh	$650,000	$690,000
Phillip R. May, Jr.	$392,043	$404,784
Sallie T. Rainer	$347,422	$358,713
Roderick K. West	$714,013	$731,863

Annual Incentive Compensation

In 2020, annual incentive awards were tied to Entergy Corporation's financial and operational performance through the EAM. Entergy Corporation uses the following process to determine annual incentive awards:

- Establish Performance Measures to Determine EAM Pool. Annually, the Personnel Committee engages in a rigorous process to determine the performance measures used to determine the EAM. The Personnel Committee's goal is to establish measures that are consistent with Entergy Corporation's strategy and business objectives for the upcoming year, as reflected in its strategic plan, and are designed to drive results that represent a high level of achievement. These measures are approved based on a comprehensive review of Entergy Corporation's strategic plan by its full Board of Directors conducted in December of the preceding year and updated in January to reflect key drivers of anticipated changes in performance from the preceding year.

- Establish Target Achievement Levels. In January, after Entergy Corporation's strategic plan is updated to reflect any changes from that reviewed in December, the Personnel Committee establishes the specific targets that must be achieved for each performance measure. The Personnel Committee also seeks to assure that the targets:

    - Take into account changes in the business environment and specific challenges facing Entergy Corporation;
    - Reflect an appropriate balancing of the various risks and opportunities recognized at the time the targets are set; and
    - Are aligned with external expectations communicated to Entergy Corporation's shareholders.

- Establish NEO Target Opportunities. In January of each year, the Personnel Committee establishes the target opportunities for the members of the OCE based on its review of the competitive analysis of job-specific market data prepared by Pay Governance as well as the officer's role, individual performance and internal equity considerations. For the NEOs who are members of the OCE (Messrs. Bakken, Brown, Denault, Marsh and West), target award opportunities are established based on these factors. For the other NEOs, target award opportunities are determined based on their management level within the Entergy organization. Executive management levels at Entergy Corporation range from ML level 1 through ML level 4 (the "ML 1-4 Officers"). At December 31, 2020, Mr. May held a Level 3 position, and Mr. Ellis,

Mr. Fisackerly, Ms. Landreaux and Ms. Rainer held Level 4 positions. Accordingly, their respective incentive award opportunities differ from one another based on either their management level or the external market data developed by the Committee's independent compensation consultant. The 2020 target opportunities were increased for Mr. Bakken, Mr. Brown, Mr. Marsh and Mr. West to align more closely with market data and internal pay equity. Mr. Denault's 2020 target opportunity was unchanged from the level set in 2019 due to the Personnel Committee's decision to increase his TDC by increasing his long-term incentive target opportunities. The target levels for the other NEOs are comparable to the levels set for 2019.

- Determine the EAM. In January, after the end of the fiscal year, the Finance and Personnel Committees jointly review Entergy Corporation's financial results and the Personnel Committee determines the EAM, which represents the level of success in achieving the performance objectives established by the committee and determines the maximum funding level of the annual incentive plan, as a percentage of the total target opportunity.

- Determine Annual Incentive Awards. To determine individual executive officer awards under the annual incentive plan, the Personnel Committee considers not only each executive's role in executing on Entergy Corporation's strategies and delivering the financial performance achieved, but also the individual's accountability for any challenges Entergy Corporation experienced during the year.

Establishing 2020 Financial Measures and Targets

Using the process described above, in December 2019, the Personnel Committee decided to use ETR Tax Adjusted EPS and ETR Adjusted OCF, with each measure weighted equally, as the performance measures for determining the 2020 EAM pool. ETR Tax Adjusted EPS is based on ETR Adjusted EPS, which is the primary earnings measure used by Entergy Corporation externally and the measure on which it provides annual earnings guidance. To arrive at ETR Tax Adjusted EPS, ETR Adjusted EPS is adjusted to add back the effect of any significant tax items that were excluded to arrive at ETR Adjusted EPS and to eliminate the effects, if any, of the Pre-Determined Exclusions. ETR Adjusted OCF is calculated based on Entergy Corporation's as-reported (GAAP) operating cash flow, adjusted to eliminate the effect of any significant non-routine items not representative of the ongoing business, such as items associated with the decisions to sell or close the Entergy Wholesale Commodities nuclear plants, and any Pre-Determined Exclusions. The Personnel Committee determined that ETR Tax Adjusted EPS and ETR Adjusted OCF were the appropriate metrics to use for annual incentives in 2020 because:

- They are based on objective financial measures that Entergy Corporation and its investors consider to be important in evaluating its financial performance;
- They are based on the same metrics we use for internal and external financial reporting; and
- They provide both discipline and transparency.

The Personnel Committee considered it appropriate to use ETR Tax Adjusted EPS, which adds back the effect of significant tax items that may have been excluded from ETR Adjusted EPS, as the earnings measure because of the significant financial benefits to Entergy Corporation resulting from such tax items and the management effort required to achieve them. The Personnel Committee also considered the appropriateness of excluding the effect of each of the specific Pre-Determined Exclusions it had identified from each of the financial measures. It viewed the exclusion of major storms as appropriate because although Entergy Corporation includes estimates for storm costs in its financial plan, it does not include estimates for a major storm event, such as a hurricane. The Personnel Committee considered the exclusion of any unanticipated effects of the tax reform legislation adopted at the end of 2017 to be appropriate because of the lingering uncertainty around those effects and the inability of management to impact those results. The Personnel Committee approved the other exclusions from reported results - for the impact of certain legacy unresolved regulatory litigation and unanticipated unrealized gains and losses on securities held by Entergy Corporation's nuclear decommissioning trusts - primarily because of management's inability to influence either of the related outcomes. The Personnel Committee further provided that in determining the 2020 EAM, the 2020 results would be subject to adjustment for other items the committee may consider appropriate in its review of 2020 performance, considering management accountability and business

rationale, and the EAM as so calculated would be subject to further adjustment at the committee's discretion based on business considerations.

In determining the targets to set for 2020, the Personnel Committee reviewed anticipated drivers and risks to Entergy Corporation's expectations for its adjusted earnings and operating cash flow for 2020 as set forth in its financial plan, as well as factors driving the strong financial performance achieved in 2019. The Personnel Committee confirmed that the proposed plan targets for ETR Tax Adjusted EPS and ETR Adjusted OCF reflected significant growth in the core earnings and consolidated operating cash flow measures underlying the annual incentive plan targets. The Personnel Committee also noted that while the 2020 ETR Tax Adjusted EPS target was less than the 2019 results, the 2020 target represented significant growth in the underlying ETR Adjusted EPS both from 2019 results and from the 2019 target, with the primary driver of the higher results in 2019 being certain one-time tax benefits that would not be recurring in 2020. The Personnel Committee also considered the potential impact of a wide range of identified risks and opportunities and confirmed that the related annual incentive plan targets reflected a reasonable balancing of such risks and opportunities and an appropriate degree of challenge.

2020 Performance Assessment

The following table shows the 2020 annual incentive plan performance metrics and targets established by the Personnel Committee to determine the 2020 EAM and 2020 results:

Annual Incentive Plan Targets and Results

		Performance Goals[(1)]			
	Weight	**Minimum**	**Target**	**Maximum**	**2020 Results**
ETR Tax Adjusted EPS ($)	50%	5.04	5.60	6.16	6.90
ETR Adjusted OCF ($ billions)	50%	3.070	3.450	3.830	3.127
EAM as % of Target		25%	100%	200%	120%

(1) Payouts for performance between achievement levels are calculated using straight-line interpolation, with no payout for performance below the minimum achievement level for both performance measures.

In January 2021, the Finance and Personnel Committees jointly reviewed Entergy Corporation's financial results against the performance objectives reflected in the table above. Management discussed with the committees Entergy Corporation's ETR Tax Adjusted EPS and the ETR Adjusted OCF results for 2020, including primary factors explaining how those results compared to the 2020 business plan and annual incentive plan targets set in January 2020. ETR Tax Adjusted EPS exceeded the ETR Tax Adjusted EPS target of $5.60 per share by $1.30, but management fell short of achieving its ETR Adjusted OCF target of $3.45 billion by approximately $323 million, leading to a preliminary EAM of 118%. These results reflected a positive adjustment of $0.10 to ETR Tax Adjusted EPS and a positive adjustment of $274 million to ETR Adjusted OCF for the effects on earnings and operational cash flow of major storms impacting Entergy Corporation's service area during 2020, consistent with the Pre-Determined Exclusions approved when the targets were set at the beginning of the year. The results also reflected a positive adjustment of $100 million to ETR Adjusted OCF for the effect on operational cash flow of additional voluntary contributions made to Entergy Corporation's pension plan in 2020 over and above the required level of contributions, which adjustment was made because the committee did not consider it appropriate for management to be penalized in the incentive compensation process for choosing to make such elective contributions, consistent with the Pre-Determined Exclusion for items the committee determined should be excluded based on management accountability and business rationale.

The Personnel Committee considered whether 2020 ETR Tax Adjusted EPS or ETR Adjusted OCF should be adjusted for any other factors that had impacted 2020 results. The committee noted that 2020 revenues and cash flow had been adversely impacted by reduced sales resulting from unfavorable weather, the COVID-19 pandemic and, to a lesser extent, major storms, which collectively reduced ETR Adjusted EPS by approximately $0.71 per share, and ETR Adjusted OCF by approximately $663 million as compared to plan. In addition, the Personnel Committee noted that ETR Adjusted OCF had been further reduced by approximately $178 million due to increased customer arrearages as a result of regulatory moratoria on customer disconnects following the onset of the pandemic. As noted, both ETR Tax Adjusted EPS and ETR Adjusted OCF were adjusted to reflect the impact of

major storms as a Pre-Determined Exclusion. However, the committee decided not to adjust the results to reflect the impact of the COVID-19 pandemic, the disconnect moratoria or the unfavorable weather experienced in 2020.

In addition to the foregoing financial results, the Personnel Committee considered management's degree of success in achieving various operational and regulatory goals set out at the beginning of the year and in overcoming certain challenges that arose in the business during the course of the year. The committee took note of not only the many ways management had created value for all Entergy Corporation's key stakeholders during 2020, but also the major challenges that were overcome in the process, including the COVID-19 pandemic and the challenges of responding to three hurricanes in a record-breaking storm season for the Gulf Coast. The committee also noted that despite these challenges, management had remained focused on achieving strong financial results for the benefit of all of its stakeholders while at the same time driving positive outcomes in certain areas that would contribute to Entergy Corporation's long term sustainability, including particularly the achievement of its 2020 CO^2 emissions goal, development and announcement of its goal to achieve net zero carbon emissions by 2050, and significant enhancements to its sustainability disclosure and reporting, and substantial progress in other important ESG and sustainability efforts. In recognition of these accomplishments, which the committee considers to be critical to Entergy Corporation's long-term success, the committee exercised its discretion to increase the EAM by 2% to 120%.

To determine individual NEO annual incentive awards for the NEOs who are member of the OCE, the Personnel Committee considered individual performance in executing on Entergy Corporation's strategies and delivering the strong financial performance achieved in 2020. In addition, the Personnel Committee considered the individual's key accountabilities and accomplishments in relation to certain operational and regulatory challenges Entergy Corporation experienced during the year. With these considerations in mind, the Personnel Committee approved payouts ranging from 115% to 120% of target for each of the NEOs who are members of the OCE.

After the EAM was established to determine overall funding for the annual incentive awards, Entergy Corporation's Chief Executive Officer allocated incentive award funding to individual business units based on business unit results. Individual awards were determined for the remaining NEOs who are not members of the OCE by their immediate supervisor based on the individual officer's key accountabilities, accomplishments, and performance. This resulted in payouts that ranged from 117% of target to 150% of target for the NEOs who are not members of the OCE.

Based on the foregoing evaluation of management performance, the Named Executive Officers received the following annual incentive payouts for 2020:

Named Executive Officer	Base Salary	Target as Percentage of Base Salary	Payout as Percentage of Target	2020 Annual Incentive Award
A. Christopher Bakken, III	$673,700	75%	115%	$581,066
Marcus V. Brown	$690,000	80%	120%	$662,400
Leo P. Denault	$1,260,000	140%	120%	$2,116,800
David D. Ellis	$321,849	40%	128%	$164,955
Haley R. Fisackerly	$388,244	40%	150%	$232,737
Laura R. Landreaux	$326,755	40%	128%	$167,153
Andrew S. Marsh	$690,000	85%	120%	$703,800
Phillip R. May, Jr.	$404,784	60%	117%	$284,881
Sallie T. Rainer	$358,713	40%	122%	$175,713
Roderick K. West	$731,863	80%	115%	$673,314

Long-Term Incentive Compensation

Overview

Long-term incentive compensation, consisting solely of equity awards in 2020, represents the largest portion of executive officer compensation, and as noted earlier, the increase in Mr. Denault's TDC opportunity was delivered in the form of long-term incentive compensation. Entergy Corporation believes the combination of long-term incentives it employs provides a compelling performance-based compensation opportunity, acts in retaining the senior management team, and aligns the interests of Entergy Corporation's executive officers with the interests of its shareholders and customers by enhancing executives focus on Entergy Corporation's long-term goals. In general, Entergy Corporation seeks to allocate the total value of long-term incentive compensation 60% to performance units and 40% to a combination of stock options and restricted stock, equally divided in value, based on the value the compensation model seeks to deliver.

For each NEO who is a member of the OCE, a dollar value is established to determine that NEO's long-term incentive awards target. The targeted award value for each NEO is determined based on market median compensation data for the officer's role, adjusted to reflect individual performance and internal equity. In January 2020, the Personnel Committee approved the 2020 long-term incentive award target amounts for each NEO with each NEO's target amount increasing in recognition of the contributions made to Entergy Corporation in 2019. This target amount was then converted into the number of performance units, stock options and shares of restricted stock granted to each NEO based on the allocation described above.

In consultation with Entergy Corporation's Chief Executive Officer, the Personnel Committee reviews each of the other NEO's performance, role and responsibilities, strengths, developmental opportunities and internal equity and allocates awards of restricted stock and stock options to each of these officers based on these factors. Grants of long-term performance units for these NEOs were determined based on the average of the market data for the officers within a specific management level, without regard to the officer's specific job function, and allocated as described above.

2020 Long-Term Incentive Award Mix

Long-Term Performance Unit Program

The NEOs are issued performance unit awards under the LTIP.

- Each performance unit represents one share of Entergy Corporation's common stock at the end of the three-year performance period, plus dividends accrued during the performance period.
- The performance units and accrued dividends on any shares earned during the performance period are settled in shares of Entergy Corporation common stock.
- The Personnel Committee sets payout opportunities for the program at the outset of each performance period.
- No payout under this program will be made if relative TSR for the performance period falls within the lowest quartile of the peer companies in the Philadelphia Utility Index and Cumulative ETR Adjusted EPS is below the minimum performance goal.
- All shares paid out under the LTIP are required to be retained by Entergy Corporation's officers until applicable executive stock ownership requirements are met.

The LTIP specifies a minimum, target and maximum achievement level, the achievement of which will determine the number of performance units that may be earned by each participant. For the 2020 – 2022 LTIP performance period, the Personnel Committee chose the performance measures and targets set forth below.

2020-2022 LTIP Unit Program Period: Measures and Goals[(1)]

Performance Measures[(1)]	LTIP Measure Weight	Payout
Relative TSR	80%	Minimum (25%) - Bottom of 3rd Quartile Target (100%) - Median Percentile Maximum (200%) - Top Quartile
Cumulative ETR Adjusted EPS	20%	Minimum (25%) - $16.07 Target (100%) - $17.85 Maximum (200%) - $19.63

(1) Payouts for performance between achievement levels are calculated using straight-line interpolation, with no payouts for performance below the minimum achievement level for both performance measures.

Performance Measures

Relative TSR

- The Personnel Committee chose relative TSR as a performance measure because it reflects Entergy Corporation's creation of shareholder value relative to other electric utilities included in the Philadelphia Utility Index over the performance period. By measuring performance in relation to an industry benchmark, this measure is intended to isolate and reward management for the creation of shareholder value that is not driven by events that affect the industry as a whole.

- Minimum, target and maximum performance levels are determined by reference to the ranking of Entergy Corporation's TSR in relation to the TSR of the companies in the Philadelphia Utility Index. The Personnel Committee identified the Philadelphia Utility Index as the appropriate industry peer group for determining relative TSR because the companies included in this index, in the aggregate, are deemed to be comparable to Entergy Corporation in terms of business and scale.

Cumulative ETR Adjusted EPS

- Cumulative ETR Adjusted EPS, which adjusts Entergy Corporation's as reported (GAAP) results to eliminate the impact of earnings or loss from Entergy Wholesale Commodities and other non-routine items, was selected in 2020 as a performance measure because the Personnel Committee wished to incentivize management to achieve steady, predictable earnings growth for Entergy Corporation over the 3 year performance period, and because it aligns with the earnings measure used to communicate Entergy Corporation's earnings expectations externally to investors.

- In a manner similar to the way targets are established for the annual incentives, targets for the Cumulative ETR Adjusted EPS performance measure were established by the Personnel Committee after the Entergy Corporation Board's review of Entergy's strategic plan for the three-year period beginning in 2020 and are consistent with the earnings expectations for Entergy Corporation that are communicated to investors. These targets also incorporate the Pre-Determined Exclusions discussed previously with respect to the annual incentive measures.

Stock Options and Restricted Stock

Entergy Corporation grants stock options and shares of restricted stock because they align the interests of the executive officers with long-term shareholder value, provide competitive compensation, and increase the executives' ownership in Entergy Corporation common stock. Generally, stock options are granted with a maximum term of ten years, and vest one-third on each of the first three anniversaries of the date of grant. The exercise price for each option granted in 2020 was $131.72, which was the closing price of Entergy Corporation's common stock on the date of grant. Shares of restricted stock vest one-third on each of the first three anniversaries

of the date of grant, are paid dividends which are reinvested in shares of Entergy Corporation common stock and have full voting rights. The dividend reinvestment shares are subject to forfeiture similar to the terms of the original grant.

2020 Long-Term Incentive Awards

In January 2020, the Personnel Committee granted the following long-term performance units, stock options and shares of restricted stock to each NEO. The number of long-term performance units, stock options and shares of restricted stock were determined as discussed above under "Long-Term Incentive Compensation - Overview."

Named Executive Officer	2020-2022 Target LTIP Units	Stock Options	Shares of Restricted Stock
A. Christopher Bakken, III	7,758	29,279	3,104
Marcus V. Brown	7,571	28,574	3,029
Leo P. Denault	31,263	117,990	12,505
David D. Ellis	950	3,200	500
Haley R. Fisackerly	950	4,300	750
Laura R. Landreaux	950	4,300	750
Andrew S. Marsh	9,560	36,079	3,824
Phillip R. May, Jr.	1,400	7,300	1,100
Sallie T. Rainer	950	4,300	750
Roderick K. West	8,401	31,705	3,361

All of the performance units, shares of restricted stock and stock options granted to the NEOs in 2020 were granted pursuant to the 2019 Omnibus Incentive Plan or 2019 OIP. The 2019 OIP requires both a change in control and an involuntary job loss without cause or a resignation by the NEO for good reason within 24 months following a change in control (a "double trigger") for the acceleration of these awards upon a change in control.

2020 LTIP Payouts

Payout for the 2018 – 2020 LTIP Performance Period. In January 2018, the Personnel Committee chose relative TSR and Cumulative Adjusted UP&O EPS as the performance measures, each weighted equally, for the 2018 – 2020 LTIP performance period. Cumulative Adjusted UP&O EPS, which adjusted Entergy Corporation's operational Utility, Parent & Other results to eliminate the impact of tax items and weather (the "UP&O Adjustments"), was added as a performance measure because it aligned with Entergy Corporation's externally communicated earnings measure on its core utility business and was the primary measure on which Entergy Corporation communicated its long term earnings outlooks in 2018. Similar to the way targets are established for the annual incentive program, targets for the Cumulative Adjusted UP&O EPS performance measure were established by the Personnel Committee after the Entergy Corporation Board's review of Entergy Corporation's strategic plan. These targets also exclude the Pre-Determined Exclusions discussed previously with respect to the annual incentive measures, as well as the UP&O Adjustments. The payout was determined based on the achievement of the following performance goals established for both performance measures by the committee at the beginning of the performance period:

2018-2020 LTIP Performance Period Measures and Goals

Performance Measure[1]	LTIP Measure Weight	Payout
Relative TSR	50%	Minimum (25%) - Bottom of 3rd Quartile Target (100%) - Median Percentile Maximum (200%) - Top Quartile
Cumulative Adjusted UP&O EPS ($)	50%	Minimum (25%) - $13.68 Target (100%) - $15.20 Maximum (200%) - $16.72

(1) Payouts for performance between achievement levels are calculated using straight-line interpolation, with no payouts for performance below the minimum achievement level.

In January 2021, the Personnel Committee reviewed Entergy Corporation's TSR and the Cumulative Adjusted UP&O EPS for the 2018 – 2020 LTIP performance period in order to determine the payout to participants based upon the performance measures and range of potential payouts for the 2018 – 2020 LTIP performance period as provided above. The committee compared Entergy Corporation's TSR against the TSR of the companies that were included in the Philadelphia Utility Index throughout the three year performance period, which were:

AES Corporation	Edison International
Ameren Corporation	Eversource Energy
American Electric Power Co. Inc.	Exelon Corporation
American Water Works Company, Inc.	FirstEnergy Corporation
CenterPoint Energy Inc.	NextEra Energy, Inc.
Consolidated Edison Inc.	PG&E Corporation
Dominion Energy	Public Service Enterprise Group, Inc.
DTE Energy Company	Southern Company
Duke Energy Corporation	Xcel Energy, Inc.

As recommended by the Finance Committee, the Personnel Committee concluded that Entergy Corporation's relative TSR for the 2018 – 2020 performance period was in the second quartile, and that Cumulative Adjusted UP&O EPS was $15.25, yielding a payout of 126% of target for the NEOs.

Named Executive Officer	2018-2020 Target	Number of Shares Issued[1]	Value of Shares Actually Issued[2]	Grant Date Fair Value[3]
A. Christopher Bakken, III	7,900	11,048	$1,050,886	$651,079
Marcus V. Brown	7,900	11,048	$1,050,886	$651,079
Leo P. Denault	42,700	59,718	$5,680,376	$3,519,121
David D. Ellis[4]	1,100	1,488	$141,539	$90,657
Haley R. Fisackerly	1,650	2,307	$219,442	$135,985
Laura R. Landreaux[5]	1,375	1,892	$179,967	$113,321
Andrew S. Marsh	7,900	11,048	$1,050,886	$651,079
Phillip R. May, Jr.	2,550	3,566	$339,198	$210,158
Sallie T. Rainer	1,650	2,307	$219,442	$135,985
Roderick K. West	7,900	11,048	$1,050,886	$651,079

(1) Includes accrued dividends.
(2) Value determined based on the closing price of Entergy Corporation common stock on January 19, 2021 ($95.12), the date the Personnel Committee certified the 2018-2020 performance period results.
(3) Represents the aggregate grant date fair value calculated in accordance with applicable accounting rules as reflected in the 2018 Summary Compensation Table.

(4) As a new hire in 2018, Mr. Ellis received a pro-rata target award opportunity for the 2018 - 2020 performance period.
(5) As a new officer in 2018, Ms. Landreaux received a pro-rata target award opportunity for the 2018 - 2020 performance period.

Benefits and Perquisites

Entergy Corporation's NEOs are eligible to participate in or receive the following benefits:

Plan Type	Description
Retirement Plans	Entergy Corporation-sponsored: Entergy Retirement Plan - a tax-qualified final average pay defined benefit pension plan that covers a broad group of employees hired before July 1, 2014. Cash Balance Plan - a tax-qualified cash balance defined benefit pension plan that covers a broad group of employees hired on or after July 1, 2014 and before January 1, 2021. Pension Equalization Plan - a non-qualified pension restoration plan for a select group of management or highly compensated employees who participate in the Entergy Retirement Plan. Cash Balance Equalization Plan - a non-qualified restoration plan for a select group of management or highly compensated employees who participate in the Cash Balance Plan. System Executive Retirement Plan - a non-qualified supplemental retirement plan for individuals who became executive officers before July 1, 2014.
Savings Plan	Entergy Corporation-sponsored 401(k) Savings Plan that covers a broad group of employees.
Health & Welfare Benefits	Medical, dental and vision coverage, health care and dependent care reimbursement plans, life and accidental death and dismemberment insurance, business travel accident insurance, and long-term disability insurance. Eligibility, coverage levels, potential employee contributions, and other plan design features are the same for the NEOs as for the broad employee population.
2020 Perquisites	Corporate aircraft usage and annual mandatory physical exams. The NEOs who are members of the OCE do not receive tax gross ups on any benefits, except for relocation assistance. In 2020, the NEOs who are not members of the OCE also were provided in 2020 with club dues and tax gross up payments on this perquisite. For additional information regarding perquisites, see the "All Other Compensation" column in the 2020 Summary Compensation Table.
Deferred Compensation	The NEOs are eligible to defer up to 100% of their base salary and annual incentive awards into the Entergy Corporation sponsored Executive Deferred Compensation Plan.
Executive Disability Plan	Eligible individuals who become disabled under the terms of the plan are eligible for 65% of the difference between their annual base salary and $276,923 (i.e. the annual base salary that produces the maximum $15,000 monthly disability payment under the general long-term disability plan).

Entergy Corporation provides these benefits to the NEOs as part of its effort to provide a competitive executive compensation program and because it believes that these benefits are important retention and recruitment tools since many of the companies with which it competes for executive talent provide similar arrangements to their senior executive officers.

Severance and Retention Arrangements

The Personnel Committee believes that retention and transitional compensation arrangements are an important part of overall compensation as they help to secure the continued employment and dedication of the NEOs, notwithstanding any concern that they might have at the time of a change in control regarding their own continued employment. In addition, the Personnel Committee believes that these arrangements are important as recruitment and retention devices, as many of the companies with which Entergy Corporation competes for executive talent have similar arrangements in place for their senior employees.

To achieve these objectives, Entergy Corporation has established a System Executive Continuity Plan under which ML 1-4 Officers are entitled to receive "change in control" payments and benefits if such officer's employment is involuntarily terminated without cause or if the officer resigns for good reason, in each case, in connection with a change in control of Entergy Corporation and its subsidiaries. Entergy Corporation strives to ensure that the benefits and payment levels under the System Executive Continuity Plan are consistent with market practices. Entergy Corporation's executive officers, including the NEOs, are not entitled to any tax gross up payments on any severance benefits received under this plan. For more information regarding the System Executive Continuity Plan, see "2020 Potential Payments Upon Termination or Change in Control."

Nuclear Retention Plan

Mr. Bakken participates in the Nuclear Retention Plan, a retention plan for officers and other leaders with expertise in the nuclear industry. The Personnel Committee authorized this plan to attract and retain key management and employee talent in the nuclear power field, a field that requires unique technical and other expertise that is in great demand in the utility industry. The plan provides for bonuses to be paid annually over a three-year service period with the bonus opportunity dependent on the participant's management level and continued employment. Each annual payment is equal to an amount ranging from 15% to 30% of the employee's base salary as of their date of enrollment in the plan.

In recognition of the value Entergy Corporation places on Mr. Bakken as a member of its senior management team and his extensive experience in the nuclear industry, and to keep his pay competitive, in May 2019, Mr. Bakken's participation in the plan was renewed for another three-year period beginning on May 1, 2019. In accordance with the terms and conditions of the Nuclear Retention Plan, in May 2020 Mr. Bakken received, and in May 2021 and 2022, Mr. Bakken will receive a cash bonus equal to 30% of $654,078, his base salary as of May 1, 2019. The three-year period covered and percentage of base salary paid to Mr. Bakken under the plan are consistent with the terms of participation of other senior executive officers who participate in this plan.

Risk Mitigation and Other Pay Practices

Entergy Corporation strives to ensure that its compensation philosophy and practices are in line with the best practices of companies in its industry as well as other companies in the S&P 500. Some of these practices include the following:

Clawback Provisions

Entergy Corporation has adopted a clawback policy that covers all individuals subject to Section 16 of the Exchange Act, including all of the NEOs. Under the policy, which goes beyond the requirements of Sarbanes-Oxley Act of 2002 (Sarbanes-Oxley), incentives paid to covered executive officers are required to be reimbursed where:

- (i) the payment was predicated upon the achievement of certain financial results with respect to the applicable performance period that were subsequently determined to be the subject of a material restatement other than a restatement due to changes in accounting policy; or (ii) a material miscalculation of a performance award occurs, whether or not the financial statements were restated and, in either such case, a lower payment would have been made to the executive officer based upon the restated financial results or correct calculation; or

- in the Board of Directors' view, the executive officer engaged in fraud that caused or partially caused the need for a restatement or caused a material miscalculation of a performance award, in each case, whether or not the financial statements were restated.

The amount required to be reimbursed is equal to the excess of the gross incentive payment made over the gross payment that would have been made if the original payment had been determined based on the restated financial results or correct calculation. In addition, Entergy Corporation will seek to recover any compensation received by its Chief Executive Officer and Chief Financial Officer that is required to be reimbursed under Sarbanes-Oxley following a material restatement of Entergy Corporation's financial statements.

Stock Ownership Guidelines and Share Retention Requirements

For many years, Entergy Corporation has had stock ownership guidelines for executives, including the NEOs. These guidelines are designed to align the executives' long-term financial interests with the interests of Entergy Corporation's shareholders. Annually, the Personnel Committee monitors the executive officers' compliance with these guidelines with all of the NEOs satisfying the applicable ownership guidelines at that time. The ownership guidelines are as follows:

The ownership guidelines are as follows:

Role	Value of Common Stock to be Owned
Chief Executive Officer (ML-1)	6 x base salary
Executive Vice Presidents (ML-2)	3 x base salary
Senior Vice Presidents (ML-3)	2 x base salary
Vice Presidents (ML-4)	1 x base salary

Further, to facilitate compliance with the guidelines, until an executive officer satisfies the stock ownership guidelines, the officer must retain:

- all net after-tax shares paid out under the LTIP;
- all net after-tax shares of the restricted stock and restricted stock units received upon vesting; and
- at least 75% of the after-tax net shares received upon the exercise of Entergy Corporation stock options.

Trading Controls

Executive officers, including the NEOs, are required to receive permission from Entergy Corporation's General Counsel or his designee prior to entering into any transaction involving Entergy Corporation securities, including gifts, other than the exercise of employee stock options. Trading is generally permitted only during specified open trading windows beginning shortly after the release of earnings. Employees, who are subject to trading restrictions, including the NEOs, may enter into trading plans under Rule 10b5-1 of the Exchange Act, but these trading plans may be entered into only during an open trading window and must be approved by Entergy Corporation. A NEO bears full responsibility if he or she violates Entergy Corporation's policy by buying or selling shares of Entergy Corporation stock without pre-approval or when trading is restricted.

Entergy Corporation also prohibits directors and executive officers, including the NEOs, from pledging any Entergy Corporation securities or entering into margin accounts involving Entergy Corporation securities. Entergy Corporation prohibits these transactions because of the potential that sales of Entergy Corporation securities could occur outside trading periods and without the required approval of the General Counsel.

Entergy Corporation also has adopted an anti-hedging policy that prohibits officers, directors, and employees from entering into hedging or monetization transactions involving Entergy Corporation's common stock. Prohibited transactions include, without limitation, zero-cost collars, forward sale contracts, purchase or sale of options, puts, calls, straddles or equity swaps or other derivatives that are directly linked to Entergy Corporation's stock or transactions involving "short-sales" of its common stock.

Compensation Consultant Independence

Annually, the Personnel Committee reviews the relationship with its compensation consultant to determine whether any conflicts of interest exist that would prevent Pay Governance from independently advising the Personnel Committee. Factors considered by the committee when assessing the independence of its compensation consultant included, among others:

- Pay Governance has policies in place to prevent conflicts of interest;
- No member of Pay Governance's consulting team serving the committee has a business relationship with any member of the committee or any of Entergy Corporation's executive officers;
- Neither Pay Governance nor any of its principals own any shares of Entergy Corporation's common stock; and
- The amount of fees paid to Pay Governance is less than 1% of Pay Governance's total consulting income.

Based on these factors, the Personnel Committee concluded that Pay Governance is independent in accordance with SEC and NYSE rules and that no conflicts of interest exist that would prevent Pay Governance from independently advising the committee.

In addition, Pay Governance has agreed that it will not accept any engagement with management without prior approval from the Personnel Committee, and Entergy Corporation's Board has adopted a policy that prohibits a compensation consultant from providing other services to it if the aggregate amount for those services would exceed $120,000 in any year. During 2020, Pay Governance did not provide any services to Entergy Corporation other than the services it performed on behalf of the Personnel and Corporate Governance Committees, and it worked with Entergy Corporation's management only as directed by the committees.

PERSONNEL COMMITTEE REPORT

The Personnel Committee Report included in the Entergy Corporation Proxy Statement is incorporated by reference, but will not be deemed to be "filed" in this Annual Report on Form 10-K. None of the Registrant Subsidiaries has a compensation committee or other board committee performing equivalent functions. The board of directors of each of the Registrant Subsidiaries is comprised of individuals who are officers or employees of Entergy Corporation or one of the Registrant Subsidiaries. These boards do not make determinations regarding the compensation paid to executive officers of the Registrant Subsidiaries.

EXECUTIVE COMPENSATION TABLES

2020 Summary Compensation Tables

The following table summarizes the total compensation paid or earned by each of the NEOs for the fiscal year ended December 31, 2020, and to the extent required by SEC executive compensation disclosure rules, the fiscal years ended December 31, 2019 and 2018. For information on the principal positions held by each of the NEOs, see Item 10, "Directors, Executive Officers, and Corporate Governance of the Registrants."

The compensation set forth in the table represents the aggregate compensation paid by all Entergy System companies. For additional information regarding the material terms of the awards reported in the following tables, including a general description of the formula or criteria to be applied in determining the amounts payable, see "Compensation Discussion and Analysis."

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Name and Principal Position (1)	**Year**	**Salary (2)**	**Bonus (3)**	**Stock Awards (4)**	**Option Awards (5)**	**Non-Equity Incentive Plan Compen-sation (6)**	**Change in Pension Value and Non-qualified Deferred Compen-sation Earnings (7)**	**All Other Compen-sation (8)**	**Total**	**Total Without Change in Pension Value (9)**
A. Christopher Bakken, III	2020	$693,819	$196,223	$1,666,710	$335,245	$581,066	$115,100	$85,846	$3,674,009	$3,558,909
Executive Vice President and	2019	$649,507	$181,500	$1,273,399	$303,023	$618,104	$98,500	$62,407	$3,186,440	$3,087,940
Chief Nuclear Officer of Entergy Corp.	2018	$632,967	$181,500	$1,041,479	$283,095	$544,959	$108,700	$452,012	$3,244,712	$3,136,012
Marcus V. Brown	2020	$709,688	$—	$1,626,512	$327,172	$662,400	$1,746,000	$78,631	$5,150,403	$3,404,403
Executive Vice President and	2019	$661,563	$—	$1,248,839	$297,182	$684,573	$1,455,300	$69,955	$4,417,412	$2,962,112
General Counsel of Entergy Corp.	2018	$644,231	$—	$1,041,479	$283,095	$546,000	$371,800	$61,885	$2,948,490	$2,576,690
Leo P. Denault	2020	$1,308,462	$—	$6,716,017	$1,350,986	$2,116,800	$4,416,700	$289,632	$16,198,597	$11,781,897
Chairman of the	2019	$1,260,000	$—	$5,391,253	$1,282,994	$2,416,680	$3,704,500	$208,822	$14,264,249	$10,559,749
Board and CEO -	2018	$1,251,346	$—	$4,744,977	$1,168,029	$2,041,200	$982,800	$138,104	$10,326,456	$9,343,656
Entergy Corp.										
David D. Ellis	2020	$331,803	$—	$219,889	$36,640	$164,955	$32,200	$19,323	$804,810	$772,610
CEO - Entergy	2019	$311,004	$—	$188,861	$39,104	$159,804	$18,000	$15,267	$732,040	$714,040
New Orleans	2018	$7,258	$200,000	$—	$—	$—	$600	$35,308	$243,166	$242,566
Haley R. Fisackerly	2020	$384,848	$—	$252,819	$49,235	$232,737	$836,200	$48,101	$1,803,940	$967,740
CEO - Entergy	2019	$373,313	$—	$197,780	$51,584	$274,570	$644,700	$37,897	$1,579,844	$935,144
Mississippi	2018	$363,089	$—	$198,449	$46,134	$172,000	$—	$35,982	$815,654	$815,654
Laura R. Landreaux	2020	$323,907	$—	$252,819	$49,235	$167,153	$330,700	$26,698	$1,150,512	$819,812
CEO - Entergy	2019	$314,407	$—	$188,861	$42,432	$263,523	$228,700	$26,536	$1,064,459	$835,759
Arkansas	2018	$246,136	$—	$273,062	$—	$124,000	$21,500	$10,741	$675,439	$653,939

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)
Name and Principal Position (1)	Year	Salary (2)	Bonus (3)	Stock Awards (4)	Option Awards (5)	Non-Equity Incentive Plan Compen-sation (6)	Change in Pension Value and Non-qualified Deferred Compen-sation Earnings (7)	All Other Compen-sation (8)	Total	Total Without Change in Pension Value (9)
Andrew S. Marsh	2020	$704,692	$—	$2,053,717	$413,105	$703,800	$2,054,000	$77,741	$6,007,055	$3,953,055
Executive Vice	2019	$641,923	$—	$1,579,663	$375,914	$712,400	$1,554,300	$69,863	$4,934,063	$3,379,763
President and CFO -	2018	$615,654	$—	$1,057,095	$342,510	$531,188	$—	$57,638	$2,604,085	$2,604,085
Entergy Corp.,										
Entergy Arkansas,										
Entergy Louisiana,										
Entergy Mississippi,										
Entergy New										
Orleans,										
Entergy Texas										
Phillip R. May, Jr.	2020	$416,677	$—	$371,882	$83,585	$284,881	$1,072,100	$28,836	$2,257,961	$1,185,861
CEO - Entergy	2019	$389,016	$—	$294,183	$77,376	$407,922	$877,100	$28,297	$2,073,894	$1,196,794
Louisiana	2018	$377,108	$—	$288,238	$69,201	$270,000	$—	$26,874	$1,031,421	$1,031,421
Sallie T. Rainer	2020	$369,133	$—	$252,819	$49,235	$175,713	$663,100	$33,383	$1,543,383	$880,283
CEO - Entergy	2019	$344,722	$—	$197,780	$51,584	$219,069	$617,200	$37,361	$1,467,716	$850,516
Texas	2018	$335,263	$—	$198,449	$46,134	$159,000	$—	$35,379	$774,225	$774,225
Roderick K. West	2020	$754,742	$—	$1,804,816	$363,022	$673,314	$1,976,400	$59,730	$5,632,024	$3,655,624
Group President	2019	$709,023	$—	$1,340,679	$319,039	$674,742	$1,604,100	$67,191	$4,714,774	$3,110,674
Utility Operations of	2018	$690,581	$—	$1,057,095	$297,075	$560,762	$—	$67,234	$2,672,747	$2,672,747
Entergy Corp.										

(1) Mr. Ellis was named Chief Executive Officer, Entergy New Orleans in December 2018, and Ms. Landreaux was named Chief Executive Officer, Entergy Arkansas in July 2018.

(2) The amounts in column (c) represent the actual base salary paid to the NEOs in the applicable year. The 2020 base salary amounts include an amount attributable to an extra pay period that occurred in 2020 as the NEOs are paid on a bi-weekly basis. The 2020 changes in base salaries noted in the Compensation Discussion and Analysis were effective in April 2020.

(3) The amount in column (d) in 2020, 2019, and 2018 for Mr. Bakken represents the cash bonus paid to him pursuant to the Nuclear Retention Plan. See “Nuclear Retention Plan” in Compensation Discussion and Analysis. The amount in column (d) in 2018 for Mr. Ellis represents a cash sign-on bonus paid in connection with his commencement of employment with Entergy New Orleans.

(4) The amounts in column (e) represent the aggregate grant date fair value of restricted stock and performance units granted under the 2015 Equity Ownership Plan of Entergy Corporation and Subsidiaries (the “2015 EOP”) and the 2019 OIP (together with the 2015 EOP, the “Equity Plans”), each calculated in accordance with FASB ASC Topic 718, without taking into account estimated forfeitures. The grant date fair value of the restricted stock is based on the closing price of Entergy Corporation common stock on the date of grant. The grant date fair value of the portion of the performance units with vesting based on the total shareholder return was measured using a Monte Carlo simulation valuation model. The simulation model applies a risk-free interest rate and an expected volatility assumption. The risk-free interest rate is assumed to equal the yield on a three-year treasury bond on the grant date. Volatility is based on historical volatility for the 36-month period preceding the grant date. The performance units in the table are also valued based on the probable outcome of the applicable performance condition at the time of grant. The maximum value of shares that would be received if the highest achievement level is attained with respect to both the total shareholder return and Cumulative ETR Adjusted EPS, for performance units granted in 2020 are as follows: Mr. Bakken,

$2,043,768; Mr. Brown, $1,994,504; Mr. Denault, $8,235,925; Mr. Ellis, $250,268; Mr. Fisackerly, $250,268; Ms. Landreaux $250,268; Mr. Marsh, $2,518,486; Mr. May, $368,816; Ms. Rainer, $250,268; and Mr. West, $2,213,159.

(5) The amounts in column (f) represent the aggregate grant date fair value of stock options granted under the Equity Plans calculated in accordance with FASB ASC Topic 718. For a discussion of the relevant assumptions used in valuing these awards, see Note 12 to the financial statements.

(6) The amounts in column (g) represent annual incentive award cash payments made under the 2019 OIP.

(7) For all NEOs, the amounts in column (h) include the annual actuarial increase in the present value of these NEOs' benefits under all pension plans established by Entergy Corporation using interest rate and mortality rate assumptions consistent with those used in Entergy Corporation's financial statements and include amounts which the NEOs may not currently be entitled to receive because such amounts are not vested (see "2020 Pension Benefits"). The increase in pension benefits for all of the NEOs in 2020 was driven by a decline in the discount rate that was a result of the decrease in prevailing interest rates. None of the increases for any of the NEOs is attributable to above-market or preferential earnings on non-qualified deferred compensation. For 2018, the aggregate change in the actuarial present value was a decrease of pension benefits of $52,000 for Mr. Fisackerly, $163,000 for Mr. Marsh, $700 for Mr. May, $110,700 for Ms. Rainer, and $149,300 for Mr. West.

(8) The amounts in column (i) for 2020 include (a) matching contributions by Entergy Corporation under the Savings Plan to each of the NEOs; (b) dividends paid on restricted stock when vested; (c) life insurance premiums; (d) tax gross up payments on club dues; and (e) perquisites and other compensation as described further below. The amounts are listed in the following table:

Named Executive Officer	Company Contribution – Savings Plan	Dividends Paid on Restricted Stock	Life Insurance Premium	Tax Gross Up Payments	Perquisites and Other Compensation	Total
A. Christopher Bakken, III	$17,100	$52,032	$12,415	$—	$4,299	$85,846
Marcus V. Brown	$11,970	$56,953	$7,482	$—	$2,226	$78,631
Leo P. Denault	$11,970	$173,952	$11,484	$—	$92,226	$289,632
David D. Ellis	$17,100	$658	$745	$—	$820	$19,323
Haley R. Fisackerly	$11,970	$8,305	$5,705	$7,939	$14,182	$48,101
Laura R. Landreaux	$—	$13,094	$493	$4,281	$8,829	$26,697
Andrew S. Marsh	$11,970	$59,177	$6,594	$—	$—	$77,741
Phillip R. May, Jr.	$11,970	$10,902	$5,964	$—	$—	$28,836
Sallie T. Rainer	$11,970	$8,564	$1,580	$2,836	$8,433	$33,383
Roderick K. West	$11,970	$41,931	$4,002	$—	$1,827	$59,730

(9) In order to show the effect that the year-over-year change in pension value had on total compensation, as determined under applicable SEC rules, we have included an additional column to show total compensation minus the change in pension value. The amounts reported in the Total Without Change in Pension Value column may differ substantially from the amounts reported in the Total column required under SEC rules and are not a substitute for total compensation. Total Without Change in Pension Value represents total compensation, as determined under applicable SEC rules, minus the change in pension value reported in the Change in Pension Value and Nonqualified Deferred Compensation Earnings column. The change in pension value is subject to many external variables, such as interest rates, assumptions about life expectancy and changes in the discount rate determined at each year end, which are functions of economic factors and actuarial calculations that are not related to Entergy Corporation's performance and are outside of the control of the Personnel Committee.

Perquisites and Other Compensation

The amounts set forth in column (i) also include perquisites and other personal benefits that Entergy Corporation provides to its NEOs as part of providing a competitive executive compensation program and for employee retention. The following perquisites were provided to the NEOs in 2020.

Named Executive Officer	Personal Use of Corporate Aircraft	Club Dues	Executive Physical Exams
A. Christopher Bakken, III			X
Marcus V. Brown	X		X
Leo P. Denault	X		X
David D. Ellis	X		
Haley R. Fisackerly		X	X
Laura R. Landreaux		X	
Andrew S. Marsh			X
Phillip R. May, Jr.			
Sallie T. Rainer		X	
Roderick K. West			X

For security and business reasons, Entergy Corporation's Chief Executive Officer is permitted to use its corporate aircraft for personal use at the expense of Entergy Corporation. The other NEOs may use the corporate aircraft for personal travel subject to the approval of Entergy Corporation's Chief Executive Officer. The Personnel Committee reviews the level of usage throughout the year. Entergy Corporation believes that its officers' ability to use its plane for limited personal use saves time and provides additional security for them, thereby benefiting Entergy Corporation. The amounts included in column (i) for the personal use of corporate aircraft, reflect the incremental cost to Entergy Corporation for use of the corporate aircraft, determined on the basis of the variable operational costs of each flight, including fuel, maintenance, flight crew travel expense, catering, communications, and fees, including flight planning, ground handling, and landing permits. The aggregate incremental aircraft usage cost associated with Mr. Denault's personal use of the corporate aircraft was $86,618 for fiscal year 2020. In addition, Entergy Corporation offers its executives comprehensive annual physical exams at Entergy Corporation's expense. None of the other perquisites referenced above exceeded $25,000 for any of the other NEOs.

2020 Grants of Plan-Based Awards

The following table summarizes award grants during 2020 to the NEOs.

		Estimated Possible Payouts Under Non-Equity Incentive Plan Awards [1]			Estimated Future Payouts under Equity Incentive Plan Awards [2]						
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)	(k)	(l)
Name	Grant Date	Thresh-old ($)	Target ($)	Maximum ($)	Thresh-old (#)	Target (#)	Maximum (#)	All Other Stock Awards: Number of Shares of Stock or Units (#) (3)	All Other Option Awards: Number of Securities Under-lying Options (#) (4)	Exercise or Base Price of Option Awards ($/Sh)	Grant Date Fair Value of Stock and Option Awards ($) (5)
A. Christopher	1/30/20	$-	$505,275	$1,010,550							
Bakken, III	1/30/20				1,940	7,758	15,516				$1,257,851
	1/30/20							3,104			$408,859
	1/30/20								29,279	$131.72	$335,245
Marcus V.	1/30/20	$-	$552,000	$1,104,000							
Brown	1/30/20				1,893	7,571	15,142				$1,227,532
	1/30/20							3,029			$398,980
	1/30/20								28,574	$131.72	$327,172
Leo P.	1/30/20	$-	$1,764,000	$3,528,000							
Denault	1/30/20				7,816	31,263	62,526				$5,068,858
	1/30/20							12,505			$1,647,159
	1/30/20								117,990	$131.72	$1,350,986
David D.	1/30/20	$-	$128,740	$257,480							
Ellis	1/30/20				238	950	1,900				$154,029
								500			$65,860
									3,200	$131.72	$36,640
Haley R.	1/30/20	$-	$155,297	$310,594							
Fisackerly	1/30/20				238	950	1,900				$154,029
	1/30/20							750			$98,790
	1/30/20								4,300	$131.72	$49,235
Laura R.	1/30/20	$-	$130,702	$261,404							
Landreaux	1/30/20				238	950	1,900				$154,029
	1/30/20							750			$98,790
									4,300	$131.72	$49,235
Andrew S.	1/30/20	$-	$586,500	$1,173,000							
Marsh	1/30/20				2,390	9,560	19,120				$1,550,020
	1/30/20							3,824			$503,697
	1/30/20								36,079	$131.72	$413,105

(a)	(b)	Estimated Possible Payouts Under Non-Equity Incentive Plan Awards [1]			Estimated Future Payouts under Equity Incentive Plan Awards [2]			(i)	(j)	(k)	(l)
Name	Grant Date	Thresh-old	Target	Maximum	Thresh-old	Target	Maximum	All Other Stock Awards: Number of Shares of Stock or Units	All Other Option Awards: Number of Securities Under-lying Options	Exercise or Base Price of Option Awards	Grant Date Fair Value of Stock and Option Awards
		($)	($)	($)	(#)	(#)	(#)	(#)	(#)	($/Sh)	($)
								(3)	(4)		(5)
Phillip R.	1/30/20	$-	$242,870	$485,740							
May, Jr.	1/30/20				350	1,400	2,800				$226,990
	1/30/20							1,100			$144,892
	1/30/20								7,300	$131.72	$85,585
Sallie T.	1/30/20	$-	$143,485	$286,970							
Rainer	1/30/20				238	950	1,900				$154,029
	1/30/20							750			$98,790
	1/30/20								4,300	$131.72	$49,235
Roderick K.	1/30/20	$-	$585,490	$1,170,980							
West	1/30/20				2,100	8,401	16,802				$1,362,105
	1/30/20							3,361			$442,711
	1/30/20								31,705	$131.72	$363,022

(1) The amounts in columns (c), (d), and (e) represent minimum, target, and maximum payment levels under the annual incentive program. The actual amounts awarded are reported in column (g) of the Summary Compensation Table.

(2) The amounts in columns (f), (g), and (h) represent the minimum, target, and maximum payment levels under the LTIP. Performance under the program is measured by Entergy Corporation's total shareholder return relative to the total shareholder returns of the companies included in the Philadelphia Utility Index and Cumulative Entergy Adjusted EPS with total shareholder return weighted eighty percent and Cumulative Entergy Adjusted EPS weighted twenty percent. There is no payout under the program if Entergy Corporation's total shareholder return falls within the lowest quartile of the peer companies in the Philadelphia Utility Index and Cumulative Entergy Adjusted EPS is below the minimum performance goal. Subject to the achievement of performance targets, each unit will be converted into one share of Entergy Corporation's common stock on the last day of the performance period (December 31, 2022). Accrued dividends on the shares earned will also be paid in Entergy Corporation common stock.

(3) The amounts in column (i) represent shares of restricted stock granted under the 2019 OIP. Shares of restricted stock vest one-third on each of the first through third anniversaries of the grant date, have voting rights, and accrue dividends during the vesting period.

(4) The amounts in column (j) represent options to purchase shares of Entergy Corporation's common stock. The options vest one-third on each of the first through third anniversaries of the grant date and have a ten-year term from the date of grant. The options were granted under the 2019 OIP.

(5) The amounts in column (l) are valued based on the aggregate grant date fair value of the award calculated in accordance with FASB ASC Topic 718 and, in the case of the performance units, are based on the probable outcome of the applicable performance conditions. See Notes 4 and 5 to the 2020 Summary Compensation Table for a discussion of the relevant assumptions used in calculating the grant date fair value.

2020 Outstanding Equity Awards at Fiscal Year-End

The following table summarizes, for each NEO, unexercised options, restricted stock that has not vested, and equity incentive plan awards outstanding as of December 31, 2020.

	Option Awards					Stock Awards			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Name	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)
A. Christopher Bakken, III	—	29,279[1]		$131.72	1/30/2030				
	—	24,281[2]		$89.19	1/31/2029				
	—	13,500[3]		$78.08	1/25/2028				
								1,940[4]	$193,640
								19,136[5]	$1,910,538
						3,104[6]	$309,903		
						2,403[7]	$239,916		
						1,667[8]	$166,433		
						20,000[9]	$1,996,800		
Marcus V. Brown	—	28,574[1]		$131.72	1/30/2030				
	—	23,813[2]		$89.19	1/31/2029				
	—	13,500[3]		$78.08	1/25/2028				
								1,893[4]	$188,972
								18,766[5]	$1,873,597
						3,029[6]	$302,415		
						2,357[7]	$235,323		
						1,667[8]	$166,433		

	Option Awards					Stock Awards			
(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Name	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)
Leo P. Denault	—	117,990[1]		$131.72	1/30/2030				
	51,402	102,804[2]		$89.19	1/31/2029				
	111,400	55,700[3]		$78.08	1/25/2028				
	179,400	—		$70.53	1/26/2027				
	167,000	—		$70.56	1/28/2026				
	88,000	—		$89.90	1/29/2025				
	106,000	—		$63.17	1/30/2024				
	50,000	—		$64.60	1/31/2023				
								7,816[4]	$780,324
								81,016[5]	$8,088,637
						12,505[6]	$1,248,499		
						10,173[7]	$1,015,672		
						5,234[8]	$522,563		
David D. Ellis	—	3,200[1]		$131.72	1/30/2030				
	1,566	3,134[2]		$89.19	1/31/2029				
								238[4]	$23,712
								2,900[5]	$289,536
						500[6]	$49,920		
						334[7]	$33,347		
Haley R. Fisackerly	—	4,300[1]		$131.72	1/30/2030				
	—	4,134[2]		$89.19	1/31/2029				
	—	2,200[3]		$78.08	1/25/2028				
								238[4]	$23,712
								2,900[5]	$289,536
						750[6]	$74,880		
						400[7]	$39,936		
						267[8]	$26,657		

(a)	Option Awards					Stock Awards			
	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Name	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)
Laura R. Landreaux	—	4,300[1]		$131.72	1/30/2030				
	1,700	3,400[2]		$89.19	1/31/2029				
								238[4]	$23,712
								2,900[5]	$289,536
						750[6]	$74,880		
						334[7]	$33,347		
						400[8]	$39,936		
Andrew S. Marsh	—	36,079[1]		$131.72	1/30/2030				
	15,060	30,122[2]		$89.19	1/31/2029				
	32,666	16,334[3]		$78.08	1/25/2028				
	44,000	—		$70.53	1/26/2027				
	45,000	—		$70.56	1/28/2026				
	24,000	—		$89.90	1/29/2025				
	35,000	—		$63.17	1/30/2024				
	32,000	—		$64.60	1/31/2023				
	10,000	—		$71.30	1/26/2022				
	4,000	—		$72.79	1/27/2021				
								2,390[4]	$238,618
								23,738[5]	$2,370,002
						3,824[6]	$381,788		
						2,981[7]	$297,623		
						1,734[8]	$173,123		
Phillip R. May, Jr.	—	7,300[1]		$131.72	1/30/2030				
	—	6,200[2]		$89.19	1/31/2029				
	—	3,300[3]		$78.08	1/25/2028				
								350[4]	$34,944
								4,300[5]	$429,312
						1,100[6]	$109,824		
						600[7]	$59,904		
						343[8]	$33,347		

(a)	Option Awards					Stock Awards			
	(b)	(c)	(d)	(e)	(f)	(g)	(h)	(i)	(j)
Name	Number of Securities Underlying Unexercised Options Exercisable (#)	Number of Securities Underlying Unexercised Options Unexercisable (#)	Equity Incentive Plan Awards: Number of Securities Underlying Unexercised Unearned Options (#)	Option Exercise Price ($)	Option Expiration Date	Number of Shares or Units of Stock That Have Not Vested (#)	Market Value of Shares or Units of Stock That Have Not Vested ($)	Equity Incentive Plan Awards: Number of Unearned Shares, Units or Other Rights That Have Not Vested (#)	Equity Incentive Plan Awards: Market or Payout Value of Unearned Shares, Units or Other Rights That Have Not Vested ($)
Sallie T. Rainer	—	4,300[1]		$131.72	1/30/2030				
	2,066	4,134[2]		$89.19	1/31/2029				
	2,200	2,200[3]		$78.08	1/25/2028				
	2,600	—		$70.53	1/26/2027				
								238[4]	$23,712
								2,900[5]	$289,536
						750[6]	$74,880		
						400[7]	$39,936		
						267[8]	$26,657		
Roderick K. West	—	31,705[1]		$131.72	1/30/2030				
	—	25,564[2]		$89.19	1/31/2029				
	—	14,167[3]		$78.08	1/25/2028				
								2,100[4]	$209,689
								20,146[5]	$2,011,377
						3,361[6]	$335,562		
						2,530[7]	$252,595		
						1,734[8]	$173,123		

(1) Consists of options granted under the 2019 OIP; 1/3 of the options vested on January 30, 2021 and 1/3 of the remaining options will vest on each of January 30, 2022 and January 30, 2023.

(2) Consists of options granted under the 2015 EOP; 1/2 of the options vested on January 31, 2021 and the remaining options will vest on January 30, 2022.

(3) Consists of options granted under the 2015 EOP that vested on January 25, 2021.

(4) Consists of performance units granted under the 2019 OIP that will vest on December 31, 2022 based on two performance measures: 1) Entergy Corporation's total shareholder return performance over the 2020-2022 performance period and 2) Cumulative Entergy Adjusted EPS with total shareholder return weighted eighty percent and Cumulative Entergy Adjusted EPS weighted twenty percent, as described under "What Entergy Corporation Pays and Why - Long-Term Incentive Compensation - 2020 Long-Term Incentive Award Mix - Long-Term Performance Unit Program" in the Compensation Discussion and Analysis.

(5) Consists of performance units granted under the 2015 EOP that will vest on December 31, 2021 based on two performance measures: 1) Entergy Corporation's total shareholder return performance over the 2019-2021 performance period and 2) Cumulative Entergy Adjusted EPS with total shareholder return weighted eighty percent and Cumulative Entergy Adjusted EPS weighted twenty percent.

(6) Consists of shares of restricted stock granted under the 2019 OIP; 1/3 of the shares of restricted stock vested on January 30, 2021 and 1/3 of the remaining shares will vest on each of January 30, 2022 and January 30, 2023.

(7) Consists of shares of restricted stock granted under the 2015 EOP; 1/2 of the shares of restricted stock vested on January 31, 2021 and the remaining shares of restricted stock will vest on January 31, 2022.
(8) Consists of shares of restricted stock granted under the 2015 EOP that vested on January 25, 2021.
(9) Consists of restricted stock units granted under the 2015 EOP which will vest 1/2 on each of April 6, 2022 and April 6, 2025.

2020 Option Exercises and Stock Vested

The following table provides information concerning each exercise of stock options and each vesting of stock during 2020 for the NEOs.

	Options Awards		Stock Awards	
(a)	(b)	(c)	(d)	(e)
Name	Number of Shares Acquired on Exercise (#)	Value Realized on Exercise ($)	Number of Shares Acquired on Vesting (#)	Value Realized on Vesting [1] ($)
A. Christopher Bakken, III	38,174	$1,954,334	16,051	$1,701,473
Marcus V. Brown	40,075	$2,081,630	16,366	$1,742,234
Leo P. Denault	—	$—	77,044	$7,935,333
David D. Ellis	—	$—	1,659	$164,028
Haley R. Fisackerly	6,800	$351,077	3,122	$325,433
Laura R. Landreaux	—	$—	3,059	$331,489
Andrew S. Marsh	—	$—	37,861	$3,959,325
Phillip R. May, Jr.	13,900	$774,394	4,650	$480,241
Sallie T. Rainer	—	$—	3,140	$327,765
Roderick K. West	97,249	$4,940,267	15,436	$1,621,930

(1) Represents the value of performance units for the 2018 - 2020 performance period (payable solely in shares based on the closing stock price of Entergy Corporation on the date of vesting) under the LTIP and the vesting of shares of restricted stock in 2020.

2020 Pension Benefits

The following table shows the present value as of December 31, 2020, of accumulated benefits payable to each of the NEOs, including the number of years of service credited to each NEO, under the retirement plans sponsored by Entergy Corporation, determined using interest rate and mortality rate assumptions set forth in Note 11 to the financial statements. Additional information regarding these retirement plans follows this table.

Name	Plan Name	Number of Years Credited Service	Present Value of Accumulated Benefit	Payments During 2020
A. Christopher Bakken, III	Cash Balance Equalization Plan	4.74	$287,400	$—
	Cash Balance Plan	4.74	$95,800	$—
Marcus V. Brown[1]	System Executive Retirement Plan	25.74	$7,889,100	$—
	Entergy Retirement Plan	25.74	$1,385,300	$—
Leo P. Denault [1][2]	System Executive Retirement Plan	30.00	$30,747,600	$—
	Entergy Retirement Plan	21.83	$1,230,700	$—
David D. Ellis	Cash Balance Equalization Plan	2.06	$15,200	$—
	Cash Balance Plan	2.06	$35,600	$—
Haley R. Fisackerly[1]	System Executive Retirement Plan	25.08	$2,338,800	$—
	Entergy Retirement Plan	25.08	$1,249,300	$—
Laura R. Landreaux	Pension Equalization Plan	13.48	$258,600	$—
	Entergy Retirement Plan	13.48	$577,100	$—
Andrew S. Marsh	System Executive Retirement Plan	22.37	$6,543,400	$—
	Entergy Retirement Plan	22.37	$944,000	$—
Phillip R. May, Jr. [1][3]	System Executive Retirement Plan	30.00	$3,747,400	$—
	Entergy Retirement Plan	34.56	$1,827,300	$—
Sallie T. Rainer [1][3]	System Executive Retirement Plan	30.00	$1,850,000	$—
	Entergy Retirement Plan	36.00	$2,090,800	$—
Roderick K. West	System Executive Retirement Plan	21.75	$7,667,200	$—
	Entergy Retirement Plan	21.75	$994,300	$—

(1) As of December 31, 2020, Mr. Brown, Mr. Denault, Mr. Fisackerly, Mr. May, and Ms. Rainer were retirement eligible.

(2) In 2006, Mr. Denault entered into a retention agreement granting him additional years of service and permission to retire under the non-qualified System Executive Retirement Plan ("SERP") in the event his employment is terminated by his Entergy employer other than for cause (as defined in the retention agreement), by Mr. Denault for good reason (as defined in the retention agreement), or on account of his death or disability. His retention agreement also provides that if he terminates employment for any other reason, he shall be entitled to up to an additional 15 years of service under the SERP only if his Entergy employer grants him permission to retire subject to the overall 30 year cap on service credit under the SERP. The amount reflected in the table for the SERP is calculated based on 30 years of service. The additional years of service credited to Mr. Denault under his retention agreement increased the present value of Mr. Denault's benefit by $4,020,200.

(3) Service under the SERP is granted from the date of hire. Service under the qualified Entergy Retirement Plan is granted from the later of the date of hire or the plan participation date. The SERP amounts reflected in the table for Mr. May and Ms. Rainer are calculated based on 30 years of service pursuant to the terms of the SERP.

Retirement Benefits

The tables below contain summaries of the pension benefit plans sponsored by Entergy Corporation that the NEOs participated in during 2020. Benefits for the NEOs who participate in these plans are determined using the same formulas as for other eligible employees.

Qualified Retirement Benefits

	Entergy Retirement Plan	Cash Balance Plan
Eligible Named Executive Officers	Marcus V. Brown Haley R. Fisackerly Leo P. Denault Andrew S. Marsh Laura R. Landreaux Phillip R. May, Jr. Sallie T. Rainer Roderick K. West	A. Christopher Bakken, III David D. Ellis
Eligibility	Non-bargaining employees hired before July 1, 2014	Non-bargaining employees hired on or after July 1, 2014 and before January 1, 2021.
Vesting	A participant becomes vested in the Entergy Retirement Plan upon attainment of at least 5 years of vesting service or upon attainment of age 65 while actively employed by an Entergy system company.	A participant becomes vested in the Cash Balance Plan upon attainment of at least 3 years of vesting service or upon attainment of age 65 while actively employed by an Entergy system company.
Form of Payment Upon Retirement	Benefits are payable as an annuity. For employees who separate from service on or after January 1, 2018, a single lump sum distribution may be elected by the participant if eligibility criteria are met.	Benefits are payable as an annuity or single lump sum distribution.
Retirement Benefit Formula	Benefits are calculated as a single life annuity payable at age 65 and generally are equal to 1.5% of a participant's Final Average Monthly Earnings (FAME) multiplied by years of service (not to exceed 40). "Earnings" for the purpose of calculating FAME generally includes the employee's base salary and eligible annual incentive awards subject to Internal Revenue Code limitations, and excludes all other bonuses. Executive annual incentive awards are not eligible for inclusion in Earnings under this plan. FAME is calculated using the employee's average monthly Earnings for the 60 consecutive months in which the employee's earnings were highest during the 120 month period immediately preceding the employee's retirement and includes up to 5 eligible annual incentive awards paid during the 60 month period.	The normal retirement benefit at age 65 is determined by converting the sum of an employee's annual pay credits and his or her annual interest credits, into an actuarially equivalent annuity. Pay credits ranging from 4-8% of an employee's eligible Earnings are allocated annually to a notional account for the employee based on an employee's age and years of service. Earnings for purposes of calculating an employee's pay credit include the employee's base salary and annual incentive awards subject to Internal Revenue Code limitations and exclude all other bonuses. Executive annual incentive awards are eligible for inclusion in Earnings under this plan. Interest credits are calculated based upon the annual rate of interest on 30-year U.S. Treasury securities, as specified by the Internal Revenue Service, for the month of August preceding the first day of the applicable calendar year subject to a minimum rate of 2.6% and a maximum rate of 9%.

Benefit Timing	Normal retirement age under the plan is 65. A reduced terminated vested benefit may be commenced as early as age 55. The amount of this benefit is determined by reducing the normal retirement benefit by 7% per year for the first 5 years commencement precedes age 65, and 6% per year for each additional year commencement precedes age 65. A subsidized early retirement benefit may be commenced by employees who are at least age 55 with 10 years of service at the time they separate from service. The amount of this benefit is determined by reducing the normal retirement benefit by 2% per year for each year that early retirement precedes age 65.	Normal retirement age under the plan is 65. A vested cash balance benefit can be commenced as early as the first day of the month following separation from service. The amount of the benefit is determined in the same manner as the normal retirement benefit described above in the "Retirement Benefit Formula" section.

Non-qualified Retirement Benefits

The NEOs are eligible to participate in certain non-qualified retirement benefit plans that provide retirement income, including the Pension Equalization Plan ("PEP"), the Cash Balance Equalization Plan, and the SERP. Each of these plans is an unfunded non-qualified defined benefit pension plan that provides benefits to key management employees. In these plans, as described below, an executive may participate in one or more non-qualified plans, but is only paid the amount due under the plan that provides the highest benefit. In general, upon disability, participants in the PEP and the SERP remain eligible for continued service credits until the earlier of recovery, separation from service due to disability, or retirement eligibility. Generally, spouses of participants who die before commencement of benefits may be eligible for a portion of the participant's accrued benefit.

	Pension Equalization Plan	**Cash Balance Equalization Plan**	**System Executive Retirement Plan**
Eligible Named Executive Officers	Marcus V. Brown Haley R. Fisackerly Leo P. Denault Laura R. Landreaux Andrew S. Marsh Phillip R. May, Jr. Sallie T. Rainer Roderick K. West	A. Christopher Bakken, III David D. Ellis	Marcus V. Brown Haley R. Fisackerly Leo P. Denault Andrew S. Marsh Phillip R. May, Jr. Sallie T. Rainer Roderick K. West
Eligibility	Management or highly compensated employees who participate in the Entergy Retirement Plan	Management or highly compensated employees who participate in the Cash Balance Plan	Certain individuals who became executive officers before July 1, 2014
Form of Payment Upon Retirement	Single lump sum distribution	Single lump sum distribution	Single lump sum distribution

Retirement Benefit Formula	Benefits generally are equal to the actuarial present value of the difference between (1) the amount that would have been payable as an annuity under the Entergy Retirement Plan, including executive annual incentive awards as eligible earnings and without applying limitations of the Internal Revenue Code of 1986, as amended (the "Code") on pension benefits and earnings that may be considered in calculating tax-qualified pension benefits, and (2) the amount actually payable as an annuity under the Entergy Retirement Plan. Executive annual incentive awards are taken into account as eligible earnings under this plan.	Benefits generally are equal to the difference between the amount that would have been payable as a lump sum under the Cash Balance Plan, but for the Code limitations on pension benefits and earnings that may be considered in calculating tax-qualified cash balance plan benefits, and the amount actually payable as a lump sum under the Cash Balance Plan.	Benefits generally are equal to the actuarial present value of a specified percentage, based on the participant's years of service (including supplemental service granted under the plan) and management level of the participant's "Final Average Monthly Compensation" (which is generally 1/36th of the sum of the participant's base salary and annual incentive plan award for the 3 highest years during the last 10 years preceding separation from service), after first being reduced by the value of the participant's Entergy Retirement Plan benefit.
Benefit timing	Payable at age 65 Benefits payable prior to age 65 are subject to the same reduced terminated vested or early retirement reduction factors as benefits payable under the Entergy Retirement Plan as described above. An employee with supplemental credited service who terminates employment prior to age 65 must receive prior written consent of the Entergy employer in order to receive the portion of their benefit attributable to their supplemental credited service agreement. Benefits payable upon separation from service subject to the 6 month delay required under the Code Section 409A.	Payable upon separation from service subject to 6 month delay required under the Code Section 409A.	Payable at age 65 Prior to age 65, vesting is conditioned on the prior written consent of the officer's Entergy employer. Benefits payable prior to age 65 are subject to the same reduced terminated vested or subsidized early retirement reduction factors as benefits payable under the Entergy Retirement Plan as described above. Benefits payable upon separation from service subject to the 6 month delay required under Internal Revenue Code Section 409A.

Additional Information

(1) Effective July 1, 2014, (a) no new grants of supplemental service may be provided to participants in the Pension Equalization Plan; (b) supplemental credited service granted prior to July 1, 2014 was grandfathered; and (c) participants in Entergy Corporation's Cash Balance Plan are not eligible to participate in the Pension Equalization Plan and instead may be eligible to participate in the Cash Balance Equalization Plan.

(2) Benefits accrued under the SERP, PEP, and Cash Balance Equalization Plan, if any, will become fully vested if a participant is involuntarily terminated without cause or terminates his or her employment for good reason in connection with a change in control with payment generally made in a lump-sum payment as soon as reasonably practicable following the first day of the month after the termination of employment, unless delayed 6 months under Internal Revenue Code Section 409A.

(3) The SERP was closed to new executive officers effective July 1, 2014.

2020 Non-qualified Deferred Compensation

As of December 31, 2020, Mr. May had a deferred account balance under a frozen Defined Contribution Restoration Plan. The amount is deemed invested, as chosen by Mr. May, in certain T. Rowe Price investment funds that are also available to the participant under the Savings Plan. Mr. May has elected to receive the deferred account balance after he retires. The Defined Contribution Restoration Plan, until it was frozen in 2005, credited eligible employees' deferral accounts with employer contributions to the extent contributions under the qualified savings plan in which the employee participated were subject to limitations imposed by the Internal Revenue Code.

Defined Contribution Restoration Plan

Name (a)	Executive Contributions in 2020 (b)	Registrant Contributions in 2020 (c)	Aggregate Earnings in 2020[1] (d)	Aggregate Withdrawals/Distributions (e)	Aggregate Balance at December 31, 2020 (f)
Phillip R. May, Jr.	$—	$—	$80	$—	$3,067

(1) Amounts in this column are not included in the Summary Compensation Table.

2020 Potential Payments Upon Termination or Change in Control

Entergy Corporation has plans and other arrangements that provide compensation to a NEO if his or her employment terminates under specified conditions, including following a change in control of Entergy Corporation or its subsidiaries.

Change in Control

Under Entergy Corporation's System Executive Continuity Plan (the "Continuity Plan"), ML 1-4 Officers are eligible to receive the severance benefits described below if their employment is terminated by their Entergy System employer other than for cause or if they terminate their employment for good reason during a period beginning with a potential change in control and ending 24 months following the effective date of a change in control (a "Qualifying Termination"). A participant will not be eligible for benefits under the Continuity Plan if such participant: accepts employment with Entergy Corporation or any of its subsidiaries; elects to receive the benefits of another severance or separation program; removes, copies or fails to return any property belonging to Entergy Corporation or any of its subsidiaries or violates his or her non-compete provision (which generally runs for two years but extends to three years if permissible under applicable law). Entergy Corporation does not have any plans or agreements that provide for payments or benefits to any of the NEOs solely upon a change in control.

In the event of a Qualifying Termination, executive officers, including the NEOs, generally will receive the benefits set forth below:

Compensation Element	Payment
Severance*	A lump sum severance payment equal to a multiple of the sum of: (a) the participant's annual base salary as in effect at any time within one year prior to the commencement of a change of control period or, if higher, immediately prior to a circumstance constituting good reason, plus (b) the participant's annual incentive, calculated using the average annual target opportunity derived under the annual incentive program for the two calendar years immediately preceding the calendar year in which termination occurs.
Performance Units	Under the 2015 EOP and the performance unit agreements in respect of the 2019 - 2021 performance period, participants would forfeit outstanding performance units, and in lieu of any payment for any outstanding performance period, would receive a single-lump sum payment calculated by multiplying the target performance units for the most recent performance period preceding (but not including) the calendar year in which termination occurs by the closing price of Entergy's common stock as of the later of the date of such termination or the date of the Change in Control. Under the 2019 OIP and the performance unit agreements in respect of the 2020 - 2022 performance unit period, participants would receive a number of shares of Entergy common stock equal to the greater of (1) the target number of performance units subject to the performance unit agreement or (2) the number of units that would vest under the performance unit agreement calculated based on the performance of Entergy Corporation through the participant's termination date, in either case pro-rated based on the portion of the performance period that occurs through the termination date.
Equity Awards	All unvested stock options, shares of restricted stock and restricted stock units will vest immediately upon a "double trigger" Qualifying Termination pursuant to the terms of the 2015 EOP and 2019 OIP.
Retirement Benefits	Benefits already accrued under the SERP, PEP and Cash Balance Equalization Plan, if any, will become fully vested.
Welfare Benefits	Participants who are not retirement-eligible would be eligible to receive Entergy-subsidized COBRA benefits for a period ranging from 12 to 18 months.

* Cash severance payments are capped at 2.99 times the sum of (a) an executive's annual base salary plus (b) the higher of his or her actual annual incentive payment under the annual incentive program or his or her annual incentive, calculated using the average annual target opportunity derived under the annual incentive program for the two calendar years immediately preceding the calendar year in which termination occurs. Any cash severance payments to be paid under the Continuity Plan in excess of this cap will be forfeited by the participant.

To protect shareholders and Entergy Corporation's business model, executives are required to comply with non-compete, non-solicitation, confidentiality and non-denigration provisions. If an executive discloses non-public data or information concerning Entergy Corporation or any of its subsidiaries or violates his or her non-compete provision, he or she will be required to repay any benefits previously received under the Continuity Plan.

For purposes of the Continuity Plan the following events are generally defined as:

- ***Change in Control***: (a) the purchase of 30% or more of either Entergy Corporation's common stock or the combined voting power of Entergy Corporation's voting securities; (b) the merger or consolidation of Entergy Corporation (unless its Board members constitute at least a majority of the board members of the surviving entity); (c) the liquidation, dissolution or sale of all or substantially all of Entergy Corporation's assets; or (d) a change in the composition of Entergy Corporation's Board such that, during any two-year period, the individuals serving at the beginning of the period no longer constitute a majority of Entergy Corporation's Board at the end of the period.

- ***Potential Change in Control***: (a) Entergy Corporation or an affiliate enters into an agreement the consummation of which would constitute a Change in Control; (b) the Entergy Corporation Board adopts resolutions determining that, for purposes of the Continuity Plan, a potential Change in Control has occurred; (c) a System Company or other person or entity publicly announces an intention to take actions that would constitute a Change in Control; or (d) any person or entity becomes the beneficial owner (directly or indirectly)

of Entergy Corporation's outstanding shares of common stock constituting 20% or more of the voting power or value of the Entergy Corporation's outstanding common stock.

- ***Cause:*** The participant's (a) willful and continuous failure to perform substantially his or her duties after written demand for performance; (b) engagement in conduct that is materially injurious to Entergy Corporation or any of its subsidiaries; (c) conviction or guilty or nolo contendere plea to a felony or other crime that materially and adversely affects either his or her ability to perform his or her duties or Entergy Corporation's reputation; (d) material violation of any agreement with Entergy Corporation or any of its subsidiaries; or (e) disclosure of any of Entergy Corporation's confidential information without authorization.

- ***Good Reason***: The participant's (a) nature or status of duties and responsibilities is substantially altered or reduced; (b) salary is reduced by 5% or more; (c) primary work location is relocated outside the continental United States; (d) compensation plans are discontinued without an equitable replacement; (e) benefits or number of vacation days are substantially reduced; or (f) employment is terminated by an Entergy employer for reasons other than in accordance with the Continuity Plan.

Other Termination Events

For termination events, other than in connection with a Change in Control, the executive officers, including the NEOs, generally will receive the benefits set forth below:

	Compensation Element				
Termination Event	**Severance**	**Annual Incentive**	**Stock Options**	**Restricted Stock**	**Performance Units**
Voluntary Resignation	None	Forfeited*	Unvested options are forfeited. Vested options expire on the earlier of (i) 90 days from the last day of active employment and (ii) the option's normal expiration date.	Forfeited	Forfeited**
Termination for Cause	None	Forfeited	Forfeited	Forfeited	Forfeited
Retirement	None	Pro-rated based on number of days employed during the performance period	Unvested stock options granted prior to 2020 vest on the retirement date and expire on the earlier of (i) five years from the retirement date and (ii) the option's normal expiration date. Unvested stock options granted in 2020 continue to vest following retirement, in accordance with the original vesting schedule and expire the earlier of (i) five years from the retirement date and (ii) the option's normal expiration date.	Forfeited	Officers with a minimum of 12 months of participation are eligible for a pro-rated award based on actual performance and full months of service during the performance period
Death/Disability	None	Pro-rated based on number of days employed during the performance period	Unvested stock options vest on the termination date and expire on the earlier of (i) five years from the termination date and (ii) the option's normal expiration date	Fully Vest	Officers are eligible for pro-rated award based on actual performance and full months of service during the performance period

* If an officer resigns after the completion of an annual incentive plan, he or she may receive, at Entergy Corporation's discretion, an annual incentive payment.

** If an officer resigns after the completion of a LTIP performance period, he or she may receive a payout under the LTIP based on the outcome of the performance period.

Mr. Denault's 2006 Retention Agreement

In 2006, Entergy Corporation entered into a retention agreement with Mr. Denault that provides benefits to him in addition to, or in lieu of, the benefits described above. Specifically, in the event of a Termination Event (as defined in his agreement): 1) Mr. Denault is entitled to a Target LTIP Award calculated by using the average annual number of performance units with respect to the two most recent performance periods preceding the calendar year in which his employment termination occurs, assuming all performance goals were achieved at target; and 2) all of Mr. Denault's unvested stock options and shares of restricted stock will immediately vest.

In the event of death or disability, Mr. Denault would receive the greater of the Target LTIP Award calculated as described above or the pro-rated number of performance units for all open performance periods, based on the number of months of his participation in each open performance period.

Under the terms of his 2006 retention agreement, Mr. Denault's employment may be terminated for cause upon Mr. Denault's: (a) continuing failure to substantially perform his duties (other than because of physical or mental illness or after he has given notice of termination for good reason) that remains uncured for 30 days after receiving a written notice from the Personnel Committee; (b) willfully engaging in conduct that is demonstrably and materially injurious to Entergy; (c) conviction of or entrance of a plea of guilty or nolo contendere to a felony or other crime that has or may have a material adverse effect on his ability to carry out his duties or upon Entergy's reputation; (d) material violation of any agreement that he has entered into with Entergy; or (e) unauthorized disclosure of Entergy's confidential information.

Mr. Denault may terminate his employment for good reason upon: (a) the substantial reduction in the nature or status of his duties or responsibilities from those in effect immediately prior to the date of the retention agreement, other than de minimis acts that are remedied after notice from Mr. Denault; (b) a reduction of 5% or more in his base salary as in effect on the date of the retention agreement; (c) the relocation of his principal place of employment to a location other than the corporate headquarters; (d) the failure to continue to allow him to participate in programs or plans providing opportunities for equity awards, incentive compensation and other plans on a basis not materially less favorable than enjoyed at the time of the retention agreement (other than changes similarly affecting all senior executives); (e) the failure to continue to allow him to participate in programs or plans with opportunities for benefits not materially less favorable than those enjoyed by him under any of the pension, savings, life insurance, medical, health and accident, disability or vacation plans or policies at the time of the retention agreement (other than changes similarly affecting all senior executives); or (f) any purported termination of his employment not taken in accordance with his retention agreement.

Aggregate Termination Payments

The tables below reflect the amount of compensation each of the NEOs would have received if his or her employment had been terminated as of December 31, 2020 under the various scenarios described above. For purposes of these tables, a stock price of $99.84 was used, which was the closing market price of Entergy Corporation stock on December 31, 2020, the last trading day of the year.

Benefits and Payments Upon Termination	Voluntary Resignation	For Cause	Termination for Good Reason or Not for Cause	Retirement	Disability	Death	Termination Related to a Change in Control
A. Christopher Bakken, III[1]							
Severance Payment	—	—	—	—	—	—	$3,435,870
Performance Units[3]	—	—	—	—	$895,065	$895,065	$1,086,858
Stock Options	—	—	—	—	$552,353	$552,353	$552,353
Restricted Stock	—	—	—	—	$764,339	$764,339	$764,339
Welfare Benefits[5]	—	—	—	—	—	—	$22,248
Unvested Restricted Stock Units[7]	—	—	—	—	—	—	$1,996,800
Marcus V. Brown[2]							
Severance Payment	—	—	—	—	—	—	$3,570,750
Performance Units[3]	—	—	—	$876,595	$876,595	$876,595	$1,080,668
Stock Options	—	—	—	$547,368	$547,368	$547,368	$547,368
Restricted Stock	—	—	—	—	$751,664	$751,664	$751,664
Welfare Benefits[6]	—	—	—	—	—	—	—
Leo P. Denault[2]							
Severance Payment	—	—	—	—	—	—	$10,993,273
Performance Units[3][4]	—	—	$4,512,768	$3,736,712	$4,512,768	$4,512,768	$5,902,641
Stock Options	—	—	$2,306,895	$2,306,895	$2,306,895	$2,306,895	$2,306,895
Restricted Stock	—	—	$2,966,300	—	$2,966,300	$2,966,300	$2,966,300
Welfare Benefits[6]	—	—	—	—	—	—	—
David D. Ellis[1]							
Severance Payment	—	—	—	—	—	—	$386,219
Performance Units[3]	—	—	—	—	$128,194	$128,194	$216,353
Stock Options	—	—	—	—	$33,377	$33,377	$33,377
Restricted Stock	—	—	—	—	$87,425	$87,425	$87,425
Welfare Benefits[5]	—	—	—	—	—	—	$19,908
Haley R. Fisackerly[2]							
Severance Payment	—	—	—	—	—	—	$543,541
Performance Units[3]	—	—	—	128,194	$128,194	$128,194	$216,353
Stock Options	—	—	—	91,899	$91,899	$91,899	$91,899
Restricted Stock	—	—	—	150,174	$150,174	$150,174	$150,174
Welfare Benefits[6]	—	—	—	—	—	—	—
Laura R. Landreaux[1]							
Severance Payment	—	—	—	—	—	—	$457,457
Performance Units[3]	—	—	—	—	$128,194	$128,194	$216,353
Stock Options	—	—	—	—	$36,210	$36,210	$36,210
Restricted Stock	—	—	—	—	$157,978	$157,978	$157,978
Welfare Benefits[5]	—	—	—	—	—	—	$19,908

Benefits and Payments Upon Termination	Voluntary Resignation	For Cause	Termination for Good Reason or Not for Cause	Retirement	Disability	Death	Termination Related to a Change in Control
Andrew S. Marsh[1]							
Severance Payment	—	—	—	—	—	—	$3,622,500
Performance Units[3]	—	—	—	—	$1,108,224	$1,108,224	$1,146,862
Stock Options	—	—	—	—	$676,227	$676,227	$676,227
Restricted Stock	—	—	—	—	$908,105	$908,105	$908,105
Welfare Benefits[5]	—	—	—	—	—	—	$29,862
Phillip R. May, Jr.[2]							
Severance Payment	—	—	—	—	—	—	$1,295,309
Performance Units[3]	—	—	—	$189,796	$189,796	$189,796	$361,121
Stock Options	—	—	—	$137,838	$137,838	$137,838	$137,838
Restricted Stock	—	—	—	—	$215,243	$215,243	$215,243
Welfare Benefits[6]	—	—	—	—	—	—	—
Sallie T. Rainer[2]							
Severance Payment	—	—	—	—	—	—	$502,198
Performance Units[3]	—	—	—	$128,194	$128,194	$128,194	$216,353
Stock Options	—	—	—	$91,899	$91,899	$91,899	$91,899
Restricted Stock	—	—	—	—	$150,174	$150,174	$150,174
Welfare Benefits[6]	—	—	—	—	—	—	—
Roderick K. West[1]							
Severance Payment	—	—	—	—	—	—	$3,732,501
Performance Units[3]	—	—	—	—	$950,177	$950,177	$1,108,324
Stock Options	—	—	—	—	$580,531	$580,531	$580,531
Restricted Stock	—	—	—	—	$811,984	$811,984	$811,984
Welfare Benefits[5]	—	—	—	—	—	—	$29,862

1) See “2020 Pension Benefits” for a description of the pension benefits Mr. Bakken, Mr. Ellis, Ms. Landreaux, Mr. Marsh, and Mr. West may receive upon the occurrence of certain termination events.

2) As of December 31, 2020, Mr. Brown, Mr. Denault, Mr. Fisackerly, Mr. May, and Ms. Rainer are retirement eligible and would retire rather than voluntarily resign, and in addition to the payments and benefits in the table, Mr. Brown, Mr. Denault, Mr. Fisackerly, Mr. May, and Ms. Rainer also would be entitled to receive their vested pension benefits under the Entergy Retirement Plan. For a description of these benefits, see “2020 Pension Benefits.”

3) For purposes of the table, in the event of a qualifying termination related to a change in control, each NEO would receive a payment in respect of his performance units for the 2019 – 2021 performance period and a number of performance units for the 2020 – 2022 performance period, calculated as follows.

For the 2019 – 2021 performance period, each NEO would be entitled to receive a single-lump sum payment calculated using the target number of performance units that the officer would have been entitled to receive under the 2015 EOP with respect to the most recent performance period that precedes and does not include the officer’s date of termination. The value of Mr. Denault’s payments was calculated by multiplying the target performance units for the 2017 – 2019 LTIP performance period (48,700) by the closing price of Entergy Corporation stock on December 31, 2020 ($99.84), which would equal a payment of $4,862,208 for the forfeited performance units for the 2019 – 2021 performance period. The value of Mr. Bakken’s, Mr. Brown’s,

Mr. Marsh's, and Mr. West's was calculated by multiplying the target performance units for the 2017 – 2019 LTIP performance period (8,300) by the closing price of Entergy Corporation stock on December 31, 2020 ($99.84), which would equal a payment of $828,672 for the forfeited performance units for the 2019 – 2021 performance period. The value of Mr. May's payment was calculated by multiplying the target performance units for the 2017 – 2019 LTIP performance period (3,150) by the closing price of Entergy Corporation stock on December 31, 2020 ($99.84), which would equal a payment of $314,496 for the forfeited performance units for the 2019 – 2021 performance period. The value of the payments for the other NEOs was calculated by multiplying the target performance units for the 2017 – 2019 LTIP performance period (1,850) by the closing price of Entergy Corporation stock on December 31, 2020 ($99.84), which would equal a payment of $184,704 for the forfeited performance units for the 2019 – 2021 performance period.

For the 2020 – 2022 performance period, in the event of a qualifying termination related to a change in control, each NEO would be entitled to receive a number of shares of Entergy Corporation stock equal to the greater of (1) the target number of performance units subject to the 2020 – 2022 performance unit agreement or (2) the number of performance units that would vest under the 2020 – 2022 performance unit agreement calculated based on Entergy Corporation's actual performance through the NEO's termination date, in either case pro-rated based on the portion of the performance period that occurs through the termination date. For purposes of the table, the values of the performance unit awards for the 2020 – 2022 performance period for each NEO were calculated as follows, based on the assumption that the target number of performance units was the greater number:

Mr. Bakken: 2,586 (12/36*7,758) performance units at target, assuming a stock price of $99.84 = $258,186

Mr. Brown: 2,524 (12/36*7,571) performance units at target, assuming a stock price of $99.84 = $251,996

Mr. Denault: 10,421 (12/36*31,263) performance units at target, assuming a stock price of $99.84 = $1,040,433

Mr. Ellis: 317 (12/36*950) performance units at target, assuming a stock price of $99.84 = $31,649

Mr. Fisackerly: 317 (12/36*950) performance units at target, assuming a stock price of $99.84 = $31,649

Ms. Landreaux: 317 (12/36*950) performance units at target, assuming a stock price of $99.84 = $31,649

Mr. May: 467 (12/36*1,400) performance units at target, assuming a stock price of $99.84 = $46,625

Mr. Marsh: 3,187 (12/36*9,560) performance units at target, assuming a stock price of $99.84 = $318,190

Ms. Rainer: 317 (12/36*950) performance units at target, assuming a stock price of $99.84 = $31,649

Mr. West: 2,801 (12/36*8,401) performance units at target, assuming a stock price of $99.84 = $279,652

The total values of the single sum payment for the 2019 – 2021 performance period and the performance units award for the 2020 – 2022 performance period upon a change in control for each NEO is as follows:

Mr. Bakken: $828,672 + $258,186 = $1,086,858

Mr. Brown: $828,672 + $251,996 = $1,080,668

Mr. Denault: $4,862,208 + $1,040,433 = $5,902,641

Mr. Ellis: $184,704 + $31,649 = $216,353

Mr. Fisackerly: $184,704 + $31,649 = $216,353

Ms. Landreaux: $184,704 + $31,649 = $216,353

Mr. May: $314,496 + $46,625 = $361,121

Mr. Marsh: $828,672 + $318,190 = $1,146,862

Ms. Rainer: $184,704 + $31,649 = $216,353

Mr. West: $828,672 + $279,652 = $1,108,324

For purposes of the table, the values of the awards payable in the event of retirement in the case of Mr. Denault, Mr. Brown, Mr. Fisackerly, Mr. May, or Ms. Rainer or upon death or disability, other than Mr. Denault, for each NEO were calculated as follows:

Mr. Bakken's:

2019 – 2021 LTIP Performance Period: 6,379 (24/36*9,568) performance units at target, assuming a stock price of $99.84 = $636,879
2020 – 2022 LTIP Performance Period: 2,586 (12/36*7,758) performance units at target, assuming a stock price of $99.84 = $258,186
Total: $895,065

Mr. Brown's:

2019 – 2021 LTIP Performance Period: 6,256 (24/36*9,383) performance units at target, assuming a stock price of $99.84 = $$624,599
2020 – 2022 LTIP Performance Period: 2,524 (12/36*7,571) performance units at target, assuming a stock price of $99.84 = $251,996
Total: $876,595

Mr. Denault's:

2019 – 2021 LTIP Performance Period: 27,006 (24/36*40,508) performance units at target, assuming a stock price of $99.84 = $2,696,279
2020 – 2022 LTIP Performance Period: 10,421 (12/36*31,263) performance units at target, assuming a stock price of $99.84 = $1,040,433
Total: $3,736,712

Mr. Marsh's:

2019 – 2021 LTIP Performance Period: 7,913 (24/36*11,869) performance units at target, assuming a stock price of $99.84 = $790,034
2020 – 2022 LTIP Performance Period: 3,187 (12/36*9,560) performance units at target, assuming a stock price of $99.84 = $318,190
Total: $1,108,224

Mr. May's:

2019 – 2021 LTIP Performance Period: 1,434 (24/36*2,150) performance units at target, assuming a stock price of $99.84 = $143,171
2020 – 2022 LTIP Performance Period: 467 (12/36*1,400) performance units at target, assuming a stock price of $99.84 = $46,625
Total: $189,796

Mr. Ellis's, Mr. Fisackerly's, Ms. Landreaux's and Ms. Rainer's:

2019 – 2021 LTIP Performance Period: 967 (24/36*1,450) performance units at target, assuming a stock price of $99.84 = $96,545

2020 – 2022 LTIP Performance Period: 317 (12/36*950) performance units at target, assuming a stock price of $99.84 = $31,649
Total: $128,194

Mr. West's:

2019 – 2021 LTIP Performance Period: 6,716 (24/36*10,073) performance units at target, assuming a stock price of $99.84 = $670,525
2020 – 2022 LTIP Performance Period: 2,801 (12/36*8,401) performance units at target, assuming a stock price of $99.84 = $279,652
Total: $950,177

4) For purposes of the table, the value of Mr. Denault's retention payment was calculated by taking an average of the target performance units from the 2016 - 2018 LTIP (41,700) and from the 2017 - 2019 LTIP (48,700). This average number of units (45,200) multiplied by the closing price of Entergy stock on December 31, 2020 ($99.84) would equal a payment of $4,512,768.

5) Pursuant to the SERP, in the event of a termination related to a change in control, Mr. Bakken, Mr. Marsh, and Mr. West would be eligible to receive Entergy-subsidized COBRA benefits for 18 months and Mr. Ellis and Ms. Landreaux would be eligible to receive Entergy-subsidized COBRA benefits for 12 months.

6) Upon retirement, Mr. Brown, Mr. Denault, Mr. Fisackerly, Mr. May, and Ms. Rainer would be eligible for retiree medical and dental benefits, the same as all other retirees.

7) Mr. Bakken's 20,000 restricted stock units vest in two equal installments on April 6, 2022 and April 6, 2025. In the event of a change in control, the unvested restricted stock units will fully vest upon Mr. Bakken's Qualifying Termination during a change in control period. Pursuant to his restricted stock unit agreement, Mr. Bakken is subject to certain restrictions on his ability to compete with Entergy and its affiliates or solicit its employees or customers during and for 12 months after his employment with his Entergy employer. In addition, the restricted stock unit agreement limits Mr. Bakken's ability to disparage Entergy and its affiliates. In the event of a breach of these restrictions, other than following certain constructive terminations of his employment, Mr. Bakken will forfeit any restricted stock units that are not yet vested and paid, and must repay to Entergy any shares of Entergy stock paid to him in respect of the restricted stock units and any amounts he received upon the sale or transfer of any such shares.

Pay Ratio

As required by Section 953(b) of the Dodd-Frank Wall Street Reform and Consumer Protection Act, the following disclosure is being provided about the relationship of the annual total compensation of the employees of each of the Utility operating companies to the annual total compensation of their respective Presidents and Chief Executive Officers. The pay ratio estimate for each of the Utility operating companies has been calculated in a manner consistent with Item 402(u) of Regulation S-K.

Identification of Median Employee

For each of the Utility operating companies, October 2, 2020 was selected as the date on which to determine the median employee. This date is different from the date used in the prior year; however, the methodology used to determine the date is consistent with that used in the prior year. Both dates correspond to the first day of the three month period prior to fiscal year-end for which information can be obtained about employees and all subsidiaries have the same number of pay cycles. To identify the median employee from each of the Utility operating companies' employee population base, all compensation included in Box 5 of Form W-2 was considered with all before-tax deductions added back to this compensation ("Box 5 Compensation"). For purposes of determining the median employee of each Utility operating company, Box 5 Compensation was selected as it is believed to be representative of the compensation received by the employees of each respective Utility operating company and is readily available.

The calculation of annual total compensation of the median employee for each Utility operating company is the same calculation used to determine total compensation for purposes of the 2020 Summary Compensation Table with respect to each of the NEOs.

Entergy Arkansas Ratio

For 2020,

- The median of the annual total compensation of all of Entergy Arkansas's employees, other than Ms. Landreaux, was $135,370.
- Ms. Landreaux's annual total compensation, as reported in the Total column of the 2020 Summary Compensation Table was $1,150,511.
- Based on this information, the ratio of the annual total compensation of Mrs. Landreaux to the median of the annual total compensation of all employees is estimated to be 8:1.

Entergy Louisiana Ratio

For 2020,

- The median of the annual total compensation of all of Entergy Louisiana's employees, other than Mr. May, was $131,155.
- Mr. May's annual total compensation, as reported in the Total column of the 2020 Summary Compensation Table, was $2,257,961.
- Based on this information, the ratio of the annual total compensation of Mr. May to the median of the annual total compensation of all employees is estimated to be 17:1.

Entergy Mississippi Ratio

For 2020,

- The median of the annual total compensation of all of Entergy Mississippi's employees, other than Mr. Fisackerly, was $111,238.
- Mr. Fisackerly's annual total compensation, as reported in the Total column of the 2020 Summary Compensation Table, was $1,803,939.
- Based on this information, the ratio of the annual total compensation of Mr. Fisackerly to the median of the annual total compensation of all employees is estimated to be 16:1.

Entergy New Orleans Ratio

For 2020,

- The median of the annual total compensation of all of Entergy New Orleans's employees, other than Mr. Ellis, was $150,102.
- Mr. Ellis's annual total compensation, as reported in the Total column of the 2020 Summary Compensation Table was $804,810.
- Based on this information, the ratio of the annual total compensation of Mr. Ellis to the median of the annual total compensation of all employees is estimated to be 5:1.

Entergy Texas Ratio

For 2020,

- The median of the annual total compensation of all of Entergy Texas's employees, other than Ms. Rainer, was $160,680.
- Ms. Rainer's annual total compensation, as reported in the Total column of the 2020 Summary Compensation Table, was $1,543,383.
- Based on this information, the ratio of the annual total compensation of Ms. Rainer to the median of the annual total compensation of all employees is estimated to be 10:1.

Item 12. Security Ownership of Certain Beneficial Owners and Management

Entergy Corporation owns 100% of the outstanding common stock of registrant Entergy Texas and indirectly 100% of the outstanding common membership interests of registrants Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans. The information with respect to persons known by Entergy Corporation to be beneficial owners of more than 5% of Entergy Corporation's outstanding common stock is included under the heading "Entergy Share Ownership - Beneficial Owners of More Than Five Percent of Entergy Common Stock" in the Entergy Corporation Proxy Statement, which information is incorporated herein by reference. The registrants know of no contractual arrangements that may, at a subsequent date, result in a change in control of any of the registrants.

The following table sets forth the beneficial ownership of common stock of Entergy Corporation and stock-based units as of January 31, 2021 for all directors and NEOs. Unless otherwise noted, each person had sole voting and investment power over the number of shares of common stock and stock-based units of Entergy Corporation set forth across from his or her name.

Name	Shares [1][2]	Options Exercisable Within 60 Days	Stock Units [3]
Entergy Corporation			
A. Christopher Bakken, III**	18,115	35,399	—
Marcus V. Brown**	38,813	34,930	—
John R. Burbank*	3,353	—	563
Patrick J. Condon*	9,333	—	—
Leo P. Denault***	324,528	899,634	—
Kirkland H. Donald*	8,590	—	3,668
Brian W. Ellis*	64		
Philip L. Frederickson*	7,889	—	805
Alexis M. Herman*	14,780	—	—
M. Elise Hyland*	1,663		563
Stuart L. Levenick*	22,920	—	—
Blanche L. Lincoln*	16,654	—	—
Andrew S. Marsh**	90,482	281,147	—
Karen A. Puckett*	9,333	—	—
Roderick K. West**	33,757	37,517	—
All directors and executive officers as a group (20 persons)	680,178	1,429,697	5,599
Entergy Arkansas			
A. Christopher Bakken, III**	18,115	35,399	—
Marcus V. Brown**	38,813	34,930	—
Leo P. Denault**	324,528	899,634	—
Andrew S. Marsh***	90,482	281,147	—
Laura R. Landreaux***	5,678	4,833	—
Roderick K. West***	33,757	37,517	—
All directors and executive officers as a group (8 persons)	556,160	1,390,535	—
Entergy Louisiana			
A. Christopher Bakken, III**	18,115	35,399	—
Marcus V. Brown**	38,813	34,930	—
Leo P. Denault**	324,528	899,634	—
Andrew S. Marsh***	90,482	281,147	—
Phillip R. May, Jr.***	23,383	8,833	13
Roderick K. West***	33,757	37,517	—
All directors and executive officers as a group (8 persons)	573,865	1,394,535	13

Name	Shares [1][2]	Options Exercisable Within 60 Days	Stock Units [3]
Entergy Mississippi			
Marcus V. Brown**	38,813	34,930	—
Leo P. Denault**	324,528	899,634	—
Haley R. Fisackerly***	7,760	5,700	—
Andrew S. Marsh***	90,482	281,147	—
Roderick K. West***	33,757	37,517	—
All directors and executive officers as a group (7 persons)	540,127	1,356,003	—
Entergy New Orleans			
Marcus V. Brown**	38,813	34,930	—
Leo P. Denault**	324,528	899,634	—
David D. Ellis***	3,332	4,199	—
Andrew S. Marsh***	90,482	281,147	—
Roderick K. West***	33,757	37,517	—
All directors and executive officers as a group (7 persons)	535,699	1,354,502	—
Entergy Texas			
Marcus V. Brown**	38,813	34,930	—
Leo P. Denault**	324,528	899,634	—
Andrew S. Marsh***	90,482	281,147	—
Sallie T. Rainer***	13,437	12,566	—
Roderick K. West***	33,757	37,517	—
All directors and executive officers as a group (7 persons)	545,804	1,362,869	—

* Director of the respective company
** NEO of the respective company
*** Director and NEO of the respective company

(1) The number of shares of Entergy Corporation common stock owned by each individual and by all non-employee directors and executive officers as a group does not exceed one percent of the outstanding shares of Entergy Corporation common stock.

(2) For the non-employee directors, the balances include phantom units that are issued under the Service Recognition Program. All non-employee directors are credited with phantom units for each year of service on the Entergy Corporation Board. These phantom units do not have voting rights or accrue dividends, and will be settled in shares of Entergy Corporation common stock following the non-employee director's separation from the Board.

(3) Represents the balances of phantom units each director or executive holds under the defined contribution restoration plan and the deferral provisions of Entergy Corporation's equity ownership plans. These units will be paid out in either Entergy Corporation Common Stock or cash equivalent to the value of one share of Entergy Corporation common stock per unit on the date of payout, including accrued dividends. The deferral period is determined by the individual and is at least two years from the award of the bonus. Messrs. Donald and Frederickson have deferred receipt of some of their quarterly stock grants. The deferred shares will be settled in cash in an amount equal to the market value of Entergy Corporation common stock at the end of the deferral period.

Equity Compensation Plan Information

The following table summarizes the equity compensation plan information as of December 31, 2020. Information is included for equity compensation plans approved by the shareholders. There are no shares authorized for issuance under equity compensation plans not approved by the shareholders.

Plan	Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (a)	Weighted Average Exercise Price (b)[2]	Number of Securities Remaining Available for Future Issuance (excluding securities reflected in column (a))(c)
Equity compensation plans approved by security holders [1]	2,399,379	$89.63	6,108,451
Equity compensation plans not approved by security holders	—	—	—
Total	2,399,379	$89.63	6,108,451

(1) Includes the 2007 Equity Ownership Plan, the 2011 Equity Ownership Plan, the 2015 Equity Plan, and the 2019 Omnibus Incentive Plan. The 2007 Equity Ownership Plan was approved by Entergy Corporation shareholders on May 12, 2006, and only applied to awards granted between January 1, 2007 and May 5, 2011. The 2011 Equity Ownership Plan was approved by Entergy Corporation shareholders on May 6, 2011, and only applied to awards granted between May 6, 2011 and May 7, 2015. The 2015 Equity Plan was approved by Entergy Corporation shareholders on May 8, 2015, and only applied to awards granted between May 8, 2015 and May 3, 2019. The 2019 Omnibus Incentive Plan was approved by the Entergy Corporation shareholders on May 3, 2019, and 7,300,000 shares of Entergy Corporation common stock can be issued from the 2019 Omnibus Incentive Plan, with all shares available for equity-based incentive awards. The 2007 Equity Ownership Plan, the 2011 Equity Ownership Plan, the 2015 Equity Plan, and the 2019 Omnibus Incentive Plan (collectively, the "Plans") are administered by the Personnel Committee of the Board of Directors (other than with respect to awards granted to non-employee directors, which awards are administered by the entire Board of Directors). Eligibility under the Plans is limited to the non-employee directors and to the officers and employees of an Entergy employer or an affiliate of Entergy Corporation. The Plans provide for the issuance of stock options, restricted stock, equity awards (units whose value is related to the value of shares of the common stock but do not represent actual shares of common stock), performance awards (performance shares or units valued by reference to shares of common stock or performance units valued by reference to financial measures or property other than common stock), restricted stock unit awards, and other stock-based awards.

(2) The weighted average exercise price reported in this column does not include outstanding performance awards.

Item 13. Certain Relationships and Related Party Transactions and Director Independence

For information regarding certain relationship, related transactions and director independence of Entergy Corporation, see the Entergy Corporation Proxy Statement under the headings “Corporate Governance - Director Independence” and “Corporate Governance - Corporate Governance Policies - Review and Approval of Related Party Transactions.”

Entergy Corporation’s Board of Directors has adopted a written Related Party Transaction Approval Policy that applies to any transaction or series of transactions in which Entergy Corporation or a subsidiary is a participant:

- When the amount involved exceeds $120,000; and
- When a Related Party (an Entergy Corporation director or executive officer, any nominee for director, any shareholder owning an excess of 5% of the total equity of Entergy Corporation and any immediate family member of any such person) has a direct or indirect material interest in such transaction(s) (other than solely as a result of being a director or a less than 10% beneficial owner of another entity).

The policy is administered by Entergy Corporation’s Corporate Governance Committee. The committee will consider relevant facts and circumstance in determining whether or not to approve or ratify such a transaction, and will approve or ratify only those transactions that are, in the Corporate Governance Committee’s judgment, appropriate or desirable under the circumstances. The Corporate Governance Committee has determined that certain types of transactions do not create or involve a direct or indirect material interest, including (i) compensation and related party transactions involving a director or an executive officer solely resulting from service as a director or employment with Entergy Corporation so long as the compensation is approved by the Entergy Corporation Board of Directors (or an appropriate committee); (ii) transactions involving public utility services at rates or charges fixed in conformity with law or governmental authority; or (iii) all business relationships between Entergy Corporation and a Related Party made in the ordinary course of business on terms and conditions generally available in the marketplace an in accordance with applicable law. To Entergy Corporation’s knowledge, since January 1, 2020, neither Entergy Corporation nor any of its affiliates has participated in any Related Party transaction.

Item 14. Principal Accountant Fees and Services (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Aggregate fees billed to Entergy Corporation (consolidated), Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy for the years ended December 31, 2020 and 2019 by Deloitte & Touche LLP were as follows:

	2020	2019
Entergy Corporation (consolidated)		
Audit Fees	$9,323,550	$8,710,000
Audit-Related Fees (a)	786,000	775,000
Total audit and audit-related fees	10,109,550	9,485,000
Tax Fees	—	—
All Other Fees (b)	183,060	31,835
Total Fees (c)	$10,292,610	$9,516,835
Entergy Arkansas		
Audit Fees	$1,137,507	$1,015,125
Audit-Related Fees (a)	—	—
Total audit and audit-related fees	1,137,507	1,015,125
Tax Fees	—	—
All Other Fees	—	—
Total Fees (c)	$1,137,507	$1,015,125
Entergy Louisiana		
Audit Fees	$2,302,851	$1,871,918
Audit-Related Fees (a)	360,000	360,000
Total audit and audit-related fees	2,662,851	2,231,918
Tax Fees	—	—
All Other Fees	—	—
Total Fees (c)	$2,662,851	$2,231,918
Entergy Mississippi		
Audit Fees	$982,507	$1,005,125
Audit-Related Fees (a)	—	—
Total audit and audit-related fees	982,507	1,005,125
Tax Fees	—	—
All Other Fees	—	—
Total Fees (c)	$982,507	$1,005,125

	2020	2019
Entergy New Orleans		
Audit Fees	$1,027,507	$950,125
Audit-Related Fees (a)	—	—
Total audit and audit-related fees	1,027,507	950,125
Tax Fees	—	—
All Other Fees	—	—
Total Fees (c)	$1,027,507	$950,125
Entergy Texas		
Audit Fees	$1,258,220	$1,165,125
Audit-Related Fees (a)	—	—
Total audit and audit-related fees	1,258,220	1,165,125
Tax Fees	—	—
All Other Fees	—	—
Total Fees (c)	$1,258,220	$1,165,125
System Energy		
Audit Fees	$1,017,507	$930,125
Audit-Related Fees (a)	—	—
Total audit and audit-related fees	1,017,507	930,125
Tax Fees	—	—
All Other Fees	—	—
Total Fees (c)	$1,017,507	$930,125

(a) Includes fees for employee benefit plan audits, consultation on financial accounting and reporting, and other attestation services.
(b) Includes fees for cybersecurity assessment and license fee for accounting research tool.
(c) 100% of fees paid in 2020 and 2019 were pre-approved by the Entergy Corporation Audit Committee.

Entergy Audit Committee Guidelines for Pre-approval of Independent Auditor Services

The Audit Committee has adopted the following guidelines regarding the engagement of Entergy's independent auditor to perform services for Entergy:

1. The independent auditor will provide the Audit Committee, for approval, an annual engagement letter outlining the scope of services proposed to be performed during the fiscal year, including audit services and other permissible non-audit services (e.g. audit-related services, tax services, and all other services).
2. For other permissible services not included in the engagement letter, Entergy management will submit a description of the proposed service, including a budget estimate, to the Audit Committee for pre-approval. Management and the independent auditor must agree that the requested service is consistent with the SEC's rules on auditor independence prior to submission to the Audit Committee. The Audit Committee, at its discretion, will pre-approve permissible services and has established the following additional guidelines for permissible non-audit services provided by the independent auditor:
    a Aggregate non-audit service fees are targeted at fifty percent or less of the approved audit service fee.
    b All other services should only be provided by the independent auditor if it is a highly qualified provider of that service or if the Audit Committee pre-approves the independent audit firm to provide the service.
3. The Audit Committee will be informed quarterly as to the status of pre-approved services actually provided by the independent auditor.
4. To ensure prompt handling of unexpected matters, the Audit Committee delegates to the Audit Committee Chair or its designee the authority to approve permissible services and fees. The Audit Committee Chair or designee will report action taken to the Audit Committee at the next scheduled Audit Committee meeting.
5. The Vice President and General Auditor will be responsible for tracking all independent auditor fees and will report quarterly to the Audit Committee.

PART IV

Item 15. Exhibits and Financial Statement Schedules

(a)1. Financial Statements and Independent Auditors' Reports for Entergy, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy are listed in the Table of Contents.

(a)2. Financial Statement Schedules

Reports of Independent Registered Public Accounting Firm (see page 542)

Financial Statement Schedules are listed in the Index to Financial Statement Schedules (see page S-1)

(a)3. Exhibits

Exhibits for Entergy, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy are listed in the Exhibit Index (see page 520 and are incorporated by reference herein). Each management contract or compensatory plan or arrangement required to be filed as an exhibit hereto is identified as such by footnote in the Exhibit Index.

Item 16. Form 10-K Summary (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

None.

EXHIBIT INDEX

The following exhibits indicated by an asterisk preceding the exhibit number are filed herewith. The balance of the exhibits have previously been filed with the SEC as the exhibits and in the file numbers indicated and are incorporated herein by reference. The exhibits marked with a (+) are management contracts or compensatory plans or arrangements required to be filed herewith and required to be identified as such by Item 15 of Form 10-K.

Some of the agreements included or incorporated by reference as exhibits to this Form 10-K contain representations and warranties by each of the parties to the applicable agreement. These representations and warranties were made solely for the benefit of the other parties to the applicable agreement and (i) were not intended to be treated as categorical statements of fact, but rather as a way of allocating the risk to one of the parties if those statements prove to be inaccurate; (ii) may have been qualified in such agreement by disclosures that were made to the other party in connection with the negotiation of the applicable agreement; (iii) may apply contract standards of "materiality" that are different from the standard of "materiality" under the applicable securities laws; and (iv) were made only as of the date of the applicable agreement or such other date or dates as may be specified in the agreement.

Entergy acknowledges that, notwithstanding the inclusion of the foregoing cautionary statements, it is responsible for considering whether additional specific disclosures of material information regarding material contractual provisions are required to make the statements in this Form 10-K not misleading.

(2) Plan of Acquisition, Reorganization, Arrangement, Liquidation or Succession

Entergy Arkansas

(a) 1 -- Plan of Merger of Entergy Arkansas, Inc. and Entergy Arkansas Power, LLC (2.1 to Form 8-K12B filed December 3, 2018 in 1-10764).

Entergy Louisiana

(b) 1 -- Plan of Merger of Entergy Gulf States Power, LLC and Entergy Gulf States Louisiana, LLC (2.1 to Form 8-K12B filed October 1, 2015 in 1-32718).

(b) 2 -- Plan of Merger of Entergy Louisiana, LLC and Entergy Louisiana Power, LLC (2.2 to Form 8-K12B filed October 1, 2015 in 1-32718).

(b) 3 -- Plan of Merger of Entergy Gulf States Power, LLC and Entergy Louisiana Power, LLC (2.3 to Form 8-K12B filed October 1, 2015 in 1-32718).

Entergy Mississippi

(c) 1 -- Plan of Merger of Entergy Mississippi, Inc. and Entergy Mississippi Power and Light, LLC (2.1 to Form 8-K12B filed December 3, 2018 in 1-31508).

Entergy New Orleans

(d) 1 -- Plan of Merger of Entergy New Orleans, Inc. and Entergy New Orleans Power, LLC (2.1 to Form 8-K12B filed December 1, 2017 in 1-35747).

(3) Articles of Incorporation and Bylaws

Entergy Corporation

(a) 1 -- Restated Certificate of Incorporation of Entergy Corporation dated October 10, 2006 (3(a) to Form 10-Q for the quarter ended September 30, 2006 in 1-11299).

(a) 2 -- Bylaws of Entergy Corporation as amended January 27, 2017, and as presently in effect (3.1 to Form 8-K filed January 30, 2017 in 1-11299).

System Energy

(b) 1 -- Amended and Restated Articles of Incorporation of System Energy effective April 28, 1989 (3(b)1 to Form 10-K for the year ended December 31, 2017 in 1-9067).

(b) 2 -- By-Laws of System Energy effective July 6, 1998, and as presently in effect (3(f) to Form 10-Q for the quarter ended June 30, 1998 in 1-9067).

Entergy Arkansas

(c) 1 -- Amended and Restated Certificate of Formation of Entergy Arkansas effective December 1, 2018 (3.3 to Form 8-K12B filed December 3, 2018 in 1-10764).

(c) 2 -- Amended and Restated Company Agreement of Entergy Arkansas effective December 1, 2018 (3.4 to Form 8-K12B filed December 3, 2018 in 1-10764).

Entergy Louisiana

(d) 1 -- Certificate of Formation of Entergy Louisiana Power, LLC (including Certificate of Amendment to Certificate of Formation to change the company name to Entergy Louisiana, LLC) effective July 7, 2015 (3.3 to Form 8-K12B filed October 1, 2015 in 1-32718).

(d) 2 -- Company Agreement of Entergy Louisiana Power, LLC (including First Amendment to Company Agreement to change the company name to Entergy Louisiana, LLC) effective July 7, 2015 (3.4 to Form 8-K12B filed October 1, 2015 in 1-32718).

Entergy Mississippi

(e) 1 -- Amended and Restated Certificate of Formation of Entergy Mississippi effective December 1, 2018 (3(e)1 to Form 10-K for the year ended December 31, 2018 in 1-31508).

(e) 2 -- Amended and Restated Company Agreement of Entergy Mississippi effective December 1, 2018 (3.4 to Form 8-K12B filed December 3, 2018 in 1-31508).

Entergy New Orleans

(f) 1 -- Composite Certificate of Formation of Entergy New Orleans effective December 1, 2017 (3.3 to Form 8-K12B filed December 1, 2017 in 1-35747).

(f) 2 -- Composite Company Agreement of Entergy New Orleans effective December 1, 2017 (3.4 to Form 8-K12B filed December 1, 2017 in 1-35747).

Entergy Texas

(g) 1 -- Amended and Restated Certificate of Formation of Entergy Texas effective August 21, 2019 (3.1 to Form 8-K filed August 21, 2019 in 1-34360), as amended by Statement of Resolution Establishing the 5.375% Series A Preferred Stock, Cumulative, No Par Value (Liquidation Value $25 Per Share) of Entergy Texas (3.3 to Form 8-A filed September 4, 2019 in 1-34360).

(g) 2 -- Amended and Restated Bylaws of Entergy Texas effective August 19, 2019 (3.2 to Form 8-K filed August 21, 2019 in 1-34360).

(4) Instruments Defining Rights of Security Holders, Including Indentures

Entergy Corporation

(a) 1 -- See (4)(b) through (4)(g) below for instruments defining the rights of security holders of System Energy, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas.

(a) 2 -- Indenture (For Unsecured Debt Securities), dated as of September 1, 2010, between Entergy Corporation and Wells Fargo Bank, National Association (4.01 to Form 8-K filed September 16, 2010 in 1-11299).

(a) 3 -- Officer's Certificate for Entergy Corporation relating to 4.0% Senior Notes due July 15, 2022 (4.02 to Form 8-K filed July 1, 2015 in 1-11299).

(a) 4 -- Officer's Certificate for Entergy Corporation relating to 2.95% Senior Notes due September 1, 2026 (4.02 to Form 8-K filed August 19, 2016 in 1-11299).

(a) 5 -- Officer's Certificate for Entergy Corporation relating to 4.50% Senior Note due December 16, 2028 (4(a)7 to Form 10-K for the year ended December 31, 2013 in 1-11299).

(a) 6 -- Officer's Certificate for Entergy Corporation relating to 2.80% Senior Notes due June 15, 2030 (4.02(a) to Form 8-K filed May 19, 2020 in 1-11299).

(a) 7 -- Officer's Certificate for Entergy Corporation relating to 3.75% Senior Notes due June 15, 2050 (4.02(b) to Form 8-K filed May 19, 2020 in 1-11299).

(a) 8 -- Officer's Certificate for Entergy Corporation relating to 0.90% Senior Notes due September 15, 2025 (4.02 to Form 8-K filed August 26, 2020 in 1-11299).

(a) 9 -- Second Amended and Restated Credit Agreement dated as of September 14, 2018, among Entergy Corporation, as Borrower, the banks and other financial institutions listed on the signatures pages thereof, as Lenders, Citibank, N.A., as Administrative Agent and LC Issuing Bank, MUFG Bank, Ltd., as LC Issuing Bank, and the other LC Issuing Banks from time to time parties thereto (4(g) to Form 10-Q for the quarter ended September 30, 2018 in 1-11299).

(a) 10 -- Extension Agreement, dated September 13, 2019, to Second Amended and Restated Credit Agreement dated as of September 14, 2018, among Entergy Corporation, as Borrower, the banks and other financial institutions listed on the signature pages thereof, as Lenders, Citibank, N.A., as Administrative Agent and LC Issuing Bank, MUFG Bank, Ltd., as LC Issuing Bank, and the other LC Issuing Banks from time to time parties thereto (4(a) to Form 10-Q for the quarter ended September 30, 2019 in 1-11299).

*(a) 11 -- Description of Entergy Corporation's securities registered under Section 12 of the Securities Exchange Act of 1934.

System Energy

(b) 1 -- Mortgage and Deed of Trust, dated as of June 15, 1977, as amended and restated by the following Supplemental Indenture: (4.42 to Form 8-K filed September 25, 2012 in 1-9067 (Twenty-fourth)).

(b) 2 -- Officer's Certificate No. 1-B-1 for System Energy Resources, Inc. relating to First Mortgage Bonds, 2.14% Series due December 9, 2025 (4.58 to Form 8-K filed December 9, 2020 in 1-09067).

(b) 3 -- Fuel Lease, dated as of February 24, 1989, between River Fuel Funding Company #3, Inc. and System Energy (4(b)3 to Form 10-K for the year ended December 31, 2017 in 1-9067).

(b) 4 -- Loan Agreement, dated as of March 1, 2019, between System Energy and Mississippi Business Finance Corporation (4(b) to Form 8-K filed March 28, 2019 in 1-9067).

Entergy Arkansas

(c) 1 -- Mortgage and Deed of Trust, dated as of October 1, 1944, as amended by the following Supplemental Indentures: (7(d) in 2-5463 (Mortgage); 7(b) in 2-7121 (First); 4(a)-7 in 2-10261 (Seventh); 2(b)-10 in 2-15767 (Tenth); 2(c) in 2-28869 (Sixteenth); 2(c) in 2-35107 (Eighteenth); 2(d) in 2-36646 (Nineteenth); 2(c) in 2-39253 (Twentieth); 4(c)1 to Form 10-K for the year ended December 31, 2017 in 1-10764 (Thirtieth); 4(c)1 to Form 10-K for the year ended December 31, 2017 in 1-10764 (Thirty-first); 4(c)1 to Form 10-K for the year ended December 31, 2017 in 1-10764 (Thirty-ninth); 4(c)1 to Form 10-K for the year ended December 31, 2017 in 1-10764 (Forty-first); 4(d)(2) in 33-54298 (Forty-sixth); C-2 to Form U5S for the year ended December 31,1995 (Fifty-third); 4(c)1 to Form 10-K for the year ended December 31, 2008 in 1-10764 (Sixty-eighth); 4.06 to Form 8-K filed October 8, 2010 in 1-10764 (Sixty-ninth); 4.06 to Form 8-K filed December 13, 2012 in 1-10764 (Seventy-first); 4(e) to Form 8-K filed January 9, 2013 in 1-10764 (Seventy-second); 4.06 to Form 8-K filed May 30, 2013 in 1-10764 (Seventy-third); 4.05 to Form 8-K filed March 14, 2014 in 1-10764 (Seventy-sixth); 4.05 to Form 8-K filed December 9, 2014 in 1-10764 (Seventy-seventh); 4.05 to Form 8-K filed January 8, 2016 in 1-10764 (Seventy-eighth); 4.05 to Form 8-K filed August 16, 2016 in 1-10764 (Seventy-ninth); 4(a) to Form 10-Q for the quarter ended September 30, 2018 (Eightieth); 4.1 to Form 8-K12B filed December 3, 2018 in 1-10764 (Eighty-first); 4.39 to Form 8-K filed March 19, 2019 in 1-10764 (Eighty-second); and 4.49 to Form 8-K filed September 11, 2020 in 1-10764 (Eighty-third)).

(c) 2 -- Second Amended and Restated Credit Agreement dated as of September 14, 2018, among Entergy Arkansas, as Borrower, the banks and other financial institutions listed on the signature pages thereof, as Lenders, Citibank, N.A., as Administrative Agent, JPMorgan Chase Bank, N.A., as LC Issuing Bank, and the other LC Issuing Banks from time to time parties thereto (4(h) to Form 10-Q for the quarter ended September 30, 2018 in 1-10764).

(c) 3 -- Borrower Assumption Agreement dated as of November 30, 2018 of Entergy Arkansas Power, LLC under the Second Amended and Restated Credit Agreement dated as of September 14, 2018, among Entergy Arkansas, as Borrower, the banks and other financial institutions listed on the signature pages thereof, as Lenders, Citibank, N.A., as Administrative Agent, JPMorgan Chase Bank, N.A., as LC Issuing Bank, and the other LC Issuing Banks from time to time parties thereto (4.2 to Form 8-K12B filed December 3, 2018 in 1-10764).

(c) 4 -- Extension Agreement, dated September 13, 2019, to Second Amended and Restated Credit Agreement dated as of September 14, 2018, as supplemented by the Borrower Assumption Agreement of Entergy Arkansas Power, LLC dated as of November 30, 2018, among Entergy Arkansas, as Borrower, the banks and other financial institutions listed on the signature pages thereof, as Lenders, Citibank, N.A., as Administrative Agent, JPMorgan Chase Bank, N.A., as LC Issuing Bank, and the other LC Issuing Banks from time to time parties thereto (4(b) to Form 10-Q for the quarter ended September 30, 2019 in 1-10764).

(c) 5 -- Fuel Lease, dated as of December 22, 1988, between River Fuel Trust #1 and Entergy Arkansas (4(c)9 to Form 10-K for the year ended December 31, 2017 in 1-10764).

(c) 6 -- Loan Agreement, dated as of January 1, 2013, between Independence County, Arkansas and Entergy Arkansas relating to Revenue Refunding Bonds (Entergy Arkansas, Inc. Project) Series 2013 (4(d) to Form 8-K filed January 9, 2013 in 1-10764).

*(c) 7 -- Description of Entergy Arkansas's securities registered under Section 12 of the Securities Exchange Act of 1934.

Entergy Louisiana

(d) 1 -- Mortgage and Deed of Trust, dated as of April 1, 1944, as amended by the following Supplemental Indentures: (7(d) in 2-5317 (Mortgage); 7(b) in 2-7408 (First); 4(d)1 to Form 10-K for the year ended December 31, 2017 in 1-32718 (Sixth); 2(c) in 2-34659 (Twelfth); 4(d)1 to Form 10-K for the year ended December 31, 2017 in 1-32718 (Thirteenth); 2(b)-2 in 2-38378 (Fourteenth); 4(d)1 to Form 10-K for the year ended December 31, 2017 in 1-32718 (Twenty-first); 4(d)1 to Form 10-K for the year ended December 31, 2017 in 1-32718 (Twenty-fifth); 4(d)1 to Form 10-K for the year ended December 31, 2017 in 1-32718 (Twenty-ninth); 4(d)1 to Form 10-K for the year ended December 31, 2017 in 1-32718 (Forty-second); A-2(a) to Rule 24 Certificate filed April 4, 1996 in 70-8487 (Fifty-first); B-4(i) to Rule 24 Certificate filed January 10, 2006 in 70-10324 (Sixty-third); B-4(ii) to Rule 24 Certificate filed January 10, 2006 in 70-10324 (Sixty-fourth); 4(a) to Form 10-Q for the quarter ended September 30, 2008 in 1-32718 (Sixty-fifth); 4(e)1 to Form 10-K for the year ended December 31, 2009 in 1-132718 (Sixty-sixth); 4.08 to Form 8-K filed September 24, 2010 in 1-32718 (Sixty-eighth); 4.08 to Form 8-K filed March 24, 2011 in 1-32718 (Seventy-first); 4(a) to Form 10-Q for the quarter ended June 30, 2011 in 1-32718 (Seventy-second); 4.08 to Form 8-K filed December 4, 2012 in 1-32718 (Seventy-sixth); 4.08 to Form 8-K filed August 23, 2013 in 1-32718 (Seventy-eighth); 4.08 to Form 8-K filed June 24, 2014 in 1-32718 (Seventy-ninth); 4.08 to Form 8-K filed July 1, 2014 in 1-32718 (Eightieth); 4.08 to Form 8-K filed November 21, 2014 (Eighty-first); 4.1 to Form 8-K12B filed October 1, 2015 (Eighty-second); 4(g) to Form 8-K filed March 18, 2016 in 1-32718 (Eighty-third); 4.33 to Form 8-K filed March 24, 2016 in 1-32718 (Eighty-fourth); 4.33 to Form 8-K filed August 17, 2016 in 1-32718 (Eighty-sixth); 4.43 to Form 8-K filed October 4, 2016 in 1-32718 (Eighty-seventh); 4.43 to Form 8-K filed May 23, 2017 in 1-32718 (Eighty-eighth); 4.43 to Form 8-K filed March 23, 2018 in 1-32718 (Eighty-ninth); 4.43 to Form 8-K filed August 14, 2018 in 1-32718 (Ninetieth); 4.43 to Form 8-K filed March 12, 2019 in 1-32718 (Ninety-first); 4.53 to Form 8-K filed March 6, 2020 in 1-32718 (Ninety-second); 4.53(b) to Form 8-K filed November 13, 2020 in 1-32718 (Ninety-third); and 4.53 to Form 8-K filed November 24, 2020 in 1-32718 (Ninety-fourth)).

(d) 2 -- Second Amended and Restated Credit Agreement dated as of September 14, 2018, among Entergy Louisiana, as Borrower, the banks and other financial institutions listed on the signature pages thereof, as Lenders, Citibank, N.A., as Administrative Agent, Wells Fargo Bank, National Association and BNP Paribas, as LC Issuing Banks, and the other LC Issuing Banks from time to time parties thereto (4(i) to Form 10-Q for the quarter ended September 30, 2018 in 1-32718).

(d) 3 -- Extension Agreement, dated September 13, 2019, to Second Amended and Restated Credit Agreement dated as of September 14, 2018, among Entergy Louisiana, as Borrower, the banks and other financial institutions listed on the signature pages thereof, as Lenders, Citibank, N.A., as Administrative Agent, Wells Fargo Bank, National Association and BNP Paribas, as LC Issuing Banks, and the other LC Issuing Banks from time to time parties thereto (4(c) to Form 10-Q for the quarter ended September 30, 2019 in 1-32718).

(d) 4 -- Fuel Lease, dated as of January 31, 1989, between River Fuel Company #2, Inc., and Entergy Louisiana (4(d)10 to Form 10-K for the year ended December 31, 2017 in 1-32718).

(d) 5 -- Nuclear Fuel Lease Agreement between Entergy Gulf States, Inc. and River Bend Fuel Services, Inc. to lease the fuel for River Bend Unit 1, dated February 7, 1989 (4(d)11 to Form 10-K for the year ended December 31, 2017 in 1-32718).

(d) 6 -- Exhibit A to Trust Indenture dated as of February 7, 1989 between River Bend Fuel Services, Inc. and U.S. Bank National Association (as successor Trustee) (4(d)12 to Form 10-K for the year ended December 31, 2017 in 1-32718).

(d) 7 -- Loan Agreement, dated as of March 1, 2016, between the Louisiana Public Facilities Authority and Entergy Louisiana relating to Refunding Revenue Bonds (Entergy Louisiana, LLC Project) Series 2016A (4(b) to Form 8-K filed March 18, 2016 in 1-32718).

(d) 8 -- Loan Agreement, dated as of March 1, 2016, between Louisiana Public Facilities Authority and Entergy Louisiana relating to Refunding Revenue Bonds (Entergy Louisiana, LLC Project) Series 2016B (4(d) to Form 8-K filed March 18, 2016 in 1-32718).

(d) 9 -- Indenture of Mortgage, dated September 1, 1926, as amended by the following Supplemental Indentures: (7-A-9 in Registration No. 2-6893 (Seventh); 4(d)15 to Form 10-K for the year ended December 31, 2017 in 1-32718 (Eighteenth); 2-A-8 in Registration No. 2-66612 (Thirty-eighth); 4(b) to Form 10-Q for the quarter ended March 31,1999 in 1-27031 (Fifty-eighth); 4(a) to Form 10-Q for the quarter ended September 30, 2009 in 0-20371 (Seventy-seventh); 4.07 to Form 8-K filed July 1, 2014 in 0-20371 (Eighty-first); 4.2 to Form 8-K12B filed October 1, 2015 in 1-32718 (Eighty-second); 4.3 to Form 8-K12B filed October 1, 2015 in 1-32718 (Eighty-third); 4.42 to Form 8-K filed March 24, 2016 in 1-32718 (Eighty-fourth); 4.42 to Form 8-K filed May 19, 2016 in 1-32718 (Eighty-fifth); 4.42 to Form 8-K filed August 17, 2016 in 1-32718 (Eighty-sixth); 4.42 to Form 8-K filed October 4, 2016 in 1-32718 (Eighty-seventh); 4.42 to Form 8-K filed May 23, 2017 in 1-32718 (Eighty-eighth); 4.42 to Form 8-K filed March 23, 2018 in 1-32718 (Eighty-ninth); 4.42 to Form 8-K filed August 14, 2018 in 1-32718 (Ninetieth); 4.42 to Form 8-K filed March 12, 2019 in 1-32718 (Ninety-first); 4.52 to Form 8-K filed March 6, 2020 in 1-32718 (Ninety-second); and 4.52(b) to Form 8-K filed November 13, 2020 in 1-32718 (Ninety-third)).

(d) 10 -- Agreement of Resignation, Appointment and Acceptance, dated as of October 3, 2007, among Entergy Gulf States, Inc., JPMorgan Chase Bank, National Association, as resigning trustee, and The Bank of New York, as successor trustee (4(a) to Form 10-Q for the quarter ended September 30, 2007 in 1-27031).

(d) 11 -- Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015, as amended by the following Supplemental Indentures: (4.38 in Registration No. 333-190911-07 (Mortgage); 4(f) to Form 8-K filed March 18, 2016 in 1-32718 (First); 4.40 to Form 8-K filed March 24, 2016 in 1-32718 (Second); 4(h) to Form 10-Q for the quarter ended March 31, 2016 in 1-32718 (Fourth); 4.40 to Form 8-K filed May 19, 2016 in 1-32718 (Fifth); 4.40 to Form 8-K filed August 17, 2016 in 1-32718 (Sixth); 4.41 to Form 8-K filed October 4, 2016 in 1-32718 (Seventh); 4.41 to Form 8-K filed May 23, 2017 in 1-32718 (Eighth); 4.41 to Form 8-K filed March 23, 2018 in 1-32718 (Ninth); 4.41 to Form 8-K filed August 14, 2018 in 1-32718 (Tenth); 4.41 to Form 8-K filed March 12, 2019 in 1-32718 (Eleventh); 4.51 to Form 8-K filed March 6, 2020 in 1-32718 (Twelfth); 4.51(b) to Form 8-K filed November 13, 2020 in 1-32718 (Thirteenth); and 4.51 to Form 8-K filed November 24, 2020 in 1-32718 (Fourteenth)).

(d) 12 -- Officer's Certificate No. 1-B-1, dated March 18, 2016, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4(e) to Form 8-K filed March 18, 2016 in 1-32718).

(d) 13 -- Officer's Certificate No. 2-B-2, dated March 17, 2016, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.39 to Form 8-K filed March 24, 2016 in 1-32718).

(d) 14 -- Officer's Certificate No. 4-B-4, dated May 16, 2016, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.39 to Form 8-K filed May 19, 2016 in 1-32718).

(d) 15 -- Officer's Certificate No. 6-B-5, dated August 10, 2016, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.39 to Form 8-K filed August 17, 2016 in 1-32718).

(d) 16 -- Officer's Certificate No. 7-B-6, dated September 28, 2016, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.40 to Form 8-K filed October 4, 2016 in 1-32718).

(d) 17 -- Officer's Certificate No. 8-B-7, dated May 17, 2017, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.40 to Form 8-K filed May 23, 2017 in 1-32718).

(d) 18 -- Officer's Certificate No. 10-B-8, dated March 20, 2018, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.40 to Form 8-K filed March 23, 2018 in 1-32718).

(d) 19 -- Officer's Certificate No. 12-B-9, dated August 8, 2018, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.40 to Form 8-K filed August 14, 2018 in 1-32718).

(d) 20 -- Officer's Certificate No. 14-B-10, dated March 6, 2019, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.40 to Form 8-K filed March 12, 2019 in 1-32718).

(d) 21 -- Officer's Certificate No. 16-B-11, dated March 3, 2020, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.50 to Form 8-K filed March 6, 2020 in 1-32718).

(d) 22 -- Officer's Certificate No. 19-B-13, dated November 9, 2020, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.50(b) to Form 8-K filed November 13, 2020 in 1-32718).

(d) 23 -- Officer's Certificate No. 20-B-14, dated November 17, 2020, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.50 to Form 8-K filed November 24, 2020 in 1-32718).

*(d) 24 -- Description of Entergy Louisiana's securities registered under Section 12 of the Securities Exchange Act of 1934.

Entergy Mississippi

(e) 1 -- Mortgage and Deed of Trust, dated as of February 1, 1988, as amended by the following Supplemental Indentures: (4(e)1 to Form 10-K for the year ended December 31, 2017 in 1-31508 (Mortgage); 4(e)1 to Form 10-K for the year ended December 31, 2017 in 1-31508 (Sixth); A-2(c) to Rule 24 Certificate filed May 14, 1999 in 70-8719 (Thirteenth); 4(b) to Form 10-Q for the quarter ended June 30, 2009 in 1-31508 (Twenty-sixth); 4.38 to Form 8-K filed December 11, 2012 in 1-31508 (Thirtieth); 4.05 to Form 8-K filed March 21, 2014 in 1-31508 (Thirty-first); 4.05 to Form 8-K filed May 13, 2016 in 1-31508 (Thirty-second); 4.16 to Form 8-K filed September 15, 2016 in 1-31508 (Thirty-third); 4.16 to Form 8-K filed November 14, 2017 in 1-31508 (Thirty-fourth); 4.1 to Form 8-K filed November 21, 2018 in 1-31508 (Thirty-fifth); 4.1 to Form 8-K12B filed December 3, 2018 in 1-31508 (Thirty-sixth); 4(a) to Form 8-K filed December 12, 2018 in 1-31508 (Thirty-seventh); 4.46 to Form 8-K filed June 5, 2019 in 1-31508 (Thirty-eighth); and 4.56 to Form 8-K filed May 22, 2020 in 1-31508 (Thirty-ninth)).

*(e) 2 -- Description of Entergy Mississippi's securities registered under Section 12 of the Securities Exchange Act of 1934.

Entergy New Orleans

(f) 1 -- Mortgage and Deed of Trust, dated as of May 1, 1987, as amended by the following Supplemental Indentures: (4(f)1 to Form 10-K for the year ended December 31, 2017 in 1-35747 (Mortgage); 4(f)1 to Form 10-K for the year ended December 31, 2017 in 1-35747 (Third); 4(b) to Form 10-Q for the quarter ended June 30, 1998 in 0-5807 (Seventh); 4.02 to Form 8-K filed November 23, 2010 in 0-5807 (Fifteenth); 4.02 to Form 8-K filed November 29, 2012 in 1-35747 (Sixteenth); 4.02 to Form 8-K filed June 21, 2013 in 1-35747 (Seventeenth); 4(m) to Form 10-Q for the quarter ended March 31, 2016 in 1-35747 (Eighteenth); 4.02 to Form 8-K filed March 22, 2016 in 1-35747 (Nineteenth); 4.02 to Form 8-K filed May 24, 2016 in 1-35747 (Twentieth); 4.1 to Form 8-K12B filed December 1, 2017 in 1-35747 (Twenty-first); 4(a) to Form 8-K filed September 27, 2018 in 1-35747 (Twenty-second); and 4(a) to Form 8-K filed March 26, 2020 in 1-35747 (Twenty-third)).

(f) 2 -- Second Amended and Restated Credit Agreement dated as of November 16, 2018, among Entergy New Orleans, as Borrower, the banks and other financial institutions listed on the signature pages thereof, as Lenders, Bank of America, N.A., as Administrative Agent and LC Issuing Bank, and the other LC Issuing Banks from time to time parties thereto (4(f)2 to Form 10-K for the year ended December 31, 2018 in 1-35747).

(f) 3 -- Term Loan Credit Agreement dated as of December 18, 2019, by and among Entergy New Orleans, the banks and other financial institutions listed on the signature pages thereof, as Lenders, and Bank of America, N.A., as Administrative Agent (4(a) to Form 8-K filed December 18, 2019 in 1-35747).

*(f) 4 -- Description of Entergy New Orleans's securities registered under Section 12 of the Securities Exchange Act of 1934.

Entergy Texas

(g) 1 -- Indenture, Deed of Trust and Security Agreement dated as of October 1, 2008, between Entergy Texas and The Bank of New York Mellon, as trustee, as amended by the following Supplemental Indenture: (4(h)2 to Form 10-K for the year ended December 31, 2008 in 0-53134 (Indenture) and 4.61 to Form 8-K filed September 20, 2019 in 1-34360 (First)).

(g) 2 -- Officer's Certificate No. 5-B-4 dated September 7, 2011, supplemental to Indenture, Deed of Trust and Security Agreement dated as of October 1, 2008, between Entergy Texas and The Bank of New York Mellon, as trustee (4.40 to Form 8-K filed September 13, 2011 in 1-34360).

(g) 3 -- Officer's Certificate No. 8-B-6 dated May 18, 2015, supplemental to Indenture, Deed of Trust and Security Agreement dated as of October 1, 2008, between Entergy Texas and The Bank of New York Mellon, as trustee (4.40 to Form 8-K filed May 21, 2015 in 1-34360).

(g) 4 -- Officer's Certificate No. 9-B-7 dated March 8, 2016, supplemental to Indenture, Deed of Trust and Security Agreement dated as of October 1, 2008, between Entergy Texas and The Bank of New York Mellon, as trustee (4.40 to Form 8-K filed March 11, 2016 in 1-34360).

(g) 5 -- Officer's Certificate No. 10-B-8 dated November 14, 2017, supplemental to Indenture, Deed of Trust and Security Agreement dated as of October 1, 2008, between Entergy Texas and The Bank of New York Mellon, as trustee (4.48 to Form 8-K filed November 17, 2017 in 1-34360).

(g) 6 -- Officer's Certificate No. 12-B-9 dated January 3, 2019, supplemental to Indenture, Deed of Trust and Security Agreement dated as of October 1, 2008, between Entergy Texas and The Bank of New York Mellon, as trustee (4.47(a) to Form 8-K filed January 8, 2019 in 1-34360).

(g) 7 -- Officer's Certificate No. 12-B-10 dated January 3, 2019, supplemental to Indenture, Deed of Trust and Security Agreement dated as of October 1, 2008, between Entergy Texas and The Bank of New York Mellon, as trustee (4.47(b) to Form 8-K filed January 8, 2019 in 1-34360).

(g) 8 -- Officer's Certificate No. 13-B-11 dated September 16, 2019, supplemental to Indenture, Deed of Trust and Security Agreement dated as of October 1, 2008, between Entergy Texas and The Bank of New York Mellon, as trustee (4.57 to Form 8-K filed September 20, 2019 in 1-34360).

(g) 9 -- Officer's Certificate No. 16-B-13 dated September 28, 2020, supplemental to Indenture, Deed of Trust and Security Agreement dated as of October 1, 2008, between Entergy Texas and The Bank of New York Mellon, as trustee (4.57 to Form 8-K filed October 1, 2020 in 1-34360).

(g) 10 -- Second Amended and Restated Credit Agreement dated as of September 14, 2018, among Entergy Texas, as Borrower, the banks and other financial institutions listed on the signature pages thereof, as Lenders, Citibank, N.A., as Administrative Agent, JPMorgan Chase Bank, N.A., BNP Paribas, Mizuho Bank, Ltd., and The Bank of Nova Scotia, as LC Issuing Banks, and the other LC Issuing Banks from time to time parties thereto (4(j) to Form 10-Q for the quarter ended September 30, 2018 in 1-34360).

(g) 11 -- Extension Agreement, dated September 13, 2019, to Second Amended and Restated Credit Agreement dated as of September 14, 2018, among Entergy Texas, as Borrower, the banks and other financial institutions listed on the signature pages thereof, as Lenders, Citibank, N.A., as Administrative Agent, JPMorgan Chase Bank, N.A., BNP Paribas, Mizuho Bank, Ltd., and The Bank of Nova Scotia, as LC Issuing Banks, and the other LC Issuing Banks from time to time parties thereto (4(d) to Form 10-Q for the quarter ended September 30, 2019 in 1-34360).

(g) 12 -- Statement of Resolution Establishing the 5.375% Series A Preferred Stock, Cumulative, No Par Value (Liquidation Value $25 Per Share) of Entergy Texas (3.3 to Form 8-A filed September 4, 2019 in 1-34360).

*(g) 13 -- Description of Entergy Texas's securities registered under Section 12 of the Securities Exchange Act of 1934.

(10) Material Contracts

Entergy Corporation

+(a)1-- 2011 Equity Ownership and Long Term Cash Incentive Plan of Entergy Corporation and Subsidiaries (Annex A to Entergy Corporation's Definitive Proxy Statement filed on March 24, 2011 in 1-11299).

+(a) 2 -- 2015 Equity Ownership Plan of Entergy Corporation and Subsidiaries (Appendix C to 2015 Entergy Corporation's Definitive Proxy Statement filed on March 20, 2015 in 1-11299).

+(a) 3 -- Supplemental Retirement Plan of Entergy Corporation and Subsidiaries, as amended and restated effective January 1, 2009 (10(a)57 to Form 10-K for the year ended December 31, 2010 in 1-11299).

+(a) 4 -- First Amendment of the Supplemental Retirement Plan of Entergy Corporation and Subsidiaries, effective December 30, 2010 (10(a)58 to Form 10-K for the year ended December 31, 2010 in 1-11299).

+(a) 5 -- Second Amendment of the Supplemental Retirement Plan of Entergy Corporation and Subsidiaries, effective January 27, 2011 (10(a)57 to Form 10-K for the year ended December 31, 2011 in 1-11299).

+(a) 6 -- Third Amendment of the Supplemental Retirement Plan of Entergy Corporation and Subsidiaries, effective July 25, 2013 (10(b) to Form 10-Q for the quarter ended September 30, 2014 in 1-11299).

+(a) 7 -- Fourth Amendment of the Supplemental Retirement Plan of Entergy Corporation and Subsidiaries, effective July 1, 2014 (10(c) to Form 10-Q for the quarter ended September 30, 2014 in 1-11299).

+(a) 8 -- Defined Contribution Restoration Plan of Entergy Corporation and Subsidiaries, as amended and restated effective January 1, 2009 (10(a)59 to Form 10-K for the year ended December 31, 2010 in 1-11299).

+(a) 9 -- First Amendment of the Defined Contribution Restoration Plan of Entergy Corporation and Subsidiaries, effective December 30, 2010 (10(a)60 to Form 10-K for the year ended December 31, 2010 in 1-11299).

+(a) 10 -- Second Amendment of the Defined Contribution Restoration Plan of Entergy Corporation and Subsidiaries, effective January 27, 2011 (10(a)60 to Form 10-K for the year ended December 31, 2011 in 1-11299).

+(a) 11 -- Executive Disability Plan of Entergy Corporation and Subsidiaries (10(a)74 to Form 10-K for the year ended December 31, 2001 in 1-11299).

+(a) 12 -- Executive Deferred Compensation Plan of Entergy Corporation and Subsidiaries, as amended and restated effective January 1, 2009 (10(a)62 to Form 10-K for the year ended December 31, 2010 in 1-11299).

+(a) 13 -- First Amendment of the Executive Deferred Compensation Plan of Entergy Corporation and Subsidiaries, effective December 30, 2010 (10(a)63 to Form 10-K for the year ended December 31, 2010 in 1-11299).

+(a) 14 --	Second Amendment of the Executive Deferred Compensation Plan of Entergy Corporation and Subsidiaries, effective January 27, 2011 (10(a)64 to Form 10-K for the year ended December 31, 2011 in 1-11299).
+(a) 15 --	System Executive Continuity Plan of Entergy Corporation and Subsidiaries, effective January 1, 2009 (10(a)77 to Form 10-K for the year ended December 31, 2009 in 1-11299).
+(a) 16 --	First Amendment of the System Executive Continuity Plan of Entergy Corporation and Subsidiaries, effective January 1, 2010 (10(a)78 to Form 10-K for the year ended December 31, 2009 in 1-11299).
+(a) 17 --	Second Amendment of the System Executive Continuity Plan of Entergy Corporation and Subsidiaries, effective December 30, 2010 (10(a)69 to Form 10-K for the year ended December 31, 2010 in 1-11299).
+(a) 18 --	Third Amendment of the System Executive Continuity Plan of Entergy Corporation and Subsidiaries, effective January 27, 2011 (10(a)71 to Form 10-K for the year ended December 31, 2011 in 1-11299).
+(a) 19 --	Pension Equalization Plan of Entergy Corporation and Subsidiaries, as amended and restated effective January 1, 2009 (10(a)74 to Form 10-K for the year ended December 31, 2010 in 1-11299).
+(a) 20 --	First Amendment of the Pension Equalization Plan of Entergy Corporation and Subsidiaries, effective December 30, 2010 (10(a)75 to Form 10-K for the year ended December 31, 2010 in 1-11299).
+(a) 21 --	Second Amendment of the Pension Equalization Plan of Entergy Corporation and Subsidiaries, effective January 27, 2011 (10(a)76 to Form 10-K for the year ended December 31, 2011 in 1-11299).
+(a) 22 --	Third Amendment of the Pension Equalization Plan of Entergy Corporation and Subsidiaries, effective June 19, 2013 (10(b) to Form 10-Q for the quarter ended June 30, 2013 in 1-11299).
+(a) 23 --	Fourth Amendment of the Pension Equalization Plan of Entergy Corporation and Subsidiaries, effective July 25, 2013 (10(c) to Form 10-Q for the quarter ended June 30, 2013 in 1-11299).
+(a) 24 --	Fifth Amendment of the Pension Equalization Plan of Entergy Corporation and Subsidiaries, effective July 1, 2014 (10(a) to Form 10-Q for the quarter ended September 30, 2014 in 1-11299).
+(a) 25 --	Cash Balance Equalization Plan of Entergy Corporation effective July 1, 2014 (10(a)31 to Form 10-K for the year ended December 31, 2019 in 1-11299).
+(a) 26 --	System Executive Retirement Plan of Entergy Corporation and Subsidiaries, effective January 1, 2009 (10(a)78 to Form 10-K for the year ended December 31, 2010 in 1-11299).
+(a) 27 --	First Amendment of the System Executive Retirement Plan of Entergy Corporation and Subsidiaries, effective December 30, 2010 (10(a)79 to Form 10-K for the year ended December 31, 2010 in 1-11299).
+(a) 28 --	Second Amendment of the System Executive Retirement Plan of Entergy Corporation and Subsidiaries, effective January 27, 2011 (10(a)81 to Form 10-K for the year ended December 31, 2011 in 1-11299).
+(a) 29 --	Third Amendment of the System Executive Retirement Plan of Entergy Corporation and Subsidiaries, effective January 1, 2009 (10(a)81 to Form 10-K for the year ended December 31, 2013 in 1-11299).
+(a) 30 --	Fourth Amendment of the System Executive Retirement Plan of Entergy Corporation and Subsidiaries, effective July 25, 2013 (10(d) to Form 10-Q for the quarter ended June 30, 2013 in 1-11299).

+(a) 31 --	Fifth Amendment of the System Executive Retirement Plan of Entergy Corporation and Subsidiaries, effective July 1, 2014 (10(d) to Form 10-Q for the quarter ended September 30, 2014 in 1-11299).
+(a) 32 --	Retention Agreement effective August 3, 2006 between Leo P. Denault and Entergy Corporation (10(b) to Form 10-Q for the quarter ended June 30, 2006 in 1-11299).
+(a) 33 --	Amendment to Retention Agreement effective January 1, 2009 between Leo P. Denault and Entergy Corporation (10(a)93 to Form 10-K for the year ended December 31, 2010 in 1-11299).
+(a) 34 --	Amendment to Retention Agreement effective January 1, 2010 between Leo P. Denault and Entergy Corporation (10(a)101 to Form 10-K for the year ended December 31, 2009 in 1-11299).
+(a) 35 --	Amendment to Retention Agreement effective December 30, 2010 between Leo P. Denault and Entergy Corporation (10(a)95 to Form 10-K for the year ended December 31, 2010 in 1-11299).
+(a) 36 --	Shareholder Approval of Future Severance Agreements Policy, effective March 8, 2004 (10(f) to Form 10-Q for the quarter ended March 31, 2004 in 1-11299).
+(a) 37 --	Entergy Nuclear Retention Plan, as amended and restated effective January 1, 2007 (10(a)107 to Form 10-K for the year ended December 31, 2007 in 1-11299).
+(a) 38--	2019 Entergy Corporation Omnibus Incentive Plan (Appendix B to 2019 Proxy Statement, dated March 22, 2019 in 1-11299).
+(a)39--	Form of Stock Option Grant Agreement (10(a)45 to Form 10-K for the year ended December 31, 2019 in 1-11299).
*+(a) 40 --	Form of Long Term Incentive Program Performance Unit Agreement.
+(a) 41 --	Form of Restricted Stock Grant Agreement (10(a)47 to Form 10-K for the year ended December 31, 2019 in 1-11299).
+(a) 42 --	Form of Restricted Stock Units Grant Agreement (10(a)48 to Form 10-K for the year ended December 31, 2019 in 1-11299).
+(a) 43 --	Restricted Stock Units Agreement by and between A. Christopher Bakken, III and Entergy Corporation effective April 6, 2016 (10(a)54 to Form 10-K for the year ended December 31, 2016 in 1-11299).
+(a) 44 --	The 2019 Entergy Corporation Non-Employee Director Stock Program (10(b) to Form 10-Q for the quarter ended June 30, 2019 in 1-11299).
+(a) 45 --	2019 Entergy Corporation Non-Employee Director Service Recognition Program (10(c) to Form 10-Q for the quarter ended June 30, 2019 in 1-11299).
*+(a) 46 --	Defined Contribution Restoration Plan effective as of January 1, 2021.

System Energy

(b) 1 --	Availability Agreement, dated June 21, 1974, among System Energy and certain other System companies (10(b)1 to Form 10-K for the year ended December 31, 2017 in 1-9067).
(b) 2 --	First Amendment to Availability Agreement, dated as of June 30, 1977 (10(b)2 to Form 10-K for the year ended December 31, 2017 in 1-9067).
(b) 3 --	Second Amendment to Availability Agreement, dated as of June 15, 1981 (10(b)3 to Form 10-K for the year ended December 31, 2017 in 1-9067).

(b) 4 -- Third Amendment to Availability Agreement, dated as of June 28, 1984 (10(b)4 to Form 10-K for the year ended December 31, 2017 in 1-9067).

(b) 5 -- Fourth Amendment to Availability Agreement, dated as of June 1, 1989 (10(b)5 to Form 10-K for the year ended December 31, 2017 in 1-9067).

(b) 6 -- Thirty-seventh Assignment of Availability Agreement, Consent and Agreement, dated as of September 1, 2012, among System Energy, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and The Bank of New York Mellon, as successor trustee (10(a)15 to Form 10-K for the year ended December 31, 2012 in 1-11299).

(b) 7 -- Amendment to the Thirty-seventh Assignment of Availability Agreement, Consent and Agreement, dated as of September 18, 2015, among System Energy, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and The Bank of New York Mellon, as successor trustee (4.25 to Form S-3 filed October 2, 2015).

(b) 8 -- Thirty-eighth Assignment of Availability Agreement, Consent and Agreement, dated as of December 9, 2020, among System Energy, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and The Bank of New York Mellon, as successor trustee (4.60 to Form 8-K filed December 9, 2020 in 1-09067).

(b) 9 -- Facility Lease No. 1, dated as of December 1, 1988, between Meridian Trust Company and Stephen M. Carta (Stephen J. Kaba, successor), as Owner Trustees, and System Energy (10(b)11 to Form 10-K for the year ended December 31, 2017 in 1-9067).

(b) 10 -- Lease Supplement No. 4, dated as of January 15, 2014, to Facility Lease No. 1 (10(b)12 to Form 10-K for the year ended December 31, 2016 in 1-11299).

(b) 11 -- Facility Lease No. 2, dated as of December 1, 1988 between Meridian Trust Company and Stephen M. Carta (Stephen J. Kaba, successor), as Owner Trustees, and System Energy (10(b)13 to Form 10-K for the year ended December 31, 2017 in 1-9067).

(b) 12 -- Lease Supplement No. 4, dated as of May 28, 2014, to Facility Lease No. 2 (10(b)14 to Form 10-K for the year ended December 31, 2016 in 1-11299).

(b) 13 -- Reallocation Agreement, dated as of July 28, 1981, among System Energy and certain other System companies (10(b)15 to Form 10-K for the year ended December 31, 2017 in 1-9067).

(b) 14 -- Unit Power Sales Agreement among System Energy, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans dated as of June 10, 1982, as amended and revised (10(b)16 to Form 10-K for the year ended December 31, 2018 in 1-9067).

Entergy Louisiana

(c) 1 -- Amendment, effective as of May 26, 2017, to the Fourth Amended and Restated Limited Liability Company Agreement of Entergy Holdings Company LLC effective as of September 19, 2015 (10(c)1 to Form 10-K for the year ended December 31, 2017 in 1-32718).

(14) Code of Ethics

Entergy Corporation

*(a) Entergy Corporation Code of Business Conduct and Ethics.

***(21) Subsidiaries of the Registrants**

(23) Consents of Experts and Counsel

*(a) The consent of Deloitte & Touche LLP is contained herein at page 541.

***(24) Powers of Attorney**

(31) Rule 13a-14(a)/15d-14(a) Certifications

*(a) Rule 13a-14(a)/15d-14(a) Certification for Entergy Corporation.

*(b) Rule 13a-14(a)/15d-14(a) Certification for Entergy Corporation.

*(c) Rule 13a-14(a)/15d-14(a) Certification for Entergy Arkansas.

*(d) Rule 13a-14(a)/15d-14(a) Certification for Entergy Arkansas.

*(e) Rule 13a-14(a)/15d-14(a) Certification for Entergy Louisiana.

*(f) Rule 13a-14(a)/15d-14(a) Certification for Entergy Louisiana.

*(g) Rule 13a-14(a)/15d-14(a) Certification for Entergy Mississippi.

*(h) Rule 13a-14(a)/15d-14(a) Certification for Entergy Mississippi.

*(i) Rule 13a-14(a)/15d-14(a) Certification for Entergy New Orleans.

*(j) Rule 13a-14(a)/15d-14(a) Certification for Entergy New Orleans.

*(k) Rule 13a-14(a)/15d-14(a) Certification for Entergy Texas.

*(l) Rule 13a-14(a)/15d-14(a) Certification for Entergy Texas.

*(m) Rule 13a-14(a)/15d-14(a) Certification for System Energy.

*(n) Rule 13a-14(a)/15d-14(a) Certification for System Energy.

(32) Section 1350 Certifications

**(a) Section 1350 Certification for Entergy Corporation.

**(b) Section 1350 Certification for Entergy Corporation.

**(c) Section 1350 Certification for Entergy Arkansas.

**(d) Section 1350 Certification for Entergy Arkansas.

**(e) Section 1350 Certification for Entergy Louisiana.

**(f) Section 1350 Certification for Entergy Louisiana.

**(g) Section 1350 Certification for Entergy Mississippi.

**(h) Section 1350 Certification for Entergy Mississippi.

**(i) Section 1350 Certification for Entergy New Orleans.

**(j) Section 1350 Certification for Entergy New Orleans.

**(k) Section 1350 Certification for Entergy Texas.

**(l) Section 1350 Certification for Entergy Texas.

**(m) Section 1350 Certification for System Energy.

**(n) Section 1350 Certification for System Energy.

(101) Interactive Data File

*INS - Inline XBRL Instance Document - The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.

*SCH - Inline XBRL Schema Document.

*CAL - Inline XBRL Calculation Linkbase Document.

*DEF - Inline XBRL Definition Linkbase Document.

*LAB - Inline XBRL Label Linkbase Document.

*PRE - Inline XBRL Presentation Linkbase Document.

***(104) Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibits 101)**

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* Filed herewith.
** Furnished, not filed, herewith.
\+ Management contracts or compensatory plans or arrangements.

ENTERGY CORPORATION

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. The signature of the undersigned company shall be deemed to relate only to matters having reference to such company and any subsidiaries thereof.

ENTERGY CORPORATION

By /s/ Kimberly A. Fontan
Kimberly A. Fontan
Senior Vice President and Chief Accounting Officer
Date: February 26, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated. The signature of each of the undersigned shall be deemed to relate only to matters having reference to the above-named company and any subsidiaries thereof.

Signature	Title	Date
/s/ Kimberly A. Fontan Kimberly A. Fontan	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 26, 2021

Leo P. Denault (Chairman of the Board, Chief Executive Officer and Director; Principal Executive Officer); Andrew S. Marsh (Executive Vice President and Chief Financial Officer; Principal Financial Officer); John R. Burbank, Patrick J. Condon, Kirkland H. Donald, Brian W. Ellis, Philip L. Frederickson, Alexis M. Herman, M. Elise Hyland, Stuart L. Levenick, Blanche L. Lincoln, and Karen A. Puckett (Directors).

By: /s/ Kimberly A. Fontan
(Kimberly A. Fontan, Attorney-in-fact)
February 26, 2021

ENTERGY ARKANSAS, LLC

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. The signature of the undersigned company shall be deemed to relate only to matters having reference to such company and any subsidiaries thereof.

ENTERGY ARKANSAS, LLC

By /s/ Kimberly A. Fontan
Kimberly A. Fontan
Senior Vice President and Chief Accounting Officer
Date: February 26, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated. The signature of each of the undersigned shall be deemed to relate only to matters having reference to the above-named company and any subsidiaries thereof.

Signature	Title	Date
/s/ Kimberly A. Fontan Kimberly A. Fontan	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 26, 2021

Laura R. Landreaux (Chair of the Board, President, Chief Executive Officer, and Director; Principal Executive Officer); Andrew S. Marsh (Executive Vice President, Chief Financial Officer, and Director; Principal Financial Officer); Paul D. Hinnenkamp and Roderick K. West (Directors).

By: /s/ Kimberly A. Fontan
(Kimberly A. Fontan, Attorney-in-fact)
February 26, 2021

ENTERGY LOUISIANA, LLC

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. The signature of the undersigned company shall be deemed to relate only to matters having reference to such company and any subsidiaries thereof.

ENTERGY LOUISIANA, LLC

By /s/ Kimberly A. Fontan
Kimberly A. Fontan
Senior Vice President and Chief Accounting Officer
Date: February 26, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated. The signature of each of the undersigned shall be deemed to relate only to matters having reference to the above-named company and any subsidiaries thereof.

Signature	Title	Date
/s/ Kimberly A. Fontan Kimberly A. Fontan	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 26, 2021

Phillip R. May, Jr. (Chairman of the Board, President, Chief Executive Officer, and Director; Principal Executive Officer); Andrew S. Marsh (Executive Vice President, Chief Financial Officer, and Director; Principal Financial Officer); Paul D. Hinnenkamp and Roderick K. West (Directors).

By: /s/ Kimberly A. Fontan
(Kimberly A. Fontan, Attorney-in-fact)

February 26, 2021

ENTERGY MISSISSIPPI, LLC

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. The signature of the undersigned company shall be deemed to relate only to matters having reference to such company and any subsidiaries thereof.

ENTERGY MISSISSIPPI, LLC

By /s/ Kimberly A. Fontan
Kimberly A. Fontan
Senior Vice President and Chief Accounting Officer
Date: February 26, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated. The signature of each of the undersigned shall be deemed to relate only to matters having reference to the above-named company and any subsidiaries thereof.

Signature	Title	Date
/s/ Kimberly A. Fontan Kimberly A. Fontan	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 26, 2021

Haley R. Fisackerly (Chairman of the Board, President, Chief Executive Officer, and Director; Principal Executive Officer); Andrew S. Marsh (Executive Vice President, Chief Financial Officer, and Director; Principal Financial Officer); Paul D. Hinnenkamp and Roderick K. West (Directors).

By: /s/ Kimberly A. Fontan
(Kimberly A. Fontan, Attorney-in-fact)
February 26, 2021

ENTERGY NEW ORLEANS, LLC

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. The signature of the undersigned company shall be deemed to relate only to matters having reference to such company and any subsidiaries thereof.

ENTERGY NEW ORLEANS, LLC

By /s/ Kimberly A. Fontan
Kimberly A. Fontan
Senior Vice President and Chief Accounting Officer
Date: February 26, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated. The signature of each of the undersigned shall be deemed to relate only to matters having reference to the above-named company and any subsidiaries thereof.

Signature	Title	Date
/s/ Kimberly A. Fontan Kimberly A. Fontan	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 26, 2021

David D. Ellis (Chairman of the Board, President, Chief Executive Officer, and Director; Principal Executive Officer); Andrew S. Marsh (Executive Vice President, Chief Financial Officer, and Director; Principal Financial Officer); Paul D. Hinnenkamp and Roderick K. West (Directors).

By: /s/ Kimberly A. Fontan
(Kimberly A. Fontan, Attorney-in-fact)
February 26, 2021

ENTERGY TEXAS, INC.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. The signature of the undersigned company shall be deemed to relate only to matters having reference to such company and any subsidiaries thereof.

ENTERGY TEXAS, INC.

By /s/ Kimberly A. Fontan
Kimberly A. Fontan
Senior Vice President and Chief Accounting Officer
Date: February 26, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated. The signature of each of the undersigned shall be deemed to relate only to matters having reference to the above-named company and any subsidiaries thereof.

Signature	Title	Date
/s/ Kimberly A. Fontan Kimberly A. Fontan	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 26, 2021

Sallie T. Rainer (Chair of the Board, President, Chief Executive Officer, and Director; Principal Executive Officer); Andrew S. Marsh (Executive Vice President, Chief Financial Officer, and Director; Principal Financial Officer); Paul D. Hinnenkamp and Roderick K. West (Directors).

By: /s/ Kimberly A. Fontan
(Kimberly A. Fontan, Attorney-in-fact)
February 26, 2021

SYSTEM ENERGY RESOURCES, INC.

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized. The signature of the undersigned company shall be deemed to relate only to matters having reference to such company and any subsidiaries thereof.

SYSTEM ENERGY RESOURCES, INC.

By /s/ Kimberly A. Fontan
Kimberly A. Fontan
Senior Vice President and Chief Accounting Officer
Date: February 26, 2021

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated. The signature of each of the undersigned shall be deemed to relate only to matters having reference to the above-named company and any subsidiaries thereof.

Signature	Title	Date
/s/ Kimberly A. Fontan Kimberly A. Fontan	Senior Vice President and Chief Accounting Officer (Principal Accounting Officer)	February 26, 2021

Roderick K. West (Chairman of the Board, President, Chief Executive Officer, and Director; Principal Executive Officer); Andrew S. Marsh (Executive Vice President, Chief Financial Officer, and Director; Principal Financial Officer); A. Christopher Bakken, III and Steven C. McNeal (Directors).

By: /s/ Kimberly A. Fontan
(Kimberly A. Fontan, Attorney-in-fact)
February 26, 2021

EXHIBIT 23(a)

CONSENTS OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

We consent to the incorporation by reference in Registration Statement No. 333-233403 on Form S-3 and in Registration Statements Nos. 333-140183, 333-174148, 333-204546, 333-231800 and 333-251819 on Form S-8 of our reports dated February 26, 2021, relating to the financial statements and financial statement schedule of Entergy Corporation and Subsidiaries, and the effectiveness of Entergy Corporation and Subsidiaries' internal control over financial reporting, appearing in this Annual Report on Form 10-K of Entergy Corporation for the year ended December 31, 2020.

We consent to the incorporation by reference in Registration Statement No. 333-233403-05 on Form S-3 of our reports dated February 26, 2021, relating to the financial statements and financial statement schedule of Entergy Arkansas, LLC and Subsidiaries appearing in this Annual Report on Form 10-K of Entergy Arkansas, LLC for the year ended December 31, 2020.

We consent to the incorporation by reference in Registration Statement No. 233403-04 on Form S-3 of our reports dated February 26, 2021, relating to the financial statements and financial statement schedule of Entergy Louisiana, LLC and Subsidiaries appearing in this Annual Report on Form 10-K of Entergy Louisiana, LLC for the year ended December 31, 2020.

We consent to the incorporation by reference in Registration Statement No. 233403-03 on Form S-3 of our reports dated February 26, 2021, relating to the financial statements and financial statement schedule of Entergy Mississippi, LLC appearing in this Annual Report on Form 10-K of Entergy Mississippi, LLC for the year ended December 31, 2020.

We consent to the incorporation by reference in Registration Statement No. 233403-02 on Form S-3 of our reports dated February 26, 2021, relating to the financial statements and financial statement schedule of Entergy Texas, Inc. and Subsidiaries appearing in this Annual Report on Form 10-K of Entergy Texas, Inc. for the year ended December 31, 2020.

We consent to the incorporation by reference in Registration Statement No. 233403-01 on Form S-3 of our report dated February 26, 2021, relating to the financial statements of System Energy Resources, Inc. appearing in this Annual Report on Form 10-K of System Energy Resources, Inc. for the year ended December 31, 2020.

/s/ DELOITTE & TOUCHE LLP

New Orleans, Louisiana
February 26, 2021

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and Board of Directors of
Entergy Corporation and Subsidiaries

Opinion on the Financial Statement Schedule

We have audited the consolidated financial statements of Entergy Corporation and Subsidiaries (the "Corporation") as of December 31, 2020 and 2019, and for each of the three years in the period ended December 31, 2020, and the Corporation's internal control over financial reporting as of December 31, 2020, and have issued our reports thereon dated February 26, 2021. Our audits also included the consolidated financial statement schedule of the Corporation listed in Item 15. This consolidated financial statement schedule is the responsibility of the Corporation's management. Our responsibility is to express an opinion on the Corporation's consolidated financial statement schedule based on our audits. In our opinion, such consolidated financial statement schedule, when considered in relation to the consolidated financial statements taken as a whole, presents fairly, in all material respects, the information set forth therein.

/s/ DELOITTE & TOUCHE LLP

New Orleans, Louisiana
February 26, 2021

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the shareholders and Board of Directors of
Entergy Texas, Inc. and Subsidiaries

To the member and Board of Directors of
Entergy Arkansas, LLC and Subsidiaries
Entergy Louisiana, LLC and Subsidiaries
Entergy Mississippi, LLC
Entergy New Orleans, LLC and Subsidiaries

Opinion on the Financial Statement Schedules

We have audited the consolidated financial statements of Entergy Arkansas, LLC and Subsidiaries, Entergy Louisiana, LLC and Subsidiaries, Entergy New Orleans, LLC and Subsidiaries, and Entergy Texas, Inc. and Subsidiaries, and we have also audited the financial statements of Entergy Mississippi, LLC (collectively the "Companies") as of December 31, 2020 and 2019, and for each of the three years in the period ended December 31, 2020, and have issued our reports thereon dated February 26, 2021. Our audits also included the financial statement schedules of the respective Companies listed in Item 15. These financial statement schedules are the responsibility of the respective Companies' management. Our responsibility is to express an opinion on the Companies' financial statement schedules based on our audits. In our opinion, such financial statement schedules, when considered in relation to the financial statements taken as a whole, present fairly, in all material respects, the information set forth therein.

/s/ DELOITTE & TOUCHE LLP

New Orleans, Louisiana
February 26, 2021

INDEX TO FINANCIAL STATEMENT SCHEDULES

Schedule		Page
II	Valuation and Qualifying Accounts 2020, 2019, and 2018:	
	Entergy Corporation and Subsidiaries	S-2
	Entergy Arkansas, LLC and Subsidiaries	S-3
	Entergy Louisiana, LLC and Subsidiaries	S-4
	Entergy Mississippi, LLC	S-5
	Entergy New Orleans, LLC and Subsidiaries	S-6
	Entergy Texas, Inc. and Subsidiaries	S-7

Schedules other than those listed above are omitted because they are not required, not applicable, or the required information is shown in the financial statements or notes thereto.

Columns have been omitted from schedules filed because the information is not applicable.

ENTERGY CORPORATION AND SUBSIDIARIES
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
For the Years Ended December 31, 2020, 2019, and 2018
(In Thousands)

Column A	Column B	Column C	Column D	Column E
Description	Balance at Beginning of Period	Additions Charged to Income (1)	Other Changes Deductions (2)	Balance at End of Period
Allowance for doubtful accounts				
2020	$7,404	$111,687	$1,297	$117,794
2019	$7,322	$2,806	$2,724	$7,404
2018	$13,587	$3,936	$10,201	$7,322

Notes:

(1) A portion of the charges to income are deferred as a regulatory asset.

(2) Deductions represent write-offs of accounts receivable balances and are reduced by recoveries of amounts previously written off.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
For the Years Ended December 31, 2020, 2019, and 2018
(In Thousands)

Column A	Column B	Column C	Column D	Column E
Description	Balance at Beginning of Period	Additions Charged to Income (1)	Other Changes Deductions (2)	Balance at End of Period
Allowance for doubtful accounts				
2020	$1,169	$17,307	$142	$18,334
2019	$1,264	$1,000	$1,095	$1,169
2018	$1,063	$810	$609	$1,264

Notes:

(1) A portion of the charges to income are deferred as a regulatory asset.

(2) Deductions represent write-offs of accounts receivable balances and are reduced by recoveries of amounts previously written off.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
For the Years Ended December 31, 2020, 2019, and 2018
(In Thousands)

Column A	Column B	Column C	Column D	Column E
Description	Balance at Beginning of Period	Additions Charged to Income (1)	Other Changes Deductions (2)	Balance at End of Period
Allowance for doubtful accounts				
2020	$1,902	$44,542	$751	$45,693
2019	$1,813	$762	$673	$1,902
2018	$8,430	$2,395	$9,012	$1,813

Notes:

(1) A portion of the charges to income are deferred as a regulatory asset.

(2) Deductions represent write-offs of accounts receivable balances and are reduced by recoveries of amounts previously written off.

ENTERGY MISSISSIPPI, LLC
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
For the Years Ended December 31, 2020, 2019, and 2018
(In Thousands)

Column A	Column B	Column C	Column D	Column E
Description	Balance at Beginning of Period	Additions Charged to Income (1)	Other Changes Deductions (2)	Balance at End of Period
Allowance for doubtful accounts				
2020	$636	$19,081	$190	$19,527
2019	$563	$406	$333	$636
2018	$574	$265	$276	$563

Notes:

(1) A portion of the charges to income are deferred as a regulatory asset.

(2) Deductions represent write-offs of accounts receivable balances and are reduced by recoveries of amounts previously written off.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
For the Years Ended December 31, 2020, 2019, and 2018
(In Thousands)

Column A	Column B	Column C	Column D	Column E
Description	Balance at Beginning of Period	Additions Charged to Income (1)	Other Changes Deductions (2)	Balance at End of Period
Allowance for doubtful accounts				
2020	$3,226	$14,204	$—	$17,430
2019	$3,222	$316	$312	$3,226
2018	$3,057	$187	$22	$3,222

Notes:
(1) A portion of the charges to income are deferred as a regulatory asset.
(2) Deductions represent write-offs of accounts receivable balances and are reduced by recoveries of amounts previously written off.

ENTERGY TEXAS, INC. AND SUBSIDIARIES
SCHEDULE II - VALUATION AND QUALIFYING ACCOUNTS
For the Years Ended December 31, 2020, 2019, and 2018
(In Thousands)

Column A	Column B	Column C	Column D	Column E
Description	Balance at Beginning of Period	Additions Charged to Income (1)	Other Changes Deductions (2)	Balance at End of Period
Allowance for doubtful accounts				
2020	$471	$16,554	$215	$16,810
2019	$461	$321	$311	$471
2018	$463	$279	$281	$461

Notes:

(1) A portion of the charges to income are deferred as a regulatory asset.

(2) Deductions represent write-offs of accounts receivable balances and are reduced by recoveries of amounts previously written off.

Exhibit 4(a)11

DESCRIPTION OF ENTERGY CORPORATION'S SECURITIES

REGISTERED PURSUANT TO SECTION 12

OF THE SECURITIES EXCHANGE ACT OF 1934

References in this exhibit to "we," "us," or "our" are to Entergy Corporation, and does not include our subsidiaries.

As of February 26, 2021, the only security registered by us under Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act") is our common stock, par value $0.01.

The following descriptions of our common stock and the relevant provisions of our certificate of incorporation and bylaws are summaries and are qualified by reference to our certificate of incorporation and bylaws that are filed as exhibits to the Annual Report on Form 10-K to which this is filed as an exhibit. The following also summarizes certain applicable provisions of the General Corporation Law of the State of Delaware (the "DGCL") and that summary is qualified by reference to the DGCL.

General

Our authorized capital stock consists of 500,000,000 shares of common stock, par value $0.01 per share.

Dividend Rights

We will pay dividends on our common stock as determined by our board of directors out of legally available funds. Our ability to pay dividends depends primarily upon the ability of our subsidiaries to pay dividends or distributions or otherwise transfer funds to us. Various financing arrangements, charter provisions and regulatory requirements may impose certain restrictions on the ability of our subsidiaries to transfer funds to us in the form of cash dividends or distributions, loans or advances.

Voting Rights

Holders of common stock are entitled to one vote for each share held by them on all matters submitted to our shareholders. Holders of our common stock do not have cumulative voting rights in the election of directors. Unless otherwise required by law, in all matters other than the election of directors, the affirmative vote of the holders of a majority of the shares represented at a shareholder meeting and entitled to vote on the subject matter shall be the act of the shareholders. At a meeting for the election of directors at which a quorum is present, directors are elected by a majority of votes cast with respect to such director; provided, however, that, if the number of nominees is greater than the number of directors who will be elected, the nominees receiving a plurality of the votes cast will be elected as directors.

Liquidation Rights

In the event of any liquidation, dissolution or winding up of our affairs, voluntarily or involuntarily, the holders of our common stock will be entitled to receive the remainder, if any, of our assets after the payment of all our debts and liabilities.

Preemptive Rights

The holders of our common stock do not have a preemptive right to purchase shares of our common stock or securities convertible into such shares nor are they liable for future capital calls or to assessments by us.

Listing

Our common stock is listed under the "ETR" symbol on both the New York Stock Exchange and the NYSE Chicago.

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Equiniti Trust Company, doing business as EQ Shareowner Services.

Certain Anti-Takeover Effects

General. Certain provisions of our certificate of incorporation, bylaws and the DGCL could have the effect of delaying, deferring or preventing an acquisition of control of us by means of a tender offer, a proxy fight, open market purchases or otherwise in a transaction not approved by our board of directors. The provisions described below may reduce our vulnerability to an unsolicited proposal for the restructuring or sale of all or substantially all of our assets or an unsolicited takeover attempt which is unfair to our shareholders.

Our board of directors has no present intention to introduce additional measures that might have an anti-takeover effect; however, our board of directors expressly reserves the right to introduce these measures in the future.

Business Combinations. Section 203 of the DGCL prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a period of three years after the time the stockholder became an interested stockholder, subject to certain exceptions, including if, prior to such time, the board of directors approved the business combination or the transaction which resulted in the stockholder becoming an interested stockholder. "Business combinations" include mergers, asset sales and other transactions resulting in a financial benefit to the "interested stockholder." Subject to various exceptions, an "interested stockholder" is a person who, together with his or her affiliates and associates, owns, or within the prior three years did own, 15% or more of the corporation's outstanding voting stock. The restrictions on business combinations with interested stockholders contained in Section 203 do not apply to a corporation whose certificate of incorporation or bylaws contains a provision expressly electing not to be governed by the statute; however, neither our certificate of incorporation nor our bylaws contain a provision electing to "opt-out" of Section 203.

Special Meetings. Pursuant to the DGCL, a special meeting of stockholders may be called by the board of directors or by any other person authorized to do so in the certificate of incorporation or bylaws. Our certificate of incorporation and bylaws provide that special meetings of stockholders may only be called by: our board of directors; the Chairman of our board of directors; a majority of the members of the entire Executive Committee of the board of directors; the Chief Executive Officer; or the holders of a majority of the outstanding shares of our common stock entitled to vote at the special meeting.

Advance Notice Requirements for Shareholder Nominations and Proposals. Our bylaws establish advance notice procedures with respect to stockholder proposals for annual meetings and the nomination of candidates for election as directors, other than nominations made by or at the direction of our board of

directors or a committee of the board of directors. A stockholder who wishes to bring a matter before a meeting must comply with our advance notice requirements and provide us with certain information. Additionally, vacancies and newly created directorships may be filled only by a vote of a majority of the directors then in office, even in the case that such directors may represent less than a quorum.

Exhibit 4(c)7

DESCRIPTION OF ENTERGY ARKANSAS, LLC'S SECURITIES

REGISTERED PURSUANT TO SECTION 12

OF THE SECURITIES EXCHANGE ACT OF 1934

References in this exhibit to "we," "us," or "our" are to Entergy Arkansas, LLC.

We have issued, and may from time to time issue, bonds in one or more series under one or more separate supplemental indentures to the Mortgage and Deed of Trust dated as of October 1, 1944, with Deutsche Bank Trust Company Americas, successor corporate trustee, and, as to property in Missouri, The Bank of New York Mellon Trust Company, N.A., successor co-trustee, and together referred to in this exhibit as "trustees." This Mortgage and Deed of Trust, as it has heretofore been and may be amended or supplemented from time to time, is referred to in this exhibit as the "mortgage." All first mortgage bonds issued or to be issued under the mortgage, including the Bonds (as defined below), are referred to herein as "first mortgage bonds."

As of February 26, 2021, we have one series of first mortgage bonds outstanding that is registered under Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), our First Mortgage Bonds, 4.875% Series due September 1, 2066, issued in an aggregate principal amount of $410,000,000 under the Seventy-Ninth Supplemental Indenture, dated as of August 1, 2016, to the mortgage and traded on the NYSE under the ticker EAI (the "Bonds"). The full aggregate principal amount of the Bonds is currently outstanding.

The mortgage, including the supplemental indenture relating to the Bonds, contains the full legal text of the matters described herein. Because this is a summary, it does not describe every aspect of the mortgage, the supplemental indenture relating to the Bonds, or the outstanding first mortgage bonds, including the Bonds. The mortgage and the supplemental indentures that relate to the outstanding first mortgage bonds, including the Bonds, are filed as exhibits to the Annual Report on Form 10-K to which this is filed as an exhibit. You should read the mortgage for provisions that may be important to you. This summary is subject to and qualified in its entirety by reference to all the provisions of the mortgage, including the definitions of some of the terms used in the mortgage, and to the particular terms of the supplemental indenture that relates to the Bonds. The mortgage has been qualified under the Trust Indenture Act of 1939, and you should also refer to the Trust Indenture Act of 1939 for provisions that apply to the Bonds.

General

The mortgage permits us to issue first mortgage bonds from time to time subject to limitations described below under "Issuance of Additional First Mortgage Bonds." All first mortgage bonds of any one series need not be issued at the same time, and a series may be reopened for issuances of additional first mortgage bonds of that series. This means that we may from time to time, without the consent of the existing holders of the first mortgage bonds of any series, including the Bonds, create and issue additional first mortgage bonds of a series having the same terms and conditions as the previously issued first mortgage bonds of that series in all respects, except for issue date, issue price and, if applicable, the initial interest payment on those additional first mortgage bonds. Additional first mortgage bonds issued in this manner will be consolidated with and will form a single series with the previously issued first mortgage bonds of that series. For more information, see the discussion below under "Issuance of Additional First Mortgage Bonds."

Payment

The principal amount of the Bonds and interest thereon is and will be paid in any coin or currency of the United States of America that at the time of payment is legal tender at the corporate trust office of the corporate trustee in the Borough of Manhattan, City and State of New York.

Interest on the Bonds accrues at the rate of 4.875% per year. Interest started to accrue from the date that the Bonds were issued. Interest payments on the Bonds are made on March 1, June 1, September 1 and December 1 of each year. As long as the Bonds are registered in the name of The Depository Trust Company ("DTC") or its nominee, the record date for interest payable on any interest payment date shall be the close of business on the Business Day (defined as any day other than a Saturday or a Sunday or a day on which banking institutions in The City of New York are authorized or required by law or executive order to remain closed or a day on which the corporate trust office of the corporate trustee is closed for business) immediately preceding such interest payment date. We have agreed to pay interest on any overdue principal and, if such payment is enforceable under applicable law, on any overdue installment of interest on the Bonds at a rate of 6% per year to holders of record at the close of business on the Business Day immediately preceding our payment of such interest.

Interest on the Bonds is computed on the basis of a 360-day year of twelve 30-day months. If any interest payment date or the maturity date of the Bonds falls on a day that is not a Business Day, the payment due on that interest payment date or the maturity date will be made on the next Business Day, and without any interest or other payment in respect of such delay.

As long as the Bonds are registered in the name of DTC or its nominee, we will pay principal and interest due on the Bonds to DTC. DTC will then make payment to its participants for disbursement to the beneficial owners of the Bonds as described under the heading "Book-Entry Only Securities."

Redemption

We may redeem the Bonds prior to maturity, in whole or in part, at our option, on not less than 30 days' nor more than 60 days' notice, at any time on or after September 1, 2021, at a redemption price equal to 100% of the principal amount of the Bonds being redeemed plus any accrued and unpaid interest thereon to, but not including, the redemption date. Unless the Bonds are held in book-entry only form through the facilities of DTC, in which case DTC's procedures for selection shall apply (see "Book-Entry Only Securities"), if less than all of the Bonds are to be redeemed, the corporate trustee will select the Bonds to be redeemed.

Unless we default in the payment of the redemption price and accrued interest, if any, in the case of an unconditional notice of redemption, the Bonds subject to such notice of redemption will cease to bear interest on the redemption date. We will pay the redemption price and any accrued interest to the redemption date upon surrender of any Bond for redemption. If only part of a Bond is redeemed, the corporate trustee will deliver to the holder of the Bond a new Bond for the remaining portion without charge.

We may make any redemption at our option conditional upon the receipt by the corporate trustee, prior to the date fixed for redemption, of money sufficient to pay the redemption price and accrued interest, if any. If the corporate trustee has not received the money by the date fixed for redemption, we will not be required to redeem the Bonds.

Form and Exchange

The Bonds are fully-registered bonds without coupons, issued in denominations of $25 and integral multiples of $25 in excess thereof. The Bonds are represented by a global certificate without coupons registered in the name of a nominee of DTC.

The Bonds are exchangeable for other Bonds in equal aggregate principal amounts. No service charge will be made for any registration of transfer or exchange of the Bonds. However, we may require payment to cover any tax or other governmental charge that may be imposed in connection with a registration of transfer or exchange. We will not be required to provide for the transfer or exchange of any Bond:

1. during the 10 days before an interest payment date,
2. during the 10 days before any designation of such Bond to be redeemed, or
3. selected for redemption.

Security

The Bonds, together with all other first mortgage bonds now or in the future outstanding under the mortgage, are and will be secured, equally and ratably, by the lien of the mortgage. The mortgage constitutes a first mortgage lien on substantially all of our property (the "mortgaged property") subject to bankruptcy law and to:

1. leases of minor portions of our mortgaged property to others for uses which do not interfere with our business;
2. leases of certain of our mortgaged property not used in our business; and
3. excepted encumbrances (as defined below).

There is excepted from the lien certain of our property, including:

1. cash and securities;
2. certain equipment, materials and supplies;
3. automobiles and other vehicles and aircraft, timber, minerals, mineral rights and royalties;
4. receivables, contracts, leases and operating agreements; and
5. certain unimproved lands sold or to be sold.

The "excepted encumbrances" mean the following:

- tax liens, assessments and other governmental charges or requirements which are not delinquent or which are being contested in good faith and by appropriate proceedings or of which at least ten business days' notice has not been given to our general counsel or to such other person designated by us to receive such notices;
- mechanics', workmen's, repairmen's, materialmen's, warehousemen's and carriers' liens, other liens incident to construction, liens or privileges of any of our employees for salary or wages earned, but not yet payable, and other liens, including without limitation liens for worker's compensation awards, arising in the ordinary course of business for charges or requirements which are not delinquent or which are being contested in good faith and by appropriate proceedings or of which at least ten business days' notice has not been given to our general counsel or to such other person designated by us to receive such notices;
- specified judgment liens and prepaid liens;
- easements, leases, reservations or other rights of others (including governmental entities) in, and defects of title in, our property;

- liens securing indebtedness or other obligations relating to real property we acquired for specified transmission, distribution or communication purposes or for the purpose of obtaining rights-of-way;
- specified leases and leasehold, license, franchise and permit interests;
- liens resulting from laws, rules, regulations, orders or rights of governmental authorities and specified liens required by law or governmental regulations;
- liens to secure public obligations; rights of others to take minerals, timber, electric energy or capacity, gas, water, steam or other products produced by us or by others on our property;
- rights and interests of persons other than us arising out of agreements relating to the common ownership or joint use of property, and liens on the interests of those persons in the property;
- restrictions on assignment and/or requirements of any assignee to qualify as a permitted assignee and/or public utility or public services corporation; and
- liens which have been bonded for the full amount in dispute or for the payment of which other adequate security arrangements have been made.

The mortgage contains provisions that impose the lien of the mortgage on property that we acquire after the date of the mortgage, other than excepted property, subject to pre-existing liens. However, if we consolidate or merge with, or convey or transfer all or substantially all of our mortgaged property to, a successor, the lien created by the mortgage will generally not cover the property of the successor, other than the mortgaged property it acquires from us and improvements, replacements and additions to such property.

The mortgage also provides that the trustees shall have a lien upon the mortgaged property to ensure the payment of their reasonable compensation, expenses and disbursements and for indemnity against certain liabilities. This lien takes priority over the lien securing the first mortgage bonds, including the Bonds.

The mortgage also contains restrictions on the issuance of debt secured by a prior lien on the mortgaged property ("qualified lien bonds").

Issuance of Additional First Mortgage Bonds

The maximum principal amount of first mortgage bonds that may be issued under the mortgage is limited to $100 billion at any time outstanding under the mortgage, subject to property additions and other limitations of the mortgage. First mortgage bonds of any series may be issued from time to time on the basis of:

1. 60% of the cost or fair value, whichever is less, of unfunded property additions after adjustments to offset retirements;
2. retirements of first mortgage bonds or qualified lien bonds; or
3. deposit of cash with the corporate trustee.

Property additions generally include, among other things, electric, gas, steam or hot water property acquired after June 30, 1944. Securities, automobiles or other vehicles or aircraft, or property used principally for the production or gathering of natural gas, are not included as property additions.

We have the right to amend the mortgage at any time without the consent or other action of the holders of any first mortgage bonds, including the Bonds, to permit the issuance of first mortgage bonds on the basis of 80% of the cost or fair value, whichever is less, of unfunded property additions after adjustments to offset retirements.

We have the right to amend the mortgage at any time without any consent or other action of the holders of any first mortgage bonds, including the Bonds, to make any form of space satellites including solar power satellites, space stations and other analogous facilities available as property additions.

As of December 31, 2020, we had approximately $3,981 million principal amount of first mortgage bonds outstanding. Also as of December 31, 2020, we had approximately $1,003 million of available property additions, entitling us to issue approximately $602 million principal amount of additional first mortgage bonds on the basis of property additions, and we could have issued approximately $802 million principal amount of additional first mortgage bonds on the basis of retired first mortgage bonds. These amounts do not reflect our repayment at maturity of $350 million aggregate principal amount of first mortgage bonds on February 15, 2021, which decreased the principal amount outstanding to $3,631 million and increased the amount issuable on the basis of retired first mortgage bonds to $1,152 million. The Bonds were issued on the basis of property additions.

Other than the security afforded by the lien of the mortgage and restrictions on the issuance of additional first mortgage bonds described above, there are no provisions of the mortgage that grant the holders of the first mortgage bonds protection in the event of a highly leveraged transaction involving us.

Release and Substitution of Property

We may release property from the lien of the mortgage on the bases of:

1. the deposit of cash or, to a limited extent, purchase money mortgages;
2. property additions, after adjustments in certain cases to offset retirements and after making adjustments for qualified lien bonds, if any, outstanding against property additions; and
3. (i) the aggregate principal amount of first mortgage bonds that we would be entitled to issue on the basis of retired qualified lien bonds; or (ii) 10/6ths of the aggregate principal amount of first mortgage bonds that we would be entitled to issue on the basis of retired first bonds; in each case with the entitlement being waived by operation of the release.

We can withdraw cash upon the bases stated in clause (2) and/or (3) above. Should we amend the mortgage as described under “Issuance of Additional First Mortgage Bonds” above to permit the issuance of first mortgage bonds on the basis of an increased percentage of the cost or fair value, whichever is less, of unfunded property additions after adjustments to offset retirements, the ratio specified in clause (3)(ii) above would change to the reciprocal of such increased percentage.

The mortgage also contains special provisions with respect to qualified lien bonds pledged and the disposition of moneys received on pledged prior lien bonds. We may also release unfunded property if after such release at least one dollar in unfunded property remains subject to the lien of the mortgage. We have the right to amend the mortgage at any time without the consent or other action of the holders of any first mortgage bonds, including the Bonds, to modify the definition of “Funded Property” in the mortgage to mean property specified by us with a fair value determined by an independent expert not less than 10/8ths of the sum of the amount of the outstanding first mortgage bonds and retired first mortgage bonds.

We may, without any release or consent by the corporate trustee,

- grant, free from the lien of the mortgage, easements, ground leases or rights-of-way in, upon, over and/or across our property for the purpose of roads, pipe lines, transmission lines, distribution lines, communication lines and similar purposes, or for the joint or common use of real property, rights-of-way, facilities and/or equipment, but only if such grant shall not materially impair the use

of the property or rights-of-way for the purposes for which such property or rights-of-way are held by us, and
- cancel or make changes or alterations in or substitutions for any and all easements, servitudes and similar rights and/or interests.

Modification

Modification Without Consent

Without the consent of any holder of first mortgage bonds, we and the trustees may enter into one or more supplemental indentures for any of the following purposes:

- to evidence the assumption by any permitted successor of our covenants in the mortgage and in the first mortgage bonds;
- to add one or more covenants or other provisions for the benefit of the holders of all or any series of first mortgage bonds, or to surrender any right or power conferred upon us;
- to add additional events of default under the mortgage for all or any series of first mortgage bonds;
- to correct or amplify the description of the mortgaged property or to subject additional property to the lien of the mortgage;
- to change, eliminate or add any provision to the mortgage; provided that no such change, elimination or addition will adversely affect the interests of the holders of first mortgage bonds of any series in any material respect;
- to establish the form or terms of first mortgage bonds of any other series as permitted by the mortgage;
- to provide for the procedures required for use of a noncertificated system of registration for the first mortgage bonds of all or any series;
- to change any place where principal, premium, if any, and interest shall be payable, first mortgage bonds may be surrendered for registration of transfer or exchange, and notices and demands to us may be served; or
- to cure any ambiguity or inconsistency or to make any other changes or additions to the provisions of the mortgage if such changes or additions will not adversely affect the interests of first mortgage bonds of any series in any material respect.

Modification Requiring Consent

Except as provided below, the consent of the holders of a majority in aggregate principal amount of then outstanding first mortgage bonds, considered as one class, is required for all other amendments or modifications to the mortgage. However, if less than all of the series of first mortgage bonds outstanding are directly affected by a proposed amendment or modification, then the consent of the holders of only a majority in aggregate principal amount of the outstanding first mortgage bonds of all series that are directly affected, considered as one class, will be required. Notwithstanding the foregoing, no amendment or modification may be made without the consent of the holder of each directly affected first mortgage bond then outstanding to:

- extend the maturity of the principal of, or interest on, any first mortgage bond, or reduce the principal amount of any first mortgage bond or its rate of interest or modify the terms of payment of such principal or interest;
- create any lien ranking prior to or on a parity with the lien of the mortgage with respect to the mortgaged property, or deprive any non-assenting holder of a first mortgage bond of a lien on the mortgaged property for the security of such holder’s first mortgage bonds (subject only to excepted encumbrances); or

- reduce the percentage in principal amount of the outstanding first mortgage bonds of any series the consent of the holders of which is required for any amendment or modification.

The mortgage provides that first mortgage bonds owned by us, for our benefit or by any entity of which we own 25% or more of the outstanding voting stock shall not be deemed outstanding for the purpose of certain votes, consents or quorums; provided that first mortgage bonds that have been pledged in good faith may be regarded as outstanding if the pledgee establishes to the satisfaction of the corporate trustee its right to vote or give consents with respect to such first mortgage bonds and such pledgee is not us or an entity of which we own 25% or more of the outstanding voting stock.

Any request, consent or vote of the owner of any first mortgage bond will bind every future holder and owner of that first mortgage bond and the holder and owner of every first mortgage bond issued upon the registration of transfer of or in exchange for that first mortgage bond.

Defaults

Defaults under the mortgage include:

1. failure to pay the principal of any first mortgage bond when due and payable;
2. failure to pay interest on any first mortgage bond or any installments of any fund required to be applied to the purchase or redemption of any first mortgage bond for a period of 60 days after the same shall have become due and payable;
3. failure to pay interest upon or principal of any qualified lien bonds beyond any applicable grace period;
4. certain events of bankruptcy, insolvency or reorganization; and
5. the expiration of 90 days after the mailing by the corporate trustee to us of a written demand, or by holders of 15% in principal amount of the first mortgage bonds at the time outstanding under the mortgage to us and to the corporate trustee of a written demand, that we perform a specified covenant or agreement contained in the mortgage, which specified covenant or agreement we have failed to perform prior to such mailing, unless during such period we shall have performed such specified covenant or agreement. The corporate trustee may, and, if requested to do so in writing by the holders of a majority in principal amount of the first mortgage bonds then outstanding, shall, make such demand.

The trustees may withhold notice of default, except in payment of principal, interest or funds for purchase or redemption of first mortgage bonds, if they in good faith determine it is in the interests of the holders of the first mortgage bonds.

Remedies

Acceleration of Maturity

If a default under the mortgage occurs, then the corporate trustee, by written notice to us, or the holders of at least 25% in principal amount of the outstanding first mortgage bonds, by written notice to us and the corporate trustee, may declare the principal amount of all of the first mortgage bonds to be due and payable immediately, and upon the giving of such notice, such principal amount and accrued and unpaid interest will become immediately due and payable.

There is no automatic acceleration, even in the event of our bankruptcy, insolvency or reorganization.

Annulment of Acceleration

At any time after such a declaration of acceleration has been made but before any sale of the mortgaged property, the holders of a majority in principal amount of all outstanding first mortgage bonds may annul such declaration of acceleration, by written notice to the trustees and us, if the default under the mortgage giving rise to such declaration of acceleration has been cured, and we have paid or deposited with the corporate trustee a sum sufficient to pay:

(1) all overdue interest on all outstanding first mortgage bonds;
(2) the principal of and premium, if any, on the outstanding first mortgage bonds that have become due otherwise than by such declaration of acceleration and overdue interest thereon;
(3) interest on overdue interest, if any, to the extent lawful, at the rate of 6% per year; and
(4) all amounts due to the trustees under the mortgage.

Trustees' Powers

Subject to the mortgage, under specified circumstances and to the extent permitted by law, if a default under the mortgage occurs, the trustees shall be entitled to the appointment of a receiver for the mortgaged property and are entitled to all other remedies available under applicable law.

Control by Holders

The holders of a majority in principal amount of the first mortgage bonds may direct the time, method and place of conducting any proceedings for any remedy available to the trustees or exercising any trust or power conferred on the trustees. The trustees are not obligated to comply with directions that conflict with law or other provisions of the mortgage or that the corporate trustee determines in good faith would involve the trustees in personal liability, would be unjustifiably prejudicial to non-assenting holders or would be in circumstances where indemnity would not be sufficient. The trustees are not required to risk their funds or incur personal liability if there is reasonable ground for believing that repayment is not reasonably assured.

Limitation on Holders' Right to Institute Proceedings

No holder of first mortgage bonds will have any right to institute any proceeding under the mortgage, or any remedy under the mortgage, unless:

- the holder has previously given to the trustees written notice of a default under the mortgage;
- the holders of 25% in aggregate principal amount of the outstanding first mortgage bonds of all series have made a written request to the trustees and have offered the trustees reasonable opportunity and indemnity satisfactory to the trustees to institute proceedings; and
- the trustees have failed to institute any proceeding for 60 days after notice;

provided that no holder or holders of first mortgage bonds shall have any right in any manner to affect or prejudice the lien of the mortgage or to obtain priority over other holders of outstanding first mortgage bonds. However, these limitations do not apply to the absolute and unconditional right of a holder of a first mortgage bond to institute suit for payment of the principal, premium, if any, or interest on the first mortgage bond on or after the applicable due date.

We have reserved the right to amend the mortgage, without any consent or other action by the holders of any first mortgage bonds created on or after May 1, 2018, to revise the limitations described in

the first sentence of the immediately preceding paragraph to apply to any proceeding or remedy under or with respect to the mortgage or the first mortgage bonds.

Evidence to be Furnished to the Trustee

Compliance with the mortgage provisions is evidenced by written statements of our officers or persons we select or pay. In certain cases, opinions of counsel and certifications of an engineer, accountant, appraiser or other expert (who in some cases must be independent) must be furnished. We must give the corporate trustee an annual certificate as to whether or not we have fulfilled our obligations under the mortgage throughout the preceding year.

Satisfaction and Discharge of Mortgage

The mortgage may be satisfied and discharged if and when we provide for the payment of all of the first mortgage bonds and all other sums due under the mortgage.

Consolidation, Merger and Conveyance of Assets

The mortgage provides that we may consolidate with or merge into any other entity or convey, transfer or lease as, or substantially as, an entirety to any entity the mortgaged property, if:

- (a) the surviving or successor entity to such merger or consolidation has authority to carry on the electric, gas, steam or hot water business, or (b) the successor entity that acquires by conveyance or transfer or that leases our mortgaged property as, or substantially as, an entirety, is authorized to acquire, lease or operate the mortgaged property so conveyed or transferred;
- such merger, consolidation, conveyance, transfer or lease is upon such terms as to preserve, and in no respect impair, the lien and security of the mortgage and the rights and powers of the trustees and the holders of first mortgage bonds;
- the survivor or successor entity expressly assumes by supplemental indenture our obligations on all first mortgage bonds then outstanding and under the mortgage; and
- in the case of a lease, such lease is made expressly subject to termination by us or by the trustees and by the purchaser of the property so leased at any sale thereof at any time during the continuance of a default under the mortgage.

In the case of the conveyance or other transfer of the mortgaged property as, or substantially as, an entirety to another entity, upon the satisfaction of all the conditions described above, we would be released and discharged from all our obligations and covenants under the mortgage and on the first mortgage bonds then outstanding unless we elect to waive such release and discharge.

The mortgage does not prevent or restrict any conveyance or other transfer, or lease, of any part of the mortgaged property that does not constitute the entirety, or substantially the entirety, of the mortgaged property.

Although the successor entity may, in its sole discretion, subject to the lien of the mortgage property then owned or thereafter acquired by the successor entity, the lien of the mortgage generally will not cover the property of the successor entity other than the mortgaged property it acquires from us and improvements, extensions and additions to such property and renewals, replacements and substitutions thereof, within the meaning of the mortgage.

The terms of the mortgage do not restrict mergers in which we are the surviving entity.

The mortgage provides that a statutory merger in which our assets and liabilities may be allocated among one or more entities shall not be considered to be a merger, consolidation or conveyance of mortgaged property subject to the provisions of the mortgage relating to a merger, consolidation or conveyance of all or substantially all of the mortgaged property unless all or substantially all of the mortgaged property is allocated to one or more other entities.

We have reserved the right to amend the mortgage without the consent or other action by the holders of any first mortgage bonds created after on or after May 1, 2018, to provide as follows:

(1) that any conveyance, transfer or lease of any of our properties where we retain mortgaged property with a fair value in excess of 167% of the aggregate principal amount of all outstanding first mortgage bonds, and any other outstanding debt secured by a purchase money lien that ranks equally with, or senior to, the first mortgage bonds with respect to the mortgaged property, shall not be deemed to be a conveyance, transfer or lease of all or substantially all of our mortgaged property. This fair value will be determined within 90 days of the conveyance, transfer or lease by an independent expert selected by us; and

(2) that, in the case of a consolidation or merger after the consummation of which we would be the surviving or resulting entity, unless we otherwise provide in a supplemental indenture to the mortgage, the lien of the mortgage will generally not cover any of the properties acquired by us in or as a result of such transaction or any improvements, extensions or additions to those properties.

Information about the Corporate Trustee

The corporate trustee is Deutsche Bank Trust Company Americas. In addition to acting as corporate trustee, Deutsche Bank Trust Company Americas and its affiliate, Deutsche Bank AG New York Branch, also act, and may act, as trustee under various other of our and our affiliates' indentures, trusts and guarantees. We and our affiliates maintain credit and liquidity facilities and conduct other banking transactions with the corporate trustee and its affiliates in the ordinary course of our respective businesses

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We have reserved the right to amend the mortgage without the consent or other action by the holders of any first mortgage bonds created on or after May 1, 2018, to provide that so long as no event of default or event that, after notice or lapse of time, or both, would become an event of default has occurred and is continuing and except with respect to a trustee appointed by act of the holders, if we have delivered to the trustees a board resolution appointing a successor for any trustee and the successor has accepted the appointment in accordance with the terms of the mortgage, the applicable trustee will be deemed to have resigned and the successor will be deemed to have been appointed as trustee in accordance with the mortgage.

Information about the Co-Trustee

The co-trustee is The Bank of New York Mellon Trust Company, N.A. In addition to acting as co-trustee, The Bank of New York Mellon Trust Company, N.A. and its affiliate, The Bank of New York Mellon, also act, and may act, as trustee under various other of our and our affiliates' indentures, trusts and guarantees. We and our affiliates maintain deposit accounts and credit and liquidity facilities and conduct other banking transactions with the co-trustee and its affiliates in the ordinary course of our respective businesses.

Book-Entry Only Securities

The Bonds trade through DTC. The Bonds are represented by a global certificate registered in the name of Cede & Co., DTC's nominee. The global certificate was deposited with the corporate trustee as custodian for DTC. Ownership of beneficial interests in the global certificates is limited to institutions that have accounts with DTC or its participants or persons that may hold interests through participants.

DTC is a New York clearing corporation and a clearing agency registered under Section 17A of the Exchange Act. DTC holds securities for its participants. DTC also facilitates the post-trade settlement of securities transactions among its participants through electronic computerized book-entry transfers and pledges in the participants' accounts. This eliminates the need for physical movement of securities certificates. The participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Others who maintain a custodial relationship with a participant can use the DTC system. The rules that apply to DTC and those using its systems are on file with the SEC.

Purchases of the Bonds within the DTC system must be made through participants, who will receive a credit for the Bonds on DTC's records. The beneficial ownership interest of each purchaser will be recorded on the appropriate participant's records. Beneficial owners do not receive written confirmation from DTC of their purchases, but beneficial owners should receive written confirmations of the transactions, as well as periodic statements of their holdings, from the participants through whom they purchased Bonds. Transfers of ownership in the Bonds are to be accomplished by entries made on the books of the participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates for their Bonds of a series, except if use of the book-entry system for the Bonds of that series is discontinued.

To facilitate subsequent transfers, all Bonds deposited by participants with DTC are registered in the name of DTC's nominee, Cede & Co. The deposit of the Bonds with DTC and their registration in the name of Cede & Co. effects no change in beneficial ownership. DTC has no knowledge of the actual beneficial owners of the Bonds. DTC's records reflect only the identity of the participants to whose accounts such Bonds are credited. These participants may or may not be the beneficial owners. Participants are responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to participants, and by participants to beneficial owners, are governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial owners of Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults and proposed amendments to the mortgage. Beneficial owners of the Bonds may wish to ascertain that the nominee holding the Bonds has agreed to obtain and transmit notices to the beneficial owners.

Redemption notices will be sent to Cede & Co., as registered holder of the Bonds. If less than all of the Bonds of a series are being redeemed, DTC's practice is to determine by lot the amount of Bonds of such series held by each participant to be redeemed.

Neither DTC nor Cede & Co. will itself consent or vote with respect to Bonds, unless authorized by a participant in accordance with DTC's procedures. Under its usual procedures, DTC would mail an omnibus proxy to us as soon as possible after the record date. The omnibus proxy assigns the consenting or voting rights of Cede & Co. to those participants to whose accounts the Bonds are credited on the

record date. We believe that these arrangements will enable the beneficial owners to exercise rights equivalent in substance to the rights that can be directly exercised by a registered holder of the Bonds.

Payments of redemption proceeds, principal of, and interest on the Bonds are and will be made to Cede & Co., or such other nominee as may be requested by DTC. DTC's practice is to credit participants' accounts upon DTC's receipt of funds and corresponding detail information from us or our agent, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by participants to beneficial owners are and will be governed by standing instructions and customary practices. Payments are the responsibility of participants and not of DTC, the trustee, or us, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, principal and interest to Cede & Co. (or such other nominee as may be requested by DTC) is our responsibility. Disbursement of payments to participants is the responsibility of DTC, and disbursement of payments to the beneficial owners is the responsibility of participants.

Other than in the circumstances described herein, a beneficial owner will not be entitled to receive physical delivery of the Bonds. Accordingly, each beneficial owner must rely on the procedures of DTC to exercise any rights under the Bonds.

DTC may discontinue providing its services as securities depositary with respect to the Bonds at any time by giving us reasonable notice. In the event no successor securities depositary is obtained, certificates for the Bonds will be printed and delivered. We may decide to replace DTC or any successor depositary. Additionally, subject to the procedures of DTC, we may decide to discontinue use of the system of book-entry transfers through DTC (or a successor depositary) with respect to some or all of the Bonds. In that event or if an event of default with respect to the Bonds has occurred and is continuing, certificates for the Bonds of such series will be printed and delivered. If certificates for the Bonds are printed and delivered,

- those Bonds will be issued in fully registered form without coupons;
- a holder of certificated Bonds would be able to exchange those Bonds, without charge, for an equal aggregate principal amount of Bonds of the same series, having the same issue date and with identical terms and provisions; and
- a holder of certificated Bonds would be able to transfer those Bonds without cost to another holder, other than for applicable stamp taxes or other governmental charges.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that we believe to be reliable, but we do not take any responsibility for the accuracy of this information.

Exhibit 4(d)24

DESCRIPTION OF ENTERGY LOUISIANA, LLC'S SECURITIES

REGISTERED PURSUANT TO SECTION 12

OF THE SECURITIES EXCHANGE ACT OF 1934

References in this exhibit to the "we," "us," or "our" are to Entergy Louisiana, LLC, a limited liability company organized under the laws of the State of Texas and, as of October 1, 2015, the successor by merger to the regulated utility operations of the Texas limited liability companies Entergy Gulf States Louisiana, LLC ("EGSL") and Entergy Louisiana, LLC ("Old Entergy Louisiana"), each formerly a public utility company providing services to customers in the State of Louisiana.

As of February 26, 2021, we have one series of collateral trust mortgage bonds outstanding that is registered under Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), our Collateral Trust Mortgage Bonds, 4.875% Series due September 1, 2066, issued in an aggregate principal amount of $270,000,000 with their terms established by Officer's Certificate 6-B-5, dated August 10, 2016, pursuant to our Mortgage and Deed of Trust dated as of November 1, 2015, as it may be amended or supplemented from time to time, with The Bank of New York Mellon, as trustee, and traded on the NYSE under the ticker ELC (the "2066 Bonds").

The full aggregate principal amount of the 2066 Bonds is currently outstanding.

Description of the 2066 Bonds

We have issued, and may from time to time issue, bonds in one or more series, under a Mortgage and Deed of Trust dated as of November 1, 2015, as it may be amended or supplemented from time to time (the "Mortgage"), between us and The Bank of New York Mellon, as trustee (the "Trustee"). All bonds issued or to be issued under the Mortgage, including the 2066 Bonds, are referred to herein as "Collateral Trust Mortgage Bonds." As summarized below, the Collateral Trust Mortgage Bonds have and will have the benefit of the lien of two mortgage indentures (the "Class A Mortgages") to the extent of the aggregate principal amount of first mortgage bonds (the "Class A Bonds") issued under the Class A Mortgages held by the Trustee and the lien of the Mortgage on our Mortgaged Property (as described below).

The Mortgage, including Officer's Certificate 6-B-5, dated August 10, 2016, which established the terms of the 2066 Bonds (the "Officer's Certificate"), and the Class A Mortgages contain the full legal texts of the matters described herein. Because this is a summary, it does not describe every aspect of the Mortgage, the Class A Mortgages, the supplemental indentures relating to the 2066 Bonds and the related Class A Bonds, the Officer's Certificate, the outstanding Collateral Trust Mortgage Bonds, including the 2066 Bonds, or the Class A Bonds, including those issued in connection with the 2066 Bonds. The Mortgage, the Officer's Certificate, the Class A Mortgages, and the officer's certificates and the supplemental indentures that relate to the outstanding Collateral Trust Mortgage Bonds and bonds under the Class A Mortgages, including the 2066 Bonds and the related Class A Bonds, are filed as exhibits to the Annual Report on Form 10-K to which this is filed as an exhibit. You should read these documents for provisions that may be important to you. This summary is subject to and qualified in its entirety by reference to all the provisions of the Mortgage and the Class A Mortgages, including the definitions of some of the terms used in the Mortgage and the Class A Mortgages, and to the particular terms of the Officer's Certificate. We also include references in parentheses to some of the sections of the Mortgage.

The Mortgage and the Class A Mortgages have been qualified under the Trust Indenture Act of 1939, and you should also refer to the Trust Indenture Act of 1939 for provisions that apply to the 2066 Bonds.

General

The Mortgage permits us to issue Collateral Trust Mortgage Bonds from time to time subject to the limitations described under "—Issuance of Additional Collateral Trust Mortgage Bonds." All Collateral Trust Mortgage Bonds of any one series need not be issued at the same time, and a series may be reopened for issuances of additional Collateral Trust Mortgage Bonds of that series. This means that we may from time to time, without the consent of the existing holders of the Collateral Trust Mortgage Bonds of any series, including the 2066 Bonds, create and issue additional Collateral Trust Mortgage Bonds of a series having the same terms and conditions as the previously issued Collateral Trust Mortgage Bonds of that series in all respects, except for issue date, issue price and, if applicable, the initial interest payment on those additional Collateral Trust Mortgage Bonds. Additional Collateral Trust Mortgage Bonds issued in this manner will be consolidated with, and will form a single series with, the previously issued Collateral Trust Mortgage Bonds of that series. For more information, see the discussion below under "—Issuance of Additional Collateral Trust Mortgage Bonds."

Other than the security afforded by the lien of the Mortgage and restrictions on the issuance of additional Collateral Trust Mortgage Bonds described above, there are no provisions of the Mortgage that grant the holders of the Collateral Trust Mortgage Bonds protection in the event of a highly leveraged transaction involving us.

Redemption

At any time on or after September 1, 2021, we may redeem the 2066 Bonds prior to maturity, in whole or in part, at our option, on not less than 30 days' nor more than 60 days' notice, at a redemption price equal to 100% of the principal amount of the 2066 Bonds being redeemed plus any accrued and unpaid interest thereon to, but not including, the redemption date. Unless the 2066 Bonds are held in book-entry only form through the facilities of The Depository Trust Company ("DTC"), in which case DTC's procedures for selection shall apply (see "—Book-Entry Only Securities"), if less than all of the 2066 Bonds are to be redeemed, the Trustee will select the 2066 Bonds to be redeemed. (Mortgage, Section 503.)

Unless we default in the payment of the redemption price and accrued interest, if any, in the case of an unconditional notice of redemption, the 2066 Bonds subject to such notice of redemption will cease to bear interest on the redemption date. (Mortgage, Section 505.) We will pay the redemption price and any accrued interest to the redemption date upon surrender of any 2066 Bond for redemption. (Mortgage, Section 505.) If only part of a 2066 Bond is redeemed, the Trustee will deliver to the holder of the 2066 Bond a new 2066 Bond for the remaining portion at our expense. (Mortgage, Section 506.)

We may make any redemption at our option conditional upon the receipt by the paying agent, on or prior to the date fixed for such redemption, of money sufficient to pay the redemption price and accrued interest, if any. If the paying agent has not received the money by the date fixed for redemption, we will not be required to redeem the 2066 Bonds. (Mortgage, Section 504.)

Payment and Paying Agents

Interest on the 2066 Bonds accrues at the rate of 4.875% per year. Interest started to accrue from the date that the 2066 Bonds were issued. Interest payments on the 2066 Bonds are made on March 1, June 1, September 1 and December 1 of each year. As long as the 2066 Bonds are registered in the name

of DTC or its nominee, the record date for interest payable on any interest payment date shall be the close of business on the Business Day (defined as any day other than a Saturday or a Sunday or a day on which banking institutions in The City of New York are authorized or required by law or executive order to remain closed or a day on which the corporate trust office of the Trustee is closed for business) immediately preceding such interest payment date. We have agreed to pay interest on any overdue principal and, if such payment is enforceable under applicable law, on any overdue installment of interest on the 2066 Bonds at a rate of 4.875% per year, to holders of record at the close of business on the Business Day immediately preceding our payment of such interest.

Interest on the 2066 Bonds is computed on the basis of a 360-day year of twelve 30-day months. If any interest payment date or the maturity date of the 2066 Bonds falls on a day that is not a Business Day, the payment due on that interest payment date or the maturity date will be made on the next Business Day and without any interest or other payment in respect of such delay.

If there has been a default in the payment of interest on the 2066 Bonds, the defaulted interest may be paid to the holders as of the close of business on a date between 10 and 15 days before the date proposed by us for payment of the defaulted interest (and not less than 10 days after the Trustee receives notice of our proposal) or in any other manner permitted by any securities exchange on which the 2066 Bonds may be listed, if the Trustee finds it practicable. (Mortgage, Section 307.)

The principal amount of the 2066 Bonds and interest thereon is and will be paid in any coin or currency of the United States of America that at the time of payment is legal tender at the corporate trust office of The Bank of New York Mellon in the Borough of Manhattan, City and State of New York, as our paying agent. However, we may choose to make payment of interest by check mailed to the address of the persons entitled to payment as they may appear or have appeared in the security register for the 2066 Bonds. We may change the place of payment on the 2066 Bonds, appoint one or more additional paying agents (including us) and remove any paying agent, all at our discretion. (Mortgage, Section 702.)

As long as the 2066 Bonds are registered in the name of DTC or its nominee, we will pay principal and interest due on the 2066 Bonds to DTC. DTC will then make payment to its participants for disbursement to the beneficial owners of the 2066 Bonds as described under the heading "—Book-Entry Only Securities."

Form and Exchange

The 2066 Bonds are fully-registered bonds without coupons, issued in denominations of $25 and integral multiples of $25 in excess thereof. The 2066 Bonds are represented by a global certificate without coupons registered in the name of a nominee of DTC.

The transfer of 2066 Bonds may be registered, and 2066 Bonds may be exchanged for other 2066 Bonds of authorized denominations and with the same terms and principal amount, at the corporate trust office of the Trustee in The City of New York. (Mortgage, Section 305.) We may, upon prompt written notice to the Trustee and the holders of the 2066 Bonds, designate one or more additional places, or change the place or places previously designated, for registration of transfer and exchange of the 2066 Bonds. (Mortgage, Section 702.) No service charge will be made for any registration of transfer or exchange of the 2066 Bonds. However, we may require payment to cover any tax or other governmental charge that may be imposed in connection with a registration of transfer or exchange of the 2066 Bonds. We will not be required to execute or to provide for the registration of transfer or exchange of any 2066 Bond:

- during the 15 days before an interest payment date;

- during the 15 days before giving any notice of redemption; or
- selected for redemption except the unredeemed portion of any 2066 Bond being redeemed in part.

(Mortgage, Section 305.)

Security

The Mortgage imposes a lien on all of our tangible electric and gas utility property located in Louisiana, whether real, personal or mixed, together with our franchises, permits and licenses that are transferable and necessary for the operation of such property and our recorded easements and rights of way and our electric utility properties located in Union County, Arkansas and certain related properties, in each case, other than Excepted Property (as defined below) and subject to Permitted Liens (as defined below). These properties are sometimes referred to as our "Mortgaged Property."

The 2066 Bonds, together with all other Collateral Trust Mortgage Bonds now or in the future outstanding under the Mortgage, have and will have the equal and ratable benefit of: (1) the first mortgage lien of each Class A Mortgage on the part of the Mortgaged Property covered thereby, as described below, to the extent of the aggregate principal amount of Class A Bonds issued under such Class A Mortgage held by the Trustee, subject to liens permitted under such Class A Mortgage, and (2) the first mortgage lien of the Mortgage on any of our Mortgaged Property that is not subject to the lien of any Class A Mortgage, subject to Permitted Liens. In addition, the 2066 Bonds, together with all other Collateral Trust Mortgage Bonds now or in the future outstanding under the Mortgage, have and will have the equal and ratable benefit of a second mortgage lien on all of our Mortgaged Property that is subject to the lien of a Class A Mortgage, subject to Permitted Liens. To the extent that any Class A Bonds do not bear interest, which is permissible under the Mortgage, holders of the Collateral Trust Mortgage Bonds do not have the benefit of the lien of the related Class A Mortgage in respect of an amount equal to the accrued interest, if any, on the related Collateral Trust Mortgage Bonds (but would have the benefit of the first mortgage lien of the related Class A Mortgage in respect of an amount equal to the principal of the related Collateral Trust Mortgage Bonds and the benefit of the second mortgage lien of the Mortgage in respect of an amount equal to the principal of, and any accrued interest or premium on, the related Collateral Trust Mortgage Bonds).

Class A Bonds

Class A Bonds are first mortgage bonds issued and outstanding under either of our Class A Mortgages. We currently have two Class A Mortgages: our Indenture of Mortgage dated September 1, 1926 (as restated, amended and supplemented, the "EGSL Mortgage") and our Mortgage and Deed of Trust dated as of April 1, 1944 (as amended and supplemented, the "ELL Mortgage"). The Class A Bonds issued under the ELL Mortgage are and will be secured by a first mortgage lien (subject to liens permitted by the ELL Mortgage) on substantially all of our Mortgaged Property that was owned by us just before the merger of Entergy Gulf States Power, LLC ("EGSP LLC") into us on October 1, 2015, together with replacements, additions and extensions of or to such property acquired by us. The Class A Bonds issued under the EGSL Mortgage are and will be secured by a first mortgage lien (subject to liens permitted by the EGSL Mortgage) on substantially all of our Mortgaged Property that was owned by EGSP LLC just before its merger into us, together with substitutions, replacements, additions and extensions of or to such property acquired by us. Neither Class A Mortgage will cover additional property acquired by us after the date of the aforesaid merger except property that constitutes a replacement, addition or extension of the property covered by such Class A Mortgage. If we merge or consolidate with an entity that has a first mortgage indenture on its property, we may designate that mortgage indenture as an additional Class A Mortgage.

If the Trustee holds all of the Class A Bonds outstanding under a particular Class A Mortgage, we may discharge that Class A Mortgage, and the lien of the Mortgage will become a first mortgage lien on the Mortgaged Property that was subject to that Class A Mortgage, subject only to Permitted Liens. As of December 31, 2020, we had approximately $6,319 million principal amount of Class A Bonds outstanding under the ELL Mortgage and approximately $2,278 million principal amount of Class A Bonds outstanding under the EGSL Mortgage.

Permitted Liens

The lien of the Mortgage is subject to permitted liens described in the Mortgage (the "Permitted Liens"). These Permitted Liens include, among others,

- liens existing at November 1, 2015 (the "Execution Date"), that have not been discharged, including the liens of the Class A Mortgages;
- as to property acquired by us after the Execution Date, liens existing or placed on such property at the time we acquire such property, including the liens of any Class A Mortgages and any purchase money liens;
- tax liens, assessments and other governmental charges or requirements which are not delinquent or which are being contested in good faith and by appropriate proceedings or of which at least ten business days' notice has not been given to our general counsel or to such other person designated by us to receive such notices;
- mechanics', workmen's, repairmen's, materialmen's, warehousemen's and carriers' liens, other liens incident to construction, liens or privileges of any of our employees for salary or wages earned, but not yet payable, and other liens, including liens for worker's compensation awards, arising in the ordinary course of business for charges or requirements which are not delinquent or which are being contested in good faith and by appropriate proceedings or of which at least ten business days' notice has not been given to our general counsel or to such other person designated by us to receive such notices;
- specified judgment liens and prepaid liens;
- easements, leases, reservations or other rights of others (including governmental entities) in, and defects of title in, our property;
- liens securing indebtedness or other obligations relating to real property we acquired for specified transmission, distribution or communication purposes or for the purpose of obtaining rights-of-way;
- specified leases and leasehold, license, franchise and permit interests;
- liens resulting from laws, rules, regulations, orders or rights of Governmental Authorities and specified liens required by law or governmental regulations;
- liens to secure public or statutory obligations;
- rights of others to take minerals, timber, electric energy or capacity, gas, water, steam or other products produced by us or by others on our property;
- rights and interests of persons other than us arising out of agreements relating to the common ownership or joint use of property, and liens on the interests of those persons in the property;
- restrictions on assignment and/or requirements of any assignee to qualify as a permitted assignee and/or public utility or public services corporation; and
- liens which have been bonded for the full amount in dispute or for the payment of which other adequate security arrangements have been made.
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(Mortgage, Granting Clauses and Section 101.)

The Mortgage provides that the Trustee has a lien, prior to the lien on the Mortgaged Property securing the 2066 Bonds, for the payment of its reasonable compensation and expenses and for indemnity

against specified liabilities. (Mortgage, Section 1007.) This lien would be a Permitted Lien under the Mortgage.

The first mortgage liens of the Class A Mortgages are subject to similar, although not identical, permitted liens.

Excepted Property

The lien of the Mortgage does not cover, among other things, the following types of property:

- all cash, deposit accounts, securities and all policies of insurance on the lives of our officers not paid or delivered to or deposited with or held by the Trustee or required so to be;
- all contracts, leases, operating agreements and other agreements of all kinds and rights thereunder (other than our franchises, permits and licenses that are transferable and necessary for the operation of the Mortgaged Property), bills, notes and other instruments, revenues, income and earnings, all accounts, accounts receivable, rights to payment, payment intangibles and unbilled revenues, rights created by statute or governmental action to bill and collect revenues or other amounts from customers or others, credits, claims, demands and judgments;
- all governmental and other licenses, permits, franchises, consents and allowances (other than our franchises, permits and licenses that are transferable and necessary for the operation of Mortgaged Property);
- all unrecorded easements and rights of way;
- all intellectual property rights and other general intangibles;
- all vehicles, movable equipment, aircraft and vessels and all parts, accessories and supplies used in connection with any of the foregoing;
- all personal property of such character that the perfection of a security interest therein or other lien thereon is not governed by the Uniform Commercial Code in effect where we are organized;
- all merchandise and appliances acquired for the purpose of resale in the ordinary course and conduct of our business, any nuclear fuel and all fuel, materials and supplies held for consumption in use or operation of any of our properties or held in advance of use thereof for fixed capital purposes;
- all electric energy and capacity, gas, steam and other materials and products generated, manufactured, produced or purchased by us for sale, distribution or use in the ordinary course and conduct of our business;
- all property that is the subject of a lease agreement designating us as lessee, and all our right, title and interest in and to the property and in, to and under the lease agreement, whether or not the lease agreement is intended as security; and the last day of the term of any lease or leasehold which may become subject to the lien of the Mortgage;
- all property, real, personal and mixed, that has been released from the lien of any Class A Mortgage, whether before or after the Execution Date, and any improvements, extensions and additions to such property and renewals, replacements, substitutions of or for any parts thereof;
- all timber, minerals, mineral rights and royalties;
- all natural gas wells, natural gas leases, natural gas lines or other property used in the production of natural gas or in the transmission of natural gas up to the point of connection with any gas distribution system owned by us (other than any transmission system or systems used for the transmission of natural gas between any gas distribution systems owned by us); and
- all property, real, personal and mixed, that, after the Execution Date, has been released from the lien of the Mortgage, and any improvements, extensions and additions to such property and renewals, replacements, substitutions of or for any parts thereof.

We sometimes refer to property of ours not covered by the lien of the Mortgage as "Excepted Property." (Mortgage, Granting Clauses.)

The Class A Mortgages have similar, although not identical, exceptions to the property subject thereto.

Funded Property

The Mortgaged Property that is owned by us at any particular time is sometimes referred to as "Property Additions." Property Additions will be or become Funded Property:

- when designated by us to be funded in connection with the discharge of a Class A Mortgage; or
- when used under the Mortgage for the issuance of Collateral Trust Mortgage Bonds, the release or retirement of Funded Property, or the withdrawal of funded cash deposited with the Trustee.

(Mortgage, Section 102.)

Issuance of Additional Bonds

Issuance of Additional Collateral Trust Mortgage Bonds

Collateral Trust Mortgage Bonds of any series may be issued from time to time, subject to the limitation that the aggregate principal amount of Collateral Trust Mortgage Bonds issued under the Mortgage at any one time outstanding shall not exceed $200 billion, on the basis of:

- the aggregate principal amount of Class A Bonds (which need not bear interest) issued to the Trustee;
- 70% of the cost or fair value to us (whichever is less) of Property Additions that do not constitute Funded Property after specified deductions and additions, primarily including adjustments to offset property retirements;
- the aggregate principal amount of Retired Securities, as defined below; or
- an amount of cash deposited with the Trustee.
-

(Mortgage, Sections 102, 1601, 1602, 1603, 1604 and 1605.)

"Retired Securities" means any Collateral Trust Mortgage Bonds authenticated and delivered under the Mortgage which:

- no longer remain outstanding;
- have not been made the basis of the authentication and delivery of Collateral Trust Mortgage Bonds, the release of Mortgaged Property or the withdrawal of funded cash; and
- have not been paid, redeemed, purchased or otherwise retired by the application thereto of funded cash.

(Mortgage, Section 101.)

Issuance of Additional Class A Bonds

The maximum principal amount of bonds that may be issued under the ELL Mortgage is limited to $100 billion at any time outstanding under the ELL Mortgage, subject to property additions and other limitations of the ELL Mortgage. Class A Bonds may be issued from time to time under the ELL Mortgage on the basis of:

- 80% of the cost or fair value, whichever is less, of unfunded property additions after adjustments to offset retirements;
- retirements of bonds issued under the ELL Mortgage or qualified lien bonds; or
- deposit of cash with the trustee under the ELL Mortgage.

Property additions under the ELL Mortgage generally include the Mortgaged Property that was acquired by us after December 31, 1943 and was owned by us just before the merger of EGSP LLC into us, together with replacements, additions and extensions of or to such property acquired by us. Unfunded property additions are generally those that have not been used under the ELL Mortgage to issue bonds, release property, withdraw cash or replace retired property that has been used for such purposes.

Class A Bonds may be issued from time to time under the EGSL Mortgage, subject to the limitation that the aggregate principal amount of bonds issued under the EGSL Mortgage at any one time outstanding shall not exceed $100 billion, on the basis of:

- an amount not exceeding 60% of available net additions;
- available debt retirements of bonds and/or refundable indebtedness under the EGSL Mortgage; or
- the deposit of cash with the trustee under the EGSL Mortgage.

Net additions under the EGSL Mortgage generally include the Mortgaged Property that was owned by EGSP LLC just before its merger into us, together with substitutions, replacements, additions and extensions of or to such property acquired by us. Available net additions are generally net additions that have not been used under the EGSL Mortgage to issue bonds, release property, withdraw cash or replace retired property that has been used for such purposes.

As a condition to the authentication and delivery of bonds under the EGSL Mortgage on the basis of property additions and (with certain exceptions) on the basis of retired bonds, qualified lien bonds and/or refundable indebtedness, the Company's net earnings (as defined in the EGSL Mortgage) for a recent period of twelve consecutive calendar months must have been at least twice the annual interest requirements on all bonds outstanding under the EGSL Mortgage including the new bonds.

As of December 31, 2020, we could have issued approximately $574 million principal amount of additional Class A Bonds under the ELL Mortgage on the basis of retired bonds, and we had approximately $610 million of unfunded property additions, entitling us to issue approximately $488 million principal amount of additional Class A Bonds under the ELL Mortgage on the basis of property additions. As of December 31, 2020, we could have issued approximately $2,214 million principal amount of additional Class A Bonds under the EGSL Mortgage on the basis of available debt retirements, and we had approximately $1,855 million of available net additions, entitling us to issue approximately $1,113 million principal amount of additional Class A Bonds under the EGSL Mortgage on the basis of available net additions (in each case, assuming such additional Class A Bonds do not bear interest). As of December 31, 2020, we could have issued approximately $4,389 million principal amount of additional Collateral Trust Mortgage Bonds on the basis of Class A Bonds. As of December 31, 2020, the Company had approximately $6,319 million principal amount of Class A Bonds outstanding under the ELL Mortgage and approximately $2,278 million principal amount of Class A Bonds outstanding under the EGSL Mortgage.

As of December 31, 2020, we had approximately $6,299 million aggregate principal amount of Collateral Trust Mortgage Bonds outstanding. As of December 31, 2020, we had approximately $666 million of unfunded property additions under the Mortgage, entitling us to issue approximately $466 million principal amount of Collateral Trust Mortgage Bonds on the basis of property additions. As of

December 31, 2020, we were not entitled to issue any Collateral Trust Mortgage Bonds on the basis of retired Collateral Trust Mortgage Bonds. Class A Bonds, property additions and cash used as a basis for the issuance of Collateral Trust Mortgage Bonds under the Mortgage from time to time will be for the benefit of the holders of all Collateral Trust Mortgage Bonds outstanding under the Mortgage from time to time, including the holders of the 2066 Bonds.

We have reserved the right to amend the EGSL Mortgage without any consent or other action by the holders of any bonds issued under the EGSL Mortgage created on or after July 1, 2014, to remove the earnings coverage test contained therein. In addition, each holder or future holder of Class A Bonds issued under the EGSL Mortgage created on or after July 1, 2014 (including the Trustee under the Mortgage), by its acquisition of an interest in such Class A Bonds, irrevocably (a) consented or will consent to the amendment to the EGSL Mortgage to remove the net earnings test without any further action and (b) designated or will designate the trustee under the EGSL Mortgage as its proxy with irrevocable instructions to vote in favor of such amendment or to deliver a written consent thereto.

Release of Property

Special Release Provision – While Class A Mortgage is in Effect

Unless an event of default under the Mortgage has occurred and is continuing, we may obtain the release from the lien of the Mortgage of any Mortgaged Property that is subject to a Class A Mortgage by obtaining the release of that property from the applicable Class A Mortgage. (Mortgage, Section 1808.)

Release of Property from Class A Mortgages

Properties subject to the lien of the ELL Mortgage may be released on the basis of:

- the deposit of cash or purchase money mortgages;
- property additions, after adjustments in certain cases to offset retirements and after making adjustments for qualified lien bonds, if any, outstanding against property additions; and
- the aggregate principal amount of bonds that we would be entitled to issue under the ELL Mortgage on the basis of retired qualified lien bonds; or (ii) 10/6ths of the aggregate principal amount of bonds that we would be entitled to issue under the ELL Mortgage on the basis of retired bonds that were issued prior to June 9, 2010; or (iii) 10/8ths of the aggregate principal amount of bonds that we would be entitled to issue under the ELL Mortgage on the basis of retired bonds that were issued after June 9, 2010; in each case with the entitlement being waived by operation of the release.

Properties subject to the lien of the EGSL Mortgage may be released on the basis of:

- the deposit of cash or, within certain limits, purchase money obligations and, in certain cases, governmental or municipal obligations;
- the deposit of the proceeds of such properties with the holder of a prior lien;
- available net additions; and
- available debt retirements of bonds or refundable indebtedness under the EGSL Mortgage.

General Release Provisions

Unless an event of default under the Mortgage has occurred and is continuing, we may obtain the release from the lien of the Mortgage of any Mortgaged Property, except for funded cash, upon delivery to

the Trustee of an amount in cash equal to the amount, if any, as calculated by us, by which the lower of the cost or fair value of the property to be released exceeds the aggregate of:

- an amount equal to the aggregate principal amount of any obligations secured by purchase money liens upon the property to be released and delivered to the Trustee;
- an amount equal to the cost or fair value to us (whichever is less) of Property Additions not constituting Funded Property after specified deductions and additions, primarily including adjustments to offset property retirements (except that these adjustments need not be made if the Property Additions were acquired, made or constructed within the 90-day period preceding the release);
- 10/7ths of the aggregate principal amount of Collateral Trust Mortgage Bonds that we would be entitled to issue on the basis of Retired Securities or Class A Bonds (with such entitlement being waived by operation of the release);
- any amount in cash and/or an amount equal to the aggregate principal amount of any obligations secured by purchase money liens delivered to a holder of a prior lien on Mortgaged Property in consideration for the release of such Mortgaged Property from such prior lien; and
- any taxes and expenses incidental to any sale, exchange, dedication or other disposition of the property to be released.

(Mortgage, Section 1803.)

Unless an event of default under the Mortgage has occurred and is continuing, we may obtain the release from the lien of the Mortgage of any part of the Mortgaged Property or any interest therein, which does not constitute Funded Property or funded cash held by the Trustee, without depositing any cash or property with the Trustee as long as (a) the aggregate amount of cost or fair value to us (whichever is less) of all Property Additions which do not constitute Funded Property (excluding the property to be released) after specified deductions and additions, primarily including adjustments to offset property retirements, is not less than zero or (b) the cost or fair value (whichever is less) of property to be released does not exceed the aggregate amount of the cost or fair value to us (whichever is less) of Property Additions acquired, made or constructed within the 90-day period preceding the release. (Mortgage, Section 1804.)

The Mortgage provides simplified procedures for the release of Mortgaged Property with an aggregate cost or fair value (whichever is less) of up to the greater of $10 million or 3% of the sum of outstanding Collateral Trust Mortgage Bonds and Class A Bonds (other than Class A Bonds held by the Trustee) during a calendar year and for the release of Mortgaged Property taken or sold in connection with the power of eminent domain; the Mortgage also provides for dispositions of certain obsolete or unnecessary Mortgaged Property and for grants or surrender of certain easements, leases or rights of way without any release or consent by the Trustee. (Mortgage, Sections 1802, 1805 and 1807.)

If we retain any interest in any property released from the lien of the Mortgage, the Mortgage will not become a lien on that property or the interest in that property or any improvements, extensions or additions to, or any renewals, replacements or substitutions of or for, any part or parts of that property unless we subject that property to the lien of the Mortgage. (Mortgage, Section 1810.)

The Mortgage also provides that we may terminate, abandon, surrender, cancel, release, modify or dispose of any of our franchises, permits or licenses that are Mortgaged Property without any consent of the Trustee or the holders of outstanding Collateral Trust Mortgage Bonds, provided that such action is, in our opinion, necessary, desirable or advisable in the conduct of our business. In addition, the Mortgage provides that, if any of our franchises, permits or licenses that are Mortgaged Property because they are necessary for the operation of other Mortgaged Property cease to be necessary, in our opinion, for the

operation of the Mortgaged Property, such franchises, permits or licenses shall automatically cease to be Mortgaged Property without any release or consent, or report to, the Trustee. (Mortgage, Section 1802.)

Withdrawal of Cash

Unless an event of default under the Mortgage has occurred and is continuing, and subject to specified limitations, cash held by the Trustee may generally, (1) be withdrawn by us (a) to the extent of the cost or fair value to us (whichever is less) of Property Additions not constituting Funded Property, after specified deductions and additions, primarily including adjustments to offset retirements (except that these adjustments need not be made if the Property Additions were acquired, made or constructed within the 90-day period preceding the withdrawal) or (b) in an amount equal to the aggregate principal amount of Collateral Trust Mortgage Bonds that we would be entitled to issue on the basis of Retired Securities or Class A Bonds (with the entitlement to the issuance being waived by operation of the withdrawal) or (c) in an amount equal to the aggregate principal amount of any outstanding Collateral Trust Mortgage Bonds delivered to the Trustee (with the Collateral Trust Mortgage Bonds being cancelled by the Trustee), or (2) upon our request, be applied to (a) the purchase of Collateral Trust Mortgage Bonds or (b) the payment (or provision for payment) at stated maturity of any Collateral Trust Mortgage Bonds or the redemption (or provision for payment) prior to stated maturity of any Collateral Trust Mortgage Bonds which are redeemable. (Mortgage, Section 1806.)

Satisfaction and Discharge of 2066 Bonds

Subject to certain conditions, the 2066 Bonds, or any portion of the 2066 Bonds, will be deemed paid and no longer outstanding under the Mortgage and we can be discharged from our obligations on such 2066 Bonds, or such portion of the 2066 Bonds, if we irrevocably deposit with the Trustee or any paying agent, other than us, sufficient cash or government securities to pay the principal, any interest and any other sums when due on such 2066 Bonds, or such portion of such 2066 Bonds, on the stated maturity date or a redemption date of the 2066 Bonds, or such portion of the 2066 Bonds. (Mortgage, Section 801.)

Consolidation, Merger and Conveyance of Assets

Under the terms of the Mortgage, we may not consolidate with or merge into any other entity or convey, transfer or lease as, or substantially as, an entirety to any entity the Mortgaged Property, unless:

- the surviving or successor entity, or an entity that acquires by conveyance or transfer or that leases our Mortgaged Property as, or substantially as, an entirety, is organized and validly existing under the laws of any domestic jurisdiction, and it expressly assumes our obligations on all Collateral Trust Mortgage Bonds then outstanding and under the Mortgage and confirms the lien of the Mortgage on the Mortgaged Property (as constituted immediately prior to the time such transaction becomes effective), including subjecting to the lien of the Mortgage all property thereafter acquired by the successor entity that constitutes an improvement, extension or addition to the Mortgaged Property (as so constituted) or a renewal, replacement or substitution of or for any part thereof, but only to the extent that such improvement, extension or addition is so affixed or attached to real property as to be regarded a part of such real property or is an improvement, extension or addition to personal property that is made to maintain, renew, repair or improve the function of such personal property and is physically installed in or affixed to such personal property;
- in the case of a lease, such lease is made expressly subject to termination by us or by the Trustee and by the purchaser of the property so leased at any sale thereof at any time during the continuance of an event of default under the Mortgage;

- we shall have delivered to the Trustee an officer's certificate and an opinion of counsel as provided in the Mortgage; and
- immediately after giving effect to such transaction (and treating any debt that becomes an obligation of the successor entity as a result of such transaction as having been incurred by the successor entity at the time of such transaction), no event of default under the Mortgage, or event that, after notice or lapse of time or both, would become an event of default under the Mortgage, shall have occurred and be continuing.

(Mortgage, Section 1201.) In the case of the conveyance or other transfer of the Mortgaged Property as, or substantially as, an entirety to another entity, upon the satisfaction of all the conditions described above, we would be released and discharged from all our obligations and covenants under the Mortgage and on the Collateral Trust Mortgage Bonds then outstanding unless we elect to waive such release and discharge. (Mortgage, Section 1204.)

The Mortgage does not prevent or restrict:

- any conveyance or other transfer, or lease, of any part of the Mortgaged Property that does not constitute the entirety, or substantially the entirety, of the Mortgaged Property; or (Mortgage, Section 1205.)
- any conveyance, transfer or lease of any of our properties where we retain Mortgaged Property with a fair value in excess of 143% of the aggregate principal amount of all outstanding Collateral Trust Mortgage Bonds, and any other outstanding debt secured by a Class A Mortgage or a purchase money lien that ranks equally with, or senior to, the Collateral Trust Mortgage Bonds with respect to the Mortgaged Property (other than Class A Bonds held by the Trustee). This fair value will be determined within 90 days of the conveyance, transfer or lease by an independent expert selected by us. (Mortgage, Section 1206.)

Although the successor entity may, in its sole discretion, subject to the lien of the Mortgage property then owned or thereafter acquired by the successor entity, the lien of the Mortgage generally will not cover the property of the successor entity other than the mortgaged property it acquires from us and improvements, extensions and additions to such property and renewals, replacements and substitutions thereof, within the meaning of the Mortgage, as described above. (Mortgage, Section 1203.)

The terms of the Mortgage do not restrict mergers in which we are the surviving entity. (Mortgage, Section 1205.) A statutory merger pursuant to which our assets and liabilities are allocated to one or more entities shall not be considered to be a merger subject to the provisions of the Mortgage described above unless all of our assets and liabilities are allocated to an entity other than us and we do not survive such statutory merger. In all other cases of a statutory merger pursuant to which any Mortgaged Property is allocated to one or more entities other than us, each allocation of any Mortgaged Property to an entity other than us shall be deemed, for purposes of the Mortgage, to be a transfer of such Mortgaged Property to such entity and not a merger. (Mortgage, Section 1207.)

Events of Default

Events of Default under the Mortgage

"Event of default," when used in the Mortgage with respect to Collateral Trust Mortgage Bonds, means any of the following:

- failure to pay interest on any Collateral Trust Mortgage Bond for 30 days after it is due unless we have made a valid extension of the interest payment period with respect to such Collateral Trust Mortgage Bond as provided in the Mortgage;
- failure to pay the principal of or any premium on any Collateral Trust Mortgage Bond when due unless we have made a valid extension of the maturity of such Collateral Trust Mortgage Bond as provided in the Mortgage;
- failure to perform or breach of any other covenant or warranty in the Mortgage that continues for 90 days after we receive written notice from the Trustee, or we and the Trustee receive written notice from the holders of at least 33% in aggregate principal amount of the outstanding Collateral Trust Mortgage Bonds, unless the Trustee, or the Trustee and the holders of a principal amount of Collateral Trust Mortgage Bonds not less than the principal amount of Collateral Trust Mortgage Bonds the holders of which gave such notice, as the case may be, agree in writing to an extension of such period prior to its expiration; provided, however, that the Trustee, or the Trustee and the holders of such principal amount of Collateral Trust Mortgage Bonds, as the case may be, shall be deemed to have agreed to an extension of such period if corrective action is initiated by us within such period and is being diligently pursued;
- events of our bankruptcy, insolvency or reorganization as specified in the Mortgage;
- so long as the Trustee holds any Class A Bonds under the Mortgage corresponding to outstanding Collateral Trust Mortgage Bonds, any matured event of default under the applicable Class A Mortgage resulting in acceleration of such Class A Bonds; provided that any cure or waiver of such event of default and any rescission or annulment of such acceleration under the applicable Class A Mortgage shall constitute a cure, waiver, rescission or annulment under the Mortgage; or
- any other event of default included in any supplemental indenture, board resolution or officer's certificate establishing a series of Collateral Trust Mortgage Bonds.
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(Mortgage, Sections 301, 901 and 1301.)

The Trustee is required to give notice of any default under the Mortgage known to the Trustee in the manner and to the extent required to do so by the Trust Indenture Act of 1939, unless such default shall have been cured or waived. However, in the case of any default of the character specified in the third bullet in the preceding paragraph, no such notice to holders of the Collateral Trust Mortgage Bonds shall be given until at least 60 days after the occurrence thereof. The Trustee shall give to the trustee under each Class A Mortgage a copy of each notice of default given to the holders of Collateral Trust Mortgage Bonds. In addition, the Trustee shall give to the holders of Collateral Trust Mortgage Bonds copies of each notice of default under any Class A Mortgage given to the Trustee in its capacity as owner and holder of Class A Bonds under that Class A Mortgage. (Mortgage, Section 1002.)

So long as the Trustee holds any Class A Bonds under the Mortgage corresponding to outstanding Collateral Trust Mortgage Bonds, such Class A Bonds shall be redeemed by us, in whole at any time, or in part from time to time, at a redemption price equal to the principal amount thereof, upon receipt by the trustee under the related Class A Mortgage of a written notice from the Trustee to us and such trustee stating that an Event of Default under the Mortgage has occurred and is continuing and that, as a result, there is due and payable a specified amount with respect to such Collateral Trust Mortgage Bonds, for the payment of which the Trustee has not received funds and specifying the principal amount of such Class A Bonds to be redeemed.

Events of Default under the Class A Mortgages

Events of default under the existing Class A Mortgages include default in payment of principal or premium, if any, when due; default, for 60 days under the ELL Mortgage and 30 days under the EGSL Mortgage, in the payment of interest; certain events of bankruptcy, insolvency or reorganization; and

default in other covenants for 90 days after notice by the trustee or the holders of a specified percentage of bonds outstanding under the applicable Class A Mortgage.

Remedies

Acceleration of Maturity

If an event of default under the Mortgage occurs and is continuing, then the Trustee, by written notice to us, or the holders of at least 33% in aggregate principal amount of the outstanding Collateral Trust Mortgage Bonds, by written notice the Trustee and us, may declare the principal amount of all of the Collateral Trust Mortgage Bonds to be due and payable immediately, and upon our receipt of such notice, such principal amount, together with premium, if any, and accrued and unpaid interest will become immediately due and payable. (Mortgage, Section 902.)

There is no automatic acceleration, even in the event of our bankruptcy, insolvency or reorganization.

Rescission of Acceleration

At any time after such a declaration of acceleration has been made but before any sale of the Mortgaged Property and before a judgment or decree for payment of the money due has been obtained by the Trustee, the event of default under the Mortgage giving rise to such declaration of acceleration will be considered cured, and such declaration and its consequences will be considered rescinded and annulled, if:

- we have paid or deposited with the Trustee a sum sufficient to pay:
a. all overdue interest on all outstanding Collateral Trust Mortgage Bonds;
b. the principal of and premium, if any, on the outstanding Collateral Trust Mortgage Bonds that have become due otherwise than by such declaration of acceleration and overdue interest thereon;
c. interest on overdue interest, if any, to the extent lawful; and
d. all amounts due to the Trustee under the Mortgage; and
- any other event of default under the Mortgage with respect to the Collateral Trust Mortgage Bonds has been cured or waived as provided in the Mortgage.

(Mortgage, Section 902.)

Trustee Powers

Subject to the Mortgage, under specified circumstances and to the extent permitted by law, if an event of default under the Mortgage occurs and is continuing, the Trustee is entitled to the appointment of a receiver for the Mortgaged Property and is entitled to all other remedies available to mortgagees and secured parties under the Uniform Commercial Code or any other applicable law. (Mortgage, Section 916.) In addition, the Trustee may exercise any right or remedy available to the Trustee as a holder of Class A Bonds which arises as a result of a default or event of default under any Class A Mortgage. (Mortgage, Section 917.)

Control by Holders

Other than its duties in the case of an event of default under the Mortgage, the Trustee is not obligated to exercise any of its rights or powers under the Mortgage at the request, order or direction of any of the holders, unless the holders offer the Trustee an indemnity satisfactory to it. (Mortgage, Section 1003.) If an event of default under the Mortgage has occurred and is continuing and they provide this

indemnity, the holders of a majority in principal amount of the outstanding Collateral Trust Mortgage Bonds will have the right to direct the time, method and place of conducting any proceeding for any remedy available to the Trustee, or exercising any trust or power conferred on the Trustee. The Trustee is not obligated to comply with directions that conflict with law or other provisions of the Mortgage or that could involve the Trustee in personal liability in circumstances where indemnity would not, in the Trustee's sole discretion, be adequate. (Mortgage, Section 912.)

Limitation on Holders' Right to Institute Proceedings

No holder of Collateral Trust Mortgage Bonds will have any right to institute any proceeding under the Mortgage or the Collateral Trust Mortgage Bonds, or any remedy under or with respect to the Mortgage or the Collateral Trust Mortgage Bonds, unless:

- the holder has previously given to the Trustee written notice of a continuing event of default under the Mortgage;
- the holders of a majority in aggregate principal amount of the outstanding Collateral Trust Mortgage Bonds of all series have made a written request to the Trustee and have offered indemnity satisfactory to the Trustee to institute proceedings; and
- the Trustee has failed to institute any proceeding for 60 days after notice and has not received during that period any direction from the holders of a majority in aggregate principal amount of the outstanding Collateral Trust Mortgage Bonds inconsistent with the written request of holders referred to above;

provided that no holder or holders of Collateral Trust Mortgage Bonds shall have any right in any manner to affect or prejudice the rights of other holders of Collateral Trust Mortgage Bonds or to obtain priority over such other holders. (Mortgage, Section 907.) However, these limitations do not apply to the absolute and unconditional right of a holder of a Collateral Trust Mortgage Bond to institute suit for payment of the principal, premium, if any, or interest on the Collateral Trust Mortgage Bond on or after the applicable due date. (Mortgage, Section 908.)

Evidence to be Furnished to the Trustee

Compliance with the Mortgage provisions is evidenced by written statements of our officers or persons we select or pay. In certain cases, opinions of counsel and certifications of an engineer, accountant, appraiser or other expert (who in some cases must be independent) must be furnished. We must give the Trustee an annual certificate as to whether or not we have fulfilled our obligations under the Mortgage throughout the preceding year. (Mortgage, Section 705.)

Modification and Waiver

Modification Without Consent

Without the consent of any holder of Collateral Trust Mortgage Bonds, we and the Trustee may enter into one or more supplemental indentures for any of the following purposes:

- to evidence the assumption by any permitted successor of our covenants in the Mortgage and in the Collateral Trust Mortgage Bonds;
- to add one or more covenants or other provisions for the benefit of the holders of all or any series or tranche of Collateral Trust Mortgage Bonds, or to surrender any right or power conferred upon us;

- to add additional events of default under the Mortgage for all or any series of Collateral Trust Mortgage Bonds;
- to change, eliminate or add any provision to the Mortgage; provided, however, if the change, elimination or addition will adversely affect the interests of the holders of Collateral Trust Mortgage Bonds of any series in any material respect, the change, elimination or addition will become effective only:

1. when the consent of the holders of Collateral Trust Mortgage Bonds of such series has been obtained in accordance with the Mortgage; or
2. when no Collateral Trust Mortgage Bonds of the affected series remain outstanding under the Mortgage;

- to provide additional security for any Collateral Trust Mortgage Bonds;
- to establish the form or terms of Collateral Trust Mortgage Bonds of any other series as permitted by the Mortgage;
- to provide for the authentication and delivery of bearer securities with or without coupons;
- to evidence and provide for the acceptance of appointment by a separate or successor Trustee or co-trustee;
- to provide for the procedures required for us to use a noncertificated system of registration for the Collateral Trust Mortgage Bonds of all or any series;
- to change any place where principal, premium, if any, and interest shall be payable, Collateral Trust Mortgage Bonds may be surrendered for registration of transfer or exchange, and notices and demands to us may be served;
- to amend and restate the Mortgage as originally executed and as amended from time to time, with additions, deletions and other changes that do not adversely affect the interests of the holders of Collateral Trust Mortgage Bonds of any series in any material respect;
- to cure any ambiguity or inconsistency or to make any other changes or additions to the provisions of the Mortgage if such changes or additions will not adversely affect the interests of the holders of Collateral Trust Mortgage Bonds of any series in any material respect; or
- to increase or decrease the maximum amount of Collateral Trust Mortgage Bonds that may be outstanding at any one time under the Mortgage to an amount that is not less than the aggregate principal amount of Collateral Trust Mortgage Bonds then outstanding.

(Mortgage, Section 1301.)

Modification and Waiver Requiring Consent

Except as provided below, the consent of the holders of a majority in aggregate principal amount of then outstanding Collateral Trust Mortgage Bonds, considered as one class, is required for all other amendments or modifications to the Mortgage. However, if less than all of the series of Collateral Trust Mortgage Bonds outstanding are directly affected by a proposed amendment or modification, then the consent of the holders of only a majority in aggregate principal amount of the outstanding Collateral Trust Mortgage Bonds of all series that are directly affected, considered as one class, will be required. Notwithstanding the foregoing, no amendment or modification may be made without the consent of the holder of each directly affected Collateral Trust Mortgage Bond then outstanding to:

- change the stated maturity of the principal of, or any installment of principal of or interest on, any Collateral Trust Mortgage Bond, or reduce the principal amount of any Collateral Trust Mortgage Bond or its rate of interest or change the method of calculating that interest rate or reduce any premium payable upon redemption, or change the currency in which payments are made, or impair the right to institute suit for the enforcement of any payment on or after the stated maturity of any Collateral Trust Mortgage Bond;

- create any lien ranking prior to or on a parity with the lien of the Mortgage with respect to the Mortgaged Property, terminate the lien of the Mortgage on the Mortgaged Property or deprive any holder of a Collateral Trust Mortgage Bond of the benefits of the security of the lien of the Mortgage;
- reduce the percentage in principal amount of the outstanding Collateral Trust Mortgage Bonds of any series the consent of the holders of which is required for any amendment or modification or any waiver of compliance with a provision of the Mortgage or of any default thereunder and its consequences, or reduce the requirements thereunder for a quorum or voting; or
- modify certain provisions of the Mortgage relating to supplemental indentures, waivers of some covenants and waivers of past defaults with respect to the Collateral Trust Mortgage Bonds of any series.

A supplemental indenture that changes the Mortgage solely for the benefit of one or more particular series of Collateral Trust Mortgage Bonds, or modifies the rights of the holders of Collateral Trust Mortgage Bonds of one or more series, will not affect the rights under the Mortgage of the holders of the Collateral Trust Mortgage Bonds of any other series. (Mortgage, Section 1302.)

The holders of a majority in aggregate principal amount of then outstanding Collateral Trust Mortgage Bonds, considered as one class, may waive compliance by us with some restrictive provisions of the Mortgage. (Mortgage, Section 706.) The holders of a majority in principal amount of then outstanding Collateral Trust Mortgage Bonds may waive any past default under the Mortgage, except a default in the payment of principal, premium, if any, or interest on any outstanding Collateral Trust Mortgage Bonds and certain covenants and provisions of the Mortgage that cannot be modified or amended without the consent of the holder of each outstanding Collateral Trust Mortgage Bond of any affected series. (Mortgage, Section 913.)

The Mortgage provides that Collateral Trust Mortgage Bonds owned by us or anyone else required to make payment on the Collateral Trust Mortgage Bonds shall be disregarded and considered not to be outstanding in determining whether the required holders have given a request or consent. (Mortgage, Section 101.)

We may fix in advance a record date to determine the holders entitled to give any request, demand, authorization, direction, notice, consent, waiver or similar act of the holders, but we have no obligation to do so. If we fix a record date, that request, demand, authorization, direction, notice, consent, waiver or other act of the holders may be given before or after that record date, but only the holders of record at the close of business on that record date will be considered holders for the purposes of determining whether holders of the required percentage of the outstanding Collateral Trust Mortgage Bonds have authorized or agreed or consented to the request, demand, authorization, direction, notice, consent, waiver or other act of the holders. For that purpose, the outstanding Collateral Trust Mortgage Bonds will be computed as of the record date.

Any request, demand, authorization, direction, notice, consent, election, waiver or other act of a holder of any Collateral Trust Mortgage Bond will bind every future holder of that Collateral Trust Mortgage Bond and the holder of every Collateral Trust Mortgage Bond issued upon the registration of transfer of or in exchange for that Collateral Trust Mortgage Bond. A transferee will also be bound by acts of the Trustee or us in reliance thereon, whether or not notation of that action is made upon the Collateral Trust Mortgage Bond. (Mortgage, Section 106.)

Voting of Class A Bonds

The Mortgage provides that the Trustee will, as holder of Class A Bonds delivered as the basis for the issuance of Collateral Trust Mortgage Bonds, attend meetings of holders of bonds under the related Class A Mortgage, or deliver its proxy in connection with those meetings, that relate to matters with respect to which it, as a holder, is entitled to vote or consent. The Mortgage provides that, so long as no event of default under the Mortgage has occurred and is continuing and except for the rights and remedies of the Trustee in case of a default or matured event of default under a Class A Mortgage, the Trustee will, as holder of the Class A Bonds, vote or consent (without any consent or other action by the holders of the Collateral Trust Mortgage Bonds, except as described in the proviso of clause (2) below) in favor of any amendments or modifications to the applicable Class A Mortgage as follows:

1. to conform any provision of a Class A Mortgage in all material respects to the correlative provision of the Mortgage, to add to a Class A Mortgage any provision not otherwise contained therein which conforms in all material respects to a provision contained in the Mortgage, to delete from a Class A Mortgage any provision to which the Mortgage contains no correlative provision and any combination of the foregoing and/or, without limiting the generality of the foregoing, to effect certain amendments included in supplemental indentures to the ELL Mortgage and the EGSL Mortgage; and/or;
2. with respect to any amendments or modifications to any Class A Mortgage other than those amendments or modifications referred to in clause (1) above, vote all the Class A Bonds delivered under such Class A Mortgage, or consent with respect thereto, proportionately with the vote or consent of holders of all other Class A Bonds outstanding under such Class A Mortgage the holders of which are eligible to vote or consent, as evidenced by a certificate delivered by the trustee under such Class A Mortgage; provided, however, that the Trustee will not vote in favor of, or consent to, any amendment or modification of a Class A Mortgage which, if it were an amendment or modification of the Mortgage, would require the consent of holders of Collateral Trust Mortgage Bonds as described under "—Modification and Waiver," without the prior consent of holders of Collateral Trust Mortgage Bonds which would be required for an amendment or modification of the Mortgage.

(Mortgage, Section 1705.)

We may make amendments to, or eliminate some of the covenants in, the ELL Mortgage with the consent of the holders of a majority of the bonds outstanding under the ELL Mortgage considered as one class, provided that, if less than all series of such bonds are affected, only the consent of holders of a majority of such bonds of each series affected, considered as one class, is required for such modification, but no such modification shall, without the consent of the holder of any such bond affected by such modification, permit:

- the extension of the maturity or reduction of the principal of or interest on such bond or other modification in the terms of payment of such principal or interest;
- the creation of a lien that is prior or equal to the lien of the ELL Mortgage with respect to the mortgaged property under the ELL Mortgage or the deprivation of any non-assenting holder of such bonds of the benefit of a lien on the mortgaged property under the ELL Mortgage (subject only to excepted encumbrances as defined in the ELL Mortgage); or
- the reduction of the percentage required for modification of the ELL Mortgage.

We may make amendments to, or eliminate some of the covenants in, the EGSL Mortgage with the consent of the holders of not less than 75% in aggregate principal amount of the bonds outstanding under the EGSL Mortgage, including not less than 60% of each series affected, but no such modification shall:

- extend the maturity of any such bonds or reduce the rate or extend the time of payment of interest on any such bonds or reduce the amount of principal of any such bonds, or reduce any premium payable on the redemption of any such bonds, without the consent of the holder of such affected bond;
- permit the creation of any lien, not otherwise permitted, prior to or on a parity with the lien of the EGSL Mortgage, without the consent of the holders of all the bonds then outstanding under the EGSL Mortgage; or
- reduce the above-described percentage of holders of bonds under the EGSL Mortgage required to approve any such modification, without the consent of the holders of all such bonds then outstanding.

If we amend a Class A Mortgage to eliminate one or more covenants as described above, a holder of Collateral Trust Mortgage Bonds would no longer benefit from such covenants.

Resignation of a Trustee; Removal

The Trustee may resign at any time by giving written notice to us or may be removed at any time by an act of the holders of a majority in principal amount of Collateral Trust Mortgage Bonds then outstanding delivered to the Trustee and us at least 31 days prior to such removal. No resignation or removal of the Trustee and no appointment of a successor Trustee will be effective until the acceptance of appointment by a successor Trustee. So long as no event of default or event that, after notice or lapse of time, or both, would become an event of default has occurred and is continuing and except with respect to a Trustee appointed by act of the holders, if we have delivered to the Trustee a board resolution appointing a successor Trustee and the successor has accepted the appointment in accordance with the terms of the Mortgage, the Trustee will be deemed to have resigned and the successor will be deemed to have been appointed as Trustee in accordance with the Mortgage. (Mortgage, Section 1010.)

Notices

Notices to holders of 2066 Bonds are given by mail in writing to the addresses of such holders as they may appear in the security register for the 2066 Bonds. (Mortgage, Section 108.)

Title

We, the Trustee, and any of our or the Trustee's agents, may treat the person in whose name 2066 Bonds are registered as the absolute owner thereof, whether or not the 2066 Bonds may be overdue, for the purpose of making payments and for all other purposes irrespective of notice to the contrary. (Mortgage, Section 308.)

Governing Law

The Mortgage and the 2066 Bonds are governed by, and construed in accordance with, the laws of the State of New York, without giving effect to its conflicts of laws principles, except where otherwise required by law, including with respect to the creation, perfection, priority or enforcement of the lien of the Mortgage. (Mortgage, Section 114.)

Information about the Trustee

The Trustee is The Bank of New York Mellon. In addition to acting as Trustee, The Bank of New York Mellon also acts, and may act, as trustee under the ELL Mortgage, the EGSL Mortgage, and various other of our and our affiliates' indentures, trusts and guarantees. We and our affiliates maintain deposit

accounts and credit and liquidity facilities and conduct other banking transactions with the Trustee and its affiliates in the ordinary course of our respective businesses.

Book-Entry Only Securities

The 2066 Bonds trade through DTC. The 2066 Bonds are represented by a global certificate and registered in the name of Cede & Co., DTC's nominee. The global certificate was deposited with the Trustee as custodian for DTC. Ownership of beneficial interests in the global certificate is limited to institutions that have accounts with DTC or its participants or persons that may hold interests through participants.

DTC is a New York clearing corporation and a clearing agency registered under Section 17A of the Exchange Act. DTC holds securities for its participants. DTC also facilitates the post-trade settlement of securities transactions among its participants through electronic computerized book-entry transfers and pledges in the participants' accounts. This eliminates the need for physical movement of securities certificates. The participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Others who maintain a custodial relationship with a participant can use the DTC system. The rules that apply to DTC and those using its systems are on file with the SEC.

Purchases of the 2066 Bonds within the DTC system must be made through participants, who will receive a credit for the 2066 Bonds on DTC's records. The beneficial ownership interest of each purchaser will be recorded on the appropriate participant's records. Beneficial owners do not receive written confirmation from DTC of their purchases, but beneficial owners should receive written confirmations of the transactions, as well as periodic statements of their holdings, from the participants through whom they purchased 2066 Bonds. Transfers of ownership in the 2066 Bonds are to be accomplished by entries made on the books of the participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates for their 2066 Bonds, except if use of the book-entry system for the 2066 Bonds is discontinued.

To facilitate subsequent transfers, all 2066 Bonds deposited by participants with DTC are registered in the name of DTC's nominee, Cede & Co. The deposit of the 2066 Bonds with DTC and their registration in the name of Cede & Co. effects no change in beneficial ownership. DTC has no knowledge of the actual beneficial owners of the 2066 Bonds. DTC's records reflect only the identity of the participants to whose accounts such 2066 Bonds are credited. These participants may or may not be the beneficial owners. Participants are responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to participants, and by participants to beneficial owners, are governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial owners of 2066 Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the 2066 Bonds, such as redemptions, tenders, defaults and proposed amendments to the Mortgage. Beneficial owners of the 2066 Bonds may wish to ascertain that the nominee holding the 2066 Bonds has agreed to obtain and transmit notices to the beneficial owners.

Redemption notices will be sent to Cede & Co., as registered holder of the 2066 Bonds. If less than all of the 2066 Bonds are being redeemed, DTC's practice is to determine by lot the amount of 2066 Bonds held by each participant to be redeemed.

Neither DTC nor Cede & Co. will itself consent or vote with respect to 2066 Bonds, unless authorized by a participant in accordance with DTC's procedures. Under its usual procedures, DTC would mail an omnibus proxy to us as soon as possible after the record date. The omnibus proxy assigns the consenting or voting rights of Cede & Co. to those participants to whose accounts the 2066 Bonds are credited on the record date. We believe that these arrangements will enable the beneficial owners to exercise rights equivalent in substance to the rights that can be directly exercised by a registered holder of the 2066 Bonds.

Payments of redemption proceeds, principal of, and interest on the 2066 Bonds are and will be made to Cede & Co., or such other nominee as may be requested by DTC. DTC's practice is to credit participants' accounts upon DTC's receipt of funds and corresponding detail information from us or our agent, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by participants to beneficial owners are and will be governed by standing instructions and customary practices. Payments are the responsibility of participants and not of DTC, the Trustee, or us, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, principal and interest to Cede & Co. (or such other nominee as may be requested by DTC) is our responsibility. Disbursement of payments to participants is the responsibility of DTC, and disbursement of payments to the beneficial owners is the responsibility of participants.

Other than in the circumstances described herein, a beneficial owner will not be entitled to receive physical delivery of the 2066 Bonds. Accordingly, each beneficial owner must rely on the procedures of DTC to exercise any rights under the 2066 Bonds.

DTC may discontinue providing its services as securities depositary with respect to the 2066 Bonds at any time by giving us reasonable notice. In the event no successor securities depositary is obtained, certificates for the 2066 Bonds will be printed and delivered. We may decide to replace DTC or any successor depositary. Additionally, subject to the procedures of DTC, we may decide to discontinue use of the system of book-entry transfers through DTC (or a successor depositary) with respect to some or all of the 2066 Bonds. In that event or if an event of default with respect the 2066 Bonds has occurred and is continuing, certificates for the 2066 Bonds will be printed and delivered. If certificates for the 2066 Bonds are printed and delivered,

- the 2066 Bonds will be issued in fully registered form without coupons;
- a holder of certificated 2066 Bonds would be able to exchange those 2066 Bonds, without charge, for an equal aggregate principal amount of 2066 Bonds having the same issue date and with identical terms and provisions; and
- a holder of certificated 2066 Bonds would be able to transfer those 2066 Bonds without cost to another holder, other than for applicable stamp taxes or other governmental charges.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that we believe to be reliable, but we do not take any responsibility for the accuracy of this information.

Exhibit 4(e)2

DESCRIPTION OF ENTERGY MISSISSIPPI, LLC'S SECURITIES

REGISTERED PURSUANT TO SECTION 12

OF THE SECURITIES EXCHANGE ACT OF 1934

References in this exhibit to "we," "us," or "our" are to Entergy Mississippi, LLC.

We have issued, and may from time to time issue, bonds in one or more series under one or more separate supplemental indentures to the Mortgage and Deed of Trust dated as of February 1, 1988, with The Bank of New York Mellon, successor trustee (the "trustee"). This Mortgage and Deed of Trust, as it has heretofore been and may be amended or supplemented from time to time, is referred to in this exhibit as the "mortgage." All first mortgage bonds issued or to be issued under the mortgage, including the Bonds (as defined below), are referred to herein as "first mortgage bonds."

As of February 26, 2021, we have one series of first mortgage bonds outstanding that is registered under Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), our First Mortgage Bonds, 4.90% Series due October 1, 2066, issued in an aggregate principal amount of $260,000,000 under the Thirty-Third Supplemental Indenture, dated as of September 1, 2016, to the mortgage and traded on the New York Stock Exchange under the ticker EMP (the "Bonds").

The full aggregate principal amount of the Bonds is currently outstanding.

The mortgage, including the applicable supplemental indenture relating to the Bonds, contains the full legal texts of the matters described herein. Because this is a summary, it does not describe every aspect of the mortgage, the supplemental indenture relating to the Bonds, or the outstanding first mortgage bonds, including the Bonds. The mortgage and the supplemental indentures that relate to the outstanding first mortgage bonds, including the Bonds, are filed as exhibits to the Annual Report on Form 10-K to which this is filed as an exhibit. You should read the mortgage for provisions that may be important to you. This summary is subject to and qualified in its entirety by reference to all the provisions of the mortgage, including the definitions of some of the terms used in the mortgage, and to the particular terms of the supplemental indenture that relates to the Bonds. The mortgage has been qualified under the Trust Indenture Act of 1939, and you should also refer to the Trust Indenture Act of 1939 for provisions that apply to the Bonds.

General

The mortgage permits us to issue first mortgage bonds from time to time in an unlimited aggregate amount subject to the limitations described below under "Issuance of Additional First Mortgage Bonds." All first mortgage bonds of any one series need not be issued at the same time, and a series may be reopened for issuances of additional first mortgage bonds of that series. This means that we may from time to time, without the consent of the existing holders of the first mortgage bonds of any series, including the Bonds, create and issue additional first mortgage bonds of a series having the same terms and conditions as the previously issued first mortgage bonds of that series in all respects, except for issue date, issue price and, if applicable, the initial interest payment on those additional first mortgage bonds. Additional first mortgage bonds issued in this manner will be consolidated with and will form a single series with, the previously issued first mortgage bonds of that series. For more information, see the discussion below under "Issuance of Additional First Mortgage Bonds."

Payment

The principal amount of the Bonds and interest thereon is and will be paid in any coin or currency of the United States of America that at the time of payment is legal tender at the corporate trust office of the trustee in the Borough of Manhattan, City and State of New York. Interest on the Bonds accrues at the rate of 4.90% per year and started to accrue from the date that the Bonds were issued. Interest payments on the Bonds are made on March 1, June 1, September 1 and December 1 of each year. As long as the Bonds are registered in the name of The Depository Trust Company ("DTC") or its nominee, the record date for interest payable on any interest payment date shall be the close of business on the Business Day (defined as any day other than a Saturday or a Sunday or a day on which banking institutions in The City of New York are authorized or required by law or executive order to remain closed or a day on which the corporate trust office of the trustee is closed for business) immediately preceding such interest payment date. We have agreed to pay interest on any overdue principal and, if such payment is enforceable under applicable law, on any overdue installment of interest on the Bonds at a rate of 5.90% per year to holders of record at the close of business on the Business Day immediately preceding our payment of such interest.

Interest on the Bonds is computed on the basis of a 360-day year of twelve 30-day months. If any interest payment date or the maturity date of the Bonds falls on a day that is not a Business Day, the payment due on that interest payment date or the maturity date will be made on the next Business Day, and without any interest or other payment in respect of such delay.

As long as the Bonds are registered in the name of DTC or its nominee, we will pay principal and interest due on the Bonds to DTC. DTC will then make payment to its participants for disbursement to the beneficial owners of the Bonds as described under the heading "Book-Entry Only Securities."

Redemption and Retirement

At any time on or after October 1, 2021, we may redeem the Bonds prior to maturity, in whole or in part, at our option, on not less than 30 days' nor more than 60 days' notice, at a redemption price equal to 100% of the principal amount of the Bonds being redeemed plus any accrued and unpaid interest thereon to, but not including, the redemption date.

Unless the Bonds are held in book-entry only form through the facilities of DTC, in which case DTC's procedures for selection shall apply (see "Book-Entry Only Securities"), if less than all of the Bonds are to be redeemed, the trustee will select the Bonds to be redeemed.

Unless we default in the payment of the redemption price and accrued interest, if any, in the case of an unconditional notice of redemption, the Bonds subject to such notice of redemption will cease to bear interest on the redemption date. We will pay the redemption price and any accrued interest to the redemption date upon presentation and surrender of any Bond for redemption. If only part of a Bond is redeemed, the trustee will deliver to the holder of the Bond a new Bond for the remaining portion without charge.

We may make any redemption at our option conditional upon the receipt by the trustee, prior to the date fixed for redemption, of money sufficient to pay the redemption price and accrued interest, if any. If the trustee has not received the money by the date fixed for redemption, we will not be required to redeem the Bonds.

Form and Exchange

The Bonds are fully-registered bonds without coupons, issued in denominations of $25 and integral multiples of $25 in excess thereof. The Bonds are represented by a global certificate without coupons registered in the name of a nominee of DTC.

The Bonds are exchangeable for other Bonds in equal aggregate principal amounts. No service charge will be made for any registration of transfer or exchange of the Bonds. However, we may require payment to cover any tax or other governmental charge that may be imposed in connection with a registration of transfer or exchange. We will not be required to provide for the transfer or exchange of any Bond:

1. during the 15 days before an interest payment date (unless such Bond has a record date for the payment of interest),
2. during the 15 days before any designation of such Bond to be redeemed, or
3. selected for redemption.

Security

The Bonds, together with all other first mortgage bonds now or in the future outstanding under the mortgage, are and will be secured, equally and ratably, by the lien of the mortgage. The mortgage constitutes a first mortgage lien on substantially all of our property (the "mortgaged property") subject to bankruptcy law and:

1. minor defects and encumbrances customarily found in similar properties that do not materially impair the use of the mortgaged property in the conduct of our business;
2. other liens, defects and encumbrances, if any, existing or created at the time of our acquisition of the mortgaged property; and
3. excepted encumbrances.

The mortgage does not create a lien on the following "excepted property":

1. cash and securities;
2. all merchandise, equipment, apparatus, materials or supplies held for sale or other disposition in the usual course of business or consumable during use;
3. automobiles, vehicles and aircraft, timber, minerals, mineral rights and royalties; and
4. accounts receivable, contracts, leases and operating agreements.

The mortgage contains provisions that impose the lien of the mortgage on property we acquire after the date of the mortgage, other than excepted property, subject to pre-existing liens. However, if we consolidate or merge with, or convey or transfer all or substantially all of our mortgaged property to, another entity, unless the successor entity elects otherwise in its sole discretion, the lien created by the mortgage will generally not cover the property of the successor company, other than the mortgaged property it acquires from us and improvements, replacements and additions to such property.

The mortgage also provides that the trustee has a lien on the mortgaged property to ensure the payment of its reasonable compensation, expenses and disbursements and for indemnity against certain liabilities. This lien takes priority over the lien securing the first mortgage bonds, including the Bonds.

We have reserved the right to amend the mortgage without the consent or other action by the holders of any first mortgage bonds created after April 30, 2016, including the Bonds, to revise the definition of "excepted encumbrances" to mean the following:

- tax liens, assessments and other governmental charges or requirements which are not delinquent or which are being contested in good faith and by appropriate proceedings or of which at least ten business days' notice has not been given to our general counsel or to such other person designated by us to receive such notices;
- mechanics', workmen's, repairmen's, materialmen's, warehousemen's and carriers' liens, other liens incident to construction, liens or privileges of any of our employees for salary or wages earned, but not yet payable, and other liens, including without limitation liens for worker's compensation awards, arising in the ordinary course of business for charges or requirements which are not delinquent or which are being contested in good faith and by appropriate proceedings or of which at least ten business days' notice has not been given to our general counsel or to such other person designated by us to receive such notices;
- specified judgment liens and prepaid liens;
- easements, leases, reservations or other rights of others (including governmental entities) in, and defects of title in, our property;
- liens securing indebtedness or other obligations relating to real property we acquired for specified transmission, distribution or communication purposes or for the purpose of obtaining rights-of-way;
- specified leases and leasehold, license, franchise and permit interests;
- liens resulting from laws, rules, regulations, orders or rights of governmental authorities and specified liens required by law or governmental regulations;
- liens to secure public or statutory obligations;
- rights of others to take minerals, timber, electric energy or capacity, gas, water, steam or other products produced by us or by others on our property;
- rights and interests of persons other than us arising out of agreements relating to the common ownership or joint use of property, and liens on the interests of those persons in the property;
- restrictions on assignment and/or requirements of any assignee to qualify as a permitted assignee and/or public utility or public services corporation; and
- liens which have been bonded for the full amount in dispute or for the payment of which other adequate security arrangements have been made.

Issuance of Additional First Mortgage Bonds

Subject to the issuance restrictions described below, the aggregate principal amount of first mortgage bonds that we can issue under the mortgage is unlimited. First mortgage bonds of any series may be issued from time to time on the basis of:

1. 70% of property additions after adjustments to offset retirements;
2. retirements of first mortgage bonds; or
3. deposit of cash with the trustee.

Property additions generally include, among other things, electric, gas, steam or hot water property acquired after December 31, 1987. Securities, automobiles, vehicles or aircraft, or property used principally for the production or gathering of natural gas, are not included as property additions. Deposited cash may be withdrawn upon the bases stated in clause (1) or (2) above.

The mortgage contains restrictions on the issuance of first mortgage bonds against property subject to liens.

As of December 31, 2020, we had approximately $1,795 million principal amount of first mortgage bonds outstanding. As of December 31, 2020, we could have issued approximately $964 million principal amount of additional first mortgage bonds on the basis of retired first mortgage bonds, and we

had approximately $856 million of unfunded property additions, entitling us to issue approximately $599 million principal amount of additional first mortgage bonds on the basis of property additions. The Bonds were issued on the basis of property additions.

Other than the security afforded by the lien of the mortgage and restrictions on the issuance of additional first mortgage bonds described above, there are no provisions of the mortgage that grant the holders of the first mortgage bonds protection in the event of a highly leveraged transaction involving us.

Release and Substitution of Property

Property may be released from the lien of the mortgage on the basis of:

1. the deposit with the trustee of cash or purchase money mortgages;
2. the lower of cost or fair value to us of unfunded property additions designated by us, after adjustments in certain cases to offset retirements and after making adjustments for certain prior lien bonds, if any, outstanding against property additions; or
3. an amount equal to the principal amount of the retired first mortgage bonds that we elect to use as the basis for such release times the reciprocal of the bonding ratio in effect at the time such retired first mortgage bonds were originally issued.

Property owned by us on December 31, 1987, may be released from the lien of the mortgage at its depreciated book value on December 31, 1987; all other property may be released at its cost, as defined in the mortgage. Unfunded property may also be released without complying with clauses (1), (2) or (3) above if, after its release, we would have at least one dollar of unfunded property that remains subject to the lien of the mortgage.

We can withdraw cash upon the bases stated in clauses (2) and/or (3) above.

Generally, "Funded Property" under the mortgage means all mortgaged property owned by us on December 31, 1987, and all property additions used as the basis for the issuance of first mortgage bonds, the release of mortgaged property or the withdrawal of cash held by the trustee. We may at any time, without further consent of any holders of first mortgage bonds, change the definition of "Funded Property" to mean any mortgaged property specified by us with a fair value, to be determined by an independent expert, of not less than 10/7ths of the sum of the amount of the outstanding first mortgage bonds and retired bond credits, together with all property additions thereafter used as the basis for the issuance of first mortgage bonds, the release of mortgaged property or the withdrawal of cash held by the trustee.

We may, without any release or consent by the trustee, cancel or make changes or alterations in or substitutions for any and all easements, servitudes, rights-of-way and similar rights and/or interests.

Modification

Modification Without Consent

Without the consent of any holder of first mortgage bonds, we and the trustee may enter into one or more supplemental indentures for any of the following purposes:

- to evidence the assumption by any permitted successor of our covenants in the mortgage and in the first mortgage bonds;
- to add one or more covenants or other provisions for the benefit of the holders of all or any series or tranche of first mortgage bonds, or to surrender any right or power conferred upon us;

- to cure any ambiguity in the mortgage or any supplemental indenture; or
- to establish the form or terms of first mortgage bonds of any other series as permitted by the mortgage;

provided that any such modification does not adversely affect any first mortgage bonds then outstanding.

We have the right to amend the mortgage at any time without any consent or other action of the holders of any first mortgage bonds, including the Bonds, for any of the following additional purposes:

- to add additional events of default under the mortgage for all or any series of first mortgage bonds;
- to correct or amplify the description of the mortgaged property or to subject additional property to the lien of the mortgage;
- to change, eliminate or add any provision to the mortgage; provided that no such change, elimination or addition will adversely affect the interests of the holders of first mortgage bonds of any series in any material respect;
- to provide for the procedures required for use of a non-certificated system of registration for the first mortgage bonds of all or any series;
- to change any place where principal, premium, if any, and interest shall be payable, first mortgage bonds may be surrendered for registration of transfer or exchange, and notices and demands to us may be served; and
- to cure any ambiguity or inconsistency or to make any other changes or additions to the provisions of the mortgage if such changes or additions will not adversely affect the interests of first mortgage bonds of any series in any material respect.

Modification Requiring Consent

Except as provided below, the consent of the holders of a majority in aggregate principal amount of then outstanding first mortgage bonds, considered as one class, is required for all other amendments or modifications to the mortgage. However, if less than all of the series of first mortgage bonds outstanding are directly affected by a proposed amendment or modification, then the consent of the holders of only a majority in aggregate principal amount of the outstanding first mortgage bonds of all series that are directly affected, considered as one class, will be required. Notwithstanding the foregoing, no amendment or modification may be made without the consent of the holder of each directly affected first mortgage bond then outstanding to:

- impair or affect the right of such holder to receive payment of the principal of (and premium, if any) and interest on such first mortgage bond, on or after the respective due dates expressed in such first mortgage bond, or to institute suit for the enforcement of any such payment on or after such respective dates;
- permit the creation of any lien ranking prior to or on a parity with the lien of the mortgage with respect to the mortgaged property, or permit the deprivation of any non-assenting holder of a first mortgage bond of a lien on the mortgaged property for the security of such holder's first mortgage bonds (subject only to certain tax, assessment and governmental liens and certain prior liens); or
- permit the reduction of the percentage in principal amount of the outstanding first mortgage bonds of any series the consent of the holders of which is required for any amendment or modification.

The mortgage provides that first mortgage bonds owned by us, for our benefit or by any affiliate of ours shall not be deemed outstanding for the purpose of certain votes, consents or quorums; provided that first mortgage bonds that have been pledged in good faith may be regarded as outstanding if the pledgee establishes to the satisfaction of the trustee its right to vote such first mortgage bonds and such pledgee is not our affiliate.

Any request, consent or vote of the owner of any first mortgage bond will bind every future holder and owner of that first mortgage bond and the holder and owner of every first mortgage bond issued upon the registration of transfer of or in exchange for that first mortgage bond.

Defaults and Notices Thereof

Defaults under the mortgage include:

1. failure to pay the principal of any first mortgage bond after it is due and payable;
2. failure to pay interest upon any first mortgage bond for a period of 30 days after it is due and payable;
3. certain events of bankruptcy, insolvency or reorganization;
4. defaults under a supplemental indenture; and
5. the expiration of a period of 90 days after the mailing by the trustee to us of a written demand, or by the holders of 15% in principal amount of the first mortgage bonds at the time outstanding to the trustee and us of a written demand, that we perform a specified covenant or agreement in the mortgage or a first mortgage bond, which specified covenant or agreement we shall have failed to perform prior to such mailing, unless during such period we shall have performed such covenant or agreement or shall have in good faith commenced efforts to perform the same. The trustee may, and, if requested to do so in writing by the holders of a majority in principal amount of the first mortgage bonds outstanding, shall, make such demand.

The trustee may withhold notice of default, except in payment of principal, interest or funds for purchase or redemption of first mortgage bonds, if the trustee in good faith determines it is in the interests of the holders of first mortgage bonds.

Remedies

Acceleration of Maturity

If a default under the mortgage occurs and is continuing, then the trustee, by written notice to us, or the holders of at least 25% in aggregate principal amount of the outstanding first mortgage bonds, by written notice to the trustee and us, may declare the principal amount of all of the first mortgage bonds to be due and payable immediately, and upon the giving of such notice, such principal amount and accrued and unpaid interest will become immediately due and payable.

There is no automatic acceleration, even in the event of our bankruptcy, insolvency or reorganization.

Annulment of Acceleration

At any time after such a declaration of acceleration has been made but before any sale of the mortgaged property, the holders of a majority in principal amount of all outstanding first mortgage bonds may annul such declaration of acceleration, by written notice to the trustee and us, if the default under the mortgage giving rise to such declaration of acceleration has been cured, and we have paid or deposited with the trustee a sum sufficient to pay:

(1) all overdue interest on all outstanding first mortgage bonds;

(2) the principal of and premium, if any, on the outstanding first mortgage bonds that have become due otherwise than by such declaration of acceleration and overdue interest thereon;

(3) interest on overdue interest, if any, to the extent lawful, at the rate borne by the first mortgage bonds for which interest is overdue plus 1% per year; and

(4) all amounts due to the trustee under the mortgage.

Trustee Powers

Subject to the mortgage, under specified circumstances and to the extent permitted by law, if a default under the mortgage occurs, the trustee shall be entitled to the appointment of a receiver for the mortgaged property and is entitled to all other remedies available under applicable law.

Control by Holders

The holders of a majority in principal amount of the first mortgage bonds may direct the time, method and place of conducting any proceedings for any remedy available to the trustee or exercising any trust or power conferred on the trustee. The trustee is not obligated to comply with directions that conflict with law or other provisions of the mortgage or that the trustee determines in good faith would involve the trustee in personal liability, would be unjustifiably prejudicial to non-assenting holders or would be in circumstances where indemnity would not be sufficient. The trustee is not required to risk its funds or incur personal liability if there is reasonable ground for believing that repayment is not reasonably assured.

Limitation on Holders' Right to Institute Proceedings

No holder of first mortgage bonds will have any right to institute any proceeding under the mortgage, or any remedy under the mortgage, unless:

- the holder has previously given to the trustee written notice of a default under the mortgage;
- the holders of 25% in aggregate principal amount of the outstanding first mortgage bonds of all series have made a written request to the trustee and have offered the trustee reasonable opportunity and indemnity satisfactory to the trustee to institute proceedings; and
- the trustee has failed to institute any proceeding for 60 days after notice;

provided that no holder or holders of first mortgage bonds shall have any right in any manner to affect or prejudice the lien of the mortgage or to obtain priority over other holders of outstanding first mortgage bonds. However, these limitations do not apply to the absolute and unconditional right of a holder of a first mortgage bond to institute suit for payment of the principal, premium, if any, or interest on the first mortgage bond on or after the applicable due date.

We have reserved the right to amend the mortgage, without any consent or other action by the holders of any first mortgage bonds created after October 31, 2017, to revise the limitations described in the first sentence of the immediately preceding paragraph to apply to any proceeding or remedy under or with respect to the mortgage or the first mortgage bonds.

Evidence to be Furnished to the Trustee

Compliance with the mortgage provisions is evidenced by written statements of our officers or persons we select or pay. In certain cases, opinions of counsel and certifications of an engineer, accountant, appraiser or other expert (who in some cases must be independent) must be furnished. We

must give the trustee an annual certificate as to whether or not we have fulfilled our obligations under the mortgage throughout the preceding year.

Satisfaction and Discharge of Mortgage

After we provide for the payment of all of the first mortgage bonds (including the Bonds) and after paying all other sums due under the mortgage, the mortgage may be satisfied and discharged. The first mortgage bonds will be deemed to have been paid when money or Eligible Obligations (as defined below) sufficient to pay the first mortgage bonds (in the opinion of an independent accountant in the case of Eligible Obligations) at maturity or upon redemption have been irrevocably set apart or deposited with the trustee; provided that the trustee shall have received an opinion of counsel to the effect that the setting apart or deposit does not require registration under the Investment Company Act of 1940, does not violate any applicable laws and does not result in a taxable event with respect to the holders of the first mortgage bonds prior to the time of their right to receive payment. "Eligible Obligations" means obligations of the United States of America that do not permit the redemption thereof at the issuer's option.

Consolidation, Merger and Conveyance of Assets

The mortgage provides that we may consolidate with or merge into any other entity or convey, transfer or lease as, or substantially as, an entirety to any entity the mortgaged property, if:

- (a) the surviving or successor entity to such merger or consolidation has authority to carry on the energy, fuel, water or steam business, or (b) the successor entity that acquires by conveyance or transfer or that leases our mortgaged property as, or substantially as, an entirety, is authorized to acquire, lease or operate the mortgaged property so conveyed or transferred;
- such merger, consolidation, conveyance, transfer or lease is upon such terms as to preserve, and in no respect impair, the lien and security of the mortgage and the rights and powers of the trustee and the holders of first mortgage bonds;
- the survivor or successor entity expressly assumes by supplemental indenture our obligations on all first mortgage bonds then outstanding and under the mortgage;
- immediately after giving effect to such transaction, no default under the mortgage shall have occurred and be continuing; and
- in the case of a lease, such lease is made expressly subject to termination by us or by the trustee and by the purchaser of the property so leased at any sale thereof at any time during the continuance of a default under the mortgage.

In the case of the conveyance or other transfer of the mortgaged property as, or substantially as, an entirety to another entity, upon the satisfaction of all the conditions described above, the successor entity would be substituted for us under the mortgage, but we would not be released and discharged from our obligations on the first mortgage bonds then outstanding.

If we transfer as an entirety all or substantially all of our mortgaged property to a successor, the successor will assume all of our obligations under the mortgage and we may be released from all such obligations.

The mortgage does not prevent or restrict any conveyance or other transfer or lease of any part of the mortgaged property that does not constitute the entirety, or substantially the entirety, of the mortgaged property.

Although the successor entity may, in its sole discretion, subject to the lien of the mortgage property then owned or thereafter acquired by the successor entity, the lien of the mortgage generally will

not cover the property of the successor entity other than the mortgaged property it acquires from us and improvements, extensions and additions to such property and renewals, replacements and substitutions thereof, within the meaning of the mortgage.

The terms of the mortgage do not restrict mergers in which we are the surviving entity.

The mortgage provides:

(1) that a statutory merger pursuant to which our assets and liabilities are allocated to one or more entities shall not be considered to be a merger subject to the provisions of the mortgage relating to a merger, consolidation or conveyance of all or substantially all of the mortgaged property unless all of our assets and liabilities are allocated to an entity other than us and we do not survive such statutory merger; in all other cases of a statutory merger pursuant to which any mortgaged property is allocated to one or more entities other than us, each allocation of any mortgaged property to an entity other than us shall be deemed, for purposes of the mortgage, to be a transfer of such mortgaged property to such entity and not a merger;

(2) that any conveyance, transfer or lease of any of our properties where we retain mortgaged property with a fair value in excess of 143% of the aggregate principal amount of all outstanding first mortgage bonds, and any other outstanding debt secured by a purchase money lien that ranks equally with, or senior to, the first mortgage bonds with respect to the mortgaged property, shall not be deemed to be a conveyance, transfer or lease of all or substantially all of our mortgaged property. This fair value will be determined within 90 days of the conveyance, transfer or lease by an independent expert selected by us; and

(3) that, in the case of a consolidation or merger after the consummation of which we would be the surviving or resulting entity, unless we otherwise provide in a supplemental indenture to the mortgage, the lien of the mortgage will generally not cover any of the properties acquired by us in or as a result of such transaction or any improvements, extensions or additions to those properties.

Release of Obligations under the Bonds upon Transfer of All or Substantially All Mortgaged Property

If we transfer as an entirety all or substantially all of our mortgaged property to a successor, the successor will assume all of our obligations under the Bonds and we may be released of all such obligations.

Consent to Amendments

Each holder or future holder of the Bonds, by its acquisition of an interest in such Bonds, irrevocably (a) consented or will consent to the amendments to the mortgage described herein under "– Security," "– Modification – Modification Without Consent," and "– Consolidation, Merger and Conveyance of Assets," without any other or further action by any holder of such Bonds, and (b) designated or will designate the trustee, and its successors, as its proxy with irrevocable instructions to vote and deliver written consents on behalf of such holder in favor of such amendments at any meeting of bondholders, in lieu of any meeting of bondholders, in response to any consent solicitation or otherwise.

Information about the Trustee

The trustee is The Bank of New York Mellon. In addition to acting as trustee, The Bank of New York Mellon also acts, and may act, as trustee under various other of our and our affiliates' indentures, trusts and guarantees. We and our affiliates maintain deposit accounts and credit and liquidity facilities and conduct other banking transactions with the trustee and its affiliates in the ordinary course of our respective businesses.

So long as no event of default or event that, after notice or lapse of time, or both, would become an event of default has occurred and is continuing and except with respect to a trustee appointed by act of the holders, if we have delivered to the trustee a board resolution appointing a successor trustee and the successor has accepted the appointment in accordance with the terms of the mortgage, the trustee will be deemed to have resigned and the successor will be deemed to have been appointed as trustee in accordance with the mortgage.

Book-Entry Only Securities

The Bonds trade through DTC. The Bonds are represented by a global certificate and registered in the name of Cede & Co., DTC's nominee. The global certificate was deposited with the trustee as custodian for DTC. Ownership of beneficial interests in the global certificate is limited to institutions that have accounts with DTC or its participants or persons that may hold interests through participants.

DTC is a New York clearing corporation and a clearing agency registered under Section 17A of the Exchange Act. DTC holds securities for its participants. DTC also facilitates the post-trade settlement of securities transactions among its participants through electronic computerized book-entry transfers and pledges in the participants' accounts. This eliminates the need for physical movement of securities certificates. The participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Others who maintain a custodial relationship with a participant can use the DTC system. The rules that apply to DTC and those using its systems are on file with the SEC.

Purchases of the Bonds within the DTC system must be made through participants, who will receive a credit for the Bonds on DTC's records. The beneficial ownership interest of each purchaser will be recorded on the appropriate participant's records. Beneficial owners do not receive written confirmation from DTC of their purchases, but beneficial owners should receive written confirmations of the transactions, as well as periodic statements of their holdings, from the participants through whom they purchased Bonds. Transfers of ownership in the Bonds are to be accomplished by entries made on the books of the participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates for their Bonds, except if use of the book-entry system for the Bonds is discontinued.

To facilitate subsequent transfers, all Bonds deposited by participants with DTC are registered in the name of DTC's nominee, Cede & Co. The deposit of the Bonds with DTC and their registration in the name of Cede & Co. effects no change in beneficial ownership. DTC has no knowledge of the actual beneficial owners of the Bonds. DTC's records reflect only the identity of the participants to whose accounts such Bonds are credited. These participants may or may not be the beneficial owners. Participants are responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to participants, and by participants to beneficial owners, are governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial owners of Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults and proposed amendments to the mortgage. Beneficial owners of the Bonds may wish to ascertain that the nominee holding the Bonds has agreed to obtain and transmit notices to the beneficial owners.

Redemption notices will be sent to Cede & Co., as registered holder of the Bonds. If less than all of the Bonds are being redeemed, DTC's practice is to determine by lot the amount of Bonds held by each participant to be redeemed.

Neither DTC nor Cede & Co. will itself consent or vote with respect to Bonds, unless authorized by a participant in accordance with DTC's procedures. Under its usual procedures, DTC would mail an omnibus proxy to us as soon as possible after the record date. The omnibus proxy assigns the consenting or voting rights of Cede & Co. to those participants to whose accounts the Bonds are credited on the record date. We believe that these arrangements will enable the beneficial owners to exercise rights equivalent in substance to the rights that can be directly exercised by a registered holder of the Bonds.

Payments of redemption proceeds, principal of, and interest on the Bonds are and will be made to Cede & Co., or such other nominee as may be requested by DTC. DTC's practice is to credit participants' accounts upon DTC's receipt of funds and corresponding detail information from us or our agent, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by participants to beneficial owners are and will be governed by standing instructions and customary practices. Payments are the responsibility of participants and not of DTC, the trustee, or us, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, principal and interest to Cede & Co. (or such other nominee as may be requested by DTC) is our responsibility. Disbursement of payments to participants is the responsibility of DTC, and disbursement of payments to the beneficial owners is the responsibility of participants.

Other than in the circumstances described herein, a beneficial owner will not be entitled to receive physical delivery of the Bonds. Accordingly, each beneficial owner must rely on the procedures of DTC to exercise any rights under the Bonds.

DTC may discontinue providing its services as securities depositary with respect to the Bonds at any time by giving us reasonable notice. In the event no successor securities depositary is obtained, certificates for the Bonds will be printed and delivered. We may decide to replace DTC or any successor depositary. Additionally, subject to the procedures of DTC, we may decide to discontinue use of the system of book-entry transfers through DTC (or a successor depositary) with respect to some or all of the Bonds. In that event or if an event of default with respect to the Bonds has occurred and is continuing, certificates for the Bonds will be printed and delivered. If certificates for the Bonds are printed and delivered,

- those Bonds will be issued in fully registered form without coupons;
- a holder of certificated Bonds would be able to exchange those Bonds, without charge, for an equal aggregate principal amount of Bonds, having the same issue date and with identical terms and provisions; and
- a holder of certificated Bonds would be able to transfer those Bonds without cost to another holder, other than for applicable stamp taxes or other governmental charges.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that we believe to be reliable, but we do not take any responsibility for the accuracy of this information.

Exhibit 4(f)4

DESCRIPTION OF ENTERGY NEW ORLEANS, LLC'S SECURITIES

REGISTERED PURSUANT TO SECTION 12

OF THE SECURITIES EXCHANGE ACT OF 1934

References in this exhibit to "we," "us," or "our" are to Entergy New Orleans, LLC.

We have issued, and may from time to time issue, bonds in one or more series under one or more separate supplemental indentures to the Mortgage and Deed of Trust dated as of May 1, 1987 with The Bank of New York Mellon, successor trustee (the "trustee"). This Mortgage and Deed of Trust, as it has heretofore been and may be amended or supplemented from time to time, is referred to in this exhibit as the "mortgage." All first mortgage bonds issued or to be issued under the mortgage, including the Bonds (as defined below), are referred to herein as "first mortgage bonds."

As of February 26, 2021, we have two series of first mortgage bonds outstanding that are registered under Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"):

- our First Mortgage Bonds, 5.0% Series due December 1, 2052, issued in an aggregate principal amount of $30,000,000 under the Sixteenth Supplemental Indenture, dated as of November 1, 2012, to the mortgage and traded on the New York Stock Exchange (the "NYSE") under the ticker ENJ (the "2052 Bonds"); and
- our First Mortgage Bonds, 5.50% Series due April 1, 2066, issued in an aggregate principal amount of $110,000,000 under the Nineteenth Supplemental Indenture, dated as of March 15, 2016, to the mortgage and traded on the NYSE under the ticker EAE (the "2066 Bonds," and together with the 2052 Bonds, the "Bonds").

The full aggregate principal amount of each series of the Bonds is currently outstanding.

The mortgage, including the applicable supplemental indentures relating to the Bonds, contains the full legal texts of the matters described herein. Because this is a summary, it does not describe every aspect of the mortgage, the supplemental indentures relating to each series of Bonds, or the outstanding first mortgage bonds, including the Bonds. The mortgage and the supplemental indentures that relate to the outstanding first mortgage bonds, including the Bonds, are filed as exhibits to the Annual Report on Form 10-K to which this is filed as an exhibit. You should read the mortgage for provisions that may be important to you. This summary is subject to and qualified in its entirety by reference to all the provisions of the mortgage, including the definitions of some of the terms used in the mortgage, and to the particular terms of the supplemental indenture that relates to each series of Bonds. The mortgage has been qualified under the Trust Indenture Act of 1939, and you should also refer to the Trust Indenture Act of 1939 for provisions that apply to the Bonds.

General

The mortgage permits us to issue first mortgage bonds from time to time subject to limitations described under "Issuance of Additional First Mortgage Bonds." All first mortgage bonds of any one series need not be issued at the same time, and a series may be reopened for issuances of additional first mortgage bonds of that series. This means that we may from time to time, without the consent of the

existing holders of the first mortgage bonds of any series, including the Bonds, create and issue additional first mortgage bonds of a series having the same terms and conditions as the previously issued first mortgage bonds of that series in all respects, except for issue date, issue price and, if applicable, the initial interest payment on those additional first mortgage bonds. Additional first mortgage bonds issued in this manner will be consolidated with and will form a single series with the previously issued first mortgage bonds of that series. For more information, see the discussion below under "Issuance of Additional First Mortgage Bonds."

Payment

The principal amount of the Bonds and interest thereon is and will be paid in any coin or currency of the United States of America that at the time of payment is legal tender at the corporate trust office of the trustee in the Borough of Manhattan, City and State of New York.

Interest on the 2052 Bonds accrues at the rate of 5.0% per year. Interest on the 2066 Bonds accrues at the rate of 5.50% per year. In each case, interest started to accrue from the date that the respective series of Bonds was issued. Interest payments on the 2052 Bonds are made on March 1, June 1, September 1 and December 1 of each year, and on the 2066 Bonds are made on January 1, April 1, July 1 and October 1 of each year. As long as the Bonds are registered in the name of The Depository Trust Company ("DTC") or its nominee, the record date for interest payable on any interest payment date shall be the close of business on the Business Day (defined as any day other than a Saturday or a Sunday or a day on which banking institutions in The City of New York are authorized or required by law or executive order to remain closed or a day on which the corporate trust office of the trustee is closed for business) immediately preceding such interest payment date. We have agreed to pay interest on any overdue principal and, if such payment is enforceable under applicable law, on any overdue installment of interest, in the case of the 2052 Bonds at a rate of 6.0% per year, and in the case of the 2066 Bonds at a rate of 6.50% per year, to the holders of record at the close of business on the Business Day immediately preceding our payment of such interest.

Interest on the Bonds is computed on the basis of a 360-day year of twelve 30-day months. If any interest payment date or the maturity date of a Bond falls on a day that is not a Business Day, the payment due on that interest payment date or the maturity date will be made on the next Business Day, and without any interest or other payment in respect of such delay.

As long as the Bonds are registered in the name of DTC or its nominee, we will pay principal and interest due on the Bonds to DTC. DTC will then make payment to its participants for disbursement to the beneficial owners of the Bonds as described under the heading "Book-Entry Only Securities."

Redemption and Purchase

Optional Redemption

We may redeem the Bonds prior to maturity, in whole or in part, at our option, on not less than 30 days' nor more than 60 days' notice to holders by mail, (i) in the case of the 2052 Bonds, at any time, and (ii) in the case of the 2066 Bonds, at any time on or after April 1, 2021; in each case, at a redemption price equal to 100% of the principal amount of the Bonds being redeemed plus any accrued and unpaid interest thereon to, but not including, the redemption date.

Unless the Bonds are held in book-entry only form through the facilities of DTC, in which case DTC's procedures for selection shall apply (see "Book-Entry Only Securities"), if less than all of the Bonds of any securities are to be redeemed, the trustee will select the Bonds to be redeemed.

Unless we default in the payment of the redemption price and accrued interest, if any, in the case of an unconditional notice of redemption, the Bonds subject to such notice of redemption will cease to bear interest on the redemption date. We will pay the redemption price and any accrued interest to the redemption date upon presentation and surrender of any Bond for redemption. If only part of a Bond is redeemed, the trustee will deliver to the holder of the Bond a new Bond of the same series for the remaining portion without charge.

We may make any redemption at our option conditional upon the receipt by the trustee, prior to the date fixed for redemption, of money sufficient to pay the redemption price and accrued interest, if any. If the trustee has not received the money by the date fixed for redemption, we will not be required to redeem the Bonds.

Redemption of Bonds at Option of Holders

The terms of the franchise ordinances pursuant to which we provide electric and gas service to the City of New Orleans state that the City has a continuing option to purchase our electric and gas properties. If all or substantially all of our property subject to the mortgage is taken or acquired by the City of New Orleans or any instrumentality or designee thereof, upon the consummation of this taking or acquisition, we have agreed to direct the trustee to send a written notice to each registered holder of bonds then outstanding stating that each such holder has the right to require us to redeem its bonds, in whole or in part, at the special redemption price of 101% of the principal amount of the bonds being redeemed plus accrued and unpaid interest thereon to, but not including, the redemption date.

Upon the mailing of notice by the trustee, each holder will have 45 days to deliver written notice to the trustee of such holder's intent to have its bonds redeemed by us in accordance with the preceding paragraph on the 60th day following the date of the notice upon delivery and surrender of such bond.

Exchange or Redemption of Bonds upon Merger or Consolidation

Although we do not currently have any plans to merge or consolidate with Entergy Louisiana, LLC, one of our affiliates, the mortgage provides that, in the event of such a merger or consolidation, we would have the right to offer to exchange all outstanding Bonds for a like principal amount of the new merged or consolidated company's first mortgage bonds with the same interest rates, interest payment dates, maturity dates and redemption provisions. Unless we waive this right, the holders of outstanding Bonds must either accept such first mortgage bonds in exchange for all or a portion of their Bonds or tender to us for redemption any Bonds not so exchanged. The redemption price applicable for these purposes to the Bonds will be 100% of the principal amount plus accrued interest thereon to, but not including, the redemption date.

Form and Exchange

The Bonds are fully-registered bonds without coupons, issued in denominations of $25 and integral multiples of $25 in excess thereof. Each series of the Bonds is represented by a global certificate without coupons registered in the name of a nominee of DTC.

The Bonds are exchangeable for other Bonds of the same series in equal aggregate principal amounts. No service charge will be made for any registration of transfer or exchange of the Bonds. However, we may require payment to cover any tax or other governmental charge that may be imposed in connection with a registration of transfer or exchange. We will not be required to provide for the transfer or exchange of any Bond:

- during the 15 days before an interest payment date (unless such series has a record date for the payment of interest),
- during the 15 days before any designation of such Bond to be redeemed, or
- selected for redemption.

Security

The Bonds, together with all other first mortgage bonds now or in the future outstanding under the mortgage, are and will be secured, equally and ratably, by the lien of the mortgage. The mortgage constitutes a first mortgage lien on substantially all of our property (the "mortgaged property") subject to bankruptcy law and:

1. minor defects and encumbrances customarily found in similar properties that do not materially impair the use of the mortgaged property in the conduct of our business;
2. other liens, defects and encumbrances, if any, existing or created at the time of our acquisition of the mortgaged property; and
3. excepted encumbrances.

The mortgage does not create a lien on the following "excepted property":

- cash and securities;
- all merchandise, equipment, apparatus, materials or supplies held for sale or other disposition in the usual course of business or consumable during use;
- automobiles, vehicles and aircraft, timber, minerals, mineral rights and royalties; and
- accounts receivable, contracts, leases and operating agreements.

The mortgage contains provisions that impose the lien of the mortgage on property we acquire after the date of the mortgage, other than excepted property, subject to pre-existing liens. However, if we consolidate or merge with, or convey or transfer all or substantially all of our mortgaged property to, another entity, unless the successor entity elects otherwise in its sole discretion, the lien created by the mortgage will generally not cover the property of the successor company, other than the mortgaged property it acquires from us and improvements, replacements and additions to such property.

The mortgage also provides that the trustee has a lien on the mortgaged property to ensure the payment of its reasonable compensation, expenses and disbursements and for indemnity against certain liabilities. This lien takes priority over the lien securing the first mortgage bonds, including the Bonds.

We have reserved the right to amend the mortgage without the consent or other action by the holders of any first mortgage bonds created after November 30, 2017, to revise the definition of "excepted encumbrances" to mean the following:

- tax liens, assessments and other governmental charges or requirements which are not delinquent or which are being contested in good faith and by appropriate proceedings or of which at least ten business days' notice has not been given to our general counsel or to such other person designated by us to receive such notices;
- mechanics', workmen's, repairmen's, materialmen's, warehousemen's and carriers' liens, other liens incident to construction, liens or privileges of any of our employees for salary or wages earned, but not yet payable, and other liens, including without limitation liens for worker's compensation awards, arising in the ordinary course of business for charges or requirements which are not delinquent or which are being contested in good faith and by appropriate proceedings or of

which at least ten business days' notice has not been given to our general counsel or to such other person designated by us to receive such notices;
- specified judgment liens and prepaid liens;
- easements, leases, reservations or other rights of others (including governmental entities) in, and defects of title in, our property;
- liens securing indebtedness or other obligations relating to real property we acquired for specified transmission, distribution or communication purposes or for the purpose of obtaining rights-of-way;
- specified leases and leasehold, license, franchise and permit interests;
- liens resulting from laws, rules, regulations, orders or rights of governmental authorities and specified liens required by law or governmental regulations;
- liens to secure public or statutory obligations;
- rights of others to take minerals, timber, electric energy or capacity, gas, water, steam or other products produced by us or by others on our property;
- rights and interests of persons other than us arising out of agreements relating to the common ownership or joint use of property, and liens on the interests of those persons in the property;
- restrictions on assignment and/or requirements of any assignee to qualify as a permitted assignee and/or public utility or public services corporation; and
- liens which have been bonded for the full amount in dispute or for the payment of which other adequate security arrangements have been made.

Issuance of Additional First Mortgage Bonds

The maximum principal amount of first mortgage bonds that may be issued under the mortgage is limited to $10 billion at any time outstanding under the mortgage, subject to the issuance restrictions described below. First mortgage bonds of any series may be issued from time to time on the basis of:

1. 70% of property additions after adjustments to offset retirements;
2. retirements of first mortgage bonds; or
3. deposit of cash with the trustee.

Property additions generally include, among other things, electric, gas, steam or hot water property acquired after December 31, 1986. Securities, automobiles, vehicles or aircraft, or property used principally for the production or gathering of natural gas, are not included as property additions. Deposited cash may be withdrawn upon the bases stated in clause (1) or (2) above.

The mortgage contains restrictions on the issuance of first mortgage bonds against property subject to liens.

As of December 31, 2020, we had approximately $550 million principal amount of first mortgage bonds outstanding. As of December 31, 2020, we could have issued approximately $165 million principal amount of additional first mortgage bonds on the basis of retired first mortgage bonds, and we had approximately $324 million of unfunded property additions, entitling us to issue approximately $227 million principal amount of additional first mortgage bonds on the basis of property additions. The 2052 Bonds were issued on the basis of retired bond credits, and the 2066 Bonds were issued on the basis of property additions.

Other than the security afforded by the lien of the mortgage and restrictions on the issuance of additional first mortgage bonds described above, there are no provisions of the mortgage that grant the holders of the first mortgage bonds protection in the event of a highly leveraged transaction involving us.

Release and Substitution of Property

Property other than the Municipalization Interest (as defined in the mortgage) may be released from the lien of the mortgage, on the basis of:

1. the deposit with the trustee of cash or purchase money mortgages;
2. the lower of cost or fair value to us of unfunded property additions designated by us, after adjustments in certain cases to offset retirements and after making adjustments for certain prior lien bonds, if any, outstanding against property additions; or
3. an amount equal to the principal amount of the retired first mortgage bonds that we elect to use as the basis for such release times the reciprocal of the bonding ratio in effect at the time such retired first mortgage bonds were originally issued.

Property owned by us on December 31, 1986 may be released from the lien of the mortgage at its depreciated book value on December 31, 1986; all other property may be released at its cost, as defined in the mortgage. Unfunded property may also be released without complying with clauses (1), (2) or (3) above if, after its release, we would have at least one dollar in unfunded property that remains subject to the lien of the mortgage.

We can withdraw cash upon the bases stated in clauses (2) or (3) above.

Generally, "funded property" under the mortgage means all mortgaged property owned by us on December 31, 1986 and all property additions used as the basis for the issuance of first mortgage bonds, the release of mortgaged property or the withdrawal of cash held by the trustee. We may at any time, without the further consent of any holders of first mortgage bonds, change the definition of "funded property" to mean any mortgaged property specified by us with a fair value, to be determined by an independent expert, of not less than 10/7ths of the sum of the amount of the outstanding first mortgage bonds and retired bond credits, together with all property additions thereafter used as the basis for the issuance of first mortgage bonds, the release of mortgaged property or the withdrawal of cash held by the trustee.

We may, without any release or consent by the trustee, cancel or make changes or alterations in or substitutions for any and all easements, servitudes, rights of way and similar rights and/or interests.

Modification

Modification Without Consent

Without the consent of any holder of first mortgage bonds, we and the trustee may enter into one or more supplemental indentures for any of the following purposes:

- to evidence the assumption by any permitted successor of our covenants in the mortgage and in the first mortgage bonds;
- to add one or more covenants or other provisions for the benefit of the holders of all or any series or tranche of first mortgage bonds, or to surrender any right or power conferred upon us;
- to cure any ambiguity in the mortgage or any supplemental indenture; or
- to establish the form or terms of first mortgage bonds of any other series as permitted by the mortgage;

provided that any such modification does not adversely affect any first mortgage bonds then outstanding.

We have reserved the right to amend the mortgage without the consent or action of any of the holders of first mortgage bonds created after October 31, 2012, including the Bonds, to permit us to amend the mortgage without the consent of the holders of first mortgage bonds for any of the following additional purposes:

- to add additional events of default under the mortgage for all or any series of first mortgage bonds;
- to correct or amplify the description of the mortgaged property or to subject additional property to the lien of the mortgage;
- to change, eliminate or add any provision to the mortgage; provided that no such change, elimination or addition will adversely affect the interests of the holders of first mortgage bonds of any series in any material respect;
- to provide for the procedures required for use of a non-certificated system of registration for the first mortgage bonds of all or any series;
- to change any place where principal, premium, if any, and interest shall be payable, first mortgage bonds may be surrendered for registration of transfer or exchange, and notices and demands to us may be served; and
- to cure any ambiguity or inconsistency or to make any other changes or additions to the provisions of the mortgage if such changes or additions will not adversely affect the interests of first mortgage bonds of any series in any material respect.

Modification Requiring Consent

Except as provided below, the consent of the holders of a majority in aggregate principal amount of then outstanding first mortgage bonds, considered as one class, is required for all other amendments or modifications to the mortgage. However, if less than all of the series of first mortgage bonds outstanding are directly affected by a proposed amendment or modification, then the consent of the holders of only a majority in aggregate principal amount of the outstanding first mortgage bonds of all series that are directly affected, considered as one class, will be required. Notwithstanding the foregoing, no amendment or modification may be made without the consent of the holder of each directly affected first mortgage bond then outstanding to:

- impair or affect the right of such holder to receive payment of the principal of (and premium, if any) and interest on such first mortgage bond, on or after the respective due dates expressed in such first mortgage bond, or to institute suit for the enforcement of any such payment on or after such respective dates;
- permit the creation of any lien ranking prior to or on a parity with the lien of the mortgage with respect to the mortgaged property, or permit the deprivation of any non-assenting holder of a first mortgage bond of a lien on the mortgaged property for the security of such holder's first mortgage bonds (subject only to certain tax, assessment and governmental liens and certain prior liens); or
- permit the reduction of the percentage in principal amount of the outstanding first mortgage bonds of any series the consent of the holders of which is required for any amendment or modification.

The mortgage provides that first mortgage bonds owned by us, for our benefit or by any affiliate of ours shall not be deemed outstanding for the purpose of certain votes, consents or quorums; provided that first mortgage bonds that have been pledged in good faith may be regarded as outstanding if the pledgee establishes to the satisfaction of the trustee its right to vote such first mortgage bonds and such pledgee is not our affiliate.

Any request, consent or vote of the owner of any first mortgage bond will bind every future holder and owner of that first mortgage bond and the holder and owner of every first mortgage bond issued upon the registration of transfer of or in exchange for that first mortgage bond.

Defaults and Notices Thereof

Defaults under the mortgage include:

1. failure to pay the principal of any first mortgage bond after it is due and payable;
2. failure to pay interest upon any first mortgage bond for a period of 30 days after it is due and payable;
3. certain events of bankruptcy, insolvency or reorganization;
4. defaults under a supplemental indenture; and
5. the expiration of a period of 90 days after the mailing by the trustee to us of a written demand, or by the holders of 15% in principal amount of the first mortgage bonds at the time outstanding to the trustee and us of a written demand, that we perform a specified covenant or agreement in the mortgage or a first mortgage bond, which specified covenant or agreement we shall have failed to perform prior to such mailing, unless during such period we shall have performed such covenant or agreement or shall have in good faith commenced efforts to perform the same. The trustee may, and, if requested to do so in writing by the holders of a majority in principal amount of the first mortgage bonds outstanding, shall, make such demand.

The trustee may withhold notice of default, except in payment of principal, interest or funds for purchase or redemption of first mortgage bonds, if the trustee in good faith determines it is in the interests of the holders of first mortgage bonds.

Remedies

Acceleration of Maturity

If a default under the mortgage occurs and is continuing, then the trustee, by written notice to us, or the holders of at least 25% in aggregate principal amount of the outstanding first mortgage bonds, by written notice to the trustee and us, may declare the principal amount of all of the first mortgage bonds to be due and payable immediately, and upon the giving of such notice, such principal amount and accrued and unpaid interest will become immediately due and payable.

There is no automatic acceleration, even in the event of our bankruptcy, insolvency or reorganization.

Annulment of Acceleration

At any time after such a declaration of acceleration has been made but before any sale of the mortgaged property, the holders of a majority in principal amount of all outstanding first mortgage bonds may annul such declaration of acceleration, by written notice to the trustee and us, if the default under the mortgage giving rise to such declaration of acceleration has been cured, and we have paid or deposited with the trustee a sum sufficient to pay:

1. all overdue interest on all outstanding first mortgage bonds;
2. the principal of and premium, if any, on the outstanding first mortgage bonds that have become due otherwise than by such declaration of acceleration and overdue interest thereon;
3. interest on overdue interest, if any, to the extent lawful, at the rate borne by the first mortgage bonds for which interest is overdue plus 1% per year; and
4. all amounts due to the trustee under the mortgage.

Trustee Powers

Subject to the mortgage, under specified circumstances and to the extent permitted by law, if a default under the mortgage occurs, the trustee shall be entitled to the appointment of a receiver for the mortgaged property and is entitled to all other remedies available under applicable law.

Control by Holders

The holders of a majority in principal amount of the first mortgage bonds may direct the time, method and place of conducting any proceedings for any remedy available to the trustee or exercising any trust or power conferred on the trustee. The trustee is not obligated to comply with directions that conflict with law or other provisions of the mortgage or that the trustee determines in good faith would involve the trustee in personal liability, would be unjustifiably prejudicial to non-assenting holders or would be in circumstances where indemnity would not be sufficient. The trustee is not required to risk its funds or incur personal liability if there is reasonable ground for believing that repayment is not reasonably assured.

Limitation on Holders' Right to Institute Proceedings

No holder of first mortgage bonds will have any right to institute any proceeding under the mortgage, or any remedy under the mortgage, unless:

- the holder has previously given to the trustee written notice of a default under the mortgage;
- the holders of 25% in aggregate principal amount of the outstanding first mortgage bonds of all series have made a written request to the trustee and have offered the trustee reasonable opportunity and indemnity satisfactory to the trustee to institute proceedings; and
- the trustee has failed to institute any proceeding for 60 days after notice;

provided that no holder or holders of first mortgage bonds shall have any right in any manner to affect or prejudice the lien of the mortgage or to obtain priority over other holders of outstanding first mortgage bonds. However, these limitations do not apply to the absolute and unconditional right of a holder of a first mortgage bond to institute suit for payment of the principal, premium, if any, or interest on the first mortgage bond on or after the applicable due date.

We have reserved the right to amend the mortgage, without any consent or other action by the holders of any first mortgage bonds created after November 30, 2017, to revise the limitations described in the first sentence of the immediately preceding paragraph to apply to any proceeding or remedy under or with respect to the mortgage or the first mortgage bonds.

Evidence to be Furnished to the Trustee

Compliance with the mortgage provisions is evidenced by written statements of our officers or persons we select or pay. In certain cases, opinions of counsel and certifications of an engineer, accountant, appraiser or other expert (who in some cases must be independent) must be furnished. We must give the trustee an annual certificate as to whether or not we have fulfilled our obligations under the mortgage throughout the preceding year.

Satisfaction and Discharge of Mortgage

After we provide for the payment of all of the first mortgage bonds (including the Bonds) and after paying all other sums due under the mortgage, the mortgage may be satisfied and discharged. The first

mortgage bonds will be deemed to have been paid when money or Eligible Obligations (as defined below) sufficient to pay the first mortgage bonds (in the opinion of an independent accountant in the case of Eligible Obligations) at maturity or upon redemption have been irrevocably set apart or deposited with the trustee; provided that the trustee shall have received an opinion of counsel to the effect that the setting apart or deposit does not require registration under the Investment Company Act of 1940, does not violate any applicable laws and does not result in a taxable event with respect to the holders of the first mortgage bonds prior to the time of their right to receive payment. "Eligible Obligations" means obligations of the United States of America that do not permit the redemption thereof at the issuer's option.

Consolidation, Merger and Conveyance of Assets

The mortgage provides that we may consolidate with or merge into any other entity or convey, transfer or lease as, or substantially as, an entirety to any entity the mortgaged property, if:

- (a) the surviving or successor entity to such merger or consolidation has authority to carry on the energy, fuel, water or steam business, or (b) the successor entity that acquires by conveyance or transfer or that leases our mortgaged property as, or substantially as, an entirety, is authorized to acquire, lease or operate the mortgaged property so conveyed or transferred;
- such merger, consolidation, conveyance, transfer or lease is upon such terms as to preserve, and in no respect impair, the lien and security of the mortgage and the rights and powers of the trustee and the holders of first mortgage bonds;
- the survivor or successor entity expressly assumes by supplemental indenture our obligations on all first mortgage bonds then outstanding and under the mortgage;
- immediately after giving effect to such transaction, no default under the mortgage shall have occurred and be continuing; and
- in the case of a lease, such lease is made expressly subject to termination by us or by the trustee and by the purchaser of the property so leased at any sale thereof at any time during the continuance of a default under the mortgage.

In the case of the conveyance or other transfer of the mortgaged property as, or substantially as, an entirety to another entity, upon the satisfaction of all the conditions described above, the successor entity would be substituted for us under the mortgage, but we would not be released and discharged from our obligations on the first mortgage bonds then outstanding.

The mortgage does not prevent or restrict any conveyance or other transfer, or lease, of any part of the mortgaged property that does not constitute the entirety, or substantially the entirety, of the mortgaged property.

Although the successor entity may, in its sole discretion, subject to the lien of the mortgage property then owned or thereafter acquired by the successor entity, the lien of the mortgage generally will not cover the property of the successor entity other than the mortgaged property it acquires from us and improvements, extensions and additions to such property and renewals, replacements and substitutions thereof, within the meaning of the mortgage.

The terms of the mortgage do not restrict mergers in which we are the surviving entity.

We have reserved the right to amend the mortgage without the consent or other action of the holders of any of the first mortgage bonds created after October 31, 2012, including the Bonds, to provide that, if we transfer as an entirety all or substantially all of our mortgaged property to a successor, the successor will assume all of our obligations under the mortgage and the first mortgage bonds and we may be released of all such obligations.

We have reserved the right to amend the mortgage, without any consent or other action by the holders of any first mortgage bonds created after November 30, 2017, as follows:

1. to provide that a statutory merger pursuant to which our assets and liabilities are allocated to one or more entities shall not be considered to be a merger subject to the provisions of the mortgage relating to a merger, consolidation or conveyance of all or substantially all of the mortgaged property unless all of our assets and liabilities are allocated to an entity other than us and we do not survive such statutory merger; in all other cases of a statutory merger pursuant to which any mortgaged property is allocated to one or more entities other than us, each allocation of any mortgaged property to an entity other than us shall be deemed, for purposes of the mortgage, to be a transfer of such mortgaged property to such entity and not a merger;
2. to provide that any conveyance, transfer or lease of any of our properties where we retain mortgaged property with a fair value in excess of 143% of the aggregate principal amount of all outstanding first mortgage bonds, and any other outstanding debt secured by a purchase money lien that ranks equally with, or senior to, the first mortgage bonds with respect to the mortgaged property, shall not be deemed to be a conveyance, transfer or lease of all or substantially all of our mortgaged property. This fair value will be determined within 90 days of the conveyance, transfer or lease by an independent expert selected by us; and
3. to provide that, in the case of a consolidation or merger after the consummation of which we would be the surviving or resulting entity, unless we otherwise provide in a supplemental indenture to the mortgage, the lien of the mortgage will generally not cover any of the properties acquired by us in or as a result of such transaction or any improvements, extensions or additions to those properties.

Release of Obligations under the Bonds upon Transfer of All or Substantially All Mortgaged Property

If we transfer as an entirety all or substantially all of our mortgaged property to a successor, the successor will assume all of our obligations under the Bonds and we may be released of all such obligations.

Consent to Amendments

Each holder or future holder of the 2066 Bonds, by its acquisition of an interest in such Bonds, irrevocably (a) consented or will consent to the amendments to the mortgage described herein under "– Modification – Modification Without Consent" in the sixth paragraph under "Consolidation, Merger and Conveyance of Assets," without any other or further action by any holder of such Bonds, and (b) designated or will designate the trustee, and its successors, as its proxy with irrevocable instructions to vote and deliver written consents on behalf of such holder in favor of such amendments at any meeting of bondholders, in lieu of any meeting of bondholders, in response to any consent solicitation or otherwise.

Information about the Trustee

The trustee is The Bank of New York Mellon. In addition to acting as trustee, The Bank of New York Mellon also acts, and may act, as trustee under various other of our and our affiliates' indentures, trusts and guarantees. We and our affiliates maintain deposit accounts and credit and liquidity facilities and conduct other banking transactions with the trustee and its affiliates in the ordinary course of our respective businesses.

We have reserved the right to amend the mortgage, without any consent or other action by the holders of any first mortgage bonds created after November 30, 2017, to provide that, so long as no event of default or event that, after notice or lapse of time, or both, would become an event of default has

occurred and is continuing and except with respect to a trustee appointed by act of the holders, if we have delivered to the trustee a board resolution appointing a successor trustee and the successor has accepted the appointment in accordance with the terms of the mortgage, the trustee will be deemed to have resigned and the successor will be deemed to have been appointed as trustee in accordance with the mortgage.

Book-Entry Only Securities

The Bonds trade through DTC. Each series of Bonds is represented by a separate global certificate and registered in the name of Cede & Co., DTC's nominee. The global certificates were deposited with the trustee as custodian for DTC. Ownership of beneficial interests in the global certificates is limited to institutions that have accounts with DTC or its participants or persons that may hold interests through participants.

DTC is a New York clearing corporation and a clearing agency registered under Section 17A of the Exchange Act. DTC holds securities for its participants. DTC also facilitates the post-trade settlement of securities transactions among its participants through electronic computerized book-entry transfers and pledges in the participants' accounts. This eliminates the need for physical movement of securities certificates. The participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Others who maintain a custodial relationship with a participant can use the DTC system. The rules that apply to DTC and those using its systems are on file with the SEC.

Purchases of the Bonds within the DTC system must be made through participants, who will receive a credit for the Bonds on DTC's records. The beneficial ownership interest of each purchaser will be recorded on the appropriate participant's records. Beneficial owners do not receive written confirmation from DTC of their purchases, but beneficial owners should receive written confirmations of the transactions, as well as periodic statements of their holdings, from the participants through whom they purchased Bonds. Transfers of ownership in the Bonds are to be accomplished by entries made on the books of the participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates for their Bonds of a given series, except if use of the book-entry system for the Bonds of that series is discontinued.

To facilitate subsequent transfers, all Bonds deposited by participants with DTC are registered in the name of DTC's nominee, Cede & Co. The deposit of the Bonds with DTC and their registration in the name of Cede & Co. effects no change in beneficial ownership. DTC has no knowledge of the actual beneficial owners of the Bonds. DTC's records reflect only the identity of the participants to whose accounts such Bonds are credited. These participants may or may not be the beneficial owners. Participants are responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to participants, and by participants to beneficial owners, are governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial owners of Bonds may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Bonds, such as redemptions, tenders, defaults and proposed amendments to the mortgage. Beneficial owners of the Bonds may wish to ascertain that the nominee holding the Bonds has agreed to obtain and transmit notices to the beneficial owners.

Redemption notices will be sent to Cede & Co., as registered holder of the Bonds. If less than all of the Bonds of a series are being redeemed, DTC's practice is to determine by lot the amount of Bonds of such series held by each participant to be redeemed.

Neither DTC nor Cede & Co. will itself consent or vote with respect to Bonds, unless authorized by a participant in accordance with DTC's procedures. Under its usual procedures, DTC would mail an omnibus proxy to us as soon as possible after the record date. The omnibus proxy assigns the consenting or voting rights of Cede & Co. to those participants to whose accounts the Bonds are credited on the record date. We believe that these arrangements will enable the beneficial owners to exercise rights equivalent in substance to the rights that can be directly exercised by a registered holder of the Bonds.

Payments of redemption proceeds, principal of, and interest on the Bonds are and will be made to Cede & Co., or such other nominee as may be requested by DTC. DTC's practice is to credit participants' accounts upon DTC's receipt of funds and corresponding detail information from us or our agent, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by participants to beneficial owners are and will be governed by standing instructions and customary practices. Payments are the responsibility of participants and not of DTC, the trustee, or us, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment of redemption proceeds, principal and interest to Cede & Co. (or such other nominee as may be requested by DTC) is our responsibility. Disbursement of payments to participants is the responsibility of DTC, and disbursement of payments to the beneficial owners is the responsibility of participants.

Other than in the circumstances described herein, a beneficial owner will not be entitled to receive physical delivery of the Bonds. Accordingly, each beneficial owner must rely on the procedures of DTC to exercise any rights under the Bonds.

DTC may discontinue providing its services as securities depositary with respect to the Bonds at any time by giving us reasonable notice. In the event no successor securities depositary is obtained, certificates for the Bonds will be printed and delivered. We may decide to replace DTC or any successor depositary. Additionally, subject to the procedures of DTC, we may decide to discontinue use of the system of book-entry transfers through DTC (or a successor depositary) with respect to some or all of the Bonds. In that event or if an event of default with respect to a series of Bonds has occurred and is continuing, certificates for the Bonds of such series will be printed and delivered. If certificates for such series of Bonds are printed and delivered,

- those Bonds will be issued in fully registered form without coupons;
- a holder of certificated Bonds would be able to exchange those Bonds, without charge, for an equal aggregate principal amount of Bonds of the same series, having the same issue date and with identical terms and provisions; and
- a holder of certificated Bonds would be able to transfer those Bonds without cost to another holder, other than for applicable stamp taxes or other governmental charges.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that we believe to be reliable, but we do not take any responsibility for the accuracy of this information.

Exhibit 4(g)13

DESCRIPTION OF ENTERGY TEXAS, INC.'S SECURITIES

REGISTERED PURSUANT TO SECTION 12

OF THE SECURITIES EXCHANGE ACT OF 1934

References in this exhibit to "we," "us," or "our" are to Entergy Texas, Inc.

As of February 26, 2021, we have one series of preferred stock outstanding that is registered under Section 12(b) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"), our 5.375% Series A Preferred Stock, Cumulative, No Par Value (Liquidation Value $25 Per Share), traded on the NYSE under the ticker ETI/PR (the "Series A Preferred Stock").

The following description of the Series A Preferred Stock does not purport to be complete. Reference is made to the Texas Business Organizations Code ("TXBOC"), our Amended and Restated Certificate of Formation, as amended by the Statement of Resolution Establishing the Series A Preferred Stock ("Resolution") adopted by our Board of Directors (as so amended, the "Charter"), and our Amended and Restated Bylaws (the "Bylaws"). Each of the Charter and the Bylaws are filed as exhibits to the Annual Report on Form 10-K to which this is filed as an exhibit. The following statements are qualified in their entirety by such references.

General

Our Board of Directors is authorized under the Charter to provide for the issuance from time to time of Preferred Stock, with no par value ("Preferred Stock"), in one or more series, and, as to each series, to fix and determine the designations, preferences, limitations, and relative rights, including voting rights, applicable to shares of such series.

Under the Charter, we are authorized to issue 200,000,000 shares of common stock, with no par value ("Common Stock") and 20,000,000 shares of Preferred Stock.

The Series A Preferred Stock is not subject to further capital calls or to assessment by us and has no exchange or conversion rights.

Dividends

The holders of the Series A Preferred Stock are entitled to receive, when, as and if, declared by our Board of Directors out of funds legally available, cash dividends at a rate per year equal to 5.375% and are not entitled to receive any other dividends.

Preferred dividends began accumulating on each share of Series A Preferred Stock from the date of issuance of that share. The preferred dividends accumulate from day to day, whether or not earned or declared by the Board of Directors, and are cumulative. The preferred dividends, if and when declared payable by the Board of Directors out of our legally available funds, will be payable in lawful money of the United States of America, quarterly on January 15, April 15, July 15 and October 15 of each year (each, a "Dividend Payment Date"). To the extent that any preferred dividend is not paid on any Dividend Payment Date, that preferred dividend will accumulate until such preferred dividend is paid in full. The

preferred dividends payable on each share of Series A Preferred Stock shall be computed on the basis of a 360-day year consisting of twelve 30-day months, and with respect to any period less than a full dividend period, on the basis of the actual number of days elapsed during such period.

No dividend or distribution in cash or other property (other than shares of Junior Stock (as defined herein)) will be declared, paid, or set apart for payment on or with respect to the Junior Stock unless all preferred dividends on the Series A Preferred Stock accumulated through the date of any distribution have been declared, paid, or set apart before or at the time of the declaration, distribution, or setting apart with respect to the Junior Stock. "Junior Stock" means the Common Stock and any series of Preferred Stock that ranks junior to the Series A Preferred Stock as to dividends or liquidation, dissolution or winding up (whether voluntary or involuntary).

At any time that dividend payments due on one or more Dividend Payment Date on any shares of the Series A Preferred Stock are accumulated and unpaid, and thereafter until all accumulated and unpaid dividends on any such Series A Preferred Stock shall have been paid (without interest), we shall not redeem, repurchase or otherwise acquire, retire or make a liquidation payment with respect to any of our stock other than redemptions, repurchases, acquisitions, retirements or liquidation payments with respect to the Series A Preferred Stock and other series of Preferred Stock with similar redemption or repurchase provisions that rank senior to the Series A Preferred Stock as to dividends and liquidation, dissolution or winding up (whether voluntary or involuntary).

When dividends are not paid in full on any shares of outstanding Preferred Stock that rank equal with the Series A Preferred Stock as to dividends and liquidation, dissolution or winding up (whether voluntary or involuntary) for a dividend period, all dividends declared with respect to shares of Series A Preferred Stock and all outstanding shares of such equal ranking Preferred Stock for such dividend period shall be declared pro rata so that the respective amounts of such dividends declared bear the same ratio to each other as all accumulated but unpaid dividends per share on the shares of Series A Preferred Stock and all shares of such outstanding equal ranking Preferred Stock for such dividend period bear to each other. Therefore, if we are not paying full dividends on any outstanding shares of such equal ranking Preferred Stock, we will not be able to pay full dividends on the Series A Preferred Stock. Similarly, if we issue any series of Preferred Stock that ranks senior to the Series A Preferred Stock as to dividends and liquidation, dissolution or winding up (whether voluntary or involuntary), we expect that if we do not pay any amount of stated dividends thereon, we will not be able to pay any dividends on the Series A Preferred Stock.

Subject to the foregoing, dividends (payable in cash, stock or otherwise) as may be determined by the Board of Directors may be declared and paid on the Common Stock and any other shares of Junior Stock (as defined below) from time to time outstanding out of any funds legally available for such payment or as otherwise permitted by applicable law, and the Series A Preferred Stock shall not be entitled to participate in any such dividend.

Ranking

The Series A Preferred Stock will rank senior to the Common Stock as to dividends, redemption, and amounts payable on our liquidation, dissolution or winding up.

Except with respect to Preferred Stock issued in the future in accordance with the provisions described under "Voting Rights—Restrictions on Issuance of Senior Equity Securities," the rights of the Series A Preferred Stock to dividends, redemption, and amounts payable on our liquidation, dissolution or winding up shall rank equal or senior to each other series of Preferred Stock which we may issue in the future.

Redemption

Optional Redemption

We may redeem shares of Series A Preferred Stock as follows:

- in whole but not in part, at any time and from time to time prior to October 15, 2024, within 120 days after the conclusion of any review or appeal process instituted by us following the occurrence of a Ratings Event (as defined herein), and the redemption price shall be equal to $25.50 per share, plus the amount of accumulated and unpaid preferred dividends on such shares up to and including the date on which the redemption price on such shares has been paid in full; and/or
- in whole or in part, at any time and from time to time on or after October 15, 2024, and the redemption price shall be equal to $25.00 per share, plus the amount of accumulated and unpaid preferred dividends on such shares being redeemed up to and including the date on which the redemption price on such shares being redeemed has been paid in full.

Partial payments on any share will be applied first to preferred dividends and then to the redemption price.

"Ratings Event" means that any nationally recognized statistical rating organization as defined in Section 3(a)(62) of the Securities Exchange Act of 1934, as amended, or in any successor provision thereto, that then publishes a rating for us (a "rating agency") amends, clarifies or changes the criteria it uses to assign equity credit to the Series A Preferred Stock, which amendment, clarification or change results in:

- the shortening of the length of time the Series A Preferred Stock is assigned a particular level of equity credit by that rating agency as compared to the length of time the Series A Preferred Stock would have been assigned that level of equity credit by that rating agency or its predecessor on the initial issuance of the Series A Preferred Stock; or
- the lowering of the equity credit (including up to a lesser amount) assigned to the Series A Preferred Stock by that rating agency as compared to the equity credit assigned thereto by that rating agency or its predecessor on the initial issuance of the Series A Preferred Stock.

Redemption Notice

At least 30 days and not more than 60 days before a redemption date, we will mail or cause to be mailed written notice, postage prepaid, to each holder of record of shares of Series A Preferred Stock to be redeemed at the holder's mailing address last shown on our share transfer records for the Series A Preferred Stock. The redemption notice will state:

- the total number of shares of Series A Preferred Stock that we will redeem on the redemption date;
- the number of shares of Series A Preferred Stock held by the holder that we will redeem on the redemption date;
- the redemption date and the redemption price;
- any conditions to such redemption; and
- the time, place, and manner in which the holder is to surrender to the registrar the certificate or certificates representing shares of Series A Preferred Stock to be redeemed.

Conditions to Redemption

If the redemption notice shall specify conditions to redemption of shares of Series A Preferred Stock and such conditions shall not have been satisfied on or prior to the redemption date, the redemption notice shall be of no force and effect and such Series A Preferred Stock shall not be subject to redemption on such redemption date.

Partial Redemption

In case of any redemption of only part of the shares of Series A Preferred Stock at the time outstanding, the shares of Series A Preferred Stock to be redeemed shall be selected either pro rata or by lot. Subject to the provisions of the Resolution, we shall have full power and authority to prescribe the terms and conditions upon which shares of Series A Preferred Stock shall be redeemed from time to time. If fewer than all the shares of Series A Preferred Stock represented by any certificate are redeemed, a new certificate shall be issued representing the unredeemed shares of Series A Preferred Stock without charge to the holder thereof.

Termination of Rights

If the redemption notice is duly given and if, on or before the redemption date, the redemption price is either paid or made available for payment on or for the shares of the Series A Preferred Stock called for redemption, then all rights with respect to such shares will terminate immediately after the redemption date, except the right of the holders of such shares to receive the redemption price (without interest) on surrender of their certificates. This termination of rights will not be affected by any failure to surrender on or before the redemption date, any of the certificates representing the shares of Series A Preferred Stock called for redemption. Notwithstanding the foregoing, in the event the redemption notice is duly given and a deposit of an amount sufficient for redemption is made with a bank or trust company in accordance with the TXBOC, rights with respect to such shares (other than the right to receive payment of the redemption price without interest thereon from the bank or trust company) shall terminate on the date of such deposit.

Liquidation Rights

In the event of our liquidation, dissolution, or winding up, whether voluntary or involuntary, the holders of the shares of Series A Preferred Stock then outstanding will be entitled to be paid out of our assets available for distribution to our stockholders, whether such assets are capital, surplus, or earnings, before any payment or declaration and setting apart for payment of any amount is made in respect of the Junior Stock.

The holders of shares of Series A Preferred Stock will be paid an amount per share (the "Liquidation Value") equal to the sum of $25.00 (subject to appropriate adjustment to maintain the same aggregate accumulated dividend on, and liquidation value of, the Series A Preferred Stock following any stock dividend, stock split, combination, or other similar recapitalization affecting the shares of Series A Preferred Stock) plus an amount equal to all accumulated and unpaid preferred dividends payable up to and including the date full payment is tendered to the holders of shares of Series A Preferred Stock with respect to the liquidation, dissolution, or winding up, and no more.

If, upon our liquidation, dissolution, or winding up, whether voluntary or involuntary, the assets distributed to the holders of shares of Series A Preferred Stock and the holders of outstanding shares of other series of Preferred Stock ranking equal to the Series A Preferred Stock as to liquidation, dissolution, or winding up are insufficient to permit payment of the full Liquidation Value thereof and the full liquidation value of the outstanding shares of such other series of Preferred Stock, all of our assets will be distributed ratably to each holder of outstanding shares of Series A Preferred Stock and each holder of

outstanding shares of other series of Preferred Stock ranking equal to the Series A Preferred Stock as to liquidation, dissolution, or winding upon the basis of the Liquidation Value of the shares of Series A Preferred Stock held by each such holder and the liquidation value of the shares of such other series of Preferred Stock.

Voting Rights

Series A Preferred Stock and Common Stock Voting Together

Each holder of Series A Preferred Stock will be entitled to vote on all matters as to which holders of the Common Stock shall be entitled to vote, in the same manner and with the same effect as such holders of the Common Stock, voting together with the holders of the Common Stock and any other series of Preferred Stock whose voting rights so provide as one class. Those shares of Preferred Stock entitled to vote with the Common Stock, including the Series A Preferred Stock, are referred to as "Voting Preferred Stock." Regardless of the number of issued and outstanding shares of Preferred Stock and Common Stock, so long as any Voting Preferred Stock is outstanding, issued and outstanding Voting Preferred Stock shall possess at all times, in the aggregate, 21% of the total votes of the issued and outstanding Common Stock and Voting Preferred Stock combined, and the issued and outstanding Common Stock shall possess at all times 79% of the total votes of the issued and outstanding Common Stock and Voting Preferred Stock combined. The total number of votes allocated to the Voting Preferred Stock shall be allocated among the issued and outstanding shares of Voting Preferred Stock on a pro rata basis in the same manner as if the holders of issued and outstanding Voting Preferred Stock were all voting as a class as described below. So long as any Voting Preferred Stock is outstanding, the total votes allocated to the holders of Common Stock shall fluctuate from time to time depending on the number of shares of Common Stock and Voting Preferred Stock issued and outstanding and shall be calculated to be equal to that number of votes which would be 79% of the total number of votes of Common Stock and Voting Preferred Stock combined and shall be allocated among the shares of Common Stock on a pro rata basis. If no Voting Preferred Stock is outstanding, each holder of Common Stock will be entitled to one vote for each share of Common Stock held by such holder.

Series A Preferred Stock Voting as a Class

For any vote of the holders of the Series A Preferred Stock on a matter in which they are entitled to vote, considered as a single class, each holder will be entitled to one vote for each share of Series A Preferred Stock held by such holder.

Preferred Stock Voting as a Class

For any vote of the holders of all series of Preferred Stock entitled to vote on a matter considered as a single class, each holder of such Preferred Stock will have a number of votes equal to the number of dollars equaling the aggregate liquidation value of the Preferred Stock held by such holder. If a series of Preferred Stock shall provide for different liquidation values in the cases of voluntary liquidation and involuntary liquidation, for purpose of the voting provisions, liquidation value shall mean the involuntary liquidation value for Preferred Stock of such series.

Election of Additional Directors

In addition to the voting powers expressly conferred upon the Series A Preferred Stock as described herein and in addition to voting rights granted to the holders of Series A Preferred Stock in statutory proceedings as to which their vote may be mandatorily required by the then-existing laws of the State of Texas and which is not permitted to be modified and so modified under the Resolution, in case at

any time we shall fail to declare and pay or set aside for payment in full dividend payments due on the Series A Preferred Stock on six Dividend Payment Dates whether or not consecutive and thereafter until all dividends accumulated and payable on the Series A Preferred Stock shall have been fully paid without interest, then in each case, such holders of the Series A Preferred Stock and all other series of Preferred Stock hereafter established with provisions corresponding to those described herein for the election of additional directors shall thereupon have and continue to have, the right, voting together as a class for such purpose by vote of a majority of the votes entitled to be cast thereon by such holders of Preferred Stock, to elect two additional directors to our Board of Directors (the "Additional Directors"), such that the number of directors then constituting the Board of Directors shall automatically be increased by two; and, during the continuance of such right of the holders of series of Preferred Stock to elect the Additional Directors, the remaining directors shall continue to be elected as provided under the Charter, the Bylaws and the laws of the State of Texas.

Upon the termination at any time of such right of the holders of Preferred Stock entitled to vote thereon to elect Additional Directors, the term of office of the Additional Directors shall end.

Restriction on Issuance of Senior Equity Securities

So long as any shares of the Series A Preferred Stock are outstanding, we shall not create, authorize or issue any new stock that, after issuance, would rank senior to the Series A Preferred Stock as to dividends or in liquidation, dissolution or winding up (whether voluntary or involuntary) without the prior written consent, voting as a single class, of at least two-thirds of the votes entitled to be cast thereon by the holders of the Series A Preferred Stock and any other outstanding series of Preferred Stock ranking equal to the Series A Preferred Stock as to dividends or in liquidation, dissolution or winding up (whether voluntary or involuntary) (including the Series A Preferred Stock).

Amendments or Waivers

So long as any shares of the Series A Preferred Stock are outstanding, the prior written consent of the holders of at least two-thirds of the votes entitled to be cast thereon by the holders of the Series A Preferred Stock, voting as a separate class, shall be required for any amendment, modification or waiver of the provisions of the Charter (including the terms of the Series A Preferred Stock) insofar as such amendment, modification or waiver amends, modifies or waives a provision in a manner prejudicial in any material respect to the holders of the Series A Preferred Stock; provided, however, that, if more than one series of Preferred Stock shall be outstanding and if such amendment, modification or waiver would be correspondingly prejudicial to the rights of the holders of other series of Preferred Stock, in lieu of the separate class vote of the Series A Preferred Stock, the prior written consent or vote of at least two-thirds of the votes entitled to be cast thereon by the holders of all series of Preferred Stock so affected considered as a single class shall be required for such amendment, modification or waiver. For all purposes described in this paragraph, any increase in the amount of the authorized or issued Series A Preferred Stock or authorized Preferred Stock, or the creation and issuance, or an increase in the authorized or issued amount, of any other series of Preferred Stock ranking equal with or junior to the Series A Preferred Stock with respect to the payment of dividends (whether such dividends are cumulative or non-cumulative) or the distribution of assets upon any liquidation, dissolution or winding up of our affairs will not be deemed to materially and prejudicially affect the special rights, preferences, privileges or voting powers of the Series A Preferred Stock.

Elimination of Need for Formal Meetings

In accordance with Section 6.202 of the TXBOC, our Charter allows the taking of action without holding a meeting, providing notice, or taking a vote if stockholders having at least the minimum number

of votes that would be necessary to take such action at a meeting at which the holders of all shares entitled to vote on the action were present and voted, sign a written consent or consents stating the action taken.

Transfer Agent, Registrar and Paying Agent

Equiniti Trust Company, doing business as EQ Shareholder Services, is currently the transfer agent, registrar and paying agent for the Series A Preferred Stock.

Book-Entry Only Issuance—The Depository Trust Company

The Depository Trust Company ("DTC") is currently the securities depository for the Series A Preferred Stock. The Series A Preferred Stock is represented by a global certificate registered in the name of Cede & Co., DTC's nominee. The global certificate was deposited with the transfer agent as custodian for DTC. Ownership of beneficial interests in the global certificate is limited to institutions that have accounts with DTC or its participants or persons that may hold interests through participants.

DTC is a New York clearing corporation and a clearing agency registered under Section 17A of the Securities Exchange Act of 1934, as amended. DTC holds securities for its participants. DTC also facilitates the post-trade settlement of securities transactions among its participants through electronic computerized book-entry transfers and pledges in the participants' accounts. This eliminates the need for physical movement of securities certificates. The participants include securities brokers and dealers, banks, trust companies, clearing corporations and certain other organizations. DTC is a wholly-owned subsidiary of The Depository Trust & Clearing Corporation ("DTCC"). DTCC is the holding company for DTC, National Securities Clearing Corporation and Fixed Income Clearing Corporation, all of which are registered clearing agencies. DTCC is owned by the users of its regulated subsidiaries. Others who maintain a custodial relationship with a participant can use the DTC system. The rules that apply to DTC and those using its systems are on file with the SEC.

Purchases of the Series A Preferred Stock within the DTC system must be made through participants, who will receive a credit for the Series A Preferred Stock on DTC's records. The beneficial ownership interest of each purchaser will be recorded on the appropriate participant's records. Beneficial owners do not receive written confirmation from DTC of their purchases, but beneficial owners should receive written confirmations of the transactions, as well as periodic statements of their holdings, from the participants through whom they purchased Series A Preferred Stock. Transfers of ownership in the Series A Preferred Stock are to be accomplished by entries made on the books of the participants acting on behalf of beneficial owners. Beneficial owners will not receive certificates for their Series A Preferred Stock, except if use of the book-entry system for the Series A Preferred Stock is discontinued.

To facilitate subsequent transfers, all shares of Series A Preferred Stock deposited by participants with DTC are registered in the name of DTC's nominee, Cede & Co. The deposit of the Series A Preferred Stock with DTC and its registration in the name of Cede & Co. effects no change in beneficial ownership. DTC has no knowledge of the actual beneficial owners of the Series A Preferred Stock. DTC's records reflect only the identity of the participants to whose accounts such Series A Preferred Stock is credited. These participants may or may not be the beneficial owners. Participants are responsible for keeping account of their holdings on behalf of their customers.

Conveyance of notices and other communications by DTC to participants, and by participants to beneficial owners, will be governed by arrangements among them, subject to any statutory or regulatory requirements as may be in effect from time to time. Beneficial owners of Series A Preferred Stock may wish to take certain steps to augment transmission to them of notices of significant events with respect to the Series A Preferred Stock. Beneficial owners of the Series A Preferred Stock may wish to ascertain that

the nominee holding the Series A Preferred Stock has agreed to obtain and transmit notices to the beneficial owners.

Redemption notices will be sent to Cede & Co., as registered holder of the Series A Preferred Stock. If less than all of the shares of Series A Preferred Stock are being redeemed, DTC's practice is to determine by lot the amount of interest of each participant in such Series A Preferred Stock to be redeemed.

Neither DTC nor Cede & Co. will itself consent or vote with respect to the Series A Preferred Stock, unless authorized by a participant in accordance with DTC's procedures. Under its usual procedures, DTC would mail an omnibus proxy to us as soon as possible after the record date. The omnibus proxy assigns the consenting or voting rights of Cede & Co. to those participants to whose accounts the Series A Preferred Stock is credited on the record date. We believe that these arrangements will enable the beneficial owners to exercise rights equivalent in substance to the rights that can be directly exercised by a registered holder of the Series A Preferred Stock.

Payments on the Series A Preferred Stock are and will be made to Cede & Co., or such other nominee as may be requested by DTC. DTC's practice is to credit participants' accounts upon DTC's receipt of funds and corresponding detail information from us or our agent, on the payable date in accordance with their respective holdings shown on DTC's records. Payments by participants to beneficial owners are and will be governed by standing instructions and customary practices. Payments are the responsibility of participants and not of DTC or us, subject to any statutory or regulatory requirements as may be in effect from time to time. Payment to Cede & Co. (or such other nominee as may be requested by DTC) is our responsibility. Disbursement of payments to participants is the responsibility of DTC, and disbursement of payments to the beneficial owners is the responsibility of participants.

Other than in the circumstances described herein, a beneficial owner of a global share of Series A Preferred Stock will not be entitled to receive physical delivery of Series A Preferred Stock. Accordingly, each beneficial owner must rely on the procedures of DTC to exercise any rights under the Series A Preferred Stock.

DTC may discontinue providing its services as securities depositary with respect to the Series A Preferred Stock at any time by giving us reasonable notice. In the event no successor securities depositary is obtained, certificates for the Series A Preferred Stock will be printed and delivered. We may decide to replace DTC or any successor depositary. Additionally, subject to the procedures of DTC, we may decide to discontinue use of the system of book-entry transfers through DTC (or a successor depositary) with respect to the Series A Preferred Stock. We understand, however, that under current industry practices, DTC would notify its participants of our decision, but will only withdraw beneficial interests from global shares of Series A Preferred Stock at the request of each participant. In that event, certificates for the Series A Preferred Stock will be printed and delivered.

The information in this section concerning DTC and DTC's book-entry system has been obtained from sources that we believe to be reliable, but we do not take any responsibility for the accuracy of this information.

Exhibit 10(a)40

2021-2023 Performance Unit Agreement ("Agreement")
Under the 2019 Entergy Corporation Omnibus Incentive Plan

Pursuant to the 2019 Entergy Corporation Omnibus Incentive Plan (the "Plan"), you are eligible to participate at a target Achievement Level (as defined below) of that number of performance units (subject to adjustment pursuant to Section 3 of this Agreement, the "Target Performance Units") (based upon an Achievement Level of 100%) set forth under the heading "Total Granted" on the Performance Unit Grant Notice to which this Agreement is attached (the "Grant Notice") for the performance period commencing January 1, 2021 and ending December 31, 2023 (the "Performance Period"), subject to the terms of the Plan and to the following terms and conditions:

1. Effective Date of Agreement; Acknowledgment and Acceptance of Performance Units. This Agreement is effective as of the Award Date set forth on the Grant Notice, contingent upon your acceptance of this Agreement in accordance with the terms of this Agreement and the Grant Notice. The effectiveness of this Agreement is subject to your electronically acknowledging and accepting this Agreement and all of its terms and conditions and the terms of the Plan in the manner and at the time set forth on the Grant Notice. If you do not timely acknowledge and accept this Agreement in accordance with the Grant Notice, the Company shall be entitled to unilaterally cancel and render void this Agreement and the Grant Notice.

2. Achievement Levels. The Personnel Committee of the Board (the "Committee") shall determine the achievement level attained by the Company for the Performance Period (the "Achievement Level") based (i) eighty percent (80%) on TSR Achievement Level (as defined below); and (ii) twenty percent (20%) on Adjusted FFO/Debt Ratio Achievement Level (as defined below). The weighted average of the two performance measures will determine the Achievement Level and overall payout for the Performance Period. For these purposes, and subject to the terms of the Plan, the Achievement Level shall be determined as follows:

a. The "TSR Achievement Level" shall be determined by comparing the Company's "total shareholder return" for the Performance Period ("Company TSR") to that of the peer group companies comprising the Philadelphia Electric Utilities Index (the "Peer Group"). For this purpose, subject to the terms of the Plan, "total shareholder return" shall be determined in accordance with Company administrative practice based on the changes in the stock price and dividends over the course of the Performance Period. The possible TSR Achievement Levels for the Performance Period shall be determined as follows: for bottom quartile performance (where Company TSR is in the fourth or bottom quartile of Peer Group TSR), the TSR Achievement Level is zero percent; for third quartile performance (where Company TSR is in the third quartile of Peer Group TSR), the TSR Achievement Level is determined by interpolating between index median (100% TSR Achievement Level) and the performance of the Peer Group company at the top of the fourth quartile, starting at 25% TSR Achievement Level; for second quartile performance (where Company TSR is in the second quartile of Peer Group TSR), the TSR

Achievement Level is determined by interpolating between the performance of the Peer Group Company at the bottom of the top quartile (200% TSR Achievement Level) and index median (100% TSR Achievement Level); and for top quartile performance (where Company TSR is in the first or top quartile of Peer Group TSR), the TSR Achievement Level is 200%.

b. The Adjusted FFO/Debt Ratio Achievement Level" shall be determined by comparing, as of December 31st for each year in the Performance Period (1) the quotient of (x) FFO (as defined below) divided by (y) the Company's consolidated debt, excluding securitization debt (or debt outstanding that is pending securitization) and adjusting for pre-defined exclusions and other adjustments determined by the Committee (such quotient, the "Annual Adjusted FFO/Debt Ratio") to (2) the adjusted FFO/debt ratio achievement levels established by the Committee for such year as "Target," (target Adjusted FFO/Debt Ratio), "Minimum," and "Maximum." For an Annual Adjusted FFO/Debt Ratio less than the Minimum, the Annual Adjusted FFO/Debt Ratio Achievement Level is zero percent. For an Annual Adjusted FFO/Debt Ratio equal to the Minimum, the Annual Adjusted FFO/Debt Ratio Achievement Level is 25%. For an Annual Adjusted FFO/Debt Ratio equal to the target Adjusted FFO/Debt Ratio, the Annual Adjusted FFO/Debt Ratio Achievement Level is 100%. For an Annual Adjusted FFO/Debt Ratio greater than or equal to the Maximum, the Annual Adjusted FFO/Debt Ratio Achievement Level is 200%. For an Annual Adjusted FFO/Debt Ratio that is greater than the Minimum and less than the Target, the Annual Adjusted FFO/Debt Ratio Achievement Level shall be determined by straight line interpolation between the Minimum and the Target. For an Annual Adjusted FFO/Debt Ratio that is greater than the Target and less than the Maximum, the Annual Adjusted FFO/Debt Ratio Achievement Level shall be determined by straight line interpolation between the Target and the Maximum. The final "Adjusted FFO/Debt Ratio Achievement Level" for the Performance Period shall be equal to the average of the Annual Adjusted FFO/Debt Ratios determined for each year in the Performance Period. Subject to the terms of the Plan and such adjustments as set forth in this Section 2, these determinations shall be made by the Committee in accordance with Company administrative practice. "FFO" means the Company's consolidated operating cash flow, adjusted for its allowance for funds used during construction, working capital amounts, the effects of securitization revenue, and certain pre-defined exclusions determined by the Committee.

c. The Achievement Level shall be equal to the sum of (1) and (2), where (1) is equal to 80% of the TSR Achievement Level, as calculated in Section 2.a. and (2) is equal to 20% of the Adjusted FFO/Debt Ratio Achievement Level, as calculated in Section 2.b. Notwithstanding anything herein to the contrary, the Achievement Level shall be adjusted for such items as the Committee may determine in its discretion during or after the Performance Period (but in any event before any delivery of Shares hereunder), whether resulting in an increase or decrease (including to zero (0)) in the number of Shares otherwise deliverable hereunder, considering management accountability and business rationale.

3. Performance Units Earned. The actual number of performance units awarded to you under this Agreement, if any (the "Performance Units"), shall be calculated by the Committee at the end of the Performance Period by multiplying the Target Performance Units by the percentage of the Company's attained Achievement Level, determined as described above. Unless otherwise provided in the Plan or this Agreement, to earn Performance Units you must (i) remain a full-time employee of a System Company for the remainder of the Performance Period, (ii) maintain your current System Management Level ("ML") 1-4 role and, as applicable, current role within the Office of the Chief Executive (each an "Eligible Role"), resulting in an award opportunity dependent on your specific ML or Office of the Chief Executive role ("Eligibility Level"); and (iii) comply with Section 10 of this Agreement.

Except as provided below for an employee on an extended leave of absence bridge to retirement under an approved severance program under the Entergy System Severance Pay Plan No. 537 or the Entergy System Severance Pay Plan No. 538, if you are approved by your System Company employer for a leave of absence (whether paid or unpaid) for reasons other than Disability or are a continuous part-time regular System Company employee participating in the phased retirement program under the Entergy System Policies & Procedures Phased Retirement – Pre-Separation Policy (the "Phased Retirement Program"), you will continue to be treated as a full-time employee of a System Company while you are on such approved leave of absence for purposes of the Plan and this Agreement or during such participation in the Phased Retirement Program, as applicable. If you are on an extended leave of absence bridge to retirement under an approved severance program offered pursuant to Entergy System Severance Pay Plan No. 537 or Entergy System Severance Pay Plan No. 538, you will not be considered under the Plan or this Agreement to be a full-time employee during the extended leave of absence bridge period or a part-time System Company employee under the Phased Retirement Program during the extended leave of absence bridge period, and your System Company employment will be considered terminated for purposes of vesting in Awards under this Agreement as of the commencement of your extended leave of absence bridge period.

If you have completed a minimum of twelve months of full-time employment in an Eligible Role during the Performance Period and you Retire, you will be eligible for a prorated portion of the applicable Achievement Level of Performance Units, based on your full months of participation and your Eligibility Level(s) during the Performance Period. For purposes of the preceding sentence, you will have "Retired" if you incur a separation from service with the System Companies and at the time of such separation from service, either (A) you are eligible to commence retirement benefits under a System Company-sponsored qualified final average pay defined benefit pension plan or (B) you have attained age 65 or have attained age 55 with ten (10) or more years of service with System Companies that is considered vesting service under the System Company-sponsored qualified defined benefit pension plan in which you actively participate or, if none, the System Company-sponsored qualified defined contribution pension plan in which you actively participate. If your employment terminates due to your incurring a Disability or you die during the Performance Period, you (or your Beneficiary or heirs) will be eligible for a prorated portion of the applicable Achievement Level of Performance Units, based on your full months of full-time employment prior to your Disability or death and your Eligibility Level(s) during the Performance Period. Notwithstanding anything to the contrary herein, if, during the Performance Period (x) your employment is terminated for Cause or (y) the Committee or its delegee determines that you engaged in an activity that would constitute Cause, then you shall not be entitled to receive any Performance Units pursuant to this Agreement.

Regardless of eligibility, you shall not be entitled to receipt of nor vest in any Performance Units and/or any dividends that have accrued on any Performance Units unless and until the Personnel Committee has certified the Achievement Level after the close of the Performance Period.

If you are promoted during the Performance Period, then the number of Target Performance Units set forth on the Grant Notice shall be adjusted (but not downward) to reflect the number of full months during the Performance Period for which you were eligible hereunder in each Eligibility Level, and the number of Performance Units, if any, awarded to you will be prorated to reflect the number of full months you earned Performance Units at each Eligibility Level.

If you are demoted during the Performance Period, but you remain in an Eligible Role following such demotion, then the number of Target Performance Units set forth on the Grant Notice shall be adjusted (but not upward) to reflect the number of full months during the Performance Period for which you were eligible hereunder in each Eligibility Level, and the number of Performance Units, if any, awarded to you will be prorated to reflect the number of full months you earned Performance Units at each Eligibility Level.

If any change to an Eligibility Level is effective on a date other than the first day of a calendar month, the number of Performance Units, if any, awarded to you with respect to the transition month in accordance with this Section 3 will be determined based on your prior Eligibility Level.
If you are demoted to a position that is not an Eligible Role or you are otherwise no longer in an Eligible Role during the Performance Period, but remain employed on a regular full-time basis by a System Company for the duration of the Performance Period, the number of Performance Units, if any, awarded to you will be prorated to reflect only the number of full months you earned Performance Units in an Eligible Role in accordance with your Eligibility Level(s).

4. Accelerated Change in Control Vesting. Notwithstanding anything herein to the contrary:

a. in the event that (i) a Change in Control occurs and (ii) either (x) outstanding Target Performance Units are not assumed or substituted in connection therewith as described in Section 12(b) of the Plan, or (y) outstanding Target Performance Units are so assumed or substituted in connection therewith and your employment or service is terminated by your System Company employer without Cause or by you for Good Reason on or after the effective date of the Change in Control but prior to twenty-four (24) months following the Change in Control (the date on which (x) or (y) occurs, the "CIC Vesting Date"), then (A) the Committee shall calculate the Achievement Level for the Performance Period during which the CIC Vesting Date occurs treating the CIC Vesting Date as if it were the last day of the Performance Period (the "CIC Achievement Level") and you shall immediately become fully vested in that number of Performance Units calculated by multiplying the Adjusted Target Performance Units (as defined below) by the percentage of the Company's attained Achievement Level that is the greater of Target Achievement Level or CIC Achievement Level and (B) the restrictive covenants set forth in Sections 10.b., 10.c., 10.d., and 10.e. of this Agreement shall cease to apply as of the CIC Vesting Date. In the event of accelerated vesting as described in this Section 4.a., but subject to the conditions and limitations described herein and subject to Section 5 of the Plan, the Company shall pay you a number of Shares equal to the number of Performance Units that vest in accordance with this Section 4.a. no later than sixty (60) days after the CIC Vesting Date; provided, that if such 60-day period straddles two of your taxable years, the payment shall be made in the later year. "Adjusted Target Performance Units" means that number of units calculated by multiplying the Target Performance Units by a fraction, the numerator of which is the number of days in the Performance Period up to and including the CIC Vesting Date and the denominator of which is the total number of days in the Performance Period.
b. Notwithstanding anything herein to the contrary, the time and form of any payments to which you may be entitled pursuant to this Section 4 are subject to the requirements and limitations set forth in Section 22 of the Plan.

5. Dividend Equivalents. If you are awarded Performance Units pursuant to this Agreement, you will also be awarded the dividend equivalents attributable to such awarded Performance Units for the time you were a Participant in an Eligible Role and at the Eligibility Level underlying such Performance Units ("Dividend Equivalents"). The Dividend Equivalents with respect to each awarded Performance Unit will be equal to only the dividends paid with respect to a Share for the period of your participation in the Plan at an Eligible Role during the Performance Period.

6. Settlement of Performance Units and Dividend Equivalents.

a. As soon as reasonably practicable following the date on which the Committee determines the number of Performance Units, if any, to be awarded to you under this Agreement and no later than March 15th following the end of the calendar year in which the Performance Units are no longer

subject to a "substantial risk of forfeiture" within the meaning of Code Section 409A, the Company shall issue to you, after withholding all applicable income tax and employment tax amounts required to be withheld in connection with such payment in accordance with Section 6.d. of this Agreement: (i) one Share for each Performance Unit so determined to be awarded, and (ii) an additional number of Shares determined by dividing the total Dividend Equivalents with respect to such awarded Performance Units by the closing share price of a Share on the last trading date of the Performance Period. Notwithstanding the foregoing, if Dividend Equivalents are awarded with respect to Performance Units that are payable pursuant to Section 4.a., the number of Shares issuable pursuant to this Section 6 in respect of such Dividend Equivalents shall be calculated treating the CIC Vesting Date as the last day of the Performance Period and shall be issued no later than sixty (60) days after the CIC Vesting Date; provided, that if such 60-day period straddles two of your taxable years, such Shares shall be issued in the later year.

b. Shares (including any Dividend Equivalents that are settled in Shares) shall be credited to a separate book entry account in your name, and such vested Shares shall be free of all restrictions except any that may be imposed by law. Upon the crediting of vested Shares to a book entry account, you may treat the Shares in the same manner as all other shares of Common Stock owned by you, subject to the provisions of Section 6.c. below. All ML 1-4 Participants are considered Restricted Employees under Entergy's Insider Trading Policy and, as such, may trade in Entergy Corporation securities only during an open window period (and only if not in possession of material, non-public information). Generally, window periods begin on the second business day after the quarterly earnings release and end at the close of trading on the 15th day of the third month of the Company's fiscal quarter or, if such day is not a trading day, on the last preceding trading day. In addition, if you are a Restricted Employee, the Insider Trading Policy requires that you pre-clear all transactions involving Entergy securities with Entergy Corporation's Office of the General Counsel.

c. Share Ownership Guidelines. All ML 1-4 Participants must maintain the applicable Common Stock Ownership Target Level in the chart below, which is expressed as a multiple of your base salary and depends on your management level.

System Management Level	Common Stock Ownership Target Level
ML 1	6 times base salary
ML 2	3 times base salary
ML 3	2 times base salary
ML 4	1 times base salary

These ownership multiples may be satisfied through any shares of Common Stock held by the ML 1-4 Participant, including those Shares earned during this Performance Period, all Restricted Shares, shares of Common Stock held in tax-qualified 401(k) plans, etc. You must continue to retain the book entry Shares issued to you pursuant to this Agreement until the earlier of (i) achieving and maintaining your applicable Common Stock Ownership Target Level, or (ii) your termination of full-time employment with all System Companies. Once you have achieved and maintain your applicable Common Stock Ownership Target Level, you are no longer bound to hold the Shares earned during this Performance Period in book entry. However, you are still subject to the trading restrictions and pre-clearance requirements in transacting in these Shares described in Section 6.b. of this Agreement.

d. Withholding Taxes. The Company shall use the "net shares method" to satisfy any tax withholding obligation in respect of any payment under this Agreement, which means the Company will reduce the number of earned Shares otherwise payable to you by the amount necessary to cover up to the maximum amount of such obligation in any applicable jurisdiction. In

no event shall the Company or any other System Company have any liability to you for your individual income tax liability, for withholding or failing to withhold taxes, or for remitting or failing to remit taxes with respect to your income, including without limitation, in the event that you are subject to penalty tax pursuant to Code Section 409A.

e. No Fractional Shares. Any fractional Share to be distributed shall be settled in cash and applied to satisfy tax withholding requirements. The Company will not pay out any fractional Shares.

7. Termination of Agreement. Except as otherwise provided herein or in the Plan, this Agreement (other than the restrictive covenants set forth in Section 10) and your Target Performance Units award opportunity shall terminate and be forfeited on the date on which your full-time System Company employment terminates.

8. Performance Units Nontransferable. Your Target Performance Units award opportunity and any Performance Units awarded pursuant to this Agreement may not be sold, exchanged, pledged, transferred, assigned, or otherwise encumbered, hypothecated or disposed of by you (or your beneficiary) other than by will or laws of descent and distribution.

9. Entergy Policies.

a. Hedging Policy. Pursuant to the Entergy Corporation Policy Relating to Hedging, as adopted by the Board at its meeting held on December 3, 2010, and as in effect on the date hereof, officers, directors and employees are prohibited from entering into hedging or monetization transactions involving Common Stock so they continue to own Common Stock with the full risks and rewards of ownership, thereby ensuring continued alignment of their objectives with the Company's other shareholders. Participation in any hedging transaction with respect to Common Stock (including Target Performance Units or Performance Units) is prohibited.

b. Recoupment Policy; Dodd-Frank; Payment in Error. Pursuant to the Entergy Corporation Policy Relating to Recoupment of Certain Compensation, as adopted by the Board at its meeting held on December 3, 2010, and as in effect on the date hereof, the Company is allowed to seek reimbursement of certain incentive compensation (including Performance Units and Shares issued in payment of Performance Units) from "executive officers" for purposes of Section 16 of the Securities Exchange Act of 1934, as amended, if the Company is required to restate its financial statements due to material noncompliance with any financial reporting requirement under the federal securities laws (other than corrections resulting from changes to accounting standards) or there is a material miscalculation of a performance measure relative to incentive compensation, regardless of the requirement to restate the financial statements; or the Board determines that an executive officer engaged in fraud resulting in either a restatement of the Company's financial statements or a material miscalculation of a performance measure relative to incentive compensation whether or not the financial statements were restated. In addition, the Performance Units (and Shares issued in payment of Performance Units) are subject to any forfeiture and/or recoupment policy which the Company has adopted or may adopt under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010 and implementing rules and regulations thereunder, or as may be required by applicable law. To the maximum extent permitted by applicable law, in the event that a payment is made to you (whether in cash, stock or other property) in error that exceeds the amount to which you are entitled pursuant to the terms of this Agreement or the Plan, including without limitation pursuant to Section 28 of the Plan (such excess amount, an "Excess Payment"), you will repay to the Company, and the Company shall have the right to recoup from you such Excess Payment by notifying you in writing of the nature and amount of such Excess Payment together with (i) demand for direct repayment to the

Company by you in the amount of such Excess Payment or (ii) reduction of any amount(s) owed to you by the Company or any other System Company by the amount of the Excess Payment.

10. Confidentiality and Restrictive Covenants. In consideration of the grant to you of the Target Performance Units award opportunity set forth herein and any Performance Units awarded to you pursuant to this Agreement, you hereby agree to the following restrictive covenants:

a. Confidential Information. You acknowledge that the System Companies have unique methods and processes for the generation, transmission and distribution and sale of energy and energy-related products, which give the System Companies a competitive advantage, including strategic and non-public plans for their products, geographic and customer markets, and for marketing, distributing and selling their products. You further acknowledge that you have held a position of confidence and trust with respect to the System Companies and that you have and will acquire additional detailed knowledge of the System Companies' unique and confidential methods of doing business and plans for the future. You acknowledge that the System Companies are expending and will continue to expend substantial amounts of time, money and effort to develop effective business and regulatory strategies, methodologies and technology. You also acknowledge that the System Companies have a compelling business interest in protecting the System Companies' Confidential Information (as defined below) and that the System Companies would be seriously and irreparably damaged by the improper disclosure of Confidential Information. You therefore agree that, during your employment or other service with any System Company and at all times thereafter, you will hold in a fiduciary capacity for the benefit of the System Companies and, other than as authorized in writing by the General Counsel of the Company or as required by law or in the proper performance of your duties and responsibilities, or as otherwise provided in this Section 10, you will not disclose, directly or indirectly, to any person or entity, or use, Confidential Information for any purpose other than the furtherance of your responsibilities to any System Company. For purposes of this Agreement, "Confidential Information" means information that is not generally known by persons outside the System Companies and could not easily be determined or learned by someone outside the System Companies, including without limitation, any and all information and knowledge, whether or not explicitly designated as confidential and whether or not reduced to writing, regarding the System Companies' business, including, without limitation, (i) the generation, transmission, brokering, marketing, distribution, sale and delivery of electric power or natural gas (through regulated utilities or otherwise), (ii) the System Companies' ownership, development, management or operation of power plants and power generation facilities (including, without limitation, nuclear power plants), and the provision of operations and management services (including, without limitation, decommissioning services) with respect to power plants, and the sale of the electric power produced by the System Companies' operating plants to wholesale customers, (iii) the System Companies' proprietary methods and methodology, technical data, trade secrets, know-how, research and development information, product plans, customer lists, specific information relating to products, services and customers or prospective customers (including, but not limited to, customers or prospective customers of any System Company with whom you became or become acquainted during your relationship with any System Company), books and records of any System Company, corporate, regulatory, customer and strategic relationships, suppliers, markets, computer software, computer software development, inventions, processes, formulae, technology, designs, drawings, technical information, source codes, engineering information, hardware configuration information, and matters of a business nature such as information regarding marketing, costs, pricing, finances, financial models and projections, billings, new or existing business or economic development plans, initiatives, and opportunities, or any other similar business information made available to you in connection with your relationship with any System Company and (iv) any attorney-client privileged information of a System Company. Confidential Information shall also include non-public information concerning any director, officer, employee, shareholder, or partner of any System Company. You agree that your obligation not to disclose or use Confidential Information, and your obligation, detailed below, to return and, upon your termination of employment with all System Companies, not to retain materials and tangible property described in this Section shall also extend to such

types of information, materials and tangible property of customers of and suppliers to the System Companies and to other third parties, in each case who may have disclosed or entrusted the same to you or to any System Company during your employment with any System Company.

b. Non-Competition. You agree that (i) at all times during the period of your employment or service with any System Company employer, and (ii) for one (1) year following the termination for any reason of your employment by or service with your last System Company employer ((i) and (ii) collectively, as applicable, the "Non-Compete Period"), you will not engage in Competing Employment. For purposes of this Section 10, "Competing Employment" means working for, providing services to or otherwise directly or indirectly assisting (whether or not for compensation) any person, entity or business which directly or indirectly competes with any part of the System Company business, and such employment or services involves products, services and business activities that are the same as or similar to those you provided to a System Company, or as to which you had access to Confidential Information, in the two years preceding your termination of employment or service with all System Companies. You agree that it is reasonable for the restriction contained in this paragraph to apply in each and every county, province, state, city, parish or other political subdivision or territory of the United States in which any System Company engages in any business activity, or otherwise distributes, licenses or sells its products or services, including, without limitation, Arkansas, Connecticut, District of Columbia, Louisiana, Massachusetts, Michigan, Mississippi, Nebraska, New York, Texas, and Vermont and any other state in which any System Company engages in business at any time and, with respect to the State of Louisiana, means the following Parishes: Acadia, Allen, Ascension, Assumption, Avoyelles, Beauregard, Bienville, Bossier, Caddo, Calcasieu, Caldwell, Cameron, Catahoula, Claiborne, Concordia, De Soto, East Baton Rouge, East Carroll, East Feliciana, Evangeline, Franklin, Grant, Iberia, Iberville, Jackson, Jefferson, Jefferson Davis, Lafayette, Lafourche, La Salle, Lincoln, Livingston, Madison, Morehouse, Natchitoches, Orleans, Ouachita, Plaquemines, Point Coupee, Rapides, Red River, Richland, Sabine, Saint Bernard, St. Charles, St. Helena, Saint James, Saint John the Baptist, Saint Landry, Saint Martin, Saint Mary, Saint Tammany, Tangipahoa, Tensas, Terrebonne, Union, Vermilion, Vernon, Washington, Webster, West Baton Rouge, West Carroll, West Feliciana and Winn (collectively, the "Restricted Territory"). Notwithstanding the foregoing, if your employment is terminated by any System Company employer without Cause, the covenant not to compete set forth in this Section 10.b. shall apply only for as long as the System Company employer continues to pay you, in accordance with the System Company employer's regular payroll practices and schedule, your bi-weekly base salary in effect on the effective date of the termination of your employment, less any applicable tax withholdings and ordinary deductions (such payments, the "Non-Compete Payments"), but in no such event for longer than the Non-Compete Period. In any instance where a System Company employer has the right to elect to make Non-Compete Payments, such System Company employer must notify you in writing of such election, and the duration for which it elects to make Non-Compete Payments, within ten (10) business days following the termination of your employment from all System Company employment. If the System Company Employer elects to make the Non-Compete Payments for less than the full Non-Compete Period, you shall be free to join a competitor after you cease receiving the Non-Compete Payments. For purposes of clarity, in the event of your termination for Cause or voluntary resignation, you shall be subject to the restrictions set forth in this Section 10.b. without any requirement that your System Company employer pay you any Non-Compete Payments.

c. Non-Solicitation. You agree that, while you are employed by any System Company and during the Non-Compete Period (or, if later, the last day you are scheduled to receive cash severance payments from your System Company employer pursuant to any severance plan or other agreement), except in the good faith performance of your duties to the System Companies, you shall not, other than as authorized in writing by the General Counsel of the Company: (i) directly or indirectly, solicit or seek to hire or identify for potential hiring (whether on your own behalf or on behalf of any other person, entity or organization) any person who is at that time (or was during the prior six (6) months) an employee or consultant of any System Company, or (ii) within the Restricted Territory, directly or indirectly solicit the trade, business or patronage of any

clients, customers or vendors or prospective clients, customers or vendors of any System Company to provide competing products or services or advise, or assist such clients, customers or vendors or prospective clients, customers or vendors to in any way modify their relationship with any System Company. The foregoing non-solicitation (1) shall not be violated by general advertising not targeted at the forgoing persons or entities; (2) shall not apply to solicitation of persons involuntarily terminated from System Company employment; and (3) shall only apply to persons or entities (A) who reported directly or indirectly to you; (B) with whom you had material contact while at a System Company; or (C) about whom or which you possessed (i) information regarding quality of performance while they were employed by or performing services for a System Company, which information you would not otherwise have except for the position you held with a System Company, or (ii) Confidential Information.

d. Non-Disparagement. You agree that, to the fullest extent permitted by applicable law, you will not at any time (whether during or after your employment or service with any System Company), other than in the proper performance of your duties, publish or communicate to any person or entity any "Disparaging" (as defined below) remarks, comments or statements concerning any System Company or any of their respective directors, officers, shareholders, employees, agents, attorneys, successors and assigns. "Disparaging" remarks, comments or statements are those that are intended to, or could be construed in a manner so as to, impugn, discredit, injure or impair the business, reputation, character, honesty, integrity, judgment, morality or business acumen or abilities of the individual or entity being disparaged.

e. System Company Property. All tangible materials, equipment, devices, documents, copies of documents, data compilations (in whatever form), software programs, and electronically created or stored materials that you receive or create in the course of employment with a System Company are and shall remain the property of the System Company and you shall immediately return (and/or cooperate in the supervised deletion of) such property to your System Company employer upon the termination of your employment, for whatever reason. The obligation to return property and documents extends to anything received or made during and as a result of employment by a System Company, regardless of whether it was received from a System Company or a third party, such as an actual or potential vendor or customer, and regardless of whether a document contains Confidential Information. The only documents not subject to the obligation to return are documents directly relating to your compensation and benefits, such as your pay stubs and benefit plan information.

f. Violation of the Restrictive Covenant Section. In the event that you violate any provision of this Section 10, the time periods set forth in those paragraphs shall be extended for the period of time you remain in violation of the provisions, to the greatest extent allowed by applicable law. The provisions of Sections 10.a. – 10.e. hereof are, and shall be construed as, independent covenants, and no claimed or actual breach of any contractual or legal duty by any System Company shall excuse or terminate your obligations hereunder or preclude any System Company from obtaining injunctive relief for your violation, or threatened violation, of any of those provisions. You also agree to indemnify and hold the System Companies harmless from any and all losses (including, but not limited to, reasonable attorney's fees and other expenses incurred to enforce this Agreement) suffered by any System Company as a result of any violation or threatened violation of any of your representations, warranties, covenants or undertakings set forth in this Agreement (in addition to any other remedies available to the System Companies set forth in Section 10.i. below), provided that a System Company is found to be the prevailing party in any such action.

g. Exclusions. Notwithstanding anything else in this Section 10 or in this Agreement to the contrary:

(i) The restrictive covenants in this Section 10 are not intended to restrict you from cooperating with any investigation or proceeding initiated by the Nuclear Regulatory Commission ("NRC") or any other federal or state regulatory agency. Further, you may make disclosure (A) to

exercise your rights as a whistleblower under the Dodd-Frank Wall Street Reform and Consumer Protection Act of 2010, the Securities and Exchange Commission Rule 21F-17(a), or any other federal or state law providing whistleblower rights; (B) to the extent necessary when providing safety-related or other information to the NRC on matters within the NRC's regulatory jurisdiction; (C) when participating in "protected activities," as defined in Section 211 of the Energy Reorganization Act of 1974 and in C.F.R. Part 50.7; (D) when engaging in activities protected by the National Labor Relations Act or any similar federal or state law; or (E) when required to do so by a court of law, by any governmental agency or administrative or legislative body with jurisdiction to order you to divulge, disclose or make accessible such information. With the exception of Confidential Information subject to the attorney-client privilege, you shall have no obligation to seek prior approval of any System Company or to inform any System Company of such disclosure. This Agreement does not limit your ability to communicate, without notice to any System Company, with any government agencies or otherwise participate in any investigation or proceeding that may be conducted by any government agency, or to collect a reward in connection with any whistleblower information provided to a government agency.

(ii) *Defend Trade Secrets Act Immunity Notice.* Pursuant to the Defend Trade Secrets Act of 2016, non-compliance with the disclosure provisions of this Agreement shall not subject you to criminal or civil liability under any Federal or State trade secret law for the disclosure of a System Company trade secret: (A) in confidence to a Federal, State or local government official, either directly or indirectly, or to an attorney in confidence solely for the purpose of reporting or investigating a suspected violation of law; (B) in a complaint or other document filed in a lawsuit or other proceeding, provided that any complaint or document containing the trade secret is filed under seal; or (C) to an attorney representing you in a lawsuit for retaliation by any System Company for reporting a suspected violation of law or to use the trade secret information in that court proceeding, provided that any document containing the trade secret is filed under seal and you do not disclose the trade secret, except pursuant to court order.

h. Restrictive Covenants Contained in Other Agreements. Notwithstanding any provision contained herein to the contrary, to the extent that you are or become subject to any other agreement that contains restrictive covenants different from the restrictive covenants contained in this Agreement, the restrictive covenants set forth in such other agreement shall supplement, and shall not replace, the restrictive covenants herein.

i. Enforcement. You hereby agree that the covenants set forth in this Section 10 are reasonable with respect to their scope, duration, and geographical area. You further agree and acknowledge that the restrictions contained in Section 10 do not and would not unreasonably impose limitations on your ability to earn a living. If any court or other tribunal determines that any term or provision of Section 10 is overbroad or otherwise invalid or unenforceable, you and the Company hereby agree that such court or tribunal shall have the power and obligation to narrow or otherwise reform the unenforceable term or provision, including to delete, replace, or add specific words or phrases, but only to the narrowest extent necessary to render the provision valid and enforceable (provided that in no event shall the length of any restrictive covenant or its scope be extended or expanded), and this Agreement shall be fully enforceable as so modified. Your agreement to the restrictions provided for in this Agreement and the Company's agreement to grant the Award are mutually dependent consideration. Therefore, notwithstanding any other provision to the contrary in this Agreement, if (i) the enforceability of any material restriction applicable to you as provided for in this Section 10 is challenged and found unenforceable by a court or other tribunal or (ii) you breach any of the provisions of Section 10, then the Company shall have the right to terminate this Agreement and recover from you all Shares paid to you pursuant to this Agreement and if you have sold, transferred, or otherwise disposed of any Shares paid to you pursuant to this Agreement, an amount equal to the aggregate Fair Market Value of such Shares on the date such Shares were paid to you pursuant to this Agreement. This provision shall be construed as a return of consideration or ill-gotten gains due to the failure of your promises and consideration under the Agreement, and not as a liquidated damages clause. In addition, in the event of the Company's termination of this Agreement, you shall immediately forfeit all unvested

Target Performance Units and your Target Performance Units award opportunity under this Agreement. You further hereby agree that, in the event of a breach by you of any of the provisions of Sections 10.a., 10.b., 10.c., 10.d., or 10.e., monetary damages shall not constitute a sufficient remedy. Consequently, in the event of any such breach or threatened breach, the Company or a System Company may, in addition to and without prejudice to other rights and remedies existing in its favor, apply to any court of competent jurisdiction for specific performance and/or injunctive or other relief in order to enforce or prevent any violations of the provisions hereof, without the requirement of posting a bond or proving actual damages and without having to demonstrate that money damages would be inadequate. You acknowledge (i) that you have carefully read this Agreement and have given careful consideration to the restraints imposed upon you by this Agreement, and you are in full accord as to their necessity for the reasonable and proper protection of the Confidential Information of the System Companies and their relationships with customers, suppliers and other business partners and (ii) that you are informed in writing hereby that you have a right to the advice of legal counsel and should consult with an attorney of your choice with regard to this Agreement, and you have been provided ample opportunity to seek out and consult with such counsel.

j. For purposes of this Section 10, "Company" shall include all System Companies. You and the Company agree that each System Company is an intended third-party beneficiary of this Section 10, and further agree that each System Company is entitled to enforce the provisions of this Section 10 in accordance with its terms. Notwithstanding anything to the contrary in this Agreement, the terms of the restrictive covenants set forth in this Section 10 shall survive the termination of this Agreement and shall remain in full force according to their respective terms.

k. In the twelve (12) months following the termination of your employment with your last System Company employer, in the event you seek or obtain employment or another business affiliation with any person or entity other than a System Company, you agree to notify the Company in writing, as far in advance as is reasonably practicable, but in no event less than two weeks prior to your proposed commencement of employment, of the details of such employment or business affiliation. You also agree to show these restrictive covenant provisions to any prospective employer, and you consent to any System Company showing these provisions to any third party believed by a System Company to be a prospective or actual employer of you, or a receiver of services from you, and to insisting on your compliance with these terms. Your obligations under this Section 10.k. will expire on that date which is twelve months after the end of your employment with all System Companies (or, if later, the last date as of which you are scheduled to receive separation payments from any System Company pursuant to a severance plan or other agreement).

11. Governing Law/Court Proceedings. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of law of such state. Any suit, action or proceeding arising out of, or with respect to this Agreement, its enforcement, breach, or interpretation, shall be brought in any court of competent jurisdiction in the State of Delaware, County of New Castle, and you and the Company hereby submit to the exclusive jurisdiction of such court (and its appellate court, whether or not located in the State of Delaware) for the purpose of any such suit, action, or proceeding. You and the Company hereby irrevocably waive (i) any objections which each may now or hereafter have to the laying of the venue of any suit, action or proceeding arising out of or relating to this Agreement brought in any court of competent jurisdiction in the State of Delaware, County of New Castle, (ii) any claim that any such suit, action or proceeding brought in any such court has been brought in an inconvenient forum and (iii) any right to a jury trial.

12. Incorporation of Plan. The Plan is hereby incorporated by reference and made a part hereof, and the Target Performance Units, your Target Performance Units award opportunity under this Agreement, any Performance Units (and any Dividend Equivalents) awarded pursuant to this Agreement, and this Agreement shall be subject to all terms and conditions of the Plan, including, without limitation, the amendment provisions thereof, and to such rules, regulations and interpretations relating to the Plan as

may be adopted by the Committee and as may be in effect from time to time. Any capitalized term that is not defined in this Agreement shall have the meaning set forth in the Plan. In the event of any conflict between the terms of this Agreement and the Plan, the terms of the Plan shall govern, and this Agreement shall be deemed to be modified accordingly, unless the Plan allows for such modification of the Plan's terms by this Agreement.

13. Amendments. This Agreement may be amended or modified only by an instrument in writing signed by the parties hereto.

14. Rights as a Shareholder. Neither you nor any of your successors in interest shall have any rights as a stockholder of the Company with respect to any Target Performance Units, your Target Performance Units award opportunity under this Agreement, Performance Units awarded pursuant to this Agreement, or Dividend Equivalents.

15. Notices. For the purpose of this Agreement, notices and all other communications provided for in the Agreement shall be in writing and shall be deemed to have been duly given when delivered personally or by United States registered mail, return receipt requested, postage prepaid, if to you, to your last known address filed in the personnel records of the System Companies, and if to the Company, to the address set forth below, or thereafter to such other address as either party may have furnished to the other in writing in accordance herewith, except that any notice of change of address shall be effective only upon actual receipt thereof:

If to the Company, by hand-delivery or email to:

Entergy Services, LLC
Attention: Executive Vice-President & General Counsel
639 Loyola Avenue, 28th Floor
New Orleans, LA 70113-3125

16. Agreement Not a Contract of Employment. Your employment with your System Company employer shall remain at will. Neither the Plan, the granting of the Target Performance Units and/or Dividend Equivalents, the Grant Notice, this Agreement nor any other action taken pursuant to the Plan shall constitute or be evidence of any agreement or understanding, express or implied, that you have a right to continue as an employee of any System Company for any period of time or at any specific rate of compensation.

17. Authority of the Committee. The Committee shall have full authority and discretion to interpret and construe the terms of the Plan, the Grant Notice, and this Agreement. The determination of the Committee as to any such matter of interpretation or construction shall be final, binding and conclusive.

18. Compliance with Code Section 409A Limitations. Notwithstanding any provision to the contrary, all provisions of the Grant Notice and this Agreement shall be construed, administered and interpreted to comply with or be exempt from Code Section 409A, and, if necessary, any provision shall be held null and void to the extent such provision (or part thereof) fails to comply with Code Section 409A or final regulations issued thereunder. Specifically, the terms "termination" and "termination of employment" shall be applied in a manner consistent with the definition of "separation from service" within the meaning of Code Section 409A. A right of any System Company, if any, to offset or otherwise reduce any sums that may be due or become payable by any System Company to you by any overpayment or indebtedness of yours shall be subject to limitations imposed by Code Section 409A. For purposes of the limitations on nonqualified deferred compensation under Code Section 409A, each payment of

compensation under this Agreement shall be treated as a separate payment of compensation for purposes of applying the Code Section 409A deferral election rules and the exclusion from Code Section 409A for certain short-term deferral amounts. Amounts payable under this Agreement shall be excludible from the requirements of Code Section 409A, to the maximum possible extent, either as (i) short-term deferral amounts (e.g., amounts payable no later than the 15th day of the third month following the end of the taxable year of your System Company employer in which such Performance Units are no longer subject to a substantial risk of forfeiture), or (ii) under the exclusion for involuntary separation pay provided in Treasury Regulations Section 1.409A-1(b)(9)(iii). To the extent that deferred compensation subject to the requirements of Code Section 409A becomes payable under this Agreement to you at a time when you are a "specified employee" (within the meaning of Code Section 409A), any such payments shall be delayed by six months to the extent necessary to comply with the requirements of Code Section 409A(a)(2)(B). The Company makes no representation that any or all of the payments or benefits described in the Plan or this Agreement will be exempt from or comply with Code Section 409A and makes no undertaking to preclude Code Section 409A from applying to any such payment.

19. Waivers. Any term or provision of this Agreement may only be waived by a System Company. Any such waiver shall be validly and sufficiently given for the purposes of this Agreement if it is in writing signed by an authorized Company officer. The failure of any System Company to enforce at any time any provision of this Agreement shall not be construed to be a waiver of such provision, nor in any way to affect the validity of this Agreement or any part hereof or the right of any System Company thereafter to enforce each and every such provision. No waiver of any breach of this Agreement shall be held to constitute a waiver of any other or subsequent breach.

20. Headings. The titles and headings of the sections in this Agreement are for convenience of reference only, do not form part of this Agreement, and shall not affect the construction of this Agreement.

21. Electronic Signature. Electronic signature of this Agreement shall have the same validity and effect as a signature affixed by hand.

22. Entire Agreement. This Agreement (including the Plan) constitutes the entire agreement of the parties hereto with respect to the subject matter hereof and supersedes any and all prior undertakings and agreements between the Company and its Affiliates and you with respect to the subject matter hereof.

23. Prospectus. This Agreement constitutes part of a prospectus covering Securities registered under the Securities Act of 1933. The remaining documents constituting the prospectus are available on Entergy Corporation's intranet under Our Company, Human Resources, Money & Finances, Compensation, Equity
https://entergy.sharepoint.com/sites/myhra/myBenefits/Pages/Compensation.aspx.

DEFINED CONTRIBUTION RESTORATION PLAN FOR THE SAVINGS PLAN OF ENTERGY CORPORATION AND SUBSIDIARIES VIII

Plan Document
Effective as of January 1, 2021

DEFINED CONTRIBUTION RESTORATION PLAN FOR THE SAVINGS PLAN OF ENTERGY CORPORATION AND SUBSIDIARIES VIII

TABLE OF CONTENTS

ARTICLE I – INTRODUCTION.. 4
1.01 Name and Purpose of Plan. 4
1.02 Funding. 4
ARTICLE II - DEFINITIONS. 4
ARTICLE III - ELIGIBILITY.. 8
3.01 Eligibility. 8
3.02 Participation. 9
ARTICLE IV – ANNUAL CREDITS. 9
4.01 Matching Restoration. 9
4.02 Matching Restoration Credit 9
4.03 Employer Retirement Restoration Account 9
4.04 Employer Retirement Restoration Credit 9
4.05 Payroll Taxes 9
ARTICLE V – ACCOUNTING, INVESTMENT AND VALUATION.. 10
5.01 Participant's Account 10
5.02 Deemed Investment Direction of Participants. 10
5.03 Allocation of Deemed Earnings or Losses on Accounts. 10
ARTICLE VI – WITHDRAWALS AND LOANS. 11
6.01 Withdrawals 11
6.02 Loans. 11
ARTICLE VII – PLAN PAYMENTS. 11
7.01 Vesting of Matching Restoration Account 11
7.02 Vesting of Employer Retirement Restoration Account 11
7.03 Forfeiture of Employer Retirement Restoration Account 11
7.04 Payment of Account Upon Separation from Service. 11
7.05 Death. 11
7.06 Form of Payment 11
7.07 Value of Account for Payment 11
7.08 Required Six-Month Delay for Certain Payments 11
7.09 Minor or Incompetent 12
ARTICLE VIII – SOURCE OF PAYMENTS. 12
8.01 Unfunded Plan. 12
8.02 Employer Liability. 12
ARTICLE IX – CHANGE IN CONTROL.. 12
9.01 Definitions 12
9.02 Accelerated Vesting. 13
9.03 Forfeiture and/or Repayment of Benefits. 13
9.04 Payment in Error 13
ARTICLE X – ADMINISTRATION.. 14
10.01 Administration of Plan. 14
10.2 Powers of the Administrator 14
10.3 Reliance on Reports and Certificates. 15
10.4 Claims Administration. 15
10.5 Filing Benefit Claims 15
10.6 Denial or Partial Denial 15

10.7 Appeal of Claims that Are Denied or Partially Denied. 16
10.08 The Appeal Process. 16
10.09 Judicial Proceedings for Benefits. 16
ARTICLE XI – AMENDMENT AND TERMINATION.. 16
11.01 Termination and Amendment 16
11.02 Successors. 17
ARTICLE XII – MISCELLANEOUS. 17
12.01 Notices. 17
12.02 Gender and Number 17
12.03 Captions. 17
12.04 Severability. 17
12.05 Controlling Law.. 17
12.06 No Right to Employment 18
12.07 Indemnification. 18
12.08 No Alienation. 18
12.09 Section 409 A Compliance. 18

DEFINED CONTRIBUTION RESTORATION PLAN FOR THE SAVINGS PLAN OF ENTERGY CORPORATION AND SUBSIDIARIES VIII

ARTICLE I – INTRODUCTION

1.01. Name and Purpose of Plan. This Plan shall be known as the Defined Contribution Restoration Plan for the Savings Plan of Entergy Corporation and Subsidiaries VIII (the "Plan"). The purpose of the Plan is to provide certain defined contribution benefits which are not otherwise payable or cannot otherwise be provided under the Savings Plan of Entergy Corporation and Subsidiaries VIII, as a result of the limitations set forth under Section 401(a)(17) of the Internal Revenue Code of 1986, as amended from time to time.

1.02 Funding. The Plan shall be an unfunded deferred compensation arrangement. Benefits shall be paid solely from the general assets of the Employer.

ARTICLE II - DEFINITIONS

The following terms shall have the meanings hereinafter indicated unless expressly provided herein to the contrary:

2.01 "Account" shall mean a notional account reflecting the aggregate of the Matching Restoration Account and the Employer Retirement Restoration Account maintained for each Participant under the terms and conditions of the Plan.

2.02 "Administrator" shall mean the Personnel Committee of the Board of Directors, or such other individual or committee as shall from time to time be designated in writing as the administrator of the Plan by the Personnel Committee. The Administrator shall be the "plan administrator" for the Plan within the meaning of ERISA.

2.03 "Annual Employer Retirement Contributions" shall mean the Annual Employer Retirement Contributions as defined in the Savings Plan.

2.04 "Beneficiary" shall mean the person or persons designated by the Participant to receive any benefits under the Plan upon the death of the Participant. If no Beneficiary survives the Participant, or the Participant fails to designate a Beneficiary, any benefits payable upon the death of the Participant shall be paid to the Participant's estate.

2.05 "Board" or "Board of Directors" shall mean the Board of Directors of the Company.

2.06 "Change in Control" shall mean:

(a) a purchase or other acquisition by any Person following which such Person is the beneficial owner (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of thirty percent (30%) or more of either (x) the shares of Common Stock outstanding immediately following such purchase or acquisition or (y) the combined voting power of the Company's voting securities entitled to vote generally and outstanding immediately following such purchase or acquisition, other than any purchase or other acquisition (i) directly from the Company, (ii) by the Company or a System Company, (iii) by any employee benefit plan (or related trust) sponsored by the Company or a System Company (a "System Plan"), or (iv) in connection with a Non-CIC Merger (defined in paragraph 2.06(b) below);

(b) the consummation of a merger, consolidation, reorganization, statutory share exchange or similar corporate transaction or series of related transactions involving the Company or any System Company or other direct or indirect subsidiary of the Company that alone or in the aggregate constitutes at least fifty percent (50%) of the book value of the Company on a consolidated basis (a "Business Combination"), other than a "Non-CIC Merger," which shall mean a Business Combination immediately following which (i) all or substantially all of the beneficial owners of the shares of Common Stock immediately prior to such Business Combination and of the combined voting power of the Company's voting securities entitled to vote generally and outstanding immediately prior to such Business Combination ("Incumbent Company Shareholders") beneficially own, directly or indirectly, more than sixty percent (60%) of the then outstanding shares of common stock (or, for a non-corporate entity, equivalent securities) and more than sixty percent (60%) of the combined voting power of the voting securities, respectively, of the corporation or entity resulting from such Business Combination (including without limitation a corporation or entity which as a result of such transaction owns the Company or all or substantially all of the Company's assets either directly or through one or more subsidiaries) in substantially the same proportions with respect to one another as their ownership immediately prior to such Business Combination, (ii) no Person (excluding any corporation or entity resulting from such Business Combination and any System Plan) beneficially owns, directly or indirectly, thirty percent (30%) or more of the shares of common stock or the combined voting power of the voting securities of the corporation or entity resulting from such Business Combination, except to the extent that such ownership existed prior to the Business Combination, and (iii) the individuals who comprise the Board immediately prior to such Business Combination constitute at least a majority of the Board, or, if the Company is not the surviving entity, either the board of directors of the entity surviving such Business Combination or the board of directors of any parent thereof immediately following such Business Combination (unless the failure of such individuals to comprise at least such a majority is unrelated to such Business Combination);

(c) the shareholders of the Company approve a plan of complete liquidation or dissolution of the Company or there is consummated a sale or disposition by the Company of all or substantially all of the Company's assets, whether in a single transaction or a series of related transactions, other than any such sale or disposition of assets to an entity at least sixty percent (60%) of the voting securities of which are held directly or indirectly by a System Company or the Incumbent Company Shareholders; or

(d) any change in the composition of the Board such that individuals who on January 1, 2021 (the "Effective Date") constitute the Board and any new director (other than a director whose initial assumption of office is in connection with an actual or threatened election contest, including without limitation a consent solicitation, relating to the election of directors of the Company) whose appointment or election by the Board or nomination for election by the Company's shareholders was approved or recommended by a vote of at least two-thirds (2/3) of the directors then still in office who either

were directors on such Effective Date or whose appointment, election or nomination for election was previously so approved or recommended, cease for any reason to constitute at least a majority thereof.

Notwithstanding the foregoing, (i) a Change in Control shall not be deemed to have occurred by virtue of the consummation of any transaction or series of integrated transactions immediately following which the holders of Common Stock immediately prior to such transaction or series of transactions continue to have substantially the same proportionate ownership in an entity which owns all or substantially all of the assets of the Company immediately following such transaction or series of transactions.

2.07 "CHRO" means the senior-most officer of the Company within the Human Resources department.

2.08 "Claims Administrator" shall mean the Administrator or its delegate responsible for administering claims for benefits under the Plan.

2.09 "Claims Appeal Administrator" shall mean the Administrator or its delegate responsible for administering appeals from the denial or partial denial of claims for benefits under the Plan.

2.10 "Code" shall mean the Internal Revenue Code of 1986, as amended from time to time.

2.11 "Code §401(a)(17) Limit" shall mean the Code §401(a)(17) annual compensation limit in effect for the Plan Year with no proration of the annual compensation limit unless the Plan has a short Plan Year. In the event of a short Plan Year, the annual compensation limit shall equal an amount determined by multiplying the otherwise applicable Code §401(a)(17) annual compensation limit for such year by a fraction, the numerator of which is the number of full months in the short period, and the denominator of which is twelve (12).

2.12 "Common Stock" means the common stock of the Company, having a par value of $0.01 per share.

2.13 "Company" shall mean Entergy Corporation or any successor company (except for purposes of determining whether a Change in Control has occurred).

2.14 "Default Investment Funds" shall have the meaning set forth in Section 5.02.

2.15 "Earnings" shall mean Earnings as defined in the Savings Plan. Notwithstanding the foregoing, Earnings shall not include amounts paid after an Employee's Separation from Service.

2.16 "Effective Date" shall mean January 1, 2021.

2.17 "Employee" shall mean an individual who is employed by a System Company employer and who is included on the Federal Insurance Contribution Act rolls of such System Company. The term "Employee" shall not include an employee who is included in a unit of employees covered by a collective bargaining agreement.

2.18 "Employer" shall mean each System Company that has adopted the Plan and with which the Participant is last employed on or before the Participant's Separation from Service with all System Company employers.

2.19 "Employer Matching Contributions" shall mean the Employer Matching Contributions as defined in the Savings Plan.

2.20 "Employer Retirement Restoration Account" shall mean the notional account described in Section 4.03 below.

2.21 "Employer Retirement Restoration Credit" shall mean the credit described in Section 4.04 below.

2.22 "Employment Commencement Date" (or, in the case of reemployment following a Separation from Service, "Reemployment Commencement Date") shall mean the first date on which an Employee is directly paid, or entitled to payment, by a System Company for an hour of service which occurs on or after the Effective Date.

2.23 "ERISA" shall mean the Employee Retirement Income Security Act of 1974, as amended from time to time.

2.24 "Excess Earnings" shall have the meaning set forth in Section 3.01.

2.25 "Exchange Act" shall mean the Securities Exchange Act of 1934, as amended from time to time.

2.26 "Investment Funds" shall mean, at the discretion of the CHRO, the several investment funds, or any subset thereof, that are from time to time made available as investments under the Savings Plan (but excluding investment funds made available to participants only through a Self-Directed Brokerage Account and the ESOP Entergy Corporation Stock Fund) and/or any other investments that the CHRO may from time to time thereafter establish for purposes of this Plan after consideration of the costs associated with, and the flexibility granted by, such investments, which investments shall be used as a basis for determining the value credited to a Participant's Account.

2.27 "Matching Restoration Account" shall mean the notional account described in Section 4.01 below.

2.28 "Matching Restoration Credit" shall mean the credit described in Section 4.02 below.

2.29 "Participant" shall mean an Employee who is eligible to participate in the Plan and who remains eligible for participation in accordance with the applicable provisions of the Plan.

2.30 "Person" for purposes of the definition of Change in Control, shall have the meaning given in Section 3(a)(9) of the Exchange Act, as modified and used in Sections 13(d) and 14(d) thereof.

2.31 "Plan" shall mean this Defined Contribution Restoration Plan for the Savings Plan of Entergy Corporation and Subsidiaries VIII, effective January 1, 2021, and any amendments, supplements or modifications from time to time made hereto.

2.32 "Plan Year" shall mean the 12-month period beginning on January 1 and ending the following December 31. The initial Plan Year shall begin January 1, 2021 and end December 31, 2021.

2.33 "Retirement Contribution Percentage" shall mean the lesser of 4% or such other percentage (including zero percent (0%)) as the Personnel Committee of the Board determines in its discretion shall apply to the Annual Employer Retirement Contribution under the Savings Plan for a given Plan Year.

2.34 "Savings Plan" shall mean the Savings Plan of Entergy Corporation and Subsidiaries VIII and any amendments, supplements or modifications from time to time made thereto.

2.35 "Separation from Service," "Separates from Service," or "Separated from Service" shall mean the separation of a Participant from employment with all System Companies that is a "separation from service" as defined in Code Section 409A and the regulations promulgated thereunder.

2.36 "Specified Employee" shall have the meaning set forth in Code Section 409A(a)(2)(B)(i). Whether a Participant is a Specified Employee shall be determined under rules established by the Administrator in accordance with regulations under Code Section 409A. All determinations by the Administrator with regard to whether a Participant is a Specified Employee shall be final and binding on the Participant for purposes of the Plan.

2.37 "System" shall mean the Company and all other System Companies, and, except for purposes of determining whether a Change in Control has occurred, shall include any successor thereto as contemplated in Section 11.02 of this Plan.

2.38 "System Company" shall mean the Company and any corporation whose stock is 80% or more (based on voting power or value) owned, directly or indirectly, by the Company and any partnership, trade or business which is 80% or more controlled, directly or indirectly, by the Company, and, except for purposes of determining whether a Change in Control has occurred, shall include any successor thereto as contemplated in Section 11.02 of this Plan.

2.39 "Valuation Date" shall mean the close of business on each day the New York Stock Exchange is open.

2.40 "Vesting Service" shall mean (a) for an Employee with no Reemployment Commencement Date, the period (calculated in years and daily fractions thereof) commencing with the Employee's Employment Commencement Date and ending upon the date of the Employee's Separation from Service, and (b) for an Employee with a Reemployment Commencement Date, the aggregate of (i) the period commencing with the Employee's most recent Reemployment Commencement Date plus (ii) the Vesting Service as defined in the Savings Plan for time periods prior to such Reemployment Commencement Date.

ARTICLE III - ELIGIBILITY

3.01 Eligibility. An Employee of any Employer who (a) is an active participant in the Savings Plan during the Plan Year, (b) has Earnings in excess of the Code §401(a)(17) Limit for such Plan Year ("Excess Earnings"), and (c) is a member of the Employer's select group of management or highly compensated employees shall be eligible to participate in the Plan.

3.02 Participation. Any Employee who satisfies the requirements of Section 3.01 shall become a Participant as of the first Plan Year in which such requirements are met. The Employee shall continue to be a Participant until the payment or forfeiture of the balance of the Employee's Account. Notwithstanding the foregoing, an Employee must be a member of the Employer's select group of management or highly compensated employees as of the end of the applicable Plan year

in order to be credited with any additional amounts based upon Excess Earnings for such Plan Year.

ARTICLE IV – ANNUAL CREDITS

4.01 Matching Restoration Account. The Employer shall establish and maintain on its books a notional Matching Restoration Account for each Participant who is credited with a Matching Restoration Credit.

4.02 Matching Restoration Credit. If a Participant is eligible to be allocated Employer Matching Contributions under the Savings Plan during a Plan Year in respect of which the Participant receives Excess Earnings, then the Participant's Matching Restoration Account shall be credited with a Matching Restoration Credit for the Plan Year in an amount equal to five percent (5%) of the Participant's Excess Earnings for the Plan Year.

Matching Restoration Credits shall be determined and credited as soon as administratively practicable following the end of the applicable Plan Year.

4.03 Employer Retirement Restoration Account. The Employer shall establish and maintain on its books a notional Employer Retirement Restoration Account for each Participant who is credited with an Employer Retirement Restoration Credit.

4.04 Employer Retirement Restoration Credit. If a Participant is eligible to receive an Annual Employer Retirement Contribution under the Savings Plan for a Plan Year in respect of which the Participant receives Excess Earnings, then the Participant's Employer Retirement Restoration Account shall be credited with an Employer Retirement Restoration Credit for such Plan Year in an amount equal to the product of the Retirement Contribution Percentage for such Plan Year multiplied by the Participant's Excess Earnings for such Plan Year. Employer Retirement Restoration Credits shall be determined and credited as soon as administratively practicable following the end of the applicable Plan Year.

Notwithstanding the foregoing to the contrary, if a Participant is eligible to receive the Annual Employer Retirement Contribution under the Savings Plan based on Earnings for a portion of the Plan Year due to the disability of the Participant, as defined in the Savings Plan, then such Participant shall not be eligible to be credited with an Employer Retirement Restoration Credit for such Plan Year.

4.05 Payroll Taxes. The Administrator may direct the Employer to pay the Federal Insurance Contributions Act ("FICA") tax imposed under Code Section 3101, Section 3121(a), and Section 3121(v)(2) on the amount otherwise to be credited as a Matching Restoration Credit and vested Employer Retirement Restoration Credit for a Participant for a Plan Year or upon the amount vested in the Employer Retirement Restoration Account. Additionally, the Administrator may direct the Employer to pay from such amount otherwise credited the income tax at source on wages imposed under section 3401 or the corresponding withholding provisions of applicable state, local, or foreign tax laws as a result of the payment of the FICA amount, and to pay the additional income tax at source on wages attributable to the pyramiding section 3401 wages and taxes. However, the total payment under this Section 4.05 must not exceed the aggregate of the FICA amount, and the income tax withholding related to such FICA amount.

ARTICLE V – ACCOUNTING, INVESTMENT AND VALUATION

5.01 Participant's Account. The Administrator shall create and maintain adequate records to reflect the interest of each Participant in the Plan. Such records shall be in the form of notional individual accounts, with each Participant having a Matching Restoration Account and an Employer Retirement Restoration Account. Such Accounts shall be kept for record-keeping purposes only and shall not be construed as providing for assets to be held in trust or escrow or any other form of asset segregation for the Participant or for any Beneficiary to whom benefits are to be paid pursuant to the terms of the Plan.

5.02 Deemed Investment Direction of Participants. Subject to such limitations, rules and procedures as may from time to time be required by law, imposed by the Administrator, or contained elsewhere in the Plan, each Participant may communicate to the Administrator, or to any person to whom the Administrator has delegated such Administrative duties, a direction as to how the amounts credited to his Account shall be deemed invested among the Investment Funds. Such direction shall be subject to such rules and procedures for direction of investments under the Savings Plan, as modified by the Administrator with respect to the Plan. The Administrator may also designate default Investment Funds in which a Participant's Account shall be deemed invested if no direction is received from the Participant ("Default Investment Funds"). Unless otherwise designated by the Administrator, the Default Investment Funds shall be the same as the default Investment Funds under the Savings Plan. No Participant directions will be executed with respect to the deemed investment of the Participant's Account on or after the Valuation Date selected by the Administrator to determine the amount of the payment from such Account under Section 7.07 following the Participant's Separation from Service. No actual investment of the Participant's Account shall be made in the Investment Funds, and Participants shall have no right, claim or demand with respect to any such Investment Funds based on the deemed investments under the Plan.

5.03 Allocation of Deemed Earnings or Losses on Accounts. The Administrator, or any person to whom the Administrator has delegated such Administrative duties, shall maintain records that track or replicate the performance of the Participant's Account's deemed investments in the Investment Funds. As of each Valuation Date, the Participant's Account shall be credited with the increase or decrease since the most recent preceding Valuation Date in the net asset value of the Investment Funds in which the Participant's Account is deemed to be invested. Any deemed dividends or capital gain distributions with respect to a Participant's Account's deemed investment in an Investment Fund shall be deemed to be reinvested in the applicable Investment Fund. Notwithstanding the foregoing sentence, deemed dividends and capital gain distributions with respect to a Participant's Account's deemed investment in an Investment Fund shall not be taken into account with respect to or in valuing a Participant's Account following the Valuation Date for payment in accordance with Section 7.07.

ARTICLE VI – WITHDRAWALS AND LOANS

6.01 Withdrawals. A Participant shall not be entitled to withdraw any portion of his Account while employed by any System Company.

6.02 Loans. A Participant shall not be eligible to obtain a loan from the Plan.

ARTICLE VII – VESTING, FORFEITURES AND PAYMENTS

7.01 Vesting of Matching Restoration Account. Except as provided in Section 9.03, a Participant shall be fully vested at all times in the Participant's Matching Restoration Account.

7.02 Vesting of Employer Retirement Restoration Account. Cliff vesting shall apply to the Employer Retirement Restoration Account and, except as provided in Section 9.03, a Participant shall become fully vested in the Participant's Employer Retirement Restoration Account upon the earliest to occur of (a) the date the Participant attains age 65, (b) the Participant's completion of three (3) years of Vesting Service, (c) the Participant's Separation from Service by reason of death, or (d) accelerated vesting of the Participant's Account pursuant to Section 9.02. Prior to the first to occur of the events set forth in subsections 7.02(a) – (d), the Participant shall not be vested in any portion of the Participant's Employer Retirement Restoration Account.

7.03 Forfeiture of Employer Retirement Restoration Account. If a Participant has a Separation from Service when the Participant is not vested in the Participant's Employer Retirement Restoration Account, the balance of the Participant's Employer Retirement Restoration Account shall be forfeited.

7.04 Payment of Account Upon Separation from Service. Except as otherwise required by Section 7.08 or Section 9.03, upon a Participant's Separation from Service, the value of the vested portion of the Participant's Account shall be paid to the Participant as soon as reasonably practicable following the Participant's Separation from Service, in accordance with Sections 7.06, 7.07 and, if applicable, 7.08.

7.05 Death. Upon a Participant's Separation from Service due to the Participant's death, the value of the Participant's Account shall be paid to the Participant's Beneficiary as soon as reasonably practicable following the Participant's death, in accordance with Sections 7.06 and 7.07.

7.06 Form of Payment. The vested value of a Participant's Account shall be paid in a single lump sum by the Employer in cash, less applicable payroll and withholding taxes.

7.07 Value of Account for Payment. Prior to a lump-sum payment, a determination by the Administrator of the amount of such payment shall be made by valuing the vested Account Balance on a Valuation Date following the Participant's Separation from Service selected by the Administrator in accordance with administrative procedures adopted by the Administrator.

7.08 Required Six-Month Delay for Certain Payments. Notwithstanding Section 7.04, if a Participant is a Specified Employee at the time of his Separation from Service and the vested Account becomes payable to the Participant under this Plan by reason of the Participant's Separation from Service, then such payment shall not be paid to the Participant prior to the earlier of (a) the expiration of the six (6)-month period measured from the date of the Participant's Separation from Service, or (b) the date of the Participant's death. The Participant's vested Account the value of which is determined pursuant to Section 7.07 shall be paid as soon as administratively practicable following the earlier of the end of Participant's six-month delay period or the Participant's death in accordance with Section 7.05.

7.09 Minor or Incompetent. In the event any amount becomes payable under the provisions of the Plan to a Participant, Beneficiary or other person who is a minor or an incompetent, whether or not declared incompetent by a court, such amount may be paid directly to the minor or incompetent person or to such person's fiduciary (or attorney-in-fact in the case of an incompetent) as the Administrator, in its sole discretion, may decide,

and neither the Administrator nor any System Company shall be liable to any other person for any such decision or any payment pursuant thereto.

ARTICLE VIII – SOURCE OF PAYMENTS

8.01 Unfunded Plan. It is a condition of the Plan that neither a Participant nor any other person or entity shall look to any person or entity other than the Employer for the payment of benefits under the Plan. The Participant or any other person or entity having or claiming a right to payments hereunder shall rely solely on the unsecured obligation of the Employer set forth herein. Nothing in this Plan shall be construed to give the Participant or any other person or entity any right, title, interest, or claim in or to any specific asset, fund, reserve, account or property of any kind whatsoever, owned by the Company or any Employer or in which the Company or any Employer may have any right, title or interest now or in the future. However, the Participant or any other person or entity shall have the right to enforce his or its claim against the Employer in the same manner as any other unsecured creditor of such entity. Neither a Participant nor his Beneficiary shall have any rights in or against any specific assets of any System Company.

8.02 Employer Liability. At its own discretion, a System Company employer may purchase such insurance or annuity contracts or other types of investments as it deems desirable in order to accumulate the necessary funds to provide for the future benefit payments under the Plan. However, (a) a System Company employer shall be under no obligation to fund the benefits provided under this Plan; (b) the investment of System Company employer funds credited to a special account established hereunder shall not be restricted in any way; and (c) such funds may be available for any purpose the System Company may choose. Nothing stated herein shall prohibit a System Company employer from adopting or establishing a trust or other means as a source for paying any obligations created hereunder; provided, however, any and all rights that any such Participants shall have with respect to any such trust or other fund shall be governed by the terms thereof.

ARTICLE IX – CHANGE IN CONTROL

9.01 Definitions. The following additional definitions shall apply to this Article IX:

a. "Cause" means (i) the willful and continuing failure by the Participant to substantially perform the Participant's duties (other than such failure resulting from the Participant's incapacity due to physical or mental illness or any such actual or anticipated failure after the issuance of a notice of termination for Good Reason by the Participant), provided that any such failure has not been cured by the Participant within thirty (30) days after a written demand for substantial performance is delivered to the Participant by the Company or the Participant's System Company employer, which demand specifically identifies the manner in which the Company or System Company employer or, in the case of an ML 1-4 Participant, the Board, believes that the Participant has not substantially performed; (ii) the willful engaging by the Participant in conduct which is demonstrably and materially injurious to the Company or any System Company, monetarily or otherwise; (iii) the Participant's indictment for, conviction of, or entrance of a plea of guilty or nolo contendere to a felony or other crime which has or may have a material adverse effect on the Participant's ability to carry out the Participant's duties or upon the reputation of the Company or any System Company; or (iv) a material violation by the Participant of any agreement the Participant has with the Company or any System Company; provided that, for purposes of clauses (a)(i) and (a)(ii) of this definition, no act, or failure to act, on the Participant's part shall be deemed "willful" unless done, or omitted to be done, by the Participant not in good faith and without

reasonable belief that the Participant's act, or failure to act, was in the best interest of the Company or the Participant's System Company employer.

b. "Good Reason" means (i) a material reduction by a Participant's System Company employer in the Participant's annual base salary as in effect from time to time or (ii) the relocation of the Participant's principal place of employment to a location more than fifty (50) miles from the Participant's principal place of employment in effect from time to time, or the Company or a System Company requiring the Participant to be based anywhere other than such principal place of employment (or permitted relocation thereof) except for required travel on the business to an extent substantially consistent with reasonable business travel obligations; provided that the Participant provides the Company with a written notice of termination for Good Reason within ninety (90) days following the occurrence of the event constituting Good Reason and the Company shall not have cured the circumstance giving rise to Good Reason within thirty (30) days following such notice.

c. "ML 1-4 Participant" means a Participant who, as of immediately prior to the occurrence of a Change in Control or at any time during the two-year period immediately following the Change in Control, is reflected on the Human Resource records of the Participant's System Company employer as being in System Management level 1, 2, 3 or 4.

9.02 Accelerated Vesting. Subject to Section 9.03 below, in the event that (a) a Change in Control occurs and (b) a Participant's employment or service is terminated by the Company, its successor or an affiliate thereof without Cause or is terminated by the Participant for Good Reason (if applicable), in each case on or after the effective date of the Change in Control but prior to the second anniversary of the Change in Control, then any unvested portion of such Participant's Account shall vest in full regardless of such Participant's vested status under the Savings Plan.

9.03 Forfeiture and/or Repayment of Benefits. Notwithstanding anything in the Plan to the contrary, all amounts credited to a Participant's Account in accordance with Article V shall be subject to forfeiture and/or repayment upon the occurrence of such Participant's breach of the restrictive covenants contained in any agreement between the Participant and any System Company.

9.04 Payment in Error. To the maximum extent permitted by applicable law, in the event that a payment is made to a Participant or Beneficiary in error that exceeds the amount to which the Participant or Beneficiary is entitled pursuant to the terms of the Plan (such excess amount, an "Excess Payment"), the Participant or Beneficiary shall repay to the Participant's System Company employer, and such System Company employer shall have the right to recoup from the Participant or the Beneficiary, such Excess Payment by notifying the Participant or Beneficiary in writing of the nature and amount of such Excess Payment together with (a) demand for direct repayment to the System Company employer by the Participant or Beneficiary in the amount of such Excess Payment or (b) reduction of any amount(s) owed to the Participant or Beneficiary by the System Company employer or any other System Company by the amount of the Excess Payment.

ARTICLE X – ADMINISTRATION

10.01 Administration of Plan. The Administrator shall operate and administer the Plan and, as such, shall have the authority as Administrator to exercise the powers and

discretion conferred on it by the Plan, including the right to delegate any function to a specified person or persons. The Administrator shall discharge its duties for the exclusive benefit of the Participants and their Beneficiaries. The Plan is intended to satisfy the requirements of Code Section 409A and the Administrator shall interpret the Plan and exercise the power and discretion conferred under the Plan in a manner that is at all times consistent with the requirements of Code Section 409A, to the extent that benefits under the Plan are subject to the requirements of Code Section 409A.

10.02 Powers of the Administrator. The Administrator and any of its delegates shall administer the Plan in accordance with its terms and shall have all powers, authority, and discretion necessary or proper for such purpose. In furtherance of this duty, the Administrator shall have the sole and exclusive power and discretion to make factual determinations, construe and interpret the Plan, including the intent of the Plan and any ambiguous, disputed or doubtful provisions of the Plan. All findings, decisions, or determinations of any type made by the Administrator, including factual determinations and any interpretation or construction of the Plan, shall be final and binding on all parties and shall not be disturbed unless the Administrator's decisions are arbitrary and capricious. The Administrator shall be the sole judge of the standard of proof required in any claim for benefits and/or in any question of eligibility for a benefit. By way of example, the Administrator shall have the sole and exclusive power and discretion:

a. to adopt such rules and regulations as it shall deem desirable or necessary for the administration of the Plan on a consistent and uniform basis;
b. to interpret the Plan including, without limitation, the power to use the Administrator's sole and exclusive discretion to construe and interpret (1) the Plan, (2) the intent of the Plan, and (3) any ambiguous, disputed or doubtful provisions of the Plan;
c. to determine all questions arising in the administration of the Plan including, but not limited to, the power and discretion to determine the rights or eligibility of any Employee, Participant, Beneficiary or other claimant to receive any benefit under the Plan;
d. to require such information as the Administrator may reasonably request from any Employee, Participant, Beneficiary or other claimant as a condition for receiving any benefit under the Plan;
e. to grant and/or deny any and all claims for benefits, and construe any and all issues of Plan interpretation and/or fact issues relating to eligibility for benefits;
f. to compute the amount of any benefits payable under the Plan;
g. to execute or deliver any instrument or make any payment on behalf of the Plan;
h. to employ one or more persons to render advice with respect to any of the Administrator's responsibilities under the Plan;
i. to direct the Employer concerning all payments that shall be made pursuant to the terms of the Plan; and
j. to make findings of fact, to resolve disputed fact issues, and to make determinations based on the facts and evidence contained in the administrative record developed during the claims review procedure.

For any acts not specifically enumerated above, when applying, construing, or interpreting any and all Plan provisions and/or fact questions presented in claims for benefits, the Administrator shall have the same discretionary powers as enumerated above.

10.03 Reliance on Reports and Certificates. The Administrator may rely conclusively upon all tables, valuations, certificates, opinions and reports furnished by an actuary, accountant, counsel or other person who may from time to time be employed or engaged for such purposes.

10.04 Claims Administration. The Administrator may appoint and, in its sole discretion, remove a Claims Administrator and/or Claims Appeal Administrator to administer claims for benefits under the Plan in accordance with its terms, and, pursuant to Section 10.02, such delegates shall have all powers, authority, and discretion necessary or proper for such purpose. In the absence of such appointment, the Administrator shall be the Claims Administrator and Claims Appeal Administrator.

10.05 Filing Benefit Claims. Any claim asserting entitlement to a benefit under the Plan must be asserted within ninety (90) days after the event giving rise to the claim by sending written notice of the claim to the Claims Administrator. The written notice of the claim must be accompanied by any and all documents, materials, or other evidence allegedly supporting the claim for benefits. If the claim is granted, the claimant will be so notified in writing by the Claims Administrator.

10.06 Denial or Partial Denial of Benefit Claims. If the Claims Administrator denies a claim for benefits in whole or part, the Claims Administrator shall notify the claimant in writing of the decision within ninety (90) days after the claim has been received by the Claims Administrator. In the Claim Administrator's sole discretion, the Claims Administrator may extend the time to decide the claim for an additional ninety (90) days, by giving written notice of the need for such an extension any time prior to the expiration of the initial ninety (90) day period. The Claims Administrator, in its sole discretion, reserves the right to request specific information from the claimant, and reserves the right to have the claimant examined or tested by person(s) employed or compensated by the Employer. If the claim is denied or partially denied, the Claims Administrator shall provide the claimant with written notice stating:

a. the specific reasons for the denial of the claim (including the facts upon which the denial was based) and reference to any pertinent plan provisions on which the denial is based;
b. if applicable, a description of any additional material or information necessary for claimant to perfect the claim and an explanation of why such material or information is necessary; and
c. an explanation of the claims review appeal procedure including the name and address of the person or committee to whom any appeal should be directed.

10.07 Appeal of Claims That Are Denied or Partially Denied. The claimant may request review of the Claims Administrator's denial or partial denial of a claim for Plan benefits. Such request must be made in writing within sixty (60) days after claimant has received notice of the Claims Administrator's decision and shall include with the written request for an appeal any and all documents, materials, or other evidence which claimant believes supports his claim for benefits. The written request for an appeal, together with all documents, materials, or other evidence which claimant believes supports his claim for benefits should be addressed to the Claims Administrator, who will be responsible for submitting the appeal for review to the Claims Appeal Administrator.

10.08 The Appeal Process. The Claims Administrator will submit the appeal to the Claims Appeal Administrator for review of the denial or partial denial of the claim. Within sixty (60) days after the receipt of claimant's appeal, the claimant will be notified of the final decision of the Claims Appeal Administrator, unless, in the Claims Appeal Administrator's sole discretion, circumstances require an extension of this period for up to an additional sixty (60) days. If such an extension is required, the Claims Appeal Administrator shall notify claimant of this extension in writing before the expiration of the initial sixty-day period. During the appeal, the Claims Appeal Administrator, in its sole discretion, reserves the right to request specific information from the claimant, and reserves the right to have the claimant examined or tested by person(s) employed or compensated by the Employer. The final decision of the Claims Appeal Administrator shall set forth in writing the facts and plan provisions upon which the decision is based. All decisions of the Claims Appeal Administrator are final and binding on all employees, Participants, their Beneficiaries, or other claimants.

10.09 Judicial Proceedings for Benefits. No claimant may file suit in court to obtain benefits under the Plan without first completely exhausting all stages of this claims review process. In any event, no legal action seeking Plan benefits may be commenced or maintained against the Plan more than ninety (90) days after the Claims Appeal Administrator's decision on appeal.

ARTICLE XI – AMENDMENT AND TERMINATION

11.01 Termination and Amendment. The Board of Directors, the Personnel Committee or any other person or persons whom the Personnel Committee may expressly from time to time authorize to take any and all such actions for and on behalf of Entergy Corporation and the respective Employers shall have the right, in its absolute discretion and consistent with the requirements of Code Section 409A, at any time and from time to time, to modify or amend, in whole or in part, any or all of the provisions of this Plan, or suspend or terminate the Plan entirely, subject to the provisions of Section 11.02 and the requirements of Code Section 409A regarding plan terminations. Any such action shall be evidenced by the minutes of the Board of Directors or the Personnel Committee or a written certificate of amendment or termination executed by any person or persons so authorized by the Personnel Committee. No amendment to, or termination of the Plan shall reduce the amount credited to a Participant's Account under this Plan through the date of any such amendment or termination without the Participant’s consent.

11.02 Successors. An Employer shall require any successor (whether direct or indirect, by purchase, merger, consolidation, or otherwise) of all or substantially all of its business and/or assets to expressly assume and agree to perform this Plan in the same manner and to the same extent that the Employer would be required to perform it if no such succession had taken place. Failure of the Employer to obtain such assumption and agreement prior to the effectiveness of any such succession shall be a breach of this Plan, and the Employer shall be liable for payment of all Plan benefits to which its Employee Participants are entitled upon their Separation from Service. Any successor or surviving entity that assumes or otherwise adopts this Plan as contemplated in this Section 11.02 shall succeed to all the rights, powers and duties of the Employer and the Personnel Committee hereunder, subject to the restrictions on amendment or termination of the Plan as set forth in Section 11.01. The employment of a Participant who has

continued in the employ of such successor or surviving entity shall not be deemed to have been terminated or severed for any purpose hereunder.

ARTICLE XII – MISCELLANEOUS

12.01 Notices. Every notice authorized or required by the Plan shall be deemed delivered to the Administrator on the date it is personally delivered to the Administrator or three business days after it is sent by registered mail, postage prepaid, and properly addressed to Entergy Services, LLC, Total Rewards, Attention: Plan Administrator for the Defined Contribution Restoration Plan for the Savings Plan of Entergy Corporation and Subsidiaries VIII, 639 Loyola Avenue, 14th Floor, New Orleans, Louisiana 70113, and shall be deemed delivered to a Participant on the date it is personally delivered to him or three business days after it is sent by registered or certificate mail, postage prepaid, addressed to him at the last address shown for him in the records of his System Company employer.

12.02 Gender and Number. The masculine pronoun whenever used in the Plan shall include the feminine. Similarly, the feminine pronoun whenever used in the Plan shall include the masculine as the context or facts may require. Whenever any words are used herein in the singular, they shall be construed as if they were also used in the plural in all cases where the context so applies.

12.03 Captions. The captions of this Plan are not part of the provisions of the Plan and shall have no force and effect.

12.04 Severability. In the event any provision of the Plan shall be held illegal or invalid for any reason, the illegality or invalidity shall not affect the remaining parts of the Plan, and the Plan shall be construed and enforced as if the illegal or invalid provision had not been included.

12.05 Controlling Law. The administration of the Plan, and any trust established thereunder, shall be governed by applicable federal law, including ERISA to the extent applicable, and to the extent federal law is inapplicable, the laws of the State of Delaware, without regard to the conflict of law principles of any state. Any persons or corporations who now are or shall subsequently become parties to the Plan shall be deemed to consent to this provision.

12.06 No Right to Employment. The Plan confers no right upon any Employee to continue his employment with any employer, whether or not a System Company.

12.07 Indemnification. To the extent not covered by insurance, or if there is a failure to provide full insurance coverage for any reason, and to the extent permissible under applicable laws and regulations, the Employers agree to hold harmless and indemnify the Administrator, its members and its employee delegates against any and all claims and causes of action by or on behalf of any and all parties whomsoever, and all losses therefrom, including, without limitation, costs of defense and attorneys' fees, based upon or arising out of any act or omission relating to or in connection with the Plan and, if applicable, any trust other than losses resulting from any such person's fraud or willful misconduct.

12.08 No Alienation. Participants' Account balances under this Plan, and any rights and privileges pertaining thereto, shall not be subject to alienation, pledge, anticipation,

attachment, garnishment, receivership, execution or levy of any kind, including liability for alimony or support payments, and any attempt to cause such amounts to be so subjected shall not be recognized, except to the extent as may be required by law, including laws of descent and distribution.

12.09 Section 409A Compliance. It is intended that all of the payments and benefits made or provided under the Plan are intended to comply with or be exempt from the requirements of Code Section 409A and regulations thereunder, in either case so that none of the payments to be provided hereunder will be subject to the additional tax imposed under Code Section 409A, and the Plan shall at all times be interpreted consistently with such intent. If any provision of this Plan would otherwise conflict with or frustrate this intent, such provision will be interpreted and deemed amended so as to avoid the conflict. The Administrator reserves the right to take any action it deems appropriate or necessary to comply with the requirements of Code Section 409A.

IN WITNESS WHEREOF, the Personnel Committee of the Board of Directors of Entergy Corporation has caused this Defined Contribution Restoration Plan for the Savings Plan of Entergy Corporation and Subsidiaries VIII, effective January 1, 2021, to be executed by its duly authorized officer on this 17th day of December, 2020.

ENTERGY CORPORATION
through its duly authorized representative

_____
KATHRYN COLLINS
Senior Vice President, HR and
Chief Human Resources Officer

Exhibit 14(a)

ENTERGY CORPORATION
CODE OF BUSINESS CONDUCT AND ETHICS

The Board of Directors (the "Board") of Entergy Corporation (the "Company") has adopted the following Code of Business Conduct and Ethics (the "Code ") for the Company's directors, executive officers and for all employees of the Company or any corporation, partnership, trade or business in which the Company has a direct or indirect majority ownership interest (collectively, "Entergy Representatives"). This Code is intended to: a) provide guidance to help Entergy Representatives recognize and deal with ethical issues; b) provide mechanisms to report unethical conduct; and c) help foster a culture of honesty, accountability and mutual respect. It is expected that each Entergy Representative will comply with the letter and spirit of this Code.

1. **Conflicts of Interest**

An Entergy Representative shall not allow his or her private interest to interfere with the interests of the Company as a whole. A "conflict of interest" occurs when an Entergy Representative takes actions or has interests that make it difficult to perform his or her duties objectively and effectively. Conflicts of interest may also arise when an Entergy Representative, or a member of his or her immediate family, receives improper personal benefits as a result of his or her position with the Company. Entergy Representatives must avoid, and may not have, conflicts of interests with the Company.

Any action by, or interest of, a director that creates, or may reasonably be expected to create, a conflict of interest with the Company must be disclosed immediately by the director to the Chair of the Corporate Governance Committee. The Corporate Governance Committee will review and analyze all such disclosures. If the Committee believes that a conflict of interest exists, the Committee Chair, in coordination with the Chairman of the Board, shall present this finding to the entire Board for appropriate action.

If an officer or employee has any reason to believe that he or she has a conflict of interest or a potential conflict of interest, then the officer or employee shall take the actions required in the Company's Conflict of Interest Policy.

2. **Corporate Opportunities**

Business opportunities that come to Entergy Representatives through access to Company property or information belong to the Company. Entergy Representatives are prohibited from: (a) taking for themselves personally opportunities that are discovered through the use of corporate property, information or the Covered Employee's position; (b) using the Company's property or information, or the Entergy Representatives position, for personal gain; or (c) competing with the Company, directly or indirectly, for business opportunities, *provided*, *however*, if the Company's disinterested directors determine that the Company will not pursue an opportunity that relates to the Company's business, an Entergy Representative may do so.

3. **Confidentiality**

Entergy Representatives must maintain the confidentiality of non-public information that they acquire in carrying out their duties and responsibilities, except where disclosure is approved by the Company or legally mandated. Confidential information includes, without limitation, trade secrets, nonpublic financial and operational information, customer information, unreleased plans or forecasts, vendor and customer information, formulas, designs and other inventions covered by a patent, copyright or trademark, employee information and records where the possession of such information was obtained as part of their formal duties, other corporate and personal information and information that if, not properly safeguarded, might impair the security or privacy of the Company's facilities or personnel.

4. **Protection and Proper Use of Company Assets**

Entergy Representatives shall protect Company assets and should only use Company property for official Company business. Entergy Representatives may not use Company time, supplies, equipment, tools, buildings or other assets for personal benefit without prior authorization.

5. **Ethical Behavior and Fair Dealing**

The Company's reputation for ethical behavior is critical to its success. Directors must lead by example and act with integrity and honesty to promote an environment that encourages the Company's officers and employees to sustain and enhance the Company's reputation.

Each Entergy Representative has a responsibility to act honestly and transparently with the Company's customers, suppliers and other employees, and to treat each other, as well as the Company's customers, suppliers and competitors, with fairness and respect. The Company will always participate in the marketplace fairly and lawfully and Entergy Representatives shall refuse to participate in any conduct or practice that is intended to take unfair advantage of anyone, including through manipulation, concealment, abuse of privileged information, misrepresentation of material facts or any other unfair dealing practices.

6. **Compliance with Laws, Rules and Regulations**

Entergy Representatives shall comply with all laws, rules and regulations applicable to the Company, including securities laws and the Company's policies governing trading of securities.

7. **Special Provisions Relating to Principal Executive Officer and Senior Financial Officers**

The principal executive officer and senior financial officers responsible for the preparation, evaluation and dissemination of financial information hold an important and elevated role in corporate governance. Therefore, the Company expects that such personnel will adhere to and advocate the following principles and responsibilities governing professional and ethical conduct.

To the best of their knowledge and ability, such personnel shall:

- Act with honesty and integrity, ethically handling actual or apparent conflicts of interest in personal and professional relationships.

- Provide full, fair, accurate, timely and understandable disclosure in reports and documents that the Company files with, or submits to, the Securities and Exchange Commission and in public communications made by the Company.

- Comply with applicable laws, rules and regulations of federal, state, provincial and local governments, and other appropriate private and public regulatory agencies.

- Act in good faith, responsibly, with due care, competence and diligence, without misrepresenting material facts or allowing independent judgment to be subordinated.

- Respect the confidentiality of information acquired in the course of work except when authorized or otherwise legally obligated to disclose. Confidential information acquired in the course of work shall not be used for personal advantage.

- Share knowledge and maintain skills important and relevant to constituents' needs.

- Proactively promote ethical behavior as a responsible colleague among peers in the work environment and community.

8. **Waivers of the Code of Business Conduct and Ethics**

Any waiver of this Code for a director or an executive officer of the Company may be made only by the Board, following a recommendation by the Corporate Governance Committee, and must be promptly disclosed to the Company's shareholders.

9. **Failure to Comply; Compliance Procedures**

Entergy Representatives, who are employees, should read this Code in conjunction with the Code of Entegrity and any other applicable Entergy codes or policies. A failure by any Entergy Representative to comply with the laws or regulations governing the Company's business, this Code or any other applicable Company policy or requirement may result in disciplinary action and, if warranted, legal proceedings.

No code or policy can anticipate every situation that may arise. Accordingly, this Code is intended to serve as a source of guiding principles for directors. Directors are encouraged to bring questions about particular circumstances that may implicate one or more of the provisions of this Code to the attention of the Chair of the Corporate Governance Committee, who may consult with inside or outside legal counsel as appropriate. Directors should communicate any suspected violations of this Code, including any unethical behavior or violation of law or governmental rule or regulation, promptly to the Lead Director, the Chairman or the Chair of the Corporate Governance Committee. The Corporate Governance Committee, or a person or persons designated by that Committee, will investigate violations and, where necessary, make recommendations to the Board. Entergy Representatives, who are employees, should report

any known, suspected or potential violations of any such laws or regulations or this Code according to the procedures provided in the Company's Code of Entegrity and other applicable Company policies.

This Code does not create any employment contract or any other contractual obligation between an employee and the Company. This Code is not intended to, and shall not be construed to, interfere with or restrict any rights provided by law, including those afforded under the National Labor Relations Act. Nothing in this policy will be construed to limit an employee's right to speak with others regarding wages and other terms and conditions of employment or to exercise any other legally protected right. Employees should read this Code in conjunction with the Company's Code of Entegrity and any other applicable code of conduct of the Company.

December 4, 2020

Exhibit 21

Subsidiaries of Entergy Corporation as of December 31, 2020

Certain subsidiaries, which if considered in the aggregate as a single subsidiary would not constitute a significant subsidiary as of December 31, 2020, have been omitted.

Name of Company		State of Incorporation
Entergy Utility Affiliates Holdings, Inc.		Texas
Entergy Utility Affiliates, LLC		Texas
Entergy Utility Assets Holdings, Inc.		Texas
Entergy Utility Assets, LLC		Texas
Entergy Utility Group, Inc.		Texas
Entergy Utility Enterprises, Inc.		Texas
Entergy Utility Property, Inc.		Texas
Entergy Utility Holding Company, LLC		Texas
Entergy Holdings Company LLC		Delaware
Entergy Finance Company LLC		Delaware
Entergy Arkansas, LLC		Texas
Arkansas Power & Light Company, LLC		Arkansas
Entergy Arkansas Restoration Funding, LLC		Delaware
Entergy Louisiana, LLC		Texas
Prudential Oil & Gas L.L.C. (57.5%)		Texas
Gulf States Utilities Company		Texas
Varibus L.L.C.		Texas
Southern Gulf Railway LLC (57.5%)		Texas
Entergy Louisiana Investment Recovery Funding I, L.L.C.		Louisiana
Louisiana Power & Light Company, LLC		Delaware
Entergy New Orleans, LLC		Texas
Entergy New Orleans Storm Recovery Funding I, L.L.C.		Louisiana
New Orleans Public Service Inc.		Louisiana
Entergy Mississippi, LLC		Texas
Jackson Gas Light Company		Mississippi
Entergy Power & Light Company		Mississippi
The Light, Heat and Water Company of Jackson, Mississippi		Mississippi
Mississippi Power & Light Company		Mississippi
Entergy Texas, Inc.		Texas
Entergy Texas Restoration Funding, LLC		Delaware
Entergy Gulf States Reconstruction Funding I, LLC		Delaware
Prudential Oil & Gas L.L.C. (42.5%)		Texas
Southern Gulf Railway LLC (42.5%)		Texas
System Energy Resources, Inc.		Arkansas
Entergy Services Holding, Inc.		Delaware
Entergy Services, LLC		Louisiana
Entergy Account Services, LLC		Delaware
Entergy Operations, Inc.		Delaware
Entergy Enterprises, Inc.		Louisiana
Entergy Nuclear, Inc.		Delaware
Entergy Finance Holding, Inc.		Arkansas
Entergy Nuclear Holding Company # 1		Delaware

Entergy Nuclear New York Investment Company, LLC		Delaware
Entergy Nuclear Indian Point 3, LLC		Delaware
Entergy Northeast Holdings, LLC		Delaware
Entergy Power Marketing Assets, LLC		Delaware
Entergy Nuclear Power Marketing, LLC		Delaware
Entergy Nuclear Holding Company # 2		Delaware
Entergy Nuclear Operations, Inc.		Delaware
Entergy Nuclear Fuels Company		Delaware
Entergy Nuclear Holding Company, LLC		Delaware
Entergy Nuclear Midwest Investment Company, LLC		Delaware
Entergy Nuclear Palisades, LLC		Delaware
Entergy Nuclear Holding Company # 3, LLC		Delaware
Entergy Nuclear Indian Point 2, LLC		Delaware
Entergy Nuclear Nebraska, LLC		Delaware
Entergy Assets Management Company, LLC		Delaware
Entergy Assets Management Operations, LLC		Delaware
TLG Services, LLC		Delaware
Entergy Power Marketing Holding I, Inc.		Delaware
Entergy Power Marketing Properties, LLC		Delaware
Entergy Power Marketing Holding II, Inc.		Delaware
Entergy Amalgamated Competitive Holdings, LLC		Delaware
Entergy Power Operations U.S. Inc.		Delaware
Entergy Power Gas Operations, LLC		Delaware
Entergy Power Ventures, LLC		Delaware
EWO Marketing, LLC		Delaware
EAM Nelson Holding, LLC		Delaware
Entergy Power Investment Holding, Inc.		Delaware
Entergy Asset Management, Inc.		Delaware
Entergy Power, LLC		Delaware

Exhibit 24

February 26, 2021

TO: Kimberly A. Fontan
Daniel T. Falstad

Re: Power of Attorney - Form 10-K

Entergy Corporation, referred to herein as the Company, will file with the Securities and Exchange Commission its Annual Report on Form 10-K for the year ended December 31, 2020, pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

The Company and the undersigned persons, in their respective capacities as directors and/or officers of the Company, as specified in Attachment I, do each hereby make, constitute and appoint Kimberly A. Fontan and Daniel T. Falstad and each of them, their true and lawful Attorneys (with full power of substitution) for each of the undersigned and in his or her name, place and stead to sign and cause to be filed with the Securities and Exchange Commission the aforementioned Annual Report on Form 10-K and any amendments thereto.

Yours very truly,

ENTERGY CORPORATION

By: /s/ Leo P. Denault
Leo P. Denault
Director, Chairman of the Board
and Chief Executive Officer

/s/ John R. Burbank
John R. Burbank
Director

/s/ Patrick J. Condon
Patrick J. Condon
Director

/s/ Leo P. Denault
Leo P. Denault
Director, Chairman of the Board and Chief Executive Officer

/s/ Kirkland H. Donald
Kirkland H. Donald
Director

/s/ Brian W. Ellis
Brian W. Ellis
Director

/s/ Philip L. Frederickson
Philip L. Frederickson
Director

/s/ Alexis M. Herman
Alexis M. Herman
Director

/s/ M. Elise Hyland
M. Elise Hyland
Director

/s/ Stuart L. Levenick
Stuart L. Levenick
Director

/s/ Blanche L. Lincoln
Blanche L. Lincoln
Director

/s/ Karen A. Puckett
Karen A. Puckett
Director

/s/ Andrew S. Marsh
Andrew S. Marsh
Executive Vice President and Chief Financial Officer

Entergy Corporation

Chairman of the Board and Chief Executive Officer - Leo P. Denault (principal executive officer)
Executive Vice President and Chief Financial Officer - Andrew S. Marsh (principal financial officer)

Directors - John R. Burbank, Patrick J. Condon, Leo P. Denault, Kirkland H. Donald, Brian W. Ellis, Philip L. Frederickson, Alexis M. Herman, M. Elise Hyland, Stuart L. Levenick, Blanche L. Lincoln and Karen A. Puckett

February 26, 2021

TO: Kimberly A. Fontan
Daniel T. Falstad

Re: Power of Attorney - Form 10-K

Entergy Arkansas, LLC., Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC, Entergy Texas, Inc. and System Energy Resources, Inc. (collectively referred to herein as the Companies) will each file with the Securities and Exchange Commission its Annual Report on Form 10-K for the year ended December 31, 2020, pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

The Companies and the undersigned persons, in their respective capacities as directors and/or officers of the Companies, as specified in Attachment I, do each hereby make, constitute and appoint Kimberly A. Fontan and Daniel T. Falstad and each of them, their true and lawful Attorneys (with full power of substitution) for each of the undersigned and in his or her name, place and stead to sign and cause to be filed with the Securities and Exchange Commission the aforementioned Annual Report on Form 10-K and any amendments thereto.

Yours very truly,

ENTERGY ARKANSAS, LLC
ENTERGY LOUISIANA, LLC
ENTERGY MISSISSIPPI, LLC
ENTERGY NEW ORLEANS, LLC
ENTERGY TEXAS, INC.
SYSTEM ENERGY RESOURCES, INC.

/s/ A. Christopher Bakken, III
A. Christopher Bakken, III
Director of System Energy Resources, Inc.

/s/ Steven C. McNeal
Steven C. McNeal
Director of System Energy Resources, Inc.

/s/ Haley R. Fisackerly
Haley R. Fisackerly
Director, Chairman of the Board, President and Chief Executive Officer of Entergy Mississippi, LLC

/s/ Sallie T. Rainer
Sallie T. Rainer
Director, Chair of the Board of Directors, President and Chief Executive Officer of Entergy Texas, Inc.

/s/ Paul D. Hinnenkamp
Paul D. Hinnenkamp
Director of Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC and Entergy Texas, Inc.

/s/ David D. Ellis
David D. Ellis
Director, Chairman of the Board, President and Chief Executive Officer of Entergy New Orleans, LLC

/s/ Andrew S. Marsh
Andrew S. Marsh
Director, Executive Vice President and Chief Financial Officer of Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC, Entergy Texas, Inc. and System Energy Resources, Inc.

/s/ Laura R. Landreaux
Laura R. Landreaux
Director, Chair of the Board of Directors, President and Chief Executive Officer of Entergy Arkansas, LLC

/s/ Phillip R. May, Jr.
Phillip R. May, Jr.
Director, Chairman of the Board, President and Chief Executive Officer of Entergy Louisiana, LLC

/s/ Roderick K. West
Roderick K. West
Director of Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC and Entergy Texas, Inc.

Director, Chairman of the Board, President and Chief Executive Officer of System Energy Resources, Inc.

Entergy Arkansas, LLC

Chair of the Board of Directors, President and Chief Executive Officer - Laura R. Landreaux (principal executive officer)
Executive Vice President and Chief Financial Officer - Andrew S. Marsh (principal financial officer)

Directors - Paul D. Hinnenkamp, Laura R. Landreaux, Andrew S. Marsh and Roderick K. West

Entergy Louisiana, LLC

Chairman of the Board, President and Chief Executive Officer - Phillip R. May, Jr. (principal executive officer)
Executive Vice President and Chief Financial Officer - Andrew S. Marsh (principal financial officer)

Directors - Paul D. Hinnenkamp, Andrew S. Marsh, Phillip R. May, Jr. and Roderick K. West

Entergy Mississippi, LLC

Chairman of the Board, President and Chief Executive Officer - Haley R. Fisackerly (principal executive officer)
Executive Vice President and Chief Financial Officer - Andrew S. Marsh (principal financial officer)

Directors - Haley R. Fisackerly, Paul D. Hinnenkamp, Andrew S. Marsh and Roderick K. West

Entergy New Orleans, LLC

Chairman of the Board, President and Chief Executive Officer - David D. Ellis (principal executive officer)
Executive Vice President and Chief Financial Officer - Andrew S. Marsh (principal financial officer)

Directors - David D. Ellis, Paul D. Hinnenkamp, Andrew S. Marsh and Roderick K. West

Entergy Texas, Inc.

Chair of the Board of Directors, President and Chief Executive Officer - Sallie T. Rainer (principal executive officer)
Executive Vice President and Chief Financial Officer - Andrew S. Marsh (principal financial officer)

Directors - Paul D. Hinnenkamp, Andrew S. Marsh, Sallie T. Rainer and Roderick K. West

System Energy Resources, Inc.

Chairman of the Board, President and Chief Executive Officer - Roderick K. West (principal executive officer)
Executive Vice President and Chief Financial Officer - Andrew S. Marsh (principal financial officer)

Directors - A. Christopher Bakken, III, Andrew S. Marsh, Steven C. McNeal and Roderick K. West

Exhibit 31(a)

CERTIFICATIONS

I, Leo P. Denault, certify that:

1. I have reviewed this annual report on Form 10-K of Entergy Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Leo P. Denault

Leo P. Denault
Chairman of the Board and Chief Executive Officer
of Entergy Corporation

Date: February 26, 2021

Exhibit 31(b)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this annual report on Form 10-K of Entergy Corporation;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and
Chief Financial Officer of Entergy Corporation

Date: February 26, 2021

Exhibit 31(c)

CERTIFICATIONS

I, Laura R. Landreaux, certify that:

1. I have reviewed this annual report on Form 10-K of Entergy Arkansas, LLC;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Laura R. Landreaux

Laura R. Landreaux
Chair of the Board, President, and
Chief Executive Officer of Entergy Arkansas, LLC

Date: February 26, 2021

Exhibit 31(d)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this annual report on Form 10-K of Entergy Arkansas, LLC;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Arkansas, LLC

Date: February 26, 2021

Exhibit 31(e)

CERTIFICATIONS

I, Phillip R. May, Jr., certify that:

1. I have reviewed this annual report on Form 10-K of Entergy Louisiana, LLC;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Phillip R. May, Jr.

Phillip R. May, Jr.
Chairman of the Board, President, and Chief Executive Officer of Entergy Louisiana, LLC

Date: February 26, 2021

Exhibit 31(f)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this annual report on Form 10-K of Entergy Louisiana, LLC;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Louisiana, LLC

Date: February 26, 2021

Exhibit 31(g)

CERTIFICATIONS

I, Haley R. Fisackerly, certify that:

1. I have reviewed this annual report on Form 10-K of Entergy Mississippi, LLC;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Haley R. Fisackerly

Haley R. Fisackerly
Chairman of the Board, President, and
Chief Executive Officer
of Entergy Mississippi, LLC

Date:February 26, 2021

Exhibit 31(h)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this annual report on Form 10-K of Entergy Mississippi, LLC;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Mississippi, LLC

Date: February 26, 2021

Exhibit 31(i)

CERTIFICATIONS

I, David D. Ellis, certify that:

1. I have reviewed this annual report on Form 10-K of Entergy New Orleans, LLC;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ David D. Ellis

David D. Ellis
Chairman of the Board, President, and
Chief Executive Officer of Entergy New Orleans, LLC

Date: February 26, 2021

Exhibit 31(j)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this annual report on Form 10-K of Entergy New Orleans, LLC;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer of
Entergy New Orleans, LLC

Date: February 26, 2021

Exhibit 31(k)

CERTIFICATIONS

I, Sallie T. Rainer, certify that:

1. I have reviewed this annual report on Form 10-K of Entergy Texas, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Sallie T. Rainer

Sallie T. Rainer
Chair of the Board, President, and
Chief Executive Officer of Entergy Texas, Inc.

Date: February 26, 2021

Exhibit 31(l)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this annual report on Form 10-K of Entergy Texas, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Texas, Inc.

Date: February 26, 2021

Exhibit 31(m)

CERTIFICATIONS

I, Roderick K. West, certify that:

1. I have reviewed this annual report on Form 10-K of System Energy Resources, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Roderick K. West

Roderick K. West
Chairman of the Board, President, and Chief Executive
Officer of System Energy Resources, Inc.

Date: February 26, 2021

Exhibit 31(n)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this annual report on Form 10-K of System Energy Resources, Inc.;

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

   a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

   b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;

   c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

   d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

   a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

   b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of System Energy Resources, Inc.

Date: February 26, 2021

Exhibit 32(a)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Leo P. Denault, Chairman of the Board and Chief Executive Officer of Entergy Corporation (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Leo P. Denault

Leo P. Denault
Chairman of the Board and
Chief Executive Officer
of Entergy Corporation

Date: February 26, 2021

Exhibit 32(b)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy Corporation (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and
Chief Financial Officer of Entergy Corporation

Date: February 26, 2021

Exhibit 32(c)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Laura R. Landreaux, Chair of the Board, President, and Chief Executive Officer of Entergy Arkansas, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Laura R. Landreaux

Laura R. Landreaux
Chair of the Board, President, and
Chief Executive Officer of Entergy Arkansas, LLC

Date: February 26, 2021

Exhibit 32(d)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy Arkansas, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Arkansas, LLC

Date: February 26, 2021

Exhibit 32(e)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Phillip R. May, Jr., Chairman of the Board, President, and Chief Executive Officer of Entergy Louisiana, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Phillip R. May, Jr.

Phillip R. May, Jr.
Chairman of the Board, President,
and Chief Executive Officer of Entergy Louisiana, LLC

Date: February 26, 2021

Exhibit 32(f)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy Louisiana, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Louisiana, LLC

Date: February 26, 2021

Exhibit 32(g)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Haley R. Fisackerly, Chairman of the Board, President, and Chief Executive Officer of Entergy Mississippi, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Haley R. Fisackerly

Haley R. Fisackerly
Chairman of the Board, President, and Chief Executive
Officer of Entergy Mississippi, LLC

Date: February 26, 2021

Exhibit 32(h)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy Mississippi, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Mississippi, LLC

Date: February 26, 2021

Exhibit 32(i)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, David D. Ellis, Chairman of the Board, President, and Chief Executive Officer of Entergy New Orleans, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ David D. Ellis

David D. Ellis
Chairman of the Board, President, and
Chief Executive Officer of
Entergy New Orleans, LLC

Date: February 26, 2021

Exhibit 32(j)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy New Orleans, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy New Orleans, LLC

Date: February 26, 2021

Exhibit 32(k)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Sallie T. Rainer, Chair of the Board, President, and Chief Executive Officer of Entergy Texas, Inc. (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Sallie T. Rainer

Sallie T. Rainer
Chair of the Board, President, and
Chief Executive Officer
of Entergy Texas, Inc.

Date: February 26, 2021

Exhibit 32(l)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy Texas, Inc. (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Texas, Inc.

Date: February 26, 2021

Exhibit 32(m)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Roderick K. West, Chairman of the Board, President, and Chief Executive Officer of System Energy Resources, Inc. (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Roderick K. West

Roderick K. West
Chairman of the Board, President, and Chief Executive
Officer of System Energy Resources, Inc.

Date: February 26, 2021

Exhibit 32(n)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of System Energy Resources, Inc. (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Annual Report on Form 10-K of the Company for the year ended December 31, 2020 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of System Energy Resources, Inc.

Date: February 26, 2021

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM 10-Q

(Mark One)

☑ **QUARTERLY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the quarterly period ended March 31, 2021

OR

☐ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the transition period from _____ to _____

Commission File Number	Registrant, State of Incorporation or Organization, Address of Principal Executive Offices, Telephone Number, and IRS Employer Identification No.	Commission File Number	Registrant, State of Incorporation or Organization, Address of Principal Executive Offices, Telephone Number, and IRS Employer Identification No.
1-11299	ENTERGY CORPORATION (a Delaware corporation) 639 Loyola Avenue New Orleans, Louisiana 70113 Telephone (504) 576-4000 72-1229752	1-35747	ENTERGY NEW ORLEANS, LLC (a Texas limited liability company) 1600 Perdido Street New Orleans, Louisiana 70112 Telephone (504) 670-3700 82-2212934
1-10764	ENTERGY ARKANSAS, LLC (a Texas limited liability company) 425 West Capitol Avenue Little Rock, Arkansas 72201 Telephone (501) 377-4000 83-1918668	1-34360	ENTERGY TEXAS, INC. (a Texas corporation) 10055 Grogans Mill Road The Woodlands, Texas 77380 Telephone (409) 981-2000 61-1435798
1-32718	ENTERGY LOUISIANA, LLC (a Texas limited liability company) 4809 Jefferson Highway Jefferson, Louisiana 70121 Telephone (504) 576-4000 47-4469646	1-09067	SYSTEM ENERGY RESOURCES, INC. (an Arkansas corporation) 1340 Echelon Parkway Jackson, Mississippi 39213 Telephone (601) 368-5000 72-0752777
1-31508	ENTERGY MISSISSIPPI, LLC (a Texas limited liability company) 308 East Pearl Street Jackson, Mississippi 39201 Telephone (601) 368-5000 83-1950019		

Table of Contents

Securities registered pursuant to Section 12(b) of the Act:

Registrant	Title of Class	Trading Symbol	Name of Each Exchange on Which Registered
Entergy Corporation	Common Stock, $0.01 Par Value	ETR	New York Stock Exchange
	Common Stock, $0.01 Par Value	ETR	NYSE Chicago, Inc.
Entergy Arkansas, LLC	Mortgage Bonds, 4.875% Series due September 2066	EAI	New York Stock Exchange
Entergy Louisiana, LLC	Mortgage Bonds, 4.875% Series due September 2066	ELC	New York Stock Exchange
Entergy Mississippi, LLC	Mortgage Bonds, 4.90% Series due October 2066	EMP	New York Stock Exchange
Entergy New Orleans, LLC	Mortgage Bonds, 5.0% Series due December 2052	ENJ	New York Stock Exchange
	Mortgage Bonds, 5.50% Series due April 2066	ENO	New York Stock Exchange
Entergy Texas, Inc.	5.375% Series A Preferred Stock, Cumulative, No Par Value (Liquidation Value $25 Per Share)	ETI/PR	New York Stock Exchange

Indicate by check mark whether the registrants (1) have filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrants were required to file such reports), and (2) have been subject to such filing requirements for the past 90 days.
Yes ☑ No ☐

Indicate by check mark whether the registrants have submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrants were required to submit such files). Yes ☑ No ☐

Indicate by check mark whether each registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company, or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company," and "emerging growth company" in Rule 12b-2 of the Securities Exchange Act of 1934.

	Large accelerated filer	Accelerated filer	Non-accelerated filer	Smaller reporting company	Emerging growth company
Entergy Corporation	ü				
Entergy Arkansas, LLC			ü		
Entergy Louisiana, LLC			ü		
Entergy Mississippi, LLC			ü		
Entergy New Orleans, LLC			ü		
Entergy Texas, Inc.			ü		
System Energy Resources, Inc.			ü		

If an emerging growth company, indicate by check mark if the registrants have elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 13(a) of the Exchange Act. ☐

Indicate by check mark whether the registrants are shell companies (as defined in Rule 12b-2 of the Exchange Act). Yes ☐ No ☑

Common Stock Outstanding		Outstanding at April 30, 2021
Entergy Corporation	($0.01 par value)	200,659,948

Entergy Corporation, Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC, Entergy Texas, Inc., and System Energy Resources, Inc. separately file this combined Quarterly Report on Form 10-Q. Information contained herein relating to any individual company is filed by such company on its own behalf. Each company reports herein only as to itself and makes no other representations whatsoever as to any other company. This combined Quarterly Report on Form 10-Q supplements and updates the Annual Report on Form 10-K for the calendar year ended December 31, 2020, filed by the individual registrants with the SEC, and should be read in conjunction therewith.

TABLE OF CONTENTS

	Page Number
Forward-looking Information	iii
Definitions	vi
Part I. Financial Information	
Entergy Corporation and Subsidiaries	
Management's Financial Discussion and Analysis	1
Consolidated Income Statements	16
Consolidated Statements of Comprehensive Income	17
Consolidated Statements of Cash Flows	18
Consolidated Balance Sheets	20
Consolidated Statements of Changes in Equity	22
Notes to Financial Statements	
Note 1. Commitments and Contingencies	23
Note 2. Rate and Regulatory Matters	24
Note 3. Equity	33
Note 4. Revolving Credit Facilities, Lines of Credit, Short-term Borrowings, and Long-term Debt	36
Note 5. Stock-based Compensation	41
Note 6. Retirement and Other Postretirement Benefits	42
Note 7. Business Segment Information	46
Note 8. Risk Management and Fair Values	47
Note 9. Decommissioning Trust Funds	65
Note 10. Income Taxes	70
Note 11. Property, Plant, and Equipment	71
Note 12. Variable Interest Entities	71
Note 13. Revenue	72
Item 3. Quantitative and Qualitative Disclosures About Market Risk	75
Item 4. Controls and Procedures	75
Entergy Arkansas, LLC and Subsidiaries	
Management's Financial Discussion and Analysis	76
Consolidated Income Statements	83
Consolidated Statements of Cash Flows	85
Consolidated Balance Sheets	86
Consolidated Statements of Changes in Member's Equity	88
Entergy Louisiana, LLC and Subsidiaries	
Management's Financial Discussion and Analysis	89
Consolidated Income Statements	99

TABLE OF CONTENTS

	Page Number
Consolidated Statements of Comprehensive Income	100
Consolidated Statements of Cash Flows	101
Consolidated Balance Sheets	102
Consolidated Statements of Changes in Equity	104
Entergy Mississippi, LLC	
Management's Financial Discussion and Analysis	105
Income Statements	111
Statements of Cash Flows	113
Balance Sheets	114
Statements of Changes in Member's Equity	116
Entergy New Orleans, LLC and Subsidiaries	
Management's Financial Discussion and Analysis	117
Consolidated Income Statements	123
Consolidated Statements of Cash Flows	125
Consolidated Balance Sheets	126
Consolidated Statements of Changes in Member's Equity	128
Entergy Texas, Inc. and Subsidiaries	
Management's Financial Discussion and Analysis	129
Consolidated Income Statements	137
Consolidated Statements of Cash Flows	139
Consolidated Balance Sheets	140
Consolidated Statements of Changes in Equity	142
System Energy Resources, Inc.	
Management's Financial Discussion and Analysis	143
Income Statements	149
Statements of Cash Flows	151
Balance Sheets	152
Statements of Changes in Common Equity	154
Part II. Other Information	
Item 1. Legal Proceedings	155
Item 1A. Risk Factors	155
Item 2. Unregistered Sales of Equity Securities and Use of Proceeds	155
Item 5. Other Information	156
Item 6. Exhibits	158
Signature	161

FORWARD-LOOKING INFORMATION

In this combined report and from time to time, Entergy Corporation and the Registrant Subsidiaries each makes statements as a registrant concerning its expectations, beliefs, plans, objectives, goals, projections, strategies, and future events or performance. Such statements are "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. Words such as "may," "will," "could," "project," "believe," "anticipate," "intend," "expect," "estimate," "continue," "potential," "plan," "predict," "forecast," and other similar words or expressions are intended to identify forward-looking statements but are not the only means to identify these statements. Although each of these registrants believes that these forward-looking statements and the underlying assumptions are reasonable, it cannot provide assurance that they will prove correct. Any forward-looking statement is based on information current as of the date of this combined report and speaks only as of the date on which such statement is made. Except to the extent required by the federal securities laws, these registrants undertake no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events, or otherwise.

Forward-looking statements involve a number of risks and uncertainties. There are factors that could cause actual results to differ materially from those expressed or implied in the forward-looking statements, including those factors discussed or incorporated by reference in (a) Item 1A. Risk Factors in the Form 10-K and in this report, (b) Management's Financial Discussion and Analysis in the Form 10-K and in this report, and (c) the following factors (in addition to others described elsewhere in this combined report and in subsequent securities filings):

- resolution of pending and future rate cases and related litigation, formula rate proceedings and related negotiations, including various performance-based rate discussions, Entergy's utility supply plan, and recovery of fuel and purchased power costs, as well as delays in cost recovery resulting from these proceedings;
- continuing long-term risks and uncertainties associated with the termination of the System Agreement in 2016, including the potential absence of federal authority to resolve certain issues among the Utility operating companies and their retail regulators;
- regulatory and operating challenges and uncertainties and economic risks associated with the Utility operating companies' participation in MISO, including the benefits of continued MISO participation, the effect of current or projected MISO market rules and market and system conditions in the MISO markets, the allocation of MISO system transmission upgrade costs, the MISO-wide base rate of return on equity allowed or any MISO-related charges and credits required by the FERC, and the effect of planning decisions that MISO makes with respect to future transmission investments by the Utility operating companies;
- changes in utility regulation, including with respect to retail and wholesale competition, the ability to recover net utility assets and other potential stranded costs, and the application of more stringent return on equity criteria, transmission reliability requirements or market power criteria by the FERC or the U.S. Department of Justice;
- changes in the regulation or regulatory oversight of Entergy's nuclear generating facilities and nuclear materials and fuel, including with respect to the planned or actual shutdown and sale of each of the nuclear generating facilities owned or operated by Entergy Wholesale Commodities, and the effects of new or existing safety or environmental concerns regarding nuclear power plants and nuclear fuel;
- resolution of pending or future applications, and related regulatory proceedings and litigation, for license modifications or other authorizations required of nuclear generating facilities and the effect of public and political opposition on these applications, regulatory proceedings, and litigation;
- the performance of and deliverability of power from Entergy's generation resources, including the capacity factors at Entergy's nuclear generating facilities;
- increases in costs and capital expenditures that could result from changing regulatory requirements, emerging operating and industry issues, and the commitment of substantial human and capital resources required for the safe and reliable operation and maintenance of Entergy's nuclear generating facilities;

FORWARD-LOOKING INFORMATION (Continued)

- Entergy's ability to develop and execute on a point of view regarding future prices of electricity, natural gas, and other energy-related commodities;
- prices for power generated by Entergy's merchant generating facilities and the ability to hedge, meet credit support requirements for hedges, sell power forward or otherwise reduce the market price risk associated with those facilities, including the Entergy Wholesale Commodities nuclear plants, especially in light of the planned shutdown and sale of each of these nuclear plants;
- the prices and availability of fuel and power Entergy must purchase for its Utility customers, and Entergy's ability to meet credit support requirements for fuel and power supply contracts;
- volatility and changes in markets for electricity, natural gas, uranium, emissions allowances, and other energy-related commodities, and the effect of those changes on Entergy and its customers;
- changes in law resulting from federal or state energy legislation or legislation subjecting energy derivatives used in hedging and risk management transactions to governmental regulation;
- changes in environmental laws and regulations, agency positions or associated litigation, including requirements for reduced emissions of sulfur dioxide, nitrogen oxide, greenhouse gases, mercury, particulate matter and other regulated air emissions, heat and other regulated discharges to water, requirements for waste management and disposal and for the remediation of contaminated sites, wetlands protection and permitting, and changes in costs of compliance with environmental laws and regulations;
- changes in laws and regulations, agency positions, or associated litigation related to protected species and associated critical habitat designations;
- the effects of changes in federal, state, or local laws and regulations, and other governmental actions or policies, including changes in monetary, fiscal, tax, environmental, trade/tariff, domestic purchase requirements, or energy policies;
- the effects of full or partial shutdowns of the federal government or delays in obtaining government or regulatory actions or decisions;
- uncertainty regarding the establishment of interim or permanent sites for spent nuclear fuel and nuclear waste storage and disposal and the level of spent fuel and nuclear waste disposal fees charged by the U.S. government or other providers related to such sites;
- variations in weather and the occurrence of hurricanes and other storms and disasters, including uncertainties associated with efforts to remediate the effects of hurricanes (including from Hurricane Laura, Hurricane Delta, and Hurricane Zeta), ice storms, or other weather events and the recovery of costs associated with restoration, including accessing funded storm reserves, federal and local cost recovery mechanisms, securitization, and insurance, as well as any related unplanned outages;
- the risk that an incident at any nuclear generation facility in the U.S. could lead to the assessment of significant retrospective assessments and/or retrospective insurance premiums as a result of Entergy's participation in a secondary financial protection system, a utility industry mutual insurance company, and industry self-insurance programs;
- effects of climate change, including the potential for increases in extreme weather events and sea levels or coastal land and wetland loss;
- changes in the quality and availability of water supplies and the related regulation of water use and diversion;
- Entergy's ability to manage its capital projects, including completion of projects timely and within budget and to obtain the anticipated performance or other benefits, and its operation and maintenance costs;
- Entergy's ability to purchase and sell assets at attractive prices and on other attractive terms;
- the economic climate, and particularly economic conditions in Entergy's Utility service area and the northern United States and events and circumstances that could influence economic conditions in those areas, including power prices, and the risk that anticipated load growth may not materialize;
- changes to federal income tax laws and regulations, including continued impact of the Tax Cuts and Jobs Act and its intended and unintended consequences on financial results and future cash flows;
- the effects of Entergy's strategies to reduce tax payments;

FORWARD-LOOKING INFORMATION (Concluded)

- changes in the financial markets and regulatory requirements for the issuance of securities, particularly as they affect access to capital and Entergy's ability to refinance existing securities, execute share repurchase programs, and fund investments and acquisitions;
- actions of rating agencies, including changes in the ratings of debt and preferred stock, changes in general corporate ratings, and changes in the rating agencies' ratings criteria;
- changes in inflation and interest rates;
- the effects of litigation and government investigations or proceedings;
- changes in technology, including (i) Entergy's ability to implement new or emerging technologies, (ii) the impact of changes relating to new, developing, or alternative sources of generation such as distributed energy and energy storage, renewable energy, energy efficiency, demand side management and other measures that reduce load and government policies incentivizing development of the foregoing, and (iii) competition from other companies offering products and services to Entergy's customers based on new or emerging technologies or alternative sources of generation;
- Entergy's ability to effectively formulate and implement plans to reduce its carbon emission rate and aggregate carbon emissions, including its commitment to achieve net-zero carbon emissions by 2050, and the potential impact on its business of attempting to achieve such objectives;
- the effects, including increased security costs, of threatened or actual terrorism, cyber-attacks or data security breaches, natural or man-made electromagnetic pulses that affect transmission or generation infrastructure, accidents, and war or a catastrophic event such as a nuclear accident or a natural gas pipeline explosion;
- the effects of a global event or pandemic, such as the COVID-19 global pandemic, including economic and societal disruptions; volatility in the capital markets (and any related increased cost of capital or any inability to access the capital markets or draw on available bank credit facilities); reduced demand for electricity, particularly from commercial and industrial customers; increased or unrecoverable costs; supply chain, vendor, and contractor disruptions; delays in completion of capital or other construction projects, maintenance, and other operations activities, including prolonged or delayed outages; impacts to Entergy's workforce availability, health, or safety; increased cybersecurity risks as a result of many employees telecommuting; increased late or uncollectible customer payments; regulatory delays; executive orders affecting, or increased regulation of, Entergy's business; changes in credit ratings or outlooks as a result of any of the foregoing; or other adverse impacts on Entergy's ability to execute on its business strategies and initiatives or, more generally, on Entergy's results of operations, financial condition, and liquidity;
- Entergy's ability to attract and retain talented management, directors, and employees with specialized skills;
- Entergy's ability to attract, retain, and manage an appropriately qualified workforce;
- changes in accounting standards and corporate governance;
- declines in the market prices of marketable securities and resulting funding requirements and the effects on benefits costs for Entergy's defined benefit pension and other postretirement benefit plans;
- future wage and employee benefit costs, including changes in discount rates and returns on benefit plan assets;
- changes in decommissioning trust fund values or earnings or in the timing of, requirements for, or cost to decommission Entergy's nuclear plant sites and the implementation of decommissioning of such sites following shutdown;
- the decision to cease merchant power generation at all Entergy Wholesale Commodities nuclear power plants by mid-2022, including the implementation of the planned shutdowns and sales of Indian Point 2, Indian Point 3, and Palisades;
- the effectiveness of Entergy's risk management policies and procedures and the ability and willingness of its counterparties to satisfy their financial and performance commitments;
- the potential for the factors listed herein to lead to the impairment of long-lived assets; and
- Entergy and its subsidiaries' ability to successfully execute on their business strategies, including their ability to complete strategic transactions that Entergy may undertake.

DEFINITIONS

Certain abbreviations or acronyms used in the text and notes are defined below:

Abbreviation or Acronym	Term
ALJ	Administrative Law Judge
ANO 1 and 2	Units 1 and 2 of Arkansas Nuclear One (nuclear), owned by Entergy Arkansas
APSC	Arkansas Public Service Commission
ASU	Accounting Standards Update issued by the FASB
Board	Board of Directors of Entergy Corporation
Cajun	Cajun Electric Power Cooperative, Inc.
capacity factor	Actual plant output divided by maximum potential plant output for the period
City Council	Council of the City of New Orleans, Louisiana
COVID-19	The novel coronavirus disease declared a pandemic by the World Health Organization and the Centers for Disease Control and Prevention in March 2020
D.C. Circuit	U.S. Court of Appeals for the District of Columbia Circuit
DOE	United States Department of Energy
Entergy	Entergy Corporation and its direct and indirect subsidiaries
Entergy Corporation	Entergy Corporation, a Delaware corporation
Entergy Gulf States, Inc.	Predecessor company for financial reporting purposes to Entergy Gulf States Louisiana that included the assets and business operations of both Entergy Gulf States Louisiana and Entergy Texas
Entergy Gulf States Louisiana	Entergy Gulf States Louisiana, L.L.C., a Louisiana limited liability company formally created as part of the jurisdictional separation of Entergy Gulf States, Inc. and the successor company to Entergy Gulf States, Inc. for financial reporting purposes. The term is also used to refer to the Louisiana jurisdictional business of Entergy Gulf States, Inc., as the context requires. Effective October 1, 2015, the business of Entergy Gulf States Louisiana was combined with Entergy Louisiana.
Entergy Louisiana	Entergy Louisiana, LLC, a Texas limited liability company formally created as part of the combination of Entergy Gulf States Louisiana and the company formerly known as Entergy Louisiana, LLC (Old Entergy Louisiana) into a single public utility company and the successor to Old Entergy Louisiana for financial reporting purposes.
Entergy Texas	Entergy Texas, Inc., a Texas corporation formally created as part of the jurisdictional separation of Entergy Gulf States, Inc. The term is also used to refer to the Texas jurisdictional business of Entergy Gulf States, Inc., as the context requires.
Entergy Wholesale Commodities	Entergy's non-utility business segment primarily comprised of the ownership, operation, and decommissioning of nuclear power plants, the ownership of interests in non-nuclear power plants, and the sale of the electric power produced by its operating power plants to wholesale customers
EPA	United States Environmental Protection Agency
FASB	Financial Accounting Standards Board
FERC	Federal Energy Regulatory Commission
Form 10-K	Annual Report on Form 10-K for the calendar year ended December 31, 2020 filed with the SEC by Entergy Corporation and its Registrant Subsidiaries
Grand Gulf	Unit No. 1 of Grand Gulf Nuclear Station (nuclear), 90% owned or leased by System Energy
GWh	Gigawatt-hour(s), which equals one million kilowatt-hours
Independence	Independence Steam Electric Station (coal), owned 16% by Entergy Arkansas, 25% by Entergy Mississippi, and 7% by Entergy Power, LLC

DEFINITIONS (Continued)

Abbreviation or Acronym	Term
Indian Point 2	Unit 2 of Indian Point Energy Center (nuclear), owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment, which ceased power production in April 2020
Indian Point 3	Unit 3 of Indian Point Energy Center (nuclear), owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment, which ceased power production in April 2021
IRS	Internal Revenue Service
ISO	Independent System Operator
kW	Kilowatt, which equals one thousand watts
kWh	Kilowatt-hour(s)
LPSC	Louisiana Public Service Commission
MISO	Midcontinent Independent System Operator, Inc., a regional transmission organization
MMBtu	One million British Thermal Units
MPSC	Mississippi Public Service Commission
MW	Megawatt(s), which equals one thousand kilowatts
MWh	Megawatt-hour(s)
Nelson Unit 6	Unit No. 6 (coal) of the Nelson Steam Electric Generating Station, 70% of which is co-owned by Entergy Louisiana (57.5%) and Entergy Texas (42.5%) and 10.9% of which is owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment
Net debt to net capital ratio	Gross debt less cash and cash equivalents divided by total capitalization less cash and cash equivalents
Net MW in operation	Installed capacity owned and operated
NRC	Nuclear Regulatory Commission
Palisades	Palisades Nuclear Plant (nuclear), owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment
Parent & Other	The portions of Entergy not included in the Utility or Entergy Wholesale Commodities segments, primarily consisting of the activities of the parent company, Entergy Corporation
Pilgrim	Pilgrim Nuclear Power Station (nuclear), previously owned by an Entergy subsidiary in the Entergy Wholesale Commodities business segment, which ceased power production in May 2019 and was sold in August 2019
PPA	Purchased power agreement or power purchase agreement
PUCT	Public Utility Commission of Texas
Registrant Subsidiaries	Entergy Arkansas, LLC, Entergy Louisiana, LLC, Entergy Mississippi, LLC, Entergy New Orleans, LLC, Entergy Texas, Inc., and System Energy Resources, Inc.
River Bend	River Bend Station (nuclear), owned by Entergy Louisiana
SEC	Securities and Exchange Commission
System Agreement	Agreement, effective January 1, 1983, as modified, among the Utility operating companies relating to the sharing of generating capacity and other power resources. The agreement terminated effective August 2016.
System Energy	System Energy Resources, Inc.
TWh	Terawatt-hour(s), which equals one billion kilowatt-hours

DEFINITIONS (Concluded)

Abbreviation or Acronym	Term
Unit Power Sales Agreement	Agreement, dated as of June 10, 1982, as amended and approved by the FERC, among Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and System Energy, relating to the sale of capacity and energy from System Energy's share of Grand Gulf
Utility	Entergy's business segment that generates, transmits, distributes, and sells electric power, with a small amount of natural gas distribution
Utility operating companies	Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas
Waterford 3	Unit No. 3 (nuclear) of the Waterford Steam Electric Station, owned by Entergy Louisiana
weather-adjusted usage	Electric usage excluding the effects of deviations from normal weather
White Bluff	White Bluff Steam Electric Generating Station, 57% owned by Entergy Arkansas

ENTERGY CORPORATION AND SUBSIDIARIES

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

Entergy operates primarily through two business segments: Utility and Entergy Wholesale Commodities.

- The **Utility** business segment includes the generation, transmission, distribution, and sale of electric power in portions of Arkansas, Mississippi, Texas, and Louisiana, including the City of New Orleans; and operation of a small natural gas distribution business.
- The **Entergy Wholesale Commodities** business segment includes the ownership, operation, and decommissioning of nuclear power plants located in the northern United States and the sale of the electric power produced by its operating plants to wholesale customers. Entergy Wholesale Commodities also provides services to other nuclear power plant owners and owns interests in non-nuclear power plants that sell the electric power produced by those plants to wholesale customers. See "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" below and in the Form 10-K for discussion of the operation and planned shutdown and sale of each of the Entergy Wholesale Commodities nuclear power plants.

See Note 7 to the financial statements herein for financial information regarding Entergy's business segments.

The COVID-19 Pandemic

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - The COVID-19 Pandemic**" in the Form 10-K for a discussion of the COVID-19 pandemic and its effects on Entergy's business.

Hurricane Laura, Hurricane Delta, and Hurricane Zeta

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Hurricane Laura, Hurricane Delta, and Hurricane Zeta**" in the Form 10-K for a discussion of Hurricane Laura, Hurricane Delta, and Hurricane Zeta, which caused significant damage to portions of the Utility's service territories in Louisiana, including New Orleans, Texas, and to a lesser extent, in Arkansas and Mississippi. See Note 2 to the financial statements herein for discussion of storm cost recovery filings made by Entergy Louisiana and Entergy Texas in April 2021. Entergy New Orleans expects to initiate its storm cost recovery proceeding in May 2021.

Winter Storm Uri

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - February 2021 Winter Storms**" in the Form 10-K for a discussion of the winter storms and extreme cold temperatures experienced in the United States, including Entergy's service area, in February 2021 (Winter Storm Uri). Fuel and purchased power costs for February 2021 for Entergy were approximately $720 million, including $145 million for Entergy Arkansas, $285 million for Entergy Louisiana, $65 million for Entergy Mississippi, $35 million for Entergy New Orleans, and $185 million for Entergy Texas. This compares to fuel and purchased power costs for February 2020 for Entergy of $245 million, including $40 million for Entergy Arkansas, $95 million for Entergy Louisiana, $35 million for Entergy Mississippi, $25 million for Entergy New Orleans, and $50 million for Entergy Texas. See Note 2 to the financial statements herein for discussion of storm cost recovery filings made by Entergy Louisiana and Entergy Texas in April 2021. See Note 2 to the financial statements herein and in the Form 10-K for discussion of fuel cost recovery at the Utility operating companies.

Results of Operations

First Quarter 2021 Compared to First Quarter 2020

Following are income statement variances for Utility, Entergy Wholesale Commodities, Parent & Other, and Entergy comparing the first quarter 2021 to the first quarter 2020 showing how much the line item increased or (decreased) in comparison to the prior period:

	Utility	Entergy Wholesale Commodities	Parent & Other (a)	Entergy
		(In Thousands)		
2020 Net Income (Loss) Attributable to Entergy Corporation	$319,816	($110,975)	($90,127)	$118,714
Operating revenues	501,987	(84,330)	2	417,659
Fuel, fuel-related expenses, and gas purchased for resale	102,680	1,094	(10)	103,764
Purchased power	155,967	7,143	10	163,120
Other regulatory charges (credits) - net	39,958	—	—	39,958
Other operation and maintenance	36,589	(32,049)	162	4,702
Asset write-offs, impairments, and related charges	—	(1,822)	—	(1,822)
Taxes other than income taxes	(255)	(13,641)	304	(13,592)
Depreciation and amortization	37,052	(22,148)	(95)	14,809
Other income (deductions)	30,046	218,171	6,257	254,474
Interest expense	13,847	(1,106)	(3,013)	9,728
Other expenses	(3,239)	1,718	—	(1,521)
Income taxes	112,683	46,100	(21,647)	137,136
2021 Net Income (Loss) Attributable to Entergy Corporation	$356,567	$37,577	($59,579)	$334,565

(a) Parent & Other includes eliminations, which are primarily intersegment activity.

First quarter 2020 results of operations include losses of $211 million (pre-tax) on Entergy Wholesale Commodities' nuclear decommissioning trust fund investments reflecting the equity market decline in March 2020 associated with the COVID-19 pandemic. See Notes 8 and 9 to the financial statements herein for a discussion of decommissioning trust fund investments.

Operating Revenues

Utility

Following is an analysis of the change in operating revenues comparing the first quarter 2021 to the first quarter 2020:

	Amount
	(In Millions)
2020 operating revenues	$2,095
Fuel, rider, and other revenues that do not significantly affect net income	323
Volume/weather	97
Retail electric price	96
Return of unprotected excess accumulated deferred income taxes to customers	(14)
2021 operating revenues	**$2,597**

The Utility operating companies' results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not affect net income. "Fuel, rider, and other revenues that do not significantly affect net income" includes the revenue variance associated with these items.

The volume/weather variance is primarily due to an increase of 990 GWh, or 4%, in billed electricity usage, including the effect of more favorable weather on residential sales, partially offset by a decrease in industrial usage and decreased demand from mid to small customers. The decrease in industrial usage is primarily due to decreased demand from existing customers in the chemicals and petroleum refining industries as a result of the COVID-19 pandemic and plant shutdowns and operational issues. The decrease in industrial usage is partially offset by an increase in demand from expansion projects, primarily in the transportation, metals, and chemicals industries. See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - The COVID-19 Pandemic**" in the Form 10-K for a discussion of the COVID-19 pandemic.

The retail electric price variance is primarily due to:

- increases in Entergy Louisiana's formula rate plan revenues, including an interim increase effective April 2020 due to the inclusion of the first-year revenue requirement for the Lake Charles Power Station, an increase in the transmission recovery mechanism effective September 2020, and an interim increase effective December 2020 due to the inclusion of the first-year revenue requirement for the Washington Parish Energy Center;
- increases in Entergy Mississippi's formula rate plan rates effective with the first billing cycle of April 2020 and the implementation of a vegetation management rider effective with the April 2020 billing cycle;
- an increase in Entergy New Orleans's formula rate plan revenues resulting from the recovery of New Orleans Power Station costs, effective November 2020; and
- the implementation of the generation cost recovery rider effective January 2021, an increase in the transmission cost recovery factor rider effective March 2021, and an increase in the distribution cost recovery factor rider effective March 2021, each at Entergy Texas.

See Note 2 to the financial statements herein and in the Form 10-K for further discussion of the regulatory proceedings discussed above.

The return of unprotected excess accumulated deferred income taxes to customers resulted from activity at the Utility operating companies in response to the enactment of the Tax Cuts and Jobs Act. The return of unprotected excess accumulated deferred income taxes began in second quarter 2018. In first quarter 2021, $41 million was returned to customers through reductions in operating revenues as compared to $27 million in first quarter 2020. There is no effect on net income as the reductions in operating revenues were offset by reductions in income tax expense. See Note 2 to the financial statements in the Form 10-K for further discussion of regulatory activity regarding the Tax Cuts and Jobs Act.

Billed electric energy sales for Utility for the three months ended March 31, 2021 and 2020 are as follows:

	2021	2020	% Change
	(GWh)		
Residential	9,599	8,126	18
Commercial	6,134	6,244	(2)
Industrial	11,458	11,815	(3)
Governmental	579	595	(3)
Total retail	27,770	26,780	4
Sales for resale	4,299	3,117	38
Total	32,069	29,897	7

See Note 13 to the financial statements herein for additional discussion of operating revenues.

Entergy Wholesale Commodities

Operating revenues for Entergy Wholesale Commodities decreased from $332 million for the first quarter 2020 to $248 million for the first quarter 2021 primarily due to the shutdown of the Indian Point 2 plant in April 2020.

Following are key performance measures for Entergy Wholesale Commodities for the first quarters 2021 and 2020:

	2021	2020
Owned capacity (MW) (a)	2,246	3,274
GWh billed	4,413	6,757
Entergy Wholesale Commodities Nuclear Fleet		
Capacity factor	99%	99%
GWh billed	3,988	6,259
Average energy price ($/MWh)	$51.86	$47.42
Average capacity price ($/kW-month)	$0.23	$1.07

The Entergy Wholesale Commodities nuclear power plants had no refueling outage days in the first quarters 2021 and 2020.

(a) The reduction in owned capacity is due to the shutdown of the 1,028 MW Indian Point 2 plant in April 2020.

Other Income Statement Items

Utility

Other operation and maintenance expenses increased from $566 million for the first quarter 2020 to $602 million for the first quarter 2021 primarily due to:

- lower nuclear insurance refunds of $13 million;
- an increase of $7 million in non-nuclear generation expenses due to higher expenses associated with plants placed in service, including the Lake Charles Power Station, which began commercial operation in March 2020, the New Orleans Power Station which began commercial operation in May 2020, the Washington Parish Energy Center purchased in November 2020, and the Montgomery County Power Station which began commercial operation in January 2021;
- an increase of $7 million in vegetation maintenance costs; and
- an increase of $5 million in nuclear generation expenses primarily due to spending on sanitation and social distancing protocols as a result of COVID-19.

Depreciation and amortization expenses increased primarily due to additions to plant in service, including the Lake Charles Power Station and the Montgomery County Power Station.

Other regulatory charges (credits) - net includes the reversal in 2021 of the remaining $39 million regulatory liability for Entergy Arkansas’s 2019 historical year netting adjustment as part of its 2020 formula rate plan proceeding and $29 million recorded in first quarter 2020, at Entergy Louisiana, due to a settlement with the IRS related to the uncertain tax position regarding the Hurricane Isaac Louisiana Act 55 financing because the savings will be shared with customers. See Note 2 to the financial statements herein and in the Form 10-K for discussion of Entergy Arkansas’s 2020 formula rate plan filing. See Note 3 to the financial statements in the Form 10-K for further discussion of the settlement and savings obligation.

Other income increased primarily due to changes in decommissioning trust fund activity, partially offset by a decrease in the allowance for equity funds used during construction due to higher construction work in progress in 2020, including the Lake Charles Power Station project and the Montgomery County Power Station project.

Interest expense increased primarily due to:

- the issuance by Entergy Louisiana of $350 million of 2.90% Series mortgage bonds in March 2020;
- the issuance by Entergy Louisiana of $1.1 billion of 0.62% Series mortgage bonds, $300 million of 2.90% Series mortgage bonds, and $300 million of 1.60% Series mortgage bonds, each in November 2020;
- the issuance by Entergy Louisiana of $500 million of 2.35% Series mortgage bonds and $500 million of 3.10% Series mortgage bonds, each in March 2021; and
- a decrease in the allowance for borrowed funds used during construction due to higher construction work in progress in 2020, including the Lake Charles Power Station project and the Montgomery County Power Station project.

The increase was partially offset by the repayments by Entergy Louisiana of $200 million of 5.25% Series mortgage bonds and $100 million of 4.70% Series mortgage bonds, each in December 2020.

Entergy Wholesale Commodities

Other operation and maintenance expenses decreased from $131 million for the first quarter 2020 to $99 million for the first quarter 2021 primarily due to:

- a decrease of $28 million primarily resulting from the absence of expenses from the Indian Point 2 plant after it was shut down in April 2020; and
- a decrease of $6 million in severance and retention expenses. Severance and retention expenses were incurred in 2021 and 2020 due to management's strategy to exit the Entergy Wholesale Commodities merchant power business.

See "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" below and in the Form 10-K for a discussion of management's strategy to shut down and sell all of the remaining plants in Entergy Wholesale Commodities' merchant nuclear fleet. See Note 7 to the financial statements herein for further discussion of severance and retention expenses resulting from management's strategy to shut down and sell all of the remaining plants in Entergy Wholesale Commodities' merchant nuclear fleet.

Taxes other than income taxes decreased primarily due to lower payroll taxes and lower ad valorem taxes.

Depreciation and amortization expenses decreased primarily due to:

- the absence of depreciation expense from the Indian Point 2 plant, after it was shut down in April 2020; and
- the effect of recording in 2021 a final judgment to resolve claims in the Palisades damages case against the DOE related to spent nuclear fuel storage costs. The damages awarded included $9 million of spent nuclear fuel storage costs previously recorded as depreciation expense. See Note 1 to the financial statements herein for discussion of the spent nuclear fuel litigation.

Other income increased primarily due to losses on decommissioning trust fund investments in the first quarter 2020. These losses reflected the equity market decline in March 2020 associated with the COVID-19 pandemic. See Notes 8 and 9 to the financial statements herein for a discussion of decommissioning trust fund investments.

Income Taxes

The effective income tax rate was 16.3% for the first quarter 2021. The difference in the effective income tax rate for the first quarter 2021 versus the federal statutory rate of 21% was primarily due to the amortization of excess accumulated deferred income taxes and certain book and tax differences related to utility plant items, offset by state income taxes. See Note 10 to the financial statements herein and Notes 2 and 3 to the financial statements in the Form 10-K for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act.

The effective income tax rate was (136.6%) for the first quarter 2020. The difference in the effective income tax rate for the first quarter 2020 versus the federal statutory rate of 21% was primarily due to the settlement with the IRS on the treatment of funds received in conjunction with the Louisiana Act 55 financing of Hurricane Isaac storm costs, permanent differences related to income tax deductions for stock-based compensation, amortization of excess accumulated deferred income taxes, certain book and tax differences related to utility plant items, and tax differences related to the allowance for equity funds used during construction, partially offset by state income taxes. See Note 3 to the financial statements in the Form 10-K for discussion of the IRS settlement and the income tax deductions for stock-based compensation. See Note 10 to the financial statements herein and Notes 2 and 3 to the financial statements in the Form 10-K for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act.

Entergy Wholesale Commodities Exit from the Merchant Power Business

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Entergy Wholesale Commodities Exit from the Merchant Power Business**" in the Form 10-K for a discussion of management's strategy to shut down and sell all remaining plants in the Entergy Wholesale Commodities merchant nuclear fleet. Following are updates to that discussion.

Planned Shutdown and Sale of Indian Point 2 and Indian Point 3

As discussed in the Form 10-K, in April 2019, Entergy entered into an agreement to sell, directly or indirectly, 100% of the equity interests in the subsidiaries that own Indian Point 1, Indian Point 2, and Indian Point 3, after Indian Point 3 has been shut down and defueled, to a Holtec subsidiary for decommissioning the plants. The sale will include the transfer of the licenses, spent fuel, decommissioning liabilities, and nuclear decommissioning trusts for the three units.

In November 2019, Entergy and Holtec submitted a license transfer application to the NRC. The NRC issued an order approving the application in November 2020, subject to the NRC's authority to condition, revise, or rescind the approval order based on the resolution of four pending hearing requests. In January 2021 the NRC issued an order denying all four hearing requests challenging the license transfer application. In January 2021, New York State filed a petition for review with the D.C. Circuit asking the court to vacate the NRC's January 2021 order denying the State's hearing request, as well as the NRC's November 2020 order approving the license transfers. In January 2021 the D.C. Circuit issued a scheduling order, setting deadlines for initial procedural filings in March 2021. In March 2021 additional parties also filed petitions for review with the D.C. Circuit seeking review of the same NRC orders. In March 2021 the court consolidated all of the appeals into the same proceeding. The court has yet to issue a scheduling order for briefing.

In November 2019, Entergy and Holtec also submitted a petition to the New York State Public Service Commission (NYPSC) seeking an order from the NYPSC disclaiming jurisdiction or abstaining from review of the transaction or, alternatively, approving the transaction. Closing is also conditioned on obtaining from the New York State Department of Environmental Conservation an agreement related to Holtec's decommissioning plan as being consistent with applicable standards. In April 2021, Entergy and Holtec filed a joint settlement proposal with the NYPSC that resolves all issues among all parties. These issues include financial assurance, site restoration, financial reporting, continued funding for state and local emergency management and response activities, a memorandum of understanding with local taxing jurisdictions, and the dismissal of the federal appeals described in the preceding paragraph. The NYPSC is expected to take action on the joint settlement proposal at its May 13, 2021 meeting.

Indian Point 2 permanently ceased operations on April 30, 2020 and Indian Point 3 permanently ceased operations on April 30, 2021. The transaction is targeted to close in May 2021, following the defueling of Indian Point 3. The Indian Point transaction is expected to result in a $285 million net loss based on the difference between Entergy's adjusted net investment in the subsidiaries at closing and the sale price net of agreed adjustments. The primary variables in the ultimate loss that Entergy will incur are the values of the nuclear decommissioning trusts and the asset retirement obligations at closing, the financial results from plant operations until the closing, and the level of any unrealized deferred tax balances at closing.

Planned Shutdown and Sale of Palisades

As discussed in the Form 10-K, in July 2018, Entergy entered into a purchase and sale agreement to sell 100% of the equity interests in the subsidiary that owns Palisades and the Big Rock Point Site, for $1,000 (subject to adjustment for net liabilities and other amounts) to a Holtec subsidiary. The sale will include the transfer of the nuclear decommissioning trust and obligation for spent fuel management and plant decommissioning.

In December 2020, Entergy and Holtec submitted a license transfer application to the NRC requesting approval to transfer the Palisades and Big Rock Point licenses from Entergy to Holtec. The NRC has indicated that it expects to complete its review of the application by January 2022. In February 2021 several parties filed with the NRC petitions to intervene and requests for hearing challenging the license transfer application. In March 2021, Entergy and Holtec filed answers opposing the petitions to intervene and hearing requests, and the petitioners filed replies. In March 2021 an additional party also filed a petition to intervene and request for hearing. Entergy and Holtec filed an answer to the March 2021 petition in April 2021.

Subject to the conditions discussed in the Form 10-K, the transaction is expected to close by the end of 2022. As of March 31, 2021, Entergy's adjusted net investment in Palisades was $30 million. The primary variables in the ultimate loss or gain that Entergy will incur on the transaction are the values of the nuclear decommissioning trust and the asset retirement obligations at closing, the financial results from plant operations until the closing, and the level of any unrealized deferred tax balances at closing.

Costs Associated with Entergy Wholesale Commodities Strategic Transactions

Entergy expects to incur employee retention and severance expenses associated with management's strategy to exit the Entergy Wholesale Commodities merchant power business of approximately $40 million in 2021, of which $13 million has been incurred as of March 31, 2021, and a total of approximately $15 million in 2022. In addition, Entergy Wholesale Commodities incurred impairment charges of $3 million primarily related to expenditures for capital assets for the three months ended March 31, 2021. These costs were charged to expense as incurred as a result of the impaired value of certain of the Entergy Wholesale Commodities nuclear plants' long-lived assets due to the significantly reduced remaining estimated operating lives associated with management's strategy to exit the Entergy Wholesale Commodities merchant power business.

Liquidity and Capital Resources

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources**" in the Form 10-K for a discussion of Entergy's capital structure, capital expenditure plans and other uses of capital, and sources of capital. Following are updates to that discussion.

Capital Structure and Resources

Entergy's debt to capital ratio is shown in the following table. The increase in the debt to capital ratio for Entergy as of March 31, 2021 is primarily due to the net issuance of debt in 2021.

	March 31, 2021	December 31, 2020
Debt to capital	69.6 %	68.3 %
Effect of excluding securitization bonds	(0.1 %)	(0.2 %)
Debt to capital, excluding securitization bonds (a)	69.5 %	68.1 %
Effect of subtracting cash	(1.5 %)	(1.7 %)
Net debt to net capital, excluding securitization bonds (a)	68.0 %	66.4 %

(a) Calculation excludes the Louisiana, New Orleans, and Texas securitization bonds, which are non-recourse to Entergy Louisiana, Entergy New Orleans, and Entergy Texas, respectively.

As of March 31, 2021, 22.2% of the debt outstanding is at the parent company, Entergy Corporation, 77.3% is at the Utility, and 0.5% is at Entergy Wholesale Commodities. Net debt consists of debt less cash and cash equivalents. Debt consists of notes payable and commercial paper, finance lease obligations, and long-term debt, including the currently maturing portion. Capital consists of debt, common shareholders' equity, and subsidiaries' preferred stock without sinking fund. Net capital consists of capital less cash and cash equivalents. Entergy uses

the debt to capital ratios excluding securitization bonds in analyzing its financial condition and believes they provide useful information to its investors and creditors in evaluating Entergy's financial condition because the securitization bonds are non-recourse to Entergy, as more fully described in Note 5 to the financial statements in the Form 10-K. Entergy also uses the net debt to net capital ratio excluding securitization bonds in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy's financial condition because net debt indicates Entergy's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Entergy Corporation has in place a credit facility that has a borrowing capacity of $3.5 billion and expires in September 2024. The facility includes fronting commitments for the issuance of letters of credit against $20 million of the total borrowing capacity of the credit facility. The commitment fee is currently 0.225% of the undrawn commitment amount. Commitment fees and interest rates on loans under the credit facility can fluctuate depending on the senior unsecured debt ratings of Entergy Corporation. The weighted average interest rate for the three months ended March 31, 2021 was 1.63% on the drawn portion of the facility. Following is a summary of the borrowings outstanding and capacity available under the facility as of March 31, 2021:

Capacity	Borrowings	Letters of Credit	Capacity Available
	(In Millions)		
$3,500	$55	$6	$3,439

A covenant in Entergy Corporation's credit facility requires Entergy to maintain a consolidated debt ratio, as defined, of 65% or less of its total capitalization. The calculation of this debt ratio under Entergy Corporation's credit facility is different than the calculation of the debt to capital ratio above. One such difference is that it excludes the effects, among other things, of certain impairments related to the Entergy Wholesale Commodities nuclear generation assets. Entergy is currently in compliance with the covenant and expects to remain in compliance with this covenant. If Entergy fails to meet this ratio, or if Entergy or one of the Registrant Subsidiaries (except Entergy New Orleans) defaults on other indebtedness or is in bankruptcy or insolvency proceedings, an acceleration of the facility's maturity date may occur. See Note 4 to the financial statements herein for additional discussion of the Entergy Corporation credit facility and discussion of the Registrant Subsidiaries' credit facilities.

Entergy Corporation has a commercial paper program with a Board-approved program limit of up to $2 billion. As of March 31, 2021, Entergy Corporation had approximately $1,028 million of commercial paper outstanding. The weighted-average interest rate for the three months ended March 31, 2021 was 0.34%.

Certain of the Utility operating companies have a total of $72 million in storm reserve escrow accounts at March 31, 2021.

Equity Distribution Program

In January 2021, Entergy entered into an equity distribution sales agreement with several counterparties establishing an at the market equity distribution program, pursuant to which Entergy may offer and sell from time to time shares of its common stock. The sales agreement provides that, in addition to the issuance and sale of shares of Entergy common stock, Entergy may also enter into forward sale agreements for the sale of its common stock. The aggregate number of shares of common stock sold under this sales agreement and under any forward sale agreement may not exceed an aggregate gross sales price of $1 billion. Entergy has not issued any shares or entered into any forward sale agreements under this program.

Capital Expenditure Plans and Other Uses of Capital

See the table and discussion in the Form 10-K under "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources - Capital Expenditure Plans and Other Uses of Capital**," that sets forth the amounts of planned construction and other capital investments by operating segment for 2021 through 2023. Following are updates to that discussion.

Liberty County Solar Facility

In September 2020, Entergy Texas filed an application seeking PUCT approval to amend Entergy Texas's certificate of convenience and necessity to acquire the 100 MW Liberty County Solar Facility and a determination that Entergy Texas's acquisition of the facility through a tax equity partnership is in the public interest. In its preliminary order, the PUCT determined that, in considering Entergy Texas's application, it would not specifically address whether Entergy Texas's use of a tax equity partnership is in the public interest. In March 2021 intervenors and PUCT staff filed testimony, and Entergy Texas filed rebuttal testimony in April 2021. A hearing on the merits was held in April 2021. Post-hearing briefs and reply briefs are due in May 2021. Closing is expected to occur in 2023.

Hardin County Peaking Facility

In April 2020, Entergy Texas and East Texas Electric Cooperative, Inc. filed a joint report and application seeking PUCT approvals related to two transactions: (1) Entergy Texas's acquisition of the Hardin County Peaking Facility from East Texas Electric Cooperative, Inc.; and (2) Entergy Texas's sale of a 7.56% partial interest in the Montgomery County Power Station to East Texas Electric Cooperative, Inc. The two transactions, currently expected to close in June 2021, are interdependent. In October 2020, Entergy Texas filed an unopposed settlement agreement supporting approval of the transactions. Key provisions of the settlement include: Entergy Texas will propose to depreciate its investment in Hardin County Peaking Facility through the end of 2041; Entergy Texas's recovery of its investment in Hardin County Peaking Facility will be capped at approximately $36 million; and Entergy Texas will not seek recovery of an acquisition adjustment, if any, or transaction costs for either transaction. The settlement was approved by the PUCT in April 2021.

Dividends

Declarations of dividends on Entergy's common stock are made at the discretion of the Board. Among other things, the Board evaluates the level of Entergy's common stock dividends based upon earnings per share from the Utility operating segment and the Parent and Other portion of the business, financial strength, and future investment opportunities. At its April 2021 meeting, the Board declared a dividend of $0.95 per share, which is the same quarterly dividend per share that Entergy has paid since the third quarter 2020.

Cash Flow Activity

As shown in Entergy's Consolidated Statements of Cash Flows, cash flows for the three months ended March 31, 2021 and 2020 were as follows:

	2021	2020
	(In Millions)	
Cash and cash equivalents at beginning of period	$1,759	$426
Cash flow provided by (used in):		
Operating activities	(49)	659
Investing activities	(1,513)	(1,045)
Financing activities	1,546	1,424
Net increase (decrease) in cash and cash equivalents	(16)	1,038
Cash and cash equivalents at end of period	$1,743	$1,464

Operating Activities

Entergy's operating activities used $49 million of cash for the three months ended March 31, 2021 compared to providing $659 million of cash for the three months ended March 31, 2020 primarily due to the following activity:

- increased fuel costs as a result of Winter Storm Uri. See "**Winter Storm Uri**" above for discussion of the incremental fuel and purchased power costs incurred. See Note 2 to the financial statements herein and in the Form 10-K for a discussion of fuel and purchased power cost recovery;
- an increase of approximately $200 million in storm spending;
- an increase of $92 million in pension contributions in 2021 as compared to the same period in 2020. See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Critical Accounting Estimates**" in the Form 10-K and Note 6 to the financial statements herein for a discussion of qualified pension and other postretirement benefits funding;
- income tax payments of $9 million in 2021 compared to income tax refunds of $23 million in 2020. Entergy had net income tax payments in 2021 as a result of amended Mississippi state tax returns filed, offset by federal income tax refunds received associated with the completion of the 2014-2015 IRS audit. Entergy had income tax refunds in 2020 as a result of an overpayment on a prior year state income tax return;
- a decrease of $18 million of nuclear insurance refunds; and
- the effect of more favorable weather on billed Utility sales in 2021.

Investing Activities

Net cash flow used in investing activities increased $468 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to:

- an increase of $524 million in distribution construction expenditures primarily due to storm spending in 2021. See **"Hurricane Laura, Hurricane Delta, and Hurricane Zeta"** above for discussion of storm restoration efforts;
- an increase of $138 million in transmission construction expenditures primarily due to storm spending in 2021, partially offset by a lower scope of work on projects performed in 2021 as compared to 2020. See **"Hurricane Laura, Hurricane Delta, and Hurricane Zeta"** above for discussion of storm restoration efforts; and

- a decrease of $46 million in proceeds received from the DOE resulting from litigation regarding spent nuclear fuel storage costs that were previously capitalized. See Note 1 to the financial statements herein and Note 8 to the financial statements in the Form 10-K for discussion of the spent nuclear fuel litigation.

The increase was partially offset by:

- a decrease of $84 million of non-nuclear generation construction expenditures primarily due to higher spending in 2020 on the Montgomery County Power Station and Lake Charles Power Station projects;
- a decrease of $41 million in nuclear construction expenditures primarily due to decreased spending on various projects in 2021;
- a decrease of $37 million in nuclear fuel purchases due to variations from year to year in the timing and pricing of fuel reload requirements, materials and services deliveries, and the timing of cash payments during the nuclear fuel cycle;
- a decrease of $32 million in decommissioning trust fund investment activity;
- a decrease of $26 million in information technology expenditures primarily due to decreased spending on various technology projects; and
- $25 million in plant upgrades for the Choctaw Generating Station in March 2020. See Note 14 to the financial statements in the Form 10-K for further discussion of the Choctaw Generating Station purchase.

Financing Activities

Net cash flow provided by financing activities increased $122 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to long-term debt activity providing approximately $2,330 million of cash in 2021 compared to providing approximately $1,581 million of cash in 2020.

The increase was partially offset by:

- an increase of $595 million in net repayments of commercial paper in 2021 compared to 2020; and
- a decrease of $39 million in treasury stock issuances in 2021 due to a larger amount of previously repurchased Entergy Corporation common stock issued in 2020 to satisfy stock option exercises.

For details of Entergy's commercial paper program and long-term debt, see Note 4 to the financial statements herein and Note 5 to the financial statements in the Form 10-K.

Rate, Cost-recovery, and Other Regulation

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Rate, Cost-recovery, and Other Regulation**" in the Form 10-K for discussions of rate regulation, federal regulation, and related regulatory proceedings.

State and Local Rate Regulation and Fuel-Cost Recovery

See Note 2 to the financial statements herein for updates to the discussion in the Form 10-K regarding these proceedings.

Federal Regulation

See Note 2 to the financial statements herein for updates to the discussion in the Form 10-K regarding federal regulatory proceedings.

Market and Credit Risk Sensitive Instruments

Commodity Price Risk

Power Generation

As a wholesale generator, Entergy Wholesale Commodities' core business is selling energy, measured in MWh, to its customers. Entergy Wholesale Commodities enters into forward contracts with its customers and also sells energy in the day ahead or spot markets. Entergy Wholesale Commodities also sells unforced capacity, which allows load-serving entities to meet specified reserve and related requirements placed on them by the ISOs in their respective areas. Entergy Wholesale Commodities' forward physical power contracts consist of contracts to sell energy only, contracts to sell capacity only, and bundled contracts in which it sells both capacity and energy. While the terminology and payment mechanics vary in these contracts, each of these types of contracts requires Entergy Wholesale Commodities to deliver MWh of energy, make capacity available, or both. In addition to its forward physical power contracts, Entergy Wholesale Commodities may also use a combination of financial contracts, including swaps, collars, and options, to manage forward commodity price risk. The sensitivities may not reflect the total maximum upside potential from higher market prices. The information contained in the following table represents projections at a point in time and will vary over time based on numerous factors, such as future market prices, contracting activities, and generation. Following is a summary of Entergy Wholesale Commodities' current forward capacity and generation contracts as well as total revenue projections based on market prices as of March 31, 2021 (2021 represents the remainder of the year):

Entergy Wholesale Commodities Nuclear Portfolio

	2021	2022
Energy		
Percent of planned generation under contract (a):		
Unit-contingent (b)	98%	99%
Planned generation (TWh) (c) (d)	5.8	2.8
Average revenue per MWh on contracted volumes:		
Expected based on market prices as of March 31, 2021	$56.4	$47.1
Capacity		
Percent of capacity sold forward (e):		
Bundled capacity and energy contracts (f)	86%	98%
Capacity contracts (g)	13%	—%
Total	99%	98%
Planned net MW in operation (average) (d)	1,158	338
Average revenue under contract per kW per month (applies to capacity contracts only)	$0.1	$—
Total Energy and Capacity Revenues (h)		
Expected sold and market total revenue per MWh	$55.8	$46.8
Sensitivity: -/+ $10 per MWh market price change	$55.7-$56.0	$46.7-$47.0

(a) Percent of planned generation output sold under contracts.
(b) Transaction under which power is supplied from a specific generation asset; if the asset is not operating, the seller is generally not liable to the buyer for any damages. Certain unit-contingent sales include a guarantee

of availability. Availability guarantees provide for the payment to the power purchaser of contract damages, if incurred, in the event the seller fails to deliver power as a result of the failure of the specified generation unit to generate power at or above a specified availability threshold. All of Entergy's outstanding guarantees of availability provide for dollar limits on Entergy's maximum liability under such guarantees.

(c) Amount of output expected to be generated by Entergy Wholesale Commodities nuclear resources considering plant operating characteristics.

(d) Assumes the shutdown of Indian Point 3 on April 30, 2021 and planned shutdown of Palisades on May 31, 2022. For a discussion regarding the shutdown of the Indian Point 3 plant and planned shutdown of the Palisades plant, see "**Entergy Wholesale Commodities Exit from the Merchant Power Business**" above.

(e) Percent of planned qualified capacity sold to mitigate price uncertainty under physical or financial transactions.

(f) A contract for the sale of installed capacity and related energy, priced per megawatt-hour sold.

(g) A contract for the sale of an installed capacity product in a regional market.

(h) Excludes non-cash revenue from the amortization of the Palisades below-market purchased power agreement, mark-to-market activity, and service revenues.

Some of the agreements to sell the power produced by Entergy Wholesale Commodities' power plants contain provisions that require an Entergy subsidiary to provide credit support to secure its obligations under the agreements. The Entergy subsidiary is required to provide credit support based upon the difference between the current market prices and contracted power prices in the regions where Entergy Wholesale Commodities sells power. The primary form of credit support to satisfy these requirements is an Entergy Corporation guarantee. Cash and letters of credit are also acceptable forms of credit support. At March 31, 2021, based on power prices at that time, Entergy had liquidity exposure of $51 million under the guarantees in place supporting Entergy Wholesale Commodities transactions and $7 million of posted cash collateral. In the event of a decrease in Entergy Corporation's credit rating to below investment grade, based on power prices as of March 31, 2021, Entergy would have been required to provide approximately $30 million of additional cash or letters of credit under some of the agreements. As of March 31, 2020, the liquidity exposure associated with Entergy Wholesale Commodities assurance requirements, including return of previously posted collateral from counterparties, would increase by $7 million for a $1 per MMBtu increase in gas prices in both the short- and long-term markets.

As of March 31, 2021, substantially all of the credit exposure associated with the planned energy output under contract for Entergy Wholesale Commodities nuclear plants through 2022 is with counterparties or their guarantors that have public investment grade credit ratings.

Nuclear Matters

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – Nuclear Matters**" in the Form 10-K for a discussion of nuclear matters. Following are updates to the discussion in the Form 10-K.

NRC Reactor Oversight Process

As discussed in the Form 10-K, the NRC's Reactor Oversight Process is a program to collect information about plant performance, assess the information for its safety significance, and provide for appropriate licensee and NRC response. The NRC evaluates plant performance by analyzing two distinct inputs: inspection findings resulting from the NRC's inspection program and performance indicators reported by the licensee. The evaluations result in the placement of each plant in one of the NRC's Reactor Oversight Process Action Matrix columns: "licensee response column," or Column 1, "regulatory response column," or Column 2, "degraded cornerstone column," or Column 3, and "multiple/repetitive degraded cornerstone column," or Column 4. Plants in Column 1 are subject to normal NRC inspection activities. Plants in Column 2, Column 3, or Column 4 are subject to progressively increasing levels of inspection by the NRC with, in general, progressively increasing levels of associated costs. Nuclear generating plants owned and operated by Entergy's Utility and Entergy Wholesale Commodities businesses are currently in Column 1, except for Grand Gulf, which is in Column 3.

In March 2021 the NRC placed Grand Gulf in Column 3 based on the incidence of five unplanned plant scrams during calendar year 2020, some of which were related to upgrades made to the plant's turbine control system during the spring 2020 refueling outage. The NRC plans to conduct a supplemental inspection of Grand Gulf in accordance with its inspection procedures for nuclear plants in Column 3.

Critical Accounting Estimates

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Critical Accounting Estimates**" in the Form 10-K for a discussion of the estimates and judgments necessary in Entergy's accounting for nuclear decommissioning costs, utility regulatory accounting, impairment of long-lived assets, taxation and uncertain tax positions, qualified pension and other postretirement benefits, and other contingencies.

New Accounting Pronouncements

See Note 1 to the financial statements in the Form 10-K for discussion of new accounting pronouncements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED INCOME STATEMENTS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands, Except Share Data)	
OPERATING REVENUES		
Electric	$2,538,420	$2,050,638
Natural gas	58,168	43,976
Competitive businesses	248,250	332,565
TOTAL	2,844,838	2,427,179
OPERATING EXPENSES		
Operation and Maintenance:		
Fuel, fuel-related expenses, and gas purchased for resale	501,167	397,403
Purchased power	379,734	216,614
Nuclear refueling outage expenses	43,739	50,218
Other operation and maintenance	706,786	702,084
Asset write-offs, impairments, and related charges	3,273	5,095
Decommissioning	98,642	93,684
Taxes other than income taxes	156,702	170,294
Depreciation and amortization	414,519	399,710
Other regulatory charges (credits) - net	32,279	(7,679)
TOTAL	2,336,841	2,027,423
OPERATING INCOME	507,997	399,756
OTHER INCOME (DEDUCTIONS)		
Allowance for equity funds used during construction	14,577	35,953
Interest and investment income (loss)	143,315	(216,853)
Miscellaneous - net	(60,929)	23,389
TOTAL	96,963	(157,511)
INTEREST EXPENSE		
Interest expense	205,886	205,589
Allowance for borrowed funds used during construction	(6,013)	(15,444)
TOTAL	199,873	190,145
INCOME BEFORE INCOME TAXES	405,087	52,100
Income taxes	65,942	(71,194)
CONSOLIDATED NET INCOME	339,145	123,294
Preferred dividend requirements of subsidiaries	4,580	4,580
NET INCOME ATTRIBUTABLE TO ENTERGY CORPORATION	$334,565	$118,714
Earnings per average common share:		
Basic	$1.67	$0.59
Diluted	$1.66	$0.59
Basic average number of common shares outstanding	200,525,549	199,790,016
Diluted average number of common shares outstanding	201,059,665	200,901,349

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
Net Income	$339,145	$123,294
Other comprehensive income (loss)		
Cash flow hedges net unrealized loss (net of tax benefit of $7,869 and $5,777)	(29,580)	(21,710)
Pension and other postretirement liabilities (net of tax expense of $6,314 and $15,076)	22,967	53,899
Net unrealized investment gain (loss) (net of tax expense (benefit) of ($25,581) and $8,743)	(44,687)	15,744
Other comprehensive income (loss)	(51,300)	47,933
Comprehensive Income	287,845	171,227
Preferred dividend requirements of subsidiaries	4,580	4,580
Comprehensive Income Attributable to Entergy Corporation	$283,265	$166,647

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING ACTIVITIES		
Consolidated net income	$339,145	$123,294
Adjustments to reconcile consolidated net income to net cash flow provided by (used in) operating activities:		
Depreciation, amortization, and decommissioning, including nuclear fuel amortization	580,571	568,596
Deferred income taxes, investment tax credits, and non-current taxes accrued	240,431	(31,405)
Asset write-offs, impairments, and related charges	3,278	4,962
Changes in working capital:		
Receivables	(52,690)	70,357
Fuel inventory	26,878	(15,389)
Accounts payable	(175,651)	(127,727)
Taxes accrued	(231,182)	(44,241)
Interest accrued	(3,778)	(4,791)
Deferred fuel costs	(353,099)	30,560
Other working capital accounts	(43,582)	(21,758)
Changes in provisions for estimated losses	(60,923)	(35,829)
Changes in other regulatory assets	89,910	99,275
Changes in other regulatory liabilities	(14,464)	(450,905)
Changes in pension and other postretirement liabilities	(166,733)	(113,071)
Other	(227,676)	607,132
Net cash flow provided by (used in) operating activities	(49,565)	659,060
INVESTING ACTIVITIES		
Construction/capital expenditures	(1,552,103)	(1,043,608)
Allowance for equity funds used during construction	14,577	35,953
Nuclear fuel purchases	(47,916)	(85,334)
Payment for purchase of assets	—	(24,633)
Changes in securitization account	(1,304)	(70)
Payments to storm reserve escrow account	(10)	(1,557)
Receipts from storm reserve escrow account	44,205	40,589
Decrease in other investments	12,521	2,265
Litigation proceeds for reimbursement of spent nuclear fuel storage costs	15,735	62,162
Proceeds from nuclear decommissioning trust fund sales	3,225,510	687,487
Investment in nuclear decommissioning trust funds	(3,224,487)	(718,741)
Net cash flow used in investing activities	(1,513,272)	(1,045,487)

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
FINANCING ACTIVITIES		
Proceeds from the issuance of:		
Long-term debt	3,676,242	3,195,345
Treasury stock	979	39,964
Retirement of long-term debt	(1,346,172)	(1,614,578)
Changes in credit borrowings and commercial paper - net	(599,860)	(4,911)
Other	10,380	(756)
Dividends paid:		
Common stock	(190,595)	(185,763)
Preferred stock	(4,580)	(4,763)
Net cash flow provided by financing activities	1,546,394	1,424,538
Net increase (decrease) in cash and cash equivalents	(16,443)	1,038,111
Cash and cash equivalents at beginning of period	1,759,099	425,722
Cash and cash equivalents at end of period	$1,742,656	$1,463,833
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid (received) during the period for:		
Interest - net of amount capitalized	$202,451	$203,466
Income taxes	$9,015	($23,063)

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
ASSETS
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$67,574	$128,851
Temporary cash investments	1,675,082	1,630,248
Total cash and cash equivalents	1,742,656	1,759,099
Accounts receivable:		
Customer	883,352	833,478
Allowance for doubtful accounts	(119,027)	(117,794)
Other	158,838	135,208
Accrued unbilled revenues	415,253	434,835
Total accounts receivable	1,338,416	1,285,727
Deferred fuel costs	226,619	4,380
Fuel inventory - at average cost	146,056	172,934
Materials and supplies - at average cost	972,771	962,185
Deferred nuclear refueling outage costs	182,721	179,150
Prepayments and other	179,315	196,424
TOTAL	4,788,554	4,559,899
OTHER PROPERTY AND INVESTMENTS		
Decommissioning trust funds	7,339,088	7,253,215
Non-utility property - at cost (less accumulated depreciation)	355,819	343,328
Other	169,094	214,222
TOTAL	7,864,001	7,810,765
PROPERTY, PLANT, AND EQUIPMENT		
Electric	60,901,229	59,696,443
Natural gas	621,682	610,768
Construction work in progress	1,311,997	2,012,030
Nuclear fuel	591,124	601,281
TOTAL PROPERTY, PLANT, AND EQUIPMENT	63,426,032	62,920,522
Less - accumulated depreciation and amortization	24,403,999	24,067,745
PROPERTY, PLANT, AND EQUIPMENT - NET	39,022,033	38,852,777
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets (includes securitization property of $92,585 as of March 31, 2021 and $119,238 as of December 31, 2020)	5,986,639	6,076,549
Deferred fuel costs	240,555	240,422
Goodwill	377,172	377,172
Accumulated deferred income taxes	56,068	76,289
Other	332,606	245,339
TOTAL	6,993,040	7,015,771
TOTAL ASSETS	$58,667,628	$58,239,212

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
LIABILITIES AND EQUITY
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT LIABILITIES		
Currently maturing long-term debt	$629,019	$1,164,015
Notes payable and commercial paper	1,027,629	1,627,489
Accounts payable	1,697,206	2,739,437
Customer deposits	391,032	401,512
Taxes accrued	209,829	441,011
Interest accrued	198,013	201,791
Deferred fuel costs	22,386	153,113
Pension and other postretirement liabilities	63,752	61,815
Current portion of unprotected excess accumulated deferred income taxes	65,056	63,683
Other	207,984	206,640
TOTAL	4,511,906	7,060,506
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	4,568,106	4,361,772
Accumulated deferred investment tax credits	217,888	212,494
Regulatory liability for income taxes-net	1,465,852	1,521,757
Other regulatory liabilities	2,363,919	2,323,851
Decommissioning and asset retirement cost liabilities	6,528,450	6,469,452
Accumulated provisions	181,912	242,835
Pension and other postretirement liabilities	2,684,343	2,853,013
Long-term debt (includes securitization bonds of $146,881 as of March 31, 2021 and $174,635 as of December 31, 2020)	24,075,456	21,205,761
Other	798,210	807,219
TOTAL	42,884,136	39,998,154
Commitments and Contingencies		
Subsidiaries' preferred stock without sinking fund	219,410	219,410
EQUITY		
Common stock, $.01 par value, authorized 500,000,000 shares; issued 270,035,180 shares in 2021 and 2020	2,700	2,700
Paid-in capital	6,520,052	6,549,923
Retained earnings	10,041,152	9,897,182
Accumulated other comprehensive loss	(500,507)	(449,207)
Less - treasury stock, at cost (69,402,016 shares in 2021 and 69,790,346 shares in 2020)	5,046,221	5,074,456
Total common shareholders' equity	11,017,176	10,926,142
Subsidiaries' preferred stock without sinking fund	35,000	35,000
TOTAL	11,052,176	10,961,142
TOTAL LIABILITIES AND SHAREHOLDERS' EQUITY	$58,667,628	$58,239,212

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

		Common Shareholders' Equity					
	Subsidiaries' Preferred Stock	Common Stock	Treasury Stock	Paid-in Capital	Retained Earnings	Accumulated Other Comprehensive Loss	Total
				(In Thousands)			
Balance at December 31, 2019	$35,000	$2,700	($5,154,150)	$6,564,436	$9,257,609	($446,920)	$10,258,675
Implementation of accounting standards	—	—	—	—	(419)	—	(419)
Balance at January 1, 2020	35,000	2,700	(5,154,150)	6,564,436	9,257,190	(446,920)	10,258,256
Consolidated net income (a)	4,580	—	—	—	118,714	—	123,294
Other comprehensive income	—	—	—	—	—	47,933	47,933
Common stock issuances related to stock plans	—	—	73,580	(53,753)	—	—	19,827
Common stock dividends declared	—	—	—	—	(185,763)	—	(185,763)
Preferred dividend requirements of subsidiaries (a)	(4,580)	—	—	—	—	—	(4,580)
Balance at March 31, 2020	$35,000	$2,700	($5,080,570)	$6,510,683	$9,190,141	($398,987)	$10,258,967
Balance at December 31, 2020	$35,000	$2,700	($5,074,456)	$6,549,923	$9,897,182	($449,207)	$10,961,142
Consolidated net income (a)	4,580	—	—	—	334,565	—	339,145
Other comprehensive loss	—	—	—	—	—	(51,300)	(51,300)
Common stock issuances related to stock plans	—	—	28,235	(29,871)	—	—	(1,636)
Common stock dividends declared	—	—	—	—	(190,595)	—	(190,595)
Preferred dividend requirements of subsidiaries (a)	(4,580)	—	—	—	—	—	(4,580)
Balance at March 31, 2021	$35,000	$2,700	($5,046,221)	$6,520,052	$10,041,152	($500,507)	$11,052,176

(a) Consolidated net income and preferred dividend requirements of subsidiaries for first quarter 2021 and first quarter 2020 each includes $4.1 million of preferred dividends on subsidiaries' preferred stock without sinking fund that is not presented as equity.

ENTERGY CORPORATION AND SUBSIDIARIES

NOTES TO FINANCIAL STATEMENTS
(Unaudited)

NOTE 1. COMMITMENTS AND CONTINGENCIES (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Entergy and the Registrant Subsidiaries are involved in a number of legal, regulatory, and tax proceedings before various courts, regulatory commissions, and governmental agencies in the ordinary course of business. While management is unable to predict with certainty the outcome of such proceedings, management does not believe that the ultimate resolution of these matters will have a material adverse effect on Entergy's results of operations, cash flows, or financial condition, except as otherwise discussed in the Form 10-K or in this report. Entergy discusses regulatory proceedings in Note 2 to the financial statements in the Form 10-K and herein and discusses tax proceedings in Note 3 to the financial statements in the Form 10-K and Note 10 to the financial statements herein.

Vidalia Purchased Power Agreement

See Note 8 to the financial statements in the Form 10-K for information on Entergy Louisiana's Vidalia purchased power agreement.

ANO Damage, Outage, and NRC Reviews

See Note 8 to the financial statements in the Form 10-K for a discussion of the ANO stator incident, subsequent NRC reviews, and the deferral of replacement power costs.

Spent Nuclear Fuel Litigation

See Note 8 to the financial statements in the Form 10-K for information on Entergy's spent nuclear fuel litigation.

In January 2021 the U.S. Court of Federal Claims issued a final judgment in the amount of $23.1 million in favor of Entergy Nuclear Palisades and against the DOE in the second round Palisades damages case. Entergy received payment from the U.S. Treasury in February 2021. The effects of recording the judgment were reductions to plant, other operation and maintenance expense, and taxes other than income taxes. The Palisades damages awarded included $15.7 million related to costs previously capitalized, $7.1 million related to costs previously recorded as other operation and maintenance expenses, and $0.3 million related to costs previously recorded as taxes other than income taxes. Of the $15.7 million previously capitalized, Entergy recorded $9.1 million as a reduction to previously-recorded depreciation expense.

Nuclear Insurance

See Note 8 to the financial statements in the Form 10-K for information on nuclear liability and property insurance associated with Entergy's nuclear power plants.

Non-Nuclear Property Insurance

See Note 8 to the financial statements in the Form 10-K for information on Entergy's non-nuclear property insurance program.

Employment and Labor-related Proceedings

See Note 8 to the financial statements in the Form 10-K for information on Entergy's employment and labor-related proceedings.

Asbestos Litigation (Entergy Arkansas, Entergy Louisiana, Entergy New Orleans, and Entergy Texas)

See Note 8 to the financial statements in the Form 10-K for information regarding asbestos litigation.

Grand Gulf-Related Agreements

See Note 8 to the financial statements in the Form 10-K for information regarding Grand Gulf-related agreements.

NOTE 2. RATE AND REGULATORY MATTERS (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Regulatory Assets and Regulatory Liabilities

See Note 2 to the financial statements in the Form 10-K for information regarding regulatory assets and regulatory liabilities in the Utility business presented on the balance sheets of Entergy and the Registrant Subsidiaries. The following are updates to that discussion.

Fuel and purchased power cost recovery

Entergy Arkansas

Energy Cost Recovery Rider

In March 2021, Entergy Arkansas filed its annual redetermination of its energy cost rate pursuant to the energy cost recovery rider, which reflected a decrease from $0.01052 per kWh to $0.00959 per kWh. The redetermined rate calculation also included an adjustment to account for a portion of the increased fuel costs resulting from the February 2021 winter storms. The redetermined rate became effective with the first billing cycle in April 2021 through the normal operation of the tariff.

Entergy Louisiana

In February 2021, Entergy Louisiana incurred extraordinary fuel costs associated with the February 2021 winter storms. To mitigate the effect of these costs on customer bills, in March 2021 Entergy Louisiana requested and the LPSC approved the deferral and recovery of $166 million in incremental fuel costs over 5 months beginning in April 2021. The incremental fuel costs remain subject to review for reasonableness and eligibility for recovery through the fuel adjustment clause mechanism. At its April 2021 meeting, the LPSC authorized its staff to review the prudence of the February 2021 fuel costs incurred by all LPSC jurisdictional utilities.

In March 2021 the LPSC staff provided notice of an audit of Entergy Louisiana's purchased gas adjustment clause filings covering the period January 2018 through December 2020. The audit includes a review of the reasonableness of charges flowed through Entergy Louisiana's purchased gas adjustment clause for that period. No audit report has been filed.

Entergy Texas

In February 2021, Entergy Texas filed an application to implement a fuel refund for a cumulative over-recovery of approximately $75 million that is primarily attributable to settlements received by Entergy Texas from MISO related to Hurricane Laura. Entergy Texas planned to issue the refund over the period of March through August 2021. On February 22, 2021, Entergy Texas filed a motion to abate its fuel refund proceeding to assess how the February 2021 winter storm impacted Entergy Texas's fuel over-recovery position. In March 2021, Entergy Texas withdrew its application to implement the fuel refund. Entergy Texas is continuing to evaluate its fuel balance and will file a subsequent refund or surcharge application consistent with the requirements of the PUCT's rules.

Retail Rate Proceedings

See Note 2 to the financial statements in the Form 10-K for information regarding retail rate proceedings involving the Utility operating companies. The following are updates to that discussion.

Filings with the APSC (Entergy Arkansas)

Retail Rates

2020 Formula Rate Plan Filing

As discussed in the Form 10-K, in December 2020, Entergy Arkansas filed a petition for rehearing of the APSC's decision in the 2020 formula rate plan proceeding regarding the 2019 netting adjustment, and in January 2021 the APSC granted further consideration of Entergy Arkansas's petition. Based on the progress of the proceeding to date, in December 2020, Entergy Arkansas recorded a regulatory liability of $43.5 million to reflect the netting adjustment for 2019, as included in the APSC's December 2020 order, which would be returned to customers in 2021. Entergy Arkansas also requested an extension of the formula rate plan rider for a second five-year term. In March 2021 the Arkansas Governor signed HB1662 into law (Act 404). Act 404 clarified aspects of the original formula rate plan legislation enacted in 2015, including with respect to the extension of a formula rate plan, the methodology for the netting adjustment, and debt and equity levels; it also reaffirmed the customer protections of the original formula rate plan legislation, including the cap on annual formula rate plan rate changes. Pursuant to Act 404, Entergy Arkansas's formula rate plan rider is extended for a second five-year term. Entergy Arkansas filed a compliance tariff in its formula rate plan docket in April 2021 to effectuate the netting provisions of Act 404, which reflected a net change in required formula rate plan rider revenue of $39.8 million, effective with the first billing cycle of May 2021. In April 2021 the APSC issued an order approving the compliance tariff and recognizing the formula rate plan extension. Also in April 2021, Entergy Arkansas filed for approval of modifications to the formula rate plan tariff incorporating the provisions in Act 404, and the APSC approved the tariff modifications in April 2021. Given the APSC general staff's support for the expedited approval of these filings by the APSC, Entergy Arkansas supported an amendment to Act 404 to achieve a reduced return on equity from 9.75% to 9.65% to apply for years applicable to the extension term; that amendment was signed by the Arkansas Governor in April 2021 and is now Act 894. Based on the APSC's order issued in April 2021, in the first quarter 2021 Entergy Arkansas reversed the remaining regulatory liability for the netting adjustment for 2019.

COVID-19 Orders

See the Form 10-K for discussion of APSC orders issued in light of the COVID-19 pandemic. In March 2021 the APSC issued an order confirming the lifting of the moratorium on service disconnects effective in May 2021. As of March 31, 2021, Entergy Arkansas recorded a regulatory asset of $11.4 million for costs associated with the COVID-19 pandemic.

Filings with the LPSC (Entergy Louisiana)

Retail Rates - Electric

2017 Formula Rate Plan Filing

As discussed in the Form 10-K, in May 2019, Entergy Louisiana filed an update to its 2017 formula rate plan evaluation report to include the estimated first-year revenue requirement of $109.5 million associated with the J. Wayne Leonard Power Station (formerly St. Charles Power Station). In February 2021, LPSC staff filed testimony that substantially all the costs to construct J. Wayne Leonard Power Station were prudently incurred and eligible for recovery from customers. LPSC staff further recommended that the LPSC consider monitoring the remaining $3.1 million that was estimated to be incurred for completion of the project in the event the final costs exceed the estimated amounts. Settlement discussions are in progress.

Request for Extension and Modification of Formula Rate Plan

As discussed in the Form 10-K, in May 2020, Entergy Louisiana filed with the LPSC its application for authority to extend its formula rate plan. The parties reached a settlement in April 2021 regarding Entergy Louisiana's proposed FRP extension. Entergy Louisiana and the LPSC staff filed a joint motion asking the LPSC to consider and approve the uncontested settlement at the May 2021 LPSC meeting. Key terms of the settlement include: a three year term (test years 2020, 2021, and 2022) covering a rate-effective period of September 2021 through August 2024; a 9.50% return on equity, with a smaller, 50 basis point deadband above and below (9.0%-10.0%); elimination of sharing if earnings are outside the deadband; a $63 million rate increase for test year 2020 (exclusive of riders); continuation of existing riders (transmission, additional capacity, etc.); addition of a distribution recovery mechanism permitting $225 million per year of distribution investment above a baseline level to be recovered dollar for dollar; modification of the tax mechanism to allow timely rate changes in the event the federal corporate income tax rate is changed from 21%; a cumulative rate increase limit of $70 million (exclusive of riders) for test years 2021 and 2022; and deferral of up to $7 million per year in 2021 and 2022 of expenditures on vegetation management for outside of right of way hazard trees.

COVID-19 Orders

As discussed in the Form 10-K, in April 2020 the LPSC issued an order authorizing utilities to record as a regulatory asset expenses incurred from the suspension of disconnections and collection of late fees imposed by LPSC orders associated with the COVID-19 pandemic. In addition, utilities may seek future recovery, subject to LPSC review and approval, of losses and expenses incurred due to compliance with the LPSC's COVID-19 orders. The suspension of late fees and disconnects for non-payment was extended until the first billing cycle after July 16, 2020. In January 2021, Entergy Louisiana resumed disconnections for customers in all customer classes with past-due balances that have not made payment arrangements. Utilities seeking to recover the regulatory asset must formally petition the LPSC to do so, identifying the direct and indirect costs for which recovery is sought. Any such request is subject to LPSC review and approval. As of March 31, 2021, Entergy Louisiana recorded a regulatory asset of $47.8 million for costs associated with the COVID-19 pandemic.

Filings with the MPSC (Entergy Mississippi)

2021 Formula Rate Plan Filing

In March 2021, Entergy Mississippi submitted its formula rate plan 2021 test year filing and 2020 look-back filing showing Entergy Mississippi's earned return for the historical 2020 calendar year to be below the formula rate plan bandwidth and projected earned return for the 2021 calendar year to be below the formula rate plan bandwidth. The 2020 test year filing shows a $95.4 million rate increase is necessary to reset Entergy Mississippi's earned return on common equity to the specified point of adjustment of 6.69% return on rate base,

within the formula rate plan bandwidth. The change in formula rate plan revenues, however, is capped at 4% of retail revenues, which equates to a revenue change of $44.3 million. The 2021 evaluation report also includes $3.9 million in demand side management costs for which the MPSC approved realignment of recovery from the energy efficiency rider to the formula rate plan. These costs are not subject to the 4% cap and result in a total change in formula rate plan revenues of $48.2 million. The 2020 look-back filing compares actual 2020 results to the approved benchmark return on rate base and reflects the need for a $16.8 million interim increase in formula rate plan revenues. In addition, the 2020 look-back filing includes an interim capacity adjustment true-up for the Choctaw Generating Station, which increases the look-back interim rate adjustment by $1.7 million. These interim rate adjustments total $18.5 million. In accordance with the provisions of the formula rate plan, Entergy Mississippi implemented a $22.1 million interim rate increase, reflecting a cap equal to 2% of 2020 retail revenues, effective with the April 2021 billing cycle, subject to refund, pending a final MPSC order. The $3.9 million of demand side management costs and the Choctaw Generating Station true-up of $1.7 million, which are not subject to the 2% cap of 2020 retail revenues, were included in the April 2021 rate adjustments. A final order is expected in the second quarter 2021, with the resulting final rates, including amounts above the 2% cap of 2020 retail revenues, effective July 2021.

COVID-19 Orders

As discussed in the Form 10-K, in April 2020 the MPSC issued an order authorizing utilities to defer incremental costs and expenses associated with COVID-19 compliance and to seek future recovery through rates of the prudently incurred incremental costs and expenses. In December 2020, Entergy Mississippi resumed disconnections for commercial, industrial, and governmental customers with past-due balances that have not made payment arrangements. In January 2021, Entergy Mississippi resumed disconnecting service for residential customers with past-due balances that have not made payment arrangements. As of March 31, 2021, Entergy Mississippi recorded a regulatory asset of $16.3 million for costs associated with the COVID-19 pandemic.

Filings with the City Council (Entergy New Orleans)

COVID-19 Orders

As discussed in the Form 10-K, in June 2020 the City Council established the City Council Cares Program and directed Entergy New Orleans to use the approximately $7 million refund received from the Entergy Arkansas opportunity sales FERC proceeding, currently being held in escrow, and approximately $15 million of non-securitized storm reserves to fund this program, which was intended to provide temporary bill relief to customers who became unemployed during the COVID-19 pandemic. The program became effective July 1, 2020 and offered qualifying residential customers bill credits of $100 per month for up to four months, for a maximum of $400 in residential customer bill credits. As of March 31, 2021 the program expired and credits of $4.3 million have been applied to customer bills under the City Council Cares Program.

Additionally, as discussed in the Form 10-K, in February 2021 the City Council adopted a resolution suspending residential customer disconnections for non-payment of utility bills and suspending the assessment and accumulation of late fees on residential customers with past-due balances through May 15, 2021. As of March 31, 2021, Entergy New Orleans recorded a regulatory asset of $14.8 million for costs associated with the COVID-19 pandemic.

Filings with the PUCT and Texas Cities (Entergy Texas)

Distribution Cost Recovery Factor (DCRF) Rider

As discussed in the Form 10-K, in October 2020, Entergy Texas filed with the PUCT a request to amend its DCRF rider. The proposed rider is designed to collect from Entergy Texas’s retail customers approximately $26.3 million annually, or $6.8 million in incremental annual revenues beyond Entergy Texas’s currently effective

DCRF rider based on its capital invested in distribution between January 1, 2020 and August 31, 2020. In February 2021 the administrative law judge with the State Office of Administrative Hearings approved Entergy Texas's agreed motion for interim rates, which went into effect in March 2021. In March 2021 the parties filed an unopposed settlement recommending that Entergy Texas be allowed to collect its full requested DCRF revenue requirement and resolving all issues in the proceeding. This case has been remanded to the PUCT for consideration of a final order at a future open meeting.

Transmission Cost Recovery Factor (TCRF) Rider

As discussed in the Form 10-K, in October 2020, Entergy Texas filed with the PUCT a request to amend its TCRF rider. The proposed rider is designed to collect from Entergy Texas's retail customers approximately $51 million annually, or $31.6 million in incremental annual revenues beyond Entergy Texas's currently effective TCRF rider based on its capital invested in transmission between July 1, 2019 and August 31, 2020. A procedural schedule was established with a hearing scheduled in March 2021. In February 2021, Entergy Texas filed an agreed motion to abate the procedural schedule, noting that the parties had reached a settlement in principle, and the administrative law judge granted the motion to abate. In March 2021 the parties filed an unopposed settlement recommending that Entergy Texas be allowed to collect its full requested TCRF revenue requirement with interim rates effective March 2021 and resolving all issues in the proceeding. In March 2021 the administrative law judge granted the motion for interim rates, admitted evidence, and remanded this case to the PUCT for consideration of a final order at a future open meeting.

COVID-19 Orders

As discussed in the Form 10-K, in March 2020 the PUCT authorized electric utilities to record as a regulatory asset expenses resulting from the effects of the COVID-19 pandemic. In future proceedings the PUCT will consider whether each utility's request for recovery of these regulatory assets is reasonable and necessary, the appropriate period of recovery, and any amount of carrying costs thereon. In March 2020 the PUCT ordered a moratorium on disconnections for nonpayment for all customer classes, but, in April 2020, revised the disconnect moratorium to apply only to residential customers. The PUCT allowed the moratorium to expire on June 13, 2020, but on July 17, 2020, the PUCT re-established the disconnect moratorium for residential customers until August 31, 2020. In January 2021, Entergy Texas resumed disconnections for customers with past-due balances that have not made payment arrangements. As of March 31, 2021, Entergy Texas recorded a regulatory asset of $10.7 million for costs associated with the COVID-19 pandemic.

Generation Cost Recovery Rider

As discussed in the Form 10-K, in October 2020, Entergy Texas filed an application to establish a generation cost recovery rider with an initial annual revenue requirement of approximately $91 million to begin recovering a return of and on its capital investment in the Montgomery County Power Station through August 31, 2020. In December 2020, Entergy Texas filed an unopposed settlement supporting a generation cost recovery rider with an annual revenue requirement of approximately $86 million. On January 14, 2021, the PUCT approved the generation cost recovery rider settlement rates on an interim basis and abated the proceeding. In March 2021, Entergy Texas filed to update its generation cost recovery rider to include investment in Montgomery County Power Station after August 31, 2020. In April 2021 the ALJ issued an order unabating the proceeding to consider Entergy Texas's updated application and establishing a procedural schedule that will result in administrative approval of Entergy Texas's application in June 2021 if it is unopposed by parties to the proceeding.

In December 2020, Entergy Texas also filed an application to amend its generation cost recovery rider to reflect its acquisition of the Hardin County Peaking Facility, which is expected to close in June 2021. The initial generation cost recovery rider rates proposed in the application represent no change from the generation cost recovery rider rates to be established in Entergy Texas's previous generation cost recovery rider proceeding. Once Entergy Texas has acquired the Hardin County Peaking Facility, its investment in the facility will be reflected in an updated filing to Entergy Texas's application, which will be made within 60 days of the acquisition's closing.

Entergy Arkansas Opportunity Sales Proceeding

As discussed in the Form 10-K, in May 2019, Entergy Arkansas filed an application and supporting testimony with the APSC requesting approval of a special rider tariff to recover from its retail customers the costs of the opportunity sales payments made to the other Utility operating companies, and in July 2020 the APSC issued a decision finding that Entergy Arkansas's application is not in the public interest. In September 2020, Entergy Arkansas filed a complaint in the U.S. District Court for the Eastern District of Arkansas challenging the APSC's order denying Entergy Arkansas's request to recover the costs of these payments. The court held a hearing in February 2021 regarding issues addressed in the pre-trial conference report, and the parties await further instructions from the court.

Complaints Against System Energy

Return on Equity and Capital Structure Complaints

As discussed in the Form 10-K, in May 2020 the FERC issued an order on rehearing of Opinion No. 569 (Opinion No. 569-A). In June 2020 the procedural schedule in the System Energy proceeding was further revised in order to allow parties to address the Opinion No. 569-A methodology. The parties and FERC trial staff filed final rounds of testimony in August 2020. The hearing before a FERC ALJ occurred in late-September through early-October 2020, post-hearing briefing took place in November and December 2020.

In March 2021 the FERC ALJ issued an initial decision. With regard to System Energy's authorized return on equity, the ALJ determined that the existing return on equity of 10.94% is no longer just and reasonable, and that the replacement authorized return on equity, based on application of the Opinion No. 569-A methodology, should be 9.32%. The ALJ further determined that System Energy should pay refunds for a fifteen-month refund period (January 2017-April 2018) based on the difference between the current return on equity and the replacement authorized return on equity. The ALJ determined that the April 2018 complaint concerning the authorized return on equity should be dismissed, and that no refunds for a second fifteen-month refund period should be due. With regard to System Energy's capital structure, the ALJ determined that System Energy's actual equity ratio is excessive and that the just and reasonable equity ratio is 48.15% equity, based on the average equity ratio of the proxy group used to evaluate the return on equity for the second complaint. The ALJ further determined that System Energy should pay refunds for a fifteen-month refund period (September 2018-December 2019) based on the difference between the actual equity ratio and the 48.15% equity ratio. If the ALJ's initial decision is upheld, the estimated refund for this proceeding is approximately $59 million, which includes interest through March 31, 2021, and the estimated resulting annual rate reduction would be approximately $46 million. The estimated refund will continue to accrue interest until a final FERC decision is issued. Based on the course of the proceeding to date, System Energy has recorded a provision of $36 million, including interest, as of March 31, 2021.

The ALJ initial decision is an interim step in the FERC litigation process, and an ALJ's determinations made in an initial decision are not controlling on the FERC. In April 2021, System Energy filed its brief on exceptions, in which it challenged the initial decision's findings on both the return on equity and capital structure issues. Also in April 2021, the LPSC, APSC, MPSC, City Council, and the FERC trial staff filed briefs on exceptions. Reply briefs opposing exceptions are due in May 2021. Refunds, if any, that might be required will only become due after the FERC issues its order reviewing the initial decision.

Grand Gulf Sale-leaseback Renewal Complaint and Uncertain Tax Position Rate Base Issue

As discussed in the Form 10-K, in May 2018 the LPSC filed a complaint against System Energy and Entergy Services related to System Energy's renewal of a sale-leaseback transaction originally entered into in December 1988 for an 11.5% undivided interest in Grand Gulf Unit 1. A hearing was held before a FERC ALJ in November 2019. In April 2020 the ALJ issued the initial decision. Among other things, the ALJ determined that refunds were due on three main issues. First, with regard to the lease renewal payments, the ALJ determined that

System Energy is recovering an unjust acquisition premium through the lease renewal payments, and that System Energy's recovery from customers through rates should be limited to the cost of service based on the remaining net book value of the leased assets, which is approximately $70 million. The ALJ found that the remedy for this issue should be the refund of lease payments (approximately $17.2 million per year since July 2015) with interest determined at the FERC quarterly interest rate, which would be offset by the addition of the net book value of the leased assets in the cost of service. The ALJ did not calculate a value for the refund expected as a result of this remedy. In addition, System Energy would no longer recover the lease payments in rates prospectively. Second, with regard to the liabilities associated with uncertain tax positions, the ALJ determined that the liabilities are accumulated deferred income taxes and that System Energy's rate base should have been reduced for those liabilities. If the ALJ's initial decision is upheld, the estimated refund for this issue through March 31, 2021, is approximately $422 million, plus interest, which is approximately $115 million through March 31, 2021. The ALJ also found that System Energy should include liabilities associated with uncertain tax positions as a rate base reduction going forward. Third, with regard to the depreciation expense adjustments, the ALJ found that System Energy should correct for the error in re-billings retroactively and prospectively, but that System Energy should not be permitted to recover interest on any retroactive return on enhanced rate base resulting from such corrections. If the initial decision is affirmed on this issue, System Energy estimates refunds of approximately $19 million, which includes interest through March 31, 2021.

The ALJ initial decision is an interim step in the FERC litigation process, and an ALJ's determinations made in an initial decision are not controlling on the FERC. The ALJ in the initial decision acknowledges that these are issues of first impression before the FERC. The case is pending before the FERC, which will review the case and issue an order on the proceeding, and the FERC may accept, reject, or modify the ALJ's initial decision in whole or in part. Refunds, if any, that might be required will only become due after the FERC issues its order reviewing the initial decision.

Also as discussed in the Form 10-K, in November 2020 the IRS issued a Revenue Agent's Report (RAR) for the 2014/2015 tax year and in December 2020 Entergy executed it. The RAR contained an adjustment to System Energy's uncertain nuclear decommissioning tax position. As a result of the RAR, in December 2020, System Energy filed amendments to its new Federal Power Act section 205 filings to establish an ongoing rate base credit for the accumulated deferred income taxes resulting from the decommissioning uncertain tax position and to credit excess accumulated deferred income taxes arising from the successful portion of the decommissioning uncertain tax position. The amendments both propose the inclusion of the RAR as support for the filings. In December 2020 the LPSC, APSC, and City Council filed a protest in response to the amendments, reiterating their prior objections to the filings. In February 2021 the FERC issued an order accepting System Energy's Federal Power Act section 205 filings subject to refund, setting them for hearing, and holding the hearing in abeyance.

In December 2020, System Energy filed a new Federal Power Act section 205 filing to provide a one-time, historical credit to customers of $25.2 million for the accumulated deferred income taxes that would have been created by the decommissioning uncertain tax position if the IRS's decision had been known in 2016. In January 2021 the LPSC, APSC, MPSC, and City Council filed a protest to the filing. In February 2021, the FERC issued an order accepting System Energy's Federal Power Act section 205 filing subject to refund, setting it for hearing, and holding the hearing in abeyance. The one-time credit was made during the first quarter 2021.

LPSC Authorization of Additional Complaints

As discussed in the Form 10-K, in May 2020 the LPSC authorized its staff to file additional complaints at FERC related to the rates charged by System Energy for Grand Gulf energy and capacity supplied to Entergy Louisiana under the Unit Power Sales Agreement, and the first of the additional complaints was filed by the LPSC, the APSC, the MPSC and the City Council in September 2020. The second of the additional complaints was filed at the FERC in March 2021 by the LPSC, the APSC, and the City Council against System Energy, Entergy Services, Entergy Operations, and Entergy Corporation. The second complaint contains two primary allegations. First, it alleges that, based on the plant's capacity factor and alleged safety performance, System Energy and the other

respondents imprudently operated Grand Gulf during the period 2016-2020, and it seeks refunds of at least $360 million in alleged replacement energy costs, in addition to other costs, including those that can only be identified upon further investigation. Second, it alleges that the performance and/or management of the 2012 extended power uprate of Grand Gulf was imprudent, and it seeks refunds of all costs of the 2012 uprate that are determined to result from imprudent planning or management of the project. In addition to the requested refunds, the complaint asks that the FERC modify the Unit Power Sales Agreement to provide for full cost recovery only if certain performance indicators are met and to require pre-authorization of capital improvement projects in excess of $125 million before related costs may be passed through to customers in rates. In April 2021, System Energy and the other respondents filed their motion to dismiss and answer to the complaint. System Energy requested that the FERC dismiss the claims within the complaint. With respect to the claim concerning operations, System Energy argues that the complaint does not meet its legal burden because, among other reasons, it fails to allege any specific imprudent conduct. With respect to the claim concerning the uprate, System Energy argues that the complaint fails because, among other reasons, the complainants' own conduct prevents them from raising a serious doubt as to the prudence of the uprate. System Energy also requests that the FERC dismiss other elements of the complaint, including the proposed modifications to the Unit Power Sales Agreement, because they are not warranted.

Storm Cost Recovery Filings with Retail Regulators

Entergy Louisiana

Hurricane Laura, Hurricane Delta, Hurricane Zeta, and Winter Storm Uri

In August 2020 and October 2020, Hurricane Laura, Hurricane Delta, and Hurricane Zeta caused significant damage to portions of Entergy Louisiana's service area. The storms resulted in widespread outages, significant damage to distribution and transmission infrastructure, and the loss of sales during the outages. Additionally, as a result of Hurricane Laura's extensive damage to the grid infrastructure serving the impacted area, large portions of the underlying transmission system required nearly a complete rebuild.

In October 2020, Entergy Louisiana filed an application at the LPSC seeking approval of certain ratemaking adjustments to facilitate issuance of shorter-term bonds to provide interim financing for restoration costs associated with Hurricane Laura, Hurricane Delta, and Hurricane Zeta. Subsequently, Entergy Louisiana and the LPSC staff filed a joint motion seeking approval to exclude from the derivation of Entergy Louisiana's capital structure and cost rate of debt for ratemaking purposes, including the allowance for funds used during construction, shorter-term debt up to $1.1 billion issued by Entergy Louisiana to fund costs associated with Hurricane Laura, Hurricane Delta, and Hurricane Zeta costs on an interim basis. In November 2020 the LPSC issued an order approving the joint motion, and Entergy Louisiana issued $1.1 billion of 0.62% Series mortgage bonds due November 2023. Also in November 2020, Entergy Louisiana drew $257 million from its funded storm reserves.

In February 2021, two winter storms (collectively, Winter Storm Uri) brought freezing rain and ice to Louisiana. Ice accumulation sagged or downed trees, limbs and power lines, causing damage to Entergy Louisiana's transmission and distribution systems. The additional weight of ice caused trees and limbs to fall into power lines and other electric equipment. When the ice melted, it affected vegetation and electrical equipment, causing incremental outages. As discussed above in "**Fuel and purchased power recovery**," Entergy Louisiana is recovering the incremental fuel costs associated with Winter Storm Uri over a five-month period from April 2021 through August 2021.

In April 2021, Entergy Louisiana filed an application with the LPSC relating to Hurricane Laura, Hurricane Delta, Hurricane Zeta, and Winter Storm Uri restoration costs. Total restoration costs for the repair and/or replacement of Entergy Louisiana's electric facilities damaged by the storms are currently estimated to be approximately $2.05 billion, including approximately $1.74 billion in capital costs and approximately $310 million in non-capital costs. Including carrying costs through January 2022, Entergy Louisiana is seeking an LPSC determination that $2.10 billion was prudently incurred and, therefore, is eligible for recovery from customers. Additionally, Entergy Louisiana is requesting that the LPSC determine that re-establishment of a storm escrow

account to the previously authorized amount of $290 million is appropriate. Entergy Louisiana intends to supplement this application with a request regarding the financing and recovery of the recoverable storm restoration costs.

Entergy New Orleans

Hurricane Zeta

In October 2020, Hurricane Zeta caused significant damage to Entergy New Orleans's service area. The storm resulted in widespread power outages, significant damage to distribution and transmission infrastructure, and the loss of sales during the power outages. Total restoration costs for the repair and/or replacement of Entergy New Orleans's electric facilities damaged by Hurricane Zeta are currently estimated to be approximately $36 million, including approximately $28 million in capital costs and approximately $8 million in non-capital costs. In March 2021, Entergy New Orleans withdrew $44 million from its funded storm reserves. Entergy New Orleans expects to initiate its storm cost recovery proceeding in May 2021.

Entergy Texas

Hurricane Laura, Hurricane Delta, and Winter Storm Uri

In August 2020 and October 2020, Hurricane Laura and Hurricane Delta caused extensive damage to Entergy Texas's service area. In February 2021, Winter Storm Uri also caused damage to Entergy Texas's service area. The storms resulted in widespread power outages, significant damage primarily to distribution and transmission infrastructure, and the loss of sales during the power outages. In April 2021, Entergy Texas filed an application with the PUCT requesting a determination that its system restoration costs associated with Hurricane Laura, Hurricane Delta, and Winter Storm Uri of approximately $250 million, including approximately $200 million in capital costs and approximately $50 million in non-capital costs were reasonable and necessary to enable Entergy Texas to restore electric service to its customers and Entergy Texas's electric utility infrastructure. The filing currently includes only a portion of the Winter Storm Uri costs. Entergy Texas expects to initiate a proceeding later in 2021 to securitize the costs approved by the PUCT.

NOTE 3. EQUITY (Entergy Corporation and Entergy Louisiana)

Common Stock

Earnings per Share

The following table presents Entergy's basic and diluted earnings per share calculations included on the consolidated income statements:

	For the Three Months Ended March 31,					
	2021			2020		
	(In Millions, Except Per Share Data)					
	Income	Shares	$/share	Income	Shares	$/share
Basic earnings per share						
Net income attributable to Entergy Corporation	$334.6	200.5	$1.67	$118.7	199.8	$0.59
Average dilutive effect of:						
Stock options		0.4	(0.01)		0.7	—
Other equity plans		0.2	—		0.4	—
Diluted earnings per share	$334.6	201.1	$1.66	$118.7	200.9	$0.59

The number of stock options not included in the calculation of diluted common shares outstanding due to their antidilutive effect was approximately 1.0 million for the three months ended March 31, 2021 and approximately 0.5 million for the three months ended March 31, 2020.

Entergy's stock options and other equity compensation plans are discussed in Note 5 to the financial statements herein and in Note 12 to the financial statements in the Form 10-K.

Dividends declared per common share were $0.95 for the three months ended March 31, 2021 and $0.93 for the three months ended March 31, 2020.

Treasury Stock

During the three months ended March 31, 2021, Entergy Corporation issued 388,330 shares of its previously repurchased common stock to satisfy stock option exercises, vesting of shares of restricted stock, and other stock-based awards. Entergy Corporation did not repurchase any of its common stock during the three months ended March 31, 2021.

Retained Earnings

On April 12, 2021, Entergy Corporation's Board of Directors declared a common stock dividend of $0.95 per share, payable on June 1, 2021, to holders of record as of May 6, 2021.

Comprehensive Income

Accumulated other comprehensive income (loss) is included in the equity section of the balance sheets of Entergy and Entergy Louisiana. The following table presents changes in accumulated other comprehensive income (loss) for Entergy for the three months ended March 31, 2021 by component:

	Cash flow hedges net unrealized gain (loss)	Pension and other postretirement liabilities	Net unrealized investment gain (loss)	Total Accumulated Other Comprehensive Income (Loss)
		(In Thousands)		
Beginning balance, January 1, 2021	$28,719	($534,576)	$56,650	($449,207)
Other comprehensive income (loss) before reclassifications	1,482	—	(45,301)	(43,819)
Amounts reclassified from accumulated other comprehensive income (loss)	(31,062)	22,967	614	(7,481)
Net other comprehensive income (loss) for the period	(29,580)	22,967	(44,687)	(51,300)
Ending balance, March 31, 2021	($861)	($511,609)	$11,963	($500,507)

The following table presents changes in accumulated other comprehensive income (loss) for Entergy for the three months ended March 31, 2020 by component:

	Cash flow hedges net unrealized gain (loss)	Pension and other postretirement liabilities	Net unrealized investment gain (loss)	Total Accumulated Other Comprehensive Income (Loss)
		(In Thousands)		
Beginning balance, January 1, 2020	$84,206	($557,072)	$25,946	($446,920)
Other comprehensive income (loss) before reclassifications	52,846	34,349	17,713	104,908
Amounts reclassified from accumulated other comprehensive income (loss)	(74,556)	19,550	(1,969)	(56,975)
Net other comprehensive income (loss) for the period	(21,710)	53,899	15,744	47,933
Ending balance, March 31, 2020	$62,496	($503,173)	$41,690	($398,987)

The following table presents changes in accumulated other comprehensive income (loss) for Entergy Louisiana for the three months ended March 31, 2021 and 2020:

	Pension and Other Postretirement Liabilities	
	2021	2020
	(In Thousands)	
Beginning balance, January 1,	$4,327	$4,562
Other comprehensive income (loss) before reclassifications	—	10,050
Amounts reclassified from accumulated other comprehensive income (loss)	(407)	(583)
Net other comprehensive income (loss) for the period	(407)	9,467
Ending balance, March 31,	$3,920	$14,029

Total reclassifications out of accumulated other comprehensive income (loss) (AOCI) into income for Entergy for the three months ended March 31, 2021 and 2020 were as follows:

	Amounts reclassified from AOCI		Income Statement Location
	2021	2020	
	(In Thousands)		
Cash flow hedges net unrealized gain (loss)			
Power contracts	$39,367	$94,423	Competitive business operating revenues
Interest rate swaps	(48)	(48)	Miscellaneous - net
Total realized gain (loss) on cash flow hedges	39,319	94,375	
Income taxes	(8,257)	(19,819)	Income taxes
Total realized gain (loss) on cash flow hedges (net of tax)	$31,062	$74,556	
Pension and other postretirement liabilities			
Amortization of prior-service credit	$5,248	$3,719	(a)
Amortization of loss	(34,529)	(27,318)	(a)
Total amortization	(29,281)	(23,599)	
Income taxes	6,314	4,049	Income taxes
Total amortization (net of tax)	($22,967)	($19,550)	
Net unrealized investment gain (loss)			
Realized gain (loss)	($972)	$3,116	Interest and investment income
Income taxes	358	(1,147)	Income taxes
Total realized investment gain (loss) (net of tax)	($614)	$1,969	
Total reclassifications for the period (net of tax)	$7,481	$56,975	

(a) These accumulated other comprehensive income (loss) components were included in the computation of net periodic pension and other postretirement cost. See Note 6 to the financial statements herein for additional

details.

Total reclassifications out of accumulated other comprehensive income (loss) (AOCI) into income for Entergy Louisiana for the three months ended March 31, 2021 and 2020 were as follows:

	Amounts reclassified from AOCI		Income Statement Location
	2021	2020	
	(In Thousands)		
Pension and other postretirement liabilities			
Amortization of prior-service credit	$1,230	$1,089	(a)
Amortization of loss	(679)	(301)	(a)
Total amortization	551	788	
Income taxes	(144)	(205)	Income taxes
Total amortization (net of tax)	407	583	
Total reclassifications for the period (net of tax)	$407	$583	

(a) These accumulated other comprehensive income (loss) components were included in the computation of net periodic pension and other postretirement cost. See Note 6 to the financial statements herein for additional details.

NOTE 4. REVOLVING CREDIT FACILITIES, LINES OF CREDIT, SHORT-TERM BORROWINGS, AND LONG-TERM DEBT (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Entergy Corporation has in place a credit facility that has a borrowing capacity of $3.5 billion and expires in September 2024. The facility includes fronting commitments for the issuance of letters of credit against $20 million of the total borrowing capacity of the credit facility. The commitment fee is currently 0.225% of the undrawn commitment amount. Commitment fees and interest rates on loans under the credit facility can fluctuate depending on the senior unsecured debt ratings of Entergy Corporation. The weighted average interest rate for the three months ended March 31, 2021 was 1.63% on the drawn portion of the facility. Following is a summary of the borrowings outstanding and capacity available under the facility as of March 31, 2021.

Capacity	Borrowings	Letters of Credit	Capacity Available
	(In Millions)		
$3,500	$55	$6	$3,439

Entergy Corporation’s credit facility requires Entergy to maintain a consolidated debt ratio, as defined, of 65% or less of its total capitalization. Entergy is in compliance with this covenant. If Entergy fails to meet this ratio, or if Entergy Corporation or one of the Registrant Subsidiaries (except Entergy New Orleans) defaults on other indebtedness or is in bankruptcy or insolvency proceedings, an acceleration of the facility maturity date may occur.

Entergy Corporation has a commercial paper program with a Board-approved program limit of up to $2 billion. As of March 31, 2021, Entergy Corporation had approximately $1,028 million of commercial paper outstanding. The weighted-average interest rate for the three months ended March 31, 2021 was 0.34%.

Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas each had credit facilities available as of March 31, 2021 as follows:

Company	Expiration Date	Amount of Facility	Interest Rate (a)	Amount Drawn as of March 31, 2021	Letters of Credit Outstanding as of March 31, 2021
Entergy Arkansas	April 2022	$25 million (b)	2.75%	$—	$—
Entergy Arkansas	September 2024	$150 million (c)	1.21%	$—	$—
Entergy Louisiana	September 2024	$350 million (c)	1.21%	$—	$—
Entergy Mississippi	April 2022	$37.5 million (d)	1.58%	$—	$—
Entergy Mississippi	April 2022	$35 million (d)	1.58%	$—	$—
Entergy Mississippi	April 2022	$10 million (d)	1.58%	$—	$—
Entergy New Orleans	November 2021	$25 million (c)	1.36%	$—	$—
Entergy Texas	September 2024	$150 million (c)	1.58%	$—	$1.3 million

(a) The interest rate is the estimated interest rate as of March 31, 2021 that would have been applied to outstanding borrowings under the facility.
(b) Borrowings under the Entergy Arkansas credit facility may be secured by a security interest in its accounts receivable at Entergy Arkansas's option.
(c) The credit facility includes fronting commitments for the issuance of letters of credit against a portion of the borrowing capacity of the facility as follows: $5 million for Entergy Arkansas; $15 million for Entergy Louisiana; $10 million for Entergy New Orleans; and $30 million for Entergy Texas.
(d) Borrowings under the Entergy Mississippi credit facilities may be secured by a security interest in its accounts receivable at Entergy Mississippi's option.

The commitment fees on the credit facilities range from 0.075% to 0.225% of the undrawn commitment amount. Each of the credit facilities requires the Registrant Subsidiary borrower to maintain a debt ratio, as defined, of 65% or less of its total capitalization. Each Registrant Subsidiary is in compliance with this covenant.

In addition, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas each entered into one or more uncommitted standby letter of credit facilities primarily as a means to post collateral to support its obligations to MISO. Following is a summary of the uncommitted standby letter of credit facilities as of March 31, 2021:

Company	Amount of Uncommitted Facility	Letter of Credit Fee	MISO Letters of Credit Issued as of March 31, 2021 (a) (b)
Entergy Arkansas	$25 million	0.78%	$1 million
Entergy Louisiana	$125 million	0.78%	$12.8 million
Entergy Mississippi	$65 million	0.78%	$1 million
Entergy New Orleans	$15 million	1.00%	$2 million
Entergy Texas	$50 million	0.70%	$30.2 million

(a) As of March 31, 2021, letters of credit posted with MISO covered financial transmission rights exposure of $0.4 million for Entergy Arkansas, $0.2 million for Entergy Louisiana, $0.4 million for Entergy Mississippi, and $0.1 million for Entergy New Orleans. See Note 8 to the financial statements herein for discussion of financial transmission rights.
(b) As of March 31, 2021, in addition to the $1 million MISO letter of credit, Entergy Mississippi has $1 million of non-MISO letters of credit outstanding under this facility.

The short-term borrowings of the Registrant Subsidiaries are limited to amounts authorized by the FERC. The current FERC-authorized limits for Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy are effective through July 14, 2022. In addition to borrowings from commercial banks, these companies may also borrow from the Entergy System money pool and from other internal short-term borrowing arrangements. The money pool and the other internal borrowing arrangements are inter-company borrowing arrangements designed to reduce the Utility subsidiaries' dependence on external short-term borrowings. Borrowings from internal and external short-term borrowings combined may not exceed the FERC-authorized limits. The following were the FERC-authorized limits for short-term borrowings and the outstanding short-term borrowings as of March 31, 2021 (aggregating both internal and external short-term borrowings) for the Registrant Subsidiaries:

	Authorized	Borrowings
	(In Millions)	
Entergy Arkansas	$250	$—
Entergy Louisiana	$450	$—
Entergy Mississippi	$175	$—
Entergy New Orleans	$150	$25
Entergy Texas	$200	$31
System Energy	$200	$—

Variable Interest Entities (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, and System Energy)

See Note 17 to the financial statements in the Form 10-K for a discussion of the consolidation of the nuclear fuel company variable interest entities (VIEs). To finance the acquisition and ownership of nuclear fuel, the nuclear fuel company VIEs have credit facilities and three of the four VIEs have commercial paper programs in place. Following is a summary as of March 31, 2021:

Company	Expiration Date	Amount of Facility	Weighted Average Interest Rate on Borrowings (a)	Amount Outstanding as of March 31, 2021
			(Dollars in Millions)	
Entergy Arkansas VIE	September 2022	$80	1.26%	$4.8
Entergy Louisiana River Bend VIE	September 2022	$105	1.24%	$70.5
Entergy Louisiana Waterford VIE	September 2022	$105	1.25%	$73.2
System Energy VIE	September 2022	$120	1.23%	$63.4

(a) Includes letter of credit fees and bank fronting fees on commercial paper issuances, if any, by the nuclear fuel company variable interest entities for Entergy Arkansas, Entergy Louisiana, and System Energy. The nuclear fuel company variable interest entity for Entergy Louisiana River Bend does not issue commercial paper, but borrows directly on its bank credit facility.

The commitment fees on the credit facilities are 0.125% of the undrawn commitment amount for the Entergy Arkansas, Entergy Louisiana, and System Energy VIEs. Each credit facility requires the respective lessee of nuclear fuel (Entergy Arkansas, Entergy Louisiana, or Entergy Corporation as guarantor for System Energy) to maintain a consolidated debt ratio, as defined, of 70% or less of its total capitalization.

The nuclear fuel company variable interest entities had notes payable that were included in debt on the respective balance sheets as of March 31, 2021 as follows:

Company	Description	Amount
Entergy Arkansas VIE	3.65% Series L due July 2021	$90 million
Entergy Arkansas VIE	3.17% Series M due December 2023	$40 million
Entergy Louisiana River Bend VIE	2.51% Series V due June 2027	$70 million
Entergy Louisiana Waterford VIE	3.22% Series I due December 2023	$20 million
System Energy VIE	2.05% Series K due September 2027	$90 million

In accordance with regulatory treatment, interest on the nuclear fuel company variable interest entities' credit facilities, commercial paper, and long-term notes payable is reported in fuel expense.

Entergy Arkansas, Entergy Louisiana, and System Energy each have obtained financing authorizations from the FERC that extend through July 14, 2022 for issuances by its nuclear fuel company variable interest entities.

Debt Issuances and Retirements

(Entergy Corporation)

In March 2021, Entergy Corporation issued $650 million of 1.90% Series senior notes due June 2028 and $650 million of 2.40% Series senior notes due June 2031. Entergy Corporation used the proceeds to repay a portion of its outstanding commercial paper and for general corporate purposes.

(Entergy Arkansas)

In March 2021, Entergy Arkansas issued $400 million of 3.35% Series mortgage bonds due June 2052. Entergy Arkansas expects to use, or has used, the proceeds, together with other funds, to finance in part the purchase of the Searcy Solar Facility, to repay a portion of the debt outstanding under its $150 million long-term revolving credit facility, to repay a portion of the debt outstanding under its $25 million short-term revolving credit facility, and for general corporate purposes.

(Entergy Louisiana)

In March 2021, Entergy Louisiana issued $500 million of 2.35% Series mortgage bonds due June 2032 and $500 million of 3.10% Series mortgage bonds due June 2041. Entergy Louisiana used the proceeds, together with other funds, to repay on or prior to maturity, its $200 million of 4.80% Series mortgage bonds due May 2021, to finance, on an interim basis, storm restoration costs related to Hurricane Laura, Hurricane Delta, Hurricane Zeta, and the winter storms of February 2021, and for general corporate purposes.

In April 2021, Entergy Louisiana arranged for the issuance by the Louisiana Local Government Environmental Facilities and Community Development Authority of (i) $16.2 million of 2.00% pollution control revenue bonds Series 2021A due June 2030, and (ii) $182.480 million of 2.50% pollution control revenue bonds Series 2021B due April 2036, each of which is evidenced by a separate series of collateral trust mortgage bonds of Entergy Louisiana. A portion of the proceeds were applied in April 2021 to the refunding of $83.680 million of outstanding pollution control revenue bonds previously issued on behalf of Entergy Louisiana. The remainder of the proceeds were held in trust as of April 1, 2021 and are expected to be applied in June 2021 to the refunding of $115 million of outstanding pollution control revenue bonds previously issued on behalf of Entergy Louisiana.

(Entergy Mississippi)

In March 2021, Entergy Mississippi issued $200 million of 3.50% Series mortgage bonds due June 2051. Entergy Mississippi used the proceeds, together with other funds, to repay a portion of the debt outstanding under its three short-term revolving credit facilities with an aggregate commitment of $82.5 million and for general corporate purposes.

(Entergy Texas)

In May 2021, Entergy Texas redeemed $125 million of 2.55% Series mortgage bonds due June 2021.

Fair Value

The book value and the fair value of long-term debt for Entergy Corporation and the Registrant Subsidiaries as of March 31, 2021 were as follows:

	Book Value of Long-Term Debt	Fair Value of Long-Term Debt (a)
	(In Thousands)	
Entergy	$24,704,475	$25,716,967
Entergy Arkansas	$3,958,751	$4,126,514
Entergy Louisiana	$10,059,885	$10,681,713
Entergy Mississippi	$1,981,429	$2,084,891
Entergy New Orleans	$642,412	$584,475
Entergy Texas	$2,465,827	$2,545,973
System Energy	$768,969	$785,758

(a) Fair values were classified as Level 2 in the fair value hierarchy discussed in Note 8 to the financial statements herein.

The book value and the fair value of long-term debt for Entergy Corporation and the Registrant Subsidiaries as of December 31, 2020 were as follows:

	Book Value of Long-Term Debt	Fair Value of Long-Term Debt (a)
	(In Thousands)	
Entergy	$22,369,776	$24,813,818
Entergy Arkansas	$3,967,507	$4,355,632
Entergy Louisiana	$9,027,451	$10,258,294
Entergy Mississippi	$1,780,577	$2,021,432
Entergy New Orleans	$642,233	$620,634
Entergy Texas	$2,493,708	$2,765,193
System Energy	$805,274	$840,540

(a) Fair values were classified as Level 2 in the fair value hierarchy discussed in Note 8 to the financial statements herein.

NOTE 5. STOCK-BASED COMPENSATION (Entergy Corporation)

Entergy grants stock and stock-based awards, which are described more fully in Note 12 to the financial statements in the Form 10-K. Awards under Entergy's plans generally vest over three years.

Stock Options

Entergy granted options on 508,704 shares of its common stock under the 2019 Omnibus Incentive Plan during the first quarter 2021 with a fair value of $12.27 per option. As of March 31, 2021, there were options on 2,890,582 shares of common stock outstanding with a weighted-average exercise price of $90.75. The intrinsic value, which has no effect on net income, of the outstanding stock options is calculated by the positive difference between the weighted average exercise price of the stock options granted and Entergy Corporation's common stock price as of March 31, 2021. The aggregate intrinsic value of the stock options outstanding as of March 31, 2021 was $41.6 million.

The following table includes financial information for outstanding stock options for the three months ended March 31, 2021 and 2020:

	2021	2020
	(In Millions)	
Compensation expense included in Entergy's net income	$1.0	$1.0
Tax benefit recognized in Entergy's net income	$0.3	$0.3
Compensation cost capitalized as part of fixed assets and materials and supplies	$0.4	$0.4

Other Equity Awards

In January 2021 the Board approved and Entergy granted 392,382 restricted stock awards and 203,983 long-term incentive awards under the 2019 Omnibus Incentive Plan. The restricted stock awards were made effective on January 28, 2021 and were valued at $95.87 per share, which was the closing price of Entergy's common stock on that date. Shares of restricted stock have the same dividend and voting rights as other common stock, are considered issued and outstanding shares of Entergy upon vesting, and are expensed ratably over the three-year vesting period. One-third of the restricted stock awards and accrued dividends will vest upon each anniversary of the grant date.

In addition, long-term incentive awards were also granted in the form of performance units that represent the value of, and are settled with, one share of Entergy Corporation common stock at the end of the three-year performance period, plus dividends accrued during the performance period on the number of performance units earned. To emphasize the importance of strong cash generation for the long-term health of its business, Entergy Corporation is replacing the cumulative adjusted earnings per share metric with a credit measure – adjusted funds from operations/debt ratio for the 2021-2023 performance period. Performance will be measured based eighty percent on relative total shareholder return and twenty percent on the credit measure. The performance units were granted on January 28, 2021 and eighty percent were valued at $110.74 per share based on various factors, primarily market conditions; and twenty percent were valued at $95.87 per share, the closing price of Entergy's common stock on that date. Performance units have the same dividend rights as shares of Entergy common stock and are considered issued and outstanding shares of Entergy upon vesting. Performance units are expensed ratably over the three-year vesting period and compensation cost for the portion of the award based on cumulative adjusted earnings per share will be adjusted based on the number of units that ultimately vest. See Note 12 to the financial statements in the Form 10-K for a description of the Long-Term Performance Unit Program.

The following table includes financial information for other outstanding equity awards for the three months ended March 31, 2021 and 2020:

	2021	2020
	(In Millions)	
Compensation expense included in Entergy's net income	$10.8	$9.4
Tax benefit recognized in Entergy's net income	$2.7	$2.4
Compensation cost capitalized as part of fixed assets and materials and supplies	$4.0	$3.4

NOTE 6. RETIREMENT AND OTHER POSTRETIREMENT BENEFITS (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Components of Qualified Net Pension Cost

Entergy's qualified pension cost, including amounts capitalized, for the first quarters of 2021 and 2020, included the following components:

	2021	2020
	(In Thousands)	
Service cost - benefits earned during the period	$45,241	$40,379
Interest cost on projected benefit obligation	46,099	60,799
Expected return on assets	(105,713)	(103,565)
Amortization of net loss	104,392	87,259
Net pension costs	$90,019	$84,872

The Registrant Subsidiaries' qualified pension cost, including amounts capitalized, for their employees for the first quarters of 2021 and 2020, included the following components:

2021	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Service cost - benefits earned during the period	$7,418	$10,043	$2,364	$796	$1,801	$2,314
Interest cost on projected benefit obligation	8,341	9,562	2,462	1,029	1,949	2,142
Expected return on assets	(19,670)	(22,538)	(5,587)	(2,622)	(5,237)	(4,778)
Amortization of net loss	19,303	19,204	5,668	2,270	3,711	5,326
Net pension cost	$15,392	$16,271	$4,907	$1,473	$2,224	$5,004

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Service cost - benefits earned during the period	$6,566	$8,794	$2,023	$663	$1,546	$1,965
Interest cost on projected benefit obligation	11,433	12,841	3,340	1,456	2,782	2,814
Expected return on assets	(19,622)	(22,402)	(5,757)	(2,627)	(5,486)	(4,663)
Amortization of net loss	16,897	16,627	4,748	2,005	3,265	4,279
Net pension cost	$15,274	$15,860	$4,354	$1,497	$2,107	$4,395

Non-Qualified Net Pension Cost

Entergy recognized $4.6 million and $4.5 million in pension cost for its non-qualified pension plans in the first quarters of 2021 and 2020, respectively.

The Registrant Subsidiaries recognized the following pension cost for their employees for their non-qualified pension plans for the first quarters of 2021 and 2020:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
2021	$90	$44	$96	$8	$115
2020	$83	$37	$90	$8	$117

Components of Net Other Postretirement Benefit Cost (Income)

Entergy's other postretirement benefit cost (income), including amounts capitalized, for the first quarters of 2021 and 2020, included the following components:

	2021	2020
	(In Thousands)	
Service cost - benefits earned during the period	$6,645	$5,801
Interest cost on accumulated postretirement benefit obligation (APBO)	5,320	7,932
Expected return on assets	(10,805)	(10,328)
Amortization of prior service credit	(8,267)	(5,922)
Amortization of net loss	713	468
Net other postretirement benefit income	($6,394)	($2,049)

The Registrant Subsidiaries' other postretirement benefit cost (income), including amounts capitalized, for their employees for the first quarters of 2021 and 2020, included the following components:

2021	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Service cost - benefits earned during the period	$1,034	$1,544	$362	$109	$346	$335
Interest cost on APBO	932	1,130	278	130	317	220
Expected return on assets	(4,505)	—	(1,384)	(1,438)	(2,548)	(789)
Amortization of prior service credit	(280)	(1,230)	(444)	(229)	(936)	(109)
Amortization of net (gain) loss	49	(91)	19	(178)	100	15
Net other postretirement benefit cost (income)	($2,770)	$1,353	($1,169)	($1,606)	($2,721)	($328)

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Service cost - benefits earned during the period	$828	$1,423	$351	$105	$303	$294
Interest cost on APBO	1,217	1,723	422	227	582	307
Expected return on assets	(4,326)	—	(1,307)	(1,355)	(2,435)	(748)
Amortization of prior service credit	(661)	(1,089)	(321)	(76)	(550)	(219)
Amortization of net (gain) loss	55	(199)	29	(38)	212	20
Net other postretirement benefit cost (income)	($2,887)	$1,858	($826)	($1,137)	($1,888)	($346)

Reclassification out of Accumulated Other Comprehensive Income (Loss)

Entergy and Entergy Louisiana reclassified the following costs out of accumulated other comprehensive income (loss) (before taxes and including amounts capitalized) for the first quarters of 2021 and 2020:

2021	Qualified Pension Costs	Other Postretirement Costs	Non-Qualified Pension Costs	Total
		(In Thousands)		
Entergy				
Amortization of prior service (cost) credit	$—	$5,288	($40)	$5,248
Amortization of net loss	(33,439)	(495)	(595)	(34,529)
	($33,439)	$4,793	($635)	($29,281)
Entergy Louisiana				
Amortization of prior service credit	$—	$1,230	$—	$1,230
Amortization of net gain (loss)	(769)	91	(1)	(679)
	($769)	$1,321	($1)	$551

2020	Qualified Pension Costs	Other Postretirement Costs	Non-Qualified Pension Costs	Total
		(In Thousands)		
Entergy				
Amortization of prior service (cost) credit	$—	$3,776	($57)	$3,719
Amortization of net gain (loss)	(26,462)	(25)	(831)	(27,318)
	($26,462)	$3,751	($888)	($23,599)
Entergy Louisiana				
Amortization of prior service credit	$—	$1,089	$—	$1,089
Amortization of net gain (loss)	(499)	199	(1)	(301)
	($499)	$1,288	($1)	$788

Accounting for Pension and Other Postretirement Benefits

In accordance with ASU No. 2017-07, “Compensation - Retirement Benefits (Topic 715): Improving the Presentation of Net Periodic Pension Cost and Net Periodic Postretirement Benefit Cost,” the other components of net benefit cost are required to be presented in the income statement separately from the service cost component and outside a subtotal of income from operations and are presented by Entergy in miscellaneous - net in other income.

Other Postretirement Benefits

In March 2020, Entergy announced changes to its other postretirement benefits. Effective January 1, 2021, certain retired, former non-bargaining employees age 65 and older who are eligible for Entergy-sponsored retiree welfare benefits, and their eligible spouses who are age 65 and older (collectively, Medicare-eligible participants), are eligible to participate in a new Entergy-sponsored retiree health plan, and are no longer eligible for retiree coverage under the Entergy Corporation Companies’ Benefits Plus Medical, Dental and Vision Plans. Under the new Entergy retiree health plan, Medicare-eligible participants are eligible to participate in a health reimbursement arrangement which they may use towards the purchase of various types of qualified insurance offered through a Medicare exchange provider and for other qualified medical expenses. In accordance with accounting standards, the effects of this change were reflected in the March 31, 2020 other postretirement obligation.

Employer Contributions

Based on current assumptions, Entergy expects to contribute $356 million to its qualified pension plans in 2021. As of March 31, 2021, Entergy had contributed $152.2 million to its pension plans. Based on current assumptions, the Registrant Subsidiaries expect to contribute the following to qualified pension plans for their employees in 2021:

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas	System Energy
			(In Thousands)			
Expected 2021 pension contributions	$66,649	$59,882	$13,715	$5,395	$6,955	$18,663
Pension contributions made through March 2021	$21,361	$29,159	$4,799	$2,629	$2,935	$6,675
Remaining estimated pension contributions to be made in 2021	$45,288	$30,723	$8,916	$2,766	$4,020	$11,988

NOTE 7. BUSINESS SEGMENT INFORMATION (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Entergy's reportable segments as of March 31, 2021 were Utility and Entergy Wholesale Commodities. Utility includes the generation, transmission, distribution, and sale of electric power in portions of Arkansas, Louisiana, Mississippi, and Texas, and natural gas utility service in portions of Louisiana. Entergy Wholesale Commodities includes the ownership, operation, and decommissioning of nuclear power plants located in the northern United States and the sale of the electric power produced by its operating plants to wholesale customers. Entergy Wholesale Commodities also includes the ownership of interests in non-nuclear power plants that sell the electric power produced by those plants to wholesale customers. "All Other" includes the parent company, Entergy Corporation, and other business activity.

Entergy's segment financial information for the first quarters of 2021 and 2020 was as follows:

	Utility	Entergy Wholesale Commodities	All Other	Eliminations	Consolidated
			(In Thousands)		
2021					
Operating revenues	$2,596,616	$248,219	$23	($20)	$2,844,838
Income taxes	$59,734	$15,560	($9,352)	$—	$65,942
Consolidated net income (loss)	$360,600	$38,124	($27,680)	($31,899)	$339,145
Total assets as of March 31, 2021	$56,086,185	$3,793,754	$867,301	($2,079,612)	$58,667,628
2020					
Operating revenues	$2,094,629	$332,549	$11	($10)	$2,427,179
Income taxes	($52,949)	($30,540)	$12,295	$—	($71,194)
Consolidated net income (loss)	$323,849	($110,428)	($58,228)	($31,899)	$123,294
Total assets as of December 31, 2020	$55,940,153	$3,800,378	$552,632	($2,053,951)	$58,239,212

The Entergy Wholesale Commodities business is sometimes referred to as the "competitive businesses." Eliminations were primarily intersegment activity. Almost all of Entergy's goodwill was related to the Utility segment.

As discussed in Note 13 to the financial statements in the Form 10-K, Entergy management has undertaken a strategy to manage and reduce the risk of the Entergy Wholesale Commodities business, which includes taking actions to shut down and sell all of the remaining plants in the merchant nuclear fleet. These decisions and transactions resulted in asset impairments; employee retention and severance expenses and other benefits-related costs; and contracted economic development contributions.

Total restructuring charges for the first quarters of 2021 and 2020 were comprised of the following:

	2021			2020		
	Employee retention and severance expenses and other benefits-related costs	Contracted economic development costs	Total	Employee retention and severance expenses and other benefits-related costs	Contracted economic development costs	Total
			(In Millions)			
Balance as of January 1,	$145	$14	$159	$129	$14	$143
Restructuring costs accrued	13	—	13	21	—	21
Cash paid out	1	—	1	—	—	—
Balance as of March 31,	$157	$14	$171	$150	$14	$164

In addition, Entergy Wholesale Commodities incurred $3 million in the first quarter 2021 and $5 million in the first quarter 2020 of impairment and other related charges associated with these strategic decisions and transactions.

Going forward, Entergy Wholesale Commodities expects to incur employee retention and severance expenses associated with management's strategy to exit the merchant power business of approximately $40 million in 2021, of which $13 million has been incurred as of March 31, 2021, and a total of approximately $15 million in 2022.

Registrant Subsidiaries

Each of the Registrant Subsidiaries has one reportable segment, which is an integrated utility business, except for System Energy, which is an electricity generation business. Each of the Registrant Subsidiaries' operations is managed on an integrated basis by that company because of the substantial effect of cost-based rates and regulatory oversight on the business process, cost structures, and operating results.

NOTE 8. RISK MANAGEMENT AND FAIR VALUES (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Market Risk

In the normal course of business, Entergy is exposed to a number of market risks. Market risk is the potential loss that Entergy may incur as a result of changes in the market or fair value of a particular commodity or instrument. All financial and commodity-related instruments, including derivatives, are subject to market risk including commodity price risk, equity price, and interest rate risk. Entergy uses derivatives primarily to mitigate commodity price risk, particularly power price and fuel price risk.

The Utility has limited exposure to the effects of market risk because it operates primarily under cost-based rate regulation. To the extent approved by their retail regulators, the Utility operating companies use derivative instruments to hedge the exposure to price volatility inherent in their purchased power, fuel, and gas purchased for resale costs that are recovered from customers.

As a wholesale generator, Entergy Wholesale Commodities' core business is selling energy, measured in MWh, to its customers. Entergy Wholesale Commodities enters into forward contracts with its customers and also sells energy and capacity in the day ahead or spot markets. In addition to its forward physical power and gas

contracts, Entergy Wholesale Commodities may also use a combination of financial contracts, including swaps, collars, and options, to mitigate commodity price risk. When the market price falls, the combination of instruments is expected to settle in gains that offset lower revenue from generation, which results in a more predictable cash flow.

Entergy's exposure to market risk is determined by a number of factors, including the size, term, composition, and diversification of positions held, as well as market volatility and liquidity. For instruments such as options, the time period during which the option may be exercised and the relationship between the current market price of the underlying instrument and the option's contractual strike or exercise price also affects the level of market risk. A significant factor influencing the overall level of market risk to which Entergy is exposed is its use of hedging techniques to mitigate such risk. Hedging instruments and volumes are chosen based on ability to mitigate risk associated with future energy and capacity prices; however, other considerations are factored into hedge product and volume decisions including corporate liquidity, corporate credit ratings, counterparty credit risk, hedging costs, firm settlement risk, and product availability in the marketplace. Entergy manages market risk by actively monitoring compliance with stated risk management policies as well as monitoring the effectiveness of its hedging policies and strategies. Entergy's risk management policies limit the amount of total net exposure and rolling net exposure during the stated periods. These policies, including related risk limits, are regularly assessed to ensure their appropriateness given Entergy's objectives.

Derivatives

Some derivative instruments are classified as cash flow hedges due to their financial settlement provisions while others are classified as normal purchase/normal sale transactions due to their physical settlement provisions. Normal purchase/normal sale risk management tools include power purchase and sales agreements, fuel purchase agreements, capacity contracts, and tolling agreements. Financially-settled cash flow hedges can include natural gas and electricity swaps and options and interest rate swaps. Entergy may enter into financially-settled swap and option contracts to manage market risk that may or may not be designated as hedging instruments.

Entergy enters into derivatives to manage natural risks inherent in its physical or financial assets or liabilities. Electricity over-the-counter instruments and futures contracts that financially settle against day-ahead power pool prices are used to manage price exposure for Entergy Wholesale Commodities generation. Entergy Wholesale Commodities is hedging the variability in future cash flows with derivatives for forecasted power transactions through April 30, 2021. Planned generation currently under contract from Entergy Wholesale Commodities nuclear power plants is 98% for the remainder of 2021, of which approximately 12% is sold under financial derivatives and the remainder under normal purchase/normal sale contracts. Total planned generation for the remainder of 2021 is 5.8 TWh.

Entergy may use standardized master netting agreements to help mitigate the credit risk of derivative instruments. These master agreements facilitate the netting of cash flows associated with a single counterparty and may include collateral requirements. Cash, letters of credit, and parental/affiliate guarantees may be obtained as security from counterparties in order to mitigate credit risk. The collateral agreements require a counterparty to post cash or letters of credit in the event an exposure exceeds an established threshold. The threshold represents an unsecured credit limit, which may be supported by a parental/affiliate guarantee, as determined in accordance with Entergy's credit policy. In addition, collateral agreements allow for termination and liquidation of all positions in the event of a failure or inability to post collateral.

Certain of the agreements to sell the power produced by Entergy Wholesale Commodities power plants contain provisions that require an Entergy subsidiary to provide credit support to secure its obligations depending on the mark-to-market values of the contracts. The primary form of credit support to satisfy these requirements is an Entergy Corporation guarantee. As of March 31, 2021, a derivative contract with one counterparty is in a liability position (approximately $1 million total). In addition to the corporate guarantee, $6 million in cash collateral was required to be posted by the Entergy subsidiary to its counterparties and $7 million in letters of credit

were required to be posted by its counterparties to the Entergy subsidiary. As of December 31, 2020, there were no derivative contracts with counterparties in a liability position. In addition to the corporate guarantee, $5 million in cash collateral was required to be posted by the Entergy subsidiary to its counterparties and $39 million in letters of credit were required to be posted by it counterparties to the Entergy subsidiary. If the Entergy Corporation credit rating falls below investment grade, Entergy would have to post collateral equal to the estimated outstanding liability under the contract at the applicable date.

Entergy manages fuel price volatility for its Louisiana jurisdictions (Entergy Louisiana and Entergy New Orleans) and Entergy Mississippi through the purchase of natural gas swaps and options that financially settle against either the average Henry Hub Gas Daily prices or the NYMEX Henry Hub. These swaps and options are marked-to-market through fuel expense with offsetting regulatory assets or liabilities. All benefits or costs of the program are recorded in fuel costs. The notional volumes of these swaps are based on a portion of projected annual exposure to gas price volatility for electric generation at Entergy Louisiana and Entergy Mississippi and projected winter purchases for gas distribution at Entergy New Orleans. The maximum length of time over which Entergy had executed natural gas swaps and options as of March 31, 2021 was 3 years for Entergy Louisiana and the maximum length of time over which Entergy had executed natural gas swaps as of March 31, 2021 was 7 months for Entergy Mississippi. The total volume of natural gas swaps and options outstanding as of March 31, 2021 was 41,296,000 MMBtu for Entergy, including 21,920,000 MMBtu for Entergy Louisiana and 19,376,000 MMBtu for Entergy Mississippi. Credit support for these natural gas swaps and options is covered by master agreements that do not require Entergy to provide collateral based on mark-to-market value, but do carry adequate assurance language that may lead to requests for collateral.

During the second quarter 2020, Entergy participated in the annual financial transmission rights auction process for the MISO planning year of June 1, 2020 through May 31, 2021. Financial transmission rights are derivative instruments that represent economic hedges of future congestion charges that will be incurred in serving Entergy’s customer load. They are not designated as hedging instruments. Entergy initially records financial transmission rights at their estimated fair value and subsequently adjusts the carrying value to their estimated fair value at the end of each accounting period prior to settlement. Unrealized gains or losses on financial transmission rights held by Entergy Wholesale Commodities are included in operating revenues. The Utility operating companies recognize regulatory liabilities or assets for unrealized gains or losses on financial transmission rights. The total volume of financial transmission rights outstanding as of March 31, 2021 was 23,009 GWh for Entergy, including 5,765 GWh for Entergy Arkansas, 10,716 GWh for Entergy Louisiana, 2,576 GWh for Entergy Mississippi, 1,055 GWh for Entergy New Orleans, and 2,820 GWh for Entergy Texas. Credit support for financial transmission rights held by the Utility operating companies is covered by cash and/or letters of credit issued by each Utility operating company as required by MISO. Credit support for financial transmission rights held by Entergy Wholesale Commodities is covered by cash. No cash or letters of credit were required to be posted for financial transmission rights exposure for Entergy Wholesale Commodities as of March 31, 2021 and December 31, 2020. Letters of credit posted with MISO covered the financial transmission rights exposure for Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans as of March 31, 2021 and for Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, and Entergy Texas as of December 31, 2020.

The fair values of Entergy's derivative instruments in the consolidated balance sheet as of March 31, 2021 are shown in the table below. Certain investments, including those not designated as hedging instruments, are subject to master netting agreements and are presented in the balance sheet on a net basis in accordance with accounting guidance for derivatives and hedging.

Instrument	Balance Sheet Location	Gross Fair Value (a)	Offsetting Position (b)	Net Fair Value (c) (d)	Business
			(In Millions)		
Derivatives not designated as hedging instruments					
Assets:					
Natural gas swaps and options	Prepayments and other (current portion)	$1	$—	$1	Utility
Financial transmission rights	Prepayments and other	$4	$—	$4	Utility and Entergy Wholesale Commodities
Liabilities:					
Natural gas swaps and options	Other current liabilities (current portion)	$2	$—	$2	Utility
Natural gas swaps and options	Other non-current liabilities (non-current portion)	$1	$—	$1	Utility

The fair values of Entergy's derivative instruments in the consolidated balance sheet as of December 31, 2020 are shown in the table below. Certain investments, including those not designated as hedging instruments, are subject to master netting agreements and are presented in the balance sheet on a net basis in accordance with accounting guidance for derivatives and hedging.

Instrument	Balance Sheet Location	Gross Fair Value (a)	Offsetting Position (b)	Net Fair Value (c) (d)	Business
			(In Millions)		
Derivatives designated as hedging instruments					
Assets:					
Electricity swaps and options	Prepayments and other (current portion)	$39	($1)	$38	Entergy Wholesale Commodities
Liabilities:					
Electricity swaps and options	Other current liabilities (current portion)	$1	($1)	$—	Entergy Wholesale Commodities
Derivatives not designated as hedging instruments					
Assets:					
Natural gas swaps and options	Prepayments and other (current portion)	$1	$—	$1	Utility
Natural gas swaps and options	Other deferred debits and other assets (non-current portion)	$1	$—	$1	Utility
Financial transmission rights	Prepayments and other	$9	$—	$9	Utility and Entergy Wholesale Commodities
Liabilities:					
Natural gas swaps and options	Other current liabilities (current portion)	$6	$—	$6	Utility
Natural gas swaps and options	Other non-current liabilities (non-current portion)	$1	$—	$1	Utility

(a) Represents the gross amounts of recognized assets/liabilities
(b) Represents the netting of fair value balances with the same counterparty
(c) Represents the net amounts of assets/liabilities presented on the Entergy Corporation and Subsidiaries' Consolidated Balance Sheet
(d) Excludes cash collateral in the amount of $6 million posted as of March 31, 2021 and $5 million posted as of December 31, 2020. Also excludes letters of credit in the amount of $1 million posted and $7 million held as of March 31, 2021 and $1 million posted and $39 million held as of December 31, 2020.

The effects of Entergy's derivative instruments designated as cash flow hedges on the consolidated income statements for the three months ended March 31, 2021 and 2020 were as follows:

Instrument	Amount of gain (loss) recognized in other comprehensive income	Income Statement location	Amount of gain (loss) reclassified from accumulated other comprehensive income into income (a)
	(In Millions)		(In Millions)
2021			
Electricity swaps and options	$2	Competitive businesses operating revenues	$39
2020			
Electricity swaps and options	$67	Competitive businesses operating revenues	$94

(a) Before taxes of $8 million and $20 million for the three months ended March 31, 2021 and 2020, respectively

Based on market prices as of March 31, 2021, unrealized gains (losses) recorded in accumulated other comprehensive income on cash flow hedges relating to power sales totaled $0.3 million, which are expected to be reclassified from accumulated other comprehensive income to operating revenues in the next twelve months. The actual amount reclassified from accumulated other comprehensive income, however, could vary due to future changes in market prices.

Entergy may effectively liquidate a cash flow hedge instrument by entering into a contract offsetting the original hedge, and then de-designating the original hedge in this situation. Gains or losses accumulated in other comprehensive income prior to de-designation continue to be deferred in other comprehensive income until they are included in income as the original hedged transaction occurs. From the point of de-designation, the gains or losses on the original hedge and the offsetting contract are recorded as assets or liabilities on the balance sheet and offset as they flow through to earnings.

The effects of Entergy's derivative instruments not designated as hedging instruments on the consolidated income statements for the three months ended March 31, 2021 and 2020 were as follows:

Instrument	Income Statement location		Amount of gain (loss) recorded in the income statement
			(In Millions)
2021			
Natural gas swaps and options	Fuel, fuel-related expenses, and gas purchased for resale	(a)	$7
Financial transmission rights	Purchased power expense	(b)	$128
Electricity swaps and options (c)	Competitive business operating revenues		($2)
2020			
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	(a)	($7)
Financial transmission rights	Purchased power expense	(b)	$13
Electricity swaps and options (c)	Competitive business operating revenues		$—

(a) Due to regulatory treatment, the natural gas swaps and options are marked-to-market through fuel, fuel-related expenses, and gas purchased for resale and then such amounts are simultaneously reversed and recorded as an offsetting regulatory asset or liability. The gains or losses recorded as fuel expenses when the swaps and options are settled are recovered or refunded through fuel cost recovery mechanisms.

(b) Due to regulatory treatment, the changes in the estimated fair value of financial transmission rights for the Utility operating companies are recorded through purchased power expense and then such amounts are simultaneously reversed and recorded as an offsetting regulatory asset or liability. The gains or losses recorded as purchased power expense when the financial transmission rights for the Utility operating companies are settled are recovered or refunded through fuel cost recovery mechanisms.

(c) There were no gains (losses) recognized in accumulated other comprehensive income from electricity swaps and options.

The fair values of the Registrant Subsidiaries' derivative instruments not designated as hedging instruments on their balance sheets as of March 31, 2021 are shown in the table below. Certain investments, including those not designated as hedging instruments, are subject to master netting agreements and are presented in the balance sheet on a net basis in accordance with accounting guidance for derivatives and hedging.

Instrument	Balance Sheet Location	Gross Fair Value (a)	Offsetting Position (b)	Net Fair Value (c) (d)	Registrant
			(In Millions)		
Assets:					
Natural gas swaps and options	Prepayments and other	$1.0	$—	$1.0	Entergy Louisiana
Natural gas swaps and options	Other deferred debits and other assets (non-current portion)	$0.4	$—	$0.4	Entergy Louisiana
Financial transmission rights	Prepayments and other	$1.5	($0.1)	$1.4	Entergy Arkansas
Financial transmission rights	Prepayments and other	$1.3	($0.1)	$1.2	Entergy Louisiana
Financial transmission rights	Prepayments and other	$0.3	$—	$0.3	Entergy Mississippi
Financial transmission rights	Prepayments and other	$0.1	$—	$0.1	Entergy New Orleans
Financial transmission rights	Prepayments and other	$0.5	$—	$0.5	Entergy Texas
Liabilities:					
Natural gas swaps and options	Other non-current liabilities	$0.8	$—	$0.8	Entergy Louisiana
Natural gas swaps	Other current liabilities	$2.3	$—	$2.3	Entergy Mississippi

The fair values of the Registrant Subsidiaries' derivative instruments not designated as hedging instruments on their balance sheets as of December 31, 2020 were as follows:

Instrument	Balance Sheet Location	Gross Fair Value (a)	Offsetting Position (b)	Net Fair Value (c) (d)	Registrant
			(In Millions)		
Assets:					
Natural gas swaps and options	Prepayments and other	$0.8	$—	$0.8	Entergy Louisiana
Natural gas swaps and options	Other deferred debits and other assets	$0.5	$—	$0.5	Entergy Louisiana
Financial transmission rights	Prepayments and other	$2.9	($0.2)	$2.7	Entergy Arkansas
Financial transmission rights	Prepayments and other	$4.3	($0.1)	$4.2	Entergy Louisiana
Financial transmission rights	Prepayments and other	$0.6	$—	$0.6	Entergy Mississippi
Financial transmission rights	Prepayments and other	$0.2	($0.1)	$0.1	Entergy New Orleans
Financial transmission rights	Prepayments and other	$1.6	$—	$1.6	Entergy Texas
Liabilities:					
Natural gas swaps and options	Other current liabilities	$0.3	$—	$0.3	Entergy Louisiana
Natural gas swaps and options	Other non-current liabilities	$1.3	$—	$1.3	Entergy Louisiana
Natural gas swaps	Other current liabilities	$5.0	$—	$5.0	Entergy Mississippi
Natural gas swaps	Other current liabilities	$0.3	$—	$0.3	Entergy New Orleans

(a) Represents the gross amounts of recognized assets/liabilities
(b) Represents the netting of fair value balances with the same counterparty
(c) Represents the net amounts of assets/liabilities presented on the Registrant Subsidiaries' balance sheets
(d) As of March 31, 2021, letters of credit posted with MISO covered financial transmission rights exposure of $0.4 million for Entergy Arkansas, $0.2 million for Entergy Louisiana, $0.4 million for Entergy Mississippi, and $0.1 million for Entergy New Orleans. As of December 31, 2020, letters of credit posted with MISO covered financial transmission rights exposure of $0.3 million for Entergy Louisiana, $0.2 million for Entergy Mississippi, $0.2 million for Entergy New Orleans, and $0.5 million for Entergy Texas.

The effects of the Registrant Subsidiaries' derivative instruments not designated as hedging instruments on their income statements for the three months ended March 31, 2021 and 2020 were as follows:

Instrument	Income Statement Location	Amount of gain (loss) recorded in the income statement		Registrant
		(In Millions)		
2021				
Natural gas swaps and options	Fuel, fuel-related expenses, and gas purchased for resale	$1.8	(a)	Entergy Louisiana
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	$5.2	(a)	Entergy Mississippi
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	($0.1)	(a)	Entergy New Orleans
Financial transmission rights	Purchased power expense	$26.1	(b)	Entergy Arkansas
Financial transmission rights	Purchased power expense	$12.3	(b)	Entergy Louisiana
Financial transmission rights	Purchased power expense	$7.2	(b)	Entergy Mississippi
Financial transmission rights	Purchased power expense	$1.3	(b)	Entergy New Orleans
Financial transmission rights	Purchased power expense	$77.9	(b)	Entergy Texas
2020				
Natural gas swaps and options	Fuel, fuel-related expenses, and gas purchased for resale	($1.3)	(a)	Entergy Louisiana
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	($5.2)	(a)	Entergy Mississippi
Natural gas swaps	Fuel, fuel-related expenses, and gas purchased for resale	($0.4)	(a)	Entergy New Orleans
Financial transmission rights	Purchased power expense	$4.6	(b)	Entergy Arkansas
Financial transmission rights	Purchased power expense	$5.3	(b)	Entergy Louisiana
Financial transmission rights	Purchased power expense	($0.1)	(b)	Entergy Mississippi
Financial transmission rights	Purchased power expense	$0.4	(b)	Entergy New Orleans
Financial transmission rights	Purchased power expense	$2.4	(b)	Entergy Texas

(a) Due to regulatory treatment, the natural gas swaps and options are marked-to-market through fuel, fuel-related expenses, and gas purchased for resale and then such amounts are simultaneously reversed and recorded as an offsetting regulatory asset or liability. The gains or losses recorded as fuel expenses when the swaps and options are settled are recovered or refunded through fuel cost recovery mechanisms.

(b) Due to regulatory treatment, the changes in the estimated fair value of financial transmission rights for the Utility operating companies are recorded through purchased power expense and then such amounts are simultaneously reversed and recorded as an offsetting regulatory asset or liability. The gains or losses recorded as purchased power expense when the financial transmission rights for the Utility operating companies are settled are recovered or refunded through fuel cost recovery mechanisms.

Fair Values

The estimated fair values of Entergy's financial instruments and derivatives are determined using historical prices, bid prices, market quotes, and financial modeling. Considerable judgment is required in developing the estimates of fair value. Therefore, estimates are not necessarily indicative of the amounts that Entergy could realize in a current market exchange. Gains or losses realized on financial instruments other than those instruments held by the Entergy Wholesale Commodities business are reflected in future rates and therefore do not affect net income. Entergy considers the carrying amounts of most financial instruments classified as current assets and liabilities to be a reasonable estimate of their fair value because of the short maturity of these instruments.

Accounting standards define fair value as an exit price, or the price that would be received to sell an asset or the amount that would be paid to transfer a liability in an orderly transaction between knowledgeable market participants at the date of measurement. Entergy and the Registrant Subsidiaries use assumptions or market input data that market participants would use in pricing assets or liabilities at fair value. The inputs can be readily observable, corroborated by market data, or generally unobservable. Entergy and the Registrant Subsidiaries endeavor to use the best available information to determine fair value.

Accounting standards establish a fair value hierarchy that prioritizes the inputs used to measure fair value. The hierarchy establishes the highest priority for unadjusted market quotes in an active market for the identical asset or liability and the lowest priority for unobservable inputs.

The three levels of the fair value hierarchy are:

- Level 1 - Level 1 inputs are unadjusted quoted prices in active markets for identical assets or liabilities that the entity has the ability to access at the measurement date. Active markets are those in which transactions for the asset or liability occur in sufficient frequency and volume to provide pricing information on an ongoing basis. Level 1 primarily consists of individually owned common stocks, cash equivalents (temporary cash investments, securitization recovery trust account, and escrow accounts), debt instruments, and gas swaps traded on exchanges with active markets. Cash equivalents includes all unrestricted highly liquid debt instruments with an original or remaining maturity of three months or less at the date of purchase.

- Level 2 - Level 2 inputs are inputs other than quoted prices included in Level 1 that are, either directly or indirectly, observable for the asset or liability at the measurement date. Assets are valued based on prices derived by independent third parties that use inputs such as benchmark yields, reported trades, broker/dealer quotes, and issuer spreads. Prices are reviewed and can be challenged with the independent parties and/or overridden by Entergy if it is believed such would be more reflective of fair value. Level 2 inputs include the following:

  – quoted prices for similar assets or liabilities in active markets;
  – quoted prices for identical assets or liabilities in inactive markets;
  – inputs other than quoted prices that are observable for the asset or liability; or
  – inputs that are derived principally from or corroborated by observable market data by correlation or other means.

Level 2 consists primarily of individually-owned debt instruments and gas swaps and options valued using observable inputs.

- Level 3 - Level 3 inputs are pricing inputs that are generally less observable or unobservable from objective sources. These inputs are used with internally developed methodologies to produce management's best estimate of fair value for the asset or liability. Level 3 consists primarily of financial transmission rights and derivative power contracts used as cash flow hedges of power sales at merchant power plants.

The values for power contract assets or liabilities are based on both observable inputs including public market prices and interest rates, and unobservable inputs such as implied volatilities, unit contingent discounts, expected basis differences, and credit adjusted counterparty interest rates. They are classified as Level 3 assets and liabilities. The valuations of these assets and liabilities are performed by the Office of Corporate Risk Oversight and the Entergy Wholesale Commodities Accounting group. The primary related functions of the Office of Corporate Risk Oversight include: gathering, validating and reporting market data, providing market risk analyses and valuations in support of Entergy Wholesale Commodities' commercial transactions, developing and administering protocols for the management of market risks, and implementing and maintaining controls around changes to market data in the energy trading and risk management system. The Office of Corporate Risk Oversight is also responsible for managing the energy trading and risk management system, forecasting revenues, forward positions and analysis. The Entergy Wholesale Commodities Accounting group performs functions related to market and counterparty settlements, revenue reporting and analysis, and financial accounting. The Office of Corporate Risk Oversight reports to the Vice President and Treasurer while the Entergy Wholesale Commodities Accounting group reports to the Chief Accounting Officer.

The amounts reflected as the fair value of electricity swaps are based on the estimated amount that the contracts are in-the-money at the balance sheet date (treated as an asset) or out-of-the-money at the balance sheet date (treated as a liability) and would equal the estimated amount receivable to or payable by Entergy if the contracts were settled at that date. These derivative contracts include cash flow hedges that swap fixed for floating cash flows for sales of the output from the Entergy Wholesale Commodities business. The fair values are based on the mark-to-market comparison between the fixed contract prices and the floating prices determined each period from quoted forward power market prices. The differences between the fixed price in the swap contract and these market-related prices multiplied by the volume specified in the contract and discounted at the counterparties' credit adjusted risk free rate are recorded as derivative contract assets or liabilities. For contracts that have unit contingent terms, a further discount is applied based on the historical relationship between contract and market prices for similar contract terms.

The amounts reflected as the fair values of electricity options are valued based on a Black Scholes model, and are calculated at the end of each month for accounting purposes. Inputs to the valuation include end of day forward market prices for the period when the transactions will settle, implied volatilities based on market volatilities provided by a third-party data aggregator, and U.S. Treasury rates for a risk-free return rate. As described further below, prices and implied volatilities are reviewed and can be adjusted if it is determined that there is a better representation of fair value.

On a daily basis, the Office of Corporate Risk Oversight calculates the mark-to-market for electricity swaps and options. The Office of Corporate Risk Oversight also validates forward market prices by comparing them to other sources of forward market prices or to settlement prices of actual market transactions. Significant differences are analyzed and potentially adjusted based on these other sources of forward market prices or settlement prices of actual market transactions. Implied volatilities used to value options are also validated using actual counterparty quotes for Entergy Wholesale Commodities transactions when available and compared with other sources of market implied volatilities. Moreover, on a quarterly basis, the Office of Corporate Risk Oversight confirms the mark-to-market calculations and prepares price scenarios and credit downgrade scenario analysis. The scenario analysis is communicated to senior management within Entergy and within Entergy Wholesale Commodities. Finally, for all proposed derivative transactions, an analysis is completed to assess the risk of adding the proposed derivative to Entergy Wholesale Commodities' portfolio. In particular, the credit and liquidity effects are calculated for this analysis. This analysis is communicated to senior management within Entergy and Entergy Wholesale Commodities.

The values of financial transmission rights are based on unobservable inputs, including estimates of congestion costs in MISO between applicable generation and load pricing nodes based on the 50th percentile of historical prices. They are classified as Level 3 assets and liabilities. The valuations of these assets and liabilities

are performed by the Office of Corporate Risk Oversight. The values are calculated internally and verified against the data published by MISO. Entergy's Entergy Wholesale Commodities Accounting group review these valuations for reasonableness, with the assistance of others within the organization with knowledge of the various inputs and assumptions used in the valuation. The Office of Corporate Risk Oversight reports to the Vice President and Treasurer. The Entergy Wholesale Commodities Accounting group reports to the Chief Accounting Officer.

The following tables set forth, by level within the fair value hierarchy, Entergy's assets and liabilities that were accounted for at fair value on a recurring basis as of March 31, 2021 and December 31, 2020. The assessment of the significance of a particular input to a fair value measurement requires judgment and may affect its placement within the fair value hierarchy levels.

2021	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$1,675	$—	$—	$1,675
Decommissioning trust funds (a):				
Equity securities	807	—	—	807
Debt securities (b)	1,489	1,947	—	3,436
Common trusts (c)				3,102
Securitization recovery trust account	44	—	—	44
Escrow accounts	103	—	—	103
Gas hedge contracts	1	—	—	1
Financial transmission rights	—	—	4	4
	$4,119	$1,947	$4	$9,172
Liabilities:				
Gas hedge contracts	$2	$1	$—	$3

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$1,630	$—	$—	$1,630
Decommissioning trust funds (a):				
Equity securities	1,533	—	—	1,533
Debt securities (b)	919	1,698	—	2,617
Common trusts (c)				3,103
Power contracts	—	—	38	38
Securitization recovery trust account	42	—	—	42
Escrow accounts	148	—	—	148
Gas hedge contracts	1	1	—	2
Financial transmission rights	—	—	9	9
	$4,273	$1,699	$47	$9,122
Liabilities:				
Gas hedge contracts	$6	$1	$—	$7

(a) The decommissioning trust funds hold equity and fixed income securities. Equity securities are invested to approximate the returns of major market indices. Fixed income securities are held in various governmental and corporate securities. See Note 9 to the financial statements herein for additional information on the investment portfolios.

(b) The decommissioning trust funds fair values presented herein do not include the recognition of a credit loss valuation allowance of $6.4 million as of March 31, 2021 and $0.1 million as of December 31, 2020 on debt securities due to the adoption of ASU 2016-13. See Note 9 to the financial statements herein for additional information on the allowance for expected credit losses.

(c) Common trust funds are not publicly quoted and are valued by the fund administrators using net asset value as a practical expedient. Accordingly, these funds are not assigned a level in the fair value table. The fund administrator of these investments allows daily trading at the net asset value and trades settle at a later date.

The following table sets forth a reconciliation of changes in the net assets (liabilities) for the fair value of derivatives classified as Level 3 in the fair value hierarchy for the three months ended March 31, 2021 and 2020:

	2021		2020	
	Power Contracts	Financial transmission rights	Power Contracts	Financial transmission rights
	(In Millions)			
Balance as of January 1,	$38	$9	$118	$10
Total gains (losses) for the period (a)				
Included in earnings	(2)	4	(18)	—
Included in other comprehensive income	2	—	67	—
Included as a regulatory liability/asset	—	119	—	7
Settlements	(38)	(128)	(82)	(13)
Balance as of March 31,	$—	$4	$85	$4

(a) Change in unrealized gains or losses for the period included in earnings for derivatives held at the end of the reporting period was $0.7 million for the three months ended March 31, 2021 and $1 million for the three months ended March 31, 2020.

The fair values of the Level 3 financial transmission rights are based on unobservable inputs calculated internally and verified against historical pricing data published by MISO.

The following table sets forth an analysis of each of the types of unobservable inputs impacting the fair value of items classified as Level 3 within the fair value hierarchy, and the sensitivity to changes to those inputs:

Significant Unobservable Input	Transaction Type	Position	Change to Input	Effect on Fair Value
Unit contingent discount	Electricity swaps	Sell	Increase (Decrease)	Decrease (Increase)

The following table sets forth, by level within the fair value hierarchy, the Registrant Subsidiaries' assets and liabilities that were accounted for at fair value on a recurring basis as of March 31, 2021 and December 31, 2020. The assessment of the significance of a particular input to a fair value measurement requires judgment and may affect its placement within the fair value hierarchy levels.

Entergy Arkansas

2021	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$123.7	$—	$—	$123.7
Decommissioning trust funds (a):				
Equity securities	53.3	—	—	53.3
Debt securities	89.9	336.0	—	425.9
Common trusts (b)				831.9
Financial transmission rights	—	—	1.4	1.4
	$266.9	$336.0	$1.4	$1,436.2

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$168.0	$—	$—	$168.0
Decommissioning trust funds (a):				
Equity securities	1.3	—	—	1.3
Debt securities	98.2	349.7	—	447.9
Common trusts (b)				824.7
Financial transmission rights	—	—	2.7	2.7
	$267.5	$349.7	$2.7	$1,444.6

Entergy Louisiana

2021	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$601.6	$—	$—	$601.6
Decommissioning trust funds (a):				
Equity securities	68.8	—	—	68.8
Debt securities	218.9	413.9	—	632.8
Common trusts (b)				1,177.7
Securitization recovery trust account	8.8	—	—	8.8
Gas hedge contracts	1.0	0.4	—	1.4
Financial transmission rights	—	—	1.2	1.2
	$899.1	$414.3	$1.2	$2,492.3
Liabilities:				
Gas hedge contracts	$—	$0.8	$—	$0.8

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$726.7	$—	$—	$726.7
Decommissioning trust funds (a):				
Equity securities	8.7	—	—	8.7
Debt securities	172.4	459.8	—	632.2
Common trusts (b)				1,153.1
Securitization recovery trust account	2.7	—	—	2.7
Gas hedge contracts	0.8	0.5	—	1.3
Financial transmission rights	—	—	4.2	4.2
	$911.3	$460.3	$4.2	$2,528.9
Liabilities:				
Gas hedge contracts	$0.3	$1.3	$—	$1.6

Entergy Mississippi

2021	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$76.7	$—	$—	$76.7
Escrow accounts	64.6	—	—	64.6
Financial transmission rights	—	—	0.3	0.3
	$141.3	$—	$0.3	$141.6
Liabilities:				
Gas hedge contracts	$2.3	$—	$—	$2.3

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Escrow accounts	$64.6	$—	$—	$64.6
Financial transmission rights	—	—	0.6	0.6
	$64.6	$—	$0.6	$65.2
Liabilities:				
Gas hedge contracts	$5.0	$—	$—	$5.0

Entergy New Orleans

2021	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Securitization recovery trust account	$6.8	$—	$—	$6.8
Escrow accounts	38.8	—	—	38.8
Financial transmission rights	—	—	0.1	0.1
	$45.6	$—	$0.1	$45.7

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Securitization recovery trust account	$3.4	$—	$—	$3.4
Escrow accounts	83.0	—	—	83.0
Financial transmission rights	—	—	0.1	0.1
	$86.4	$—	$0.1	$86.5
Liabilities:				
Gas hedge contracts	$0.3	$—	$—	$0.3

Entergy Texas

2021	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Securitization recovery trust account	$28.1	$—	$—	$28.1
Financial transmission rights	—	—	0.5	0.5
	$28.1	$—	$0.5	$28.6

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$248.6	$—	$—	$248.6
Securitization recovery trust account	36.2	—	—	36.2
Financial transmission rights	—	—	1.6	1.6
	$284.8	$—	$1.6	$286.4

System Energy

2021	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$132.1	$—	$—	$132.1
Decommissioning trust funds (a):				
Equity securities	60.6	—	—	60.6
Debt Securities	179.4	227.0	—	406.4
Common trusts (b)				782.8
	$372.1	$227.0	$—	$1,381.9

2020	Level 1	Level 2	Level 3	Total
		(In Millions)		
Assets:				
Temporary cash investments	$216.4	$—	$—	$216.4
Decommissioning trust funds (a):				
Equity securities	3.8	—	—	3.8
Debt securities	177.3	250.4	—	427.7
Common trusts (b)				784.4
	$397.5	$250.4	$—	$1,432.3

(a) The decommissioning trust funds hold equity and fixed income securities. Equity securities are invested to approximate the returns of major market indices. Fixed income securities are held in various governmental and corporate securities. See Note 9 to the financial statements herein for additional information on the investment portfolios.

(b) Common trust funds are not publicly quoted and are valued by the fund administrators using net asset value as a practical expedient. Accordingly, these funds are not assigned a level in the fair value table. The fund administrator of these investments allows daily trading at the net asset value and trades settle at a later date.

The following table sets forth a reconciliation of changes in the net assets (liabilities) for the fair value of derivatives classified as Level 3 in the fair value hierarchy for the three months ended March 31, 2021.

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Millions)		
Balance as of January 1,	$2.7	$4.2	$0.6	$0.1	$1.6
Gains (losses) included as a regulatory liability/asset	24.8	9.3	6.9	1.2	76.8
Settlements	(26.1)	(12.3)	(7.2)	(1.2)	(77.9)
Balance as of March 31,	$1.4	$1.2	$0.3	$0.1	$0.5

The following table sets forth a reconciliation of changes in the net assets (liabilities) for the fair value of derivatives classified as Level 3 in the fair value hierarchy for the three months ended March 31, 2020.

	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Millions)		
Balance as of January 1,	$3.3	$4.5	$0.8	$0.3	$0.9
Gains (losses) included as a regulatory liability/asset	2.4	2.7	(0.6)	0.1	1.8
Settlements	(4.6)	(5.3)	0.1	(0.4)	(2.4)
Balance as of March 31,	$1.1	$1.9	$0.3	$—	$0.3

NOTE 9. DECOMMISSIONING TRUST FUNDS (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, and System Energy)

The NRC requires Entergy subsidiaries to maintain nuclear decommissioning trusts to fund the costs of decommissioning ANO 1, ANO 2, River Bend, Waterford 3, Grand Gulf, Indian Point 1, Indian Point 2, Indian Point 3, and Palisades. Entergy's nuclear decommissioning trust funds invest in equity securities, fixed-rate debt securities, and cash and cash equivalents.

Entergy records decommissioning trust funds on the balance sheet at their fair value. Because of the ability of the Registrant Subsidiaries to recover decommissioning costs in rates and in accordance with the regulatory treatment for decommissioning trust funds, the Registrant Subsidiaries have recorded an offsetting amount of unrealized gains/(losses) on investment securities in other regulatory liabilities/assets. For the 30% interest in River Bend formerly owned by Cajun, Entergy Louisiana records an offsetting amount in other deferred credits for the unrealized trust earnings not currently expected to be needed to decommission the plant. Decommissioning trust funds for the Entergy Wholesale Commodities nuclear plants do not meet the criteria for regulatory accounting treatment. Accordingly, unrealized gains/(losses) recorded on the equity securities in the trust funds are recognized in earnings. Unrealized gains recorded on the available-for-sale debt securities in the trust funds are recognized in the accumulated other comprehensive income component of shareholders' equity. Unrealized losses (where cost exceeds fair market value) on the available-for-sale debt securities in the trust funds are also recorded in the accumulated other comprehensive income component of shareholders' equity unless the unrealized loss is other than temporary and therefore recorded in earnings. A portion of Entergy's decommissioning trust funds were held in a wholly-owned registered investment company, and unrealized gains and losses on both the equity and debt securities held in the registered investment company were recognized in earnings. Generally, Entergy records gains and losses on its debt and equity securities using the specific identification method to determine the cost basis of its securities.

The unrealized gains/(losses) recognized during the three months ended March 31, 2021 on equity securities still held as of March 31, 2021 were $200 million. The equity securities are generally held in funds that are designed to approximate or somewhat exceed the return of the Standard & Poor's 500 Index. A relatively small percentage of the equity securities are held in funds intended to replicate the return of the Wilshire 4500 Index or the Russell 3000 Index. The debt securities are generally held in individual government and credit issuances.

The available-for-sale securities held as of March 31, 2021 and December 31, 2020 are summarized as follows:

	Fair Value	Total Unrealized Gains	Total Unrealized Losses
		(In Millions)	
2021			
Debt Securities	$3,436	$102	$43
2020			
Debt Securities	$2,617	$197	$3

The unrealized gains/(losses) above are reported before deferred taxes of $5 million as of March 31, 2021 and $31 million as of December 31, 2020 for debt securities. The amortized cost of available-for-sale debt securities was $3,376 million as of March 31, 2021 and $2,423 million as of December 31, 2020. As of March 31, 2021, available-for-sale debt securities had an average coupon rate of approximately 2.59%, an average duration of approximately 5.98 years, and an average maturity of approximately 8.45 years.

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities had been in a continuous loss position, were as follows as of March 31, 2021 and December 31, 2020:

	March 31, 2021		December 31, 2020	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
	(In Millions)			
Less than 12 months	$1,748	$43	$187	$3
More than 12 months	3	—	2	—
Total	$1,751	$43	$189	$3

The fair value of available-for-sale debt securities, summarized by contractual maturities, as of March 31, 2021 and December 31, 2020 were as follows:

	2021	2020
	(In Millions)	
Less than 1 year	$—	($4)
1 year - 5 years	1,027	672
5 years - 10 years	1,257	852
10 years - 15 years	492	377
15 years - 20 years	128	144
20 years+	532	576
Total	$3,436	$2,617

During the three months ended March 31, 2021 and 2020, proceeds from the dispositions of available-for-sale securities amounted to $524 million and $400 million, respectively. During the three months ended March 31, 2021 and 2020, gross gains of $11 million and $14 million, respectively, and gross losses of $11 million and $3 million, respectively, related to available-for-sale securities were reclassified out of other comprehensive income or other regulatory liabilities/assets into earnings.

The fair values of the decommissioning trust funds related to the Entergy Wholesale Commodities nuclear plants as of March 31, 2021 were $631 million for Indian Point 1, $760 million for Indian Point 2, $970 million for Indian Point 3, and $545 million for Palisades. The fair values of the decommissioning trust funds related to the Entergy Wholesale Commodities nuclear plants as of December 31, 2020 were $631 million for Indian Point 1, $794 million for Indian Point 2, $991 million for Indian Point 3, and $554 million for Palisades. The fair values of the decommissioning trust funds for the Registrant Subsidiaries' nuclear plants are detailed below.

Entergy Arkansas

Entergy Arkansas holds equity securities and available-for-sale debt securities in nuclear decommissioning trust accounts. The available-for-sale securities held as of March 31, 2021 and December 31, 2020 are summarized as follows:

	Fair Value	Total Unrealized Gains	Total Unrealized Losses
		(In Millions)	
2021			
Debt Securities	$425.9	$13.2	$6.8
2020			
Debt Securities	$447.9	$27.7	$0.3

The amortized cost of available-for-sale debt securities was $419.5 million as of March 31, 2021 and $420.4 million as of December 31, 2020. As of March 31, 2021, available-for-sale debt securities had an average coupon rate of approximately 2.42%, an average duration of approximately 6.40 years, and an average maturity of approximately 7.62 years.

The unrealized gains/(losses) recognized during the three months ended March 31, 2021 on equity securities still held as of March 31, 2021 was $45.2 million. The equity securities are generally held in funds that are designed to approximate the return of the Standard & Poor's 500 Index. A relatively small percentage of the equity securities are held in funds intended to replicate the return of the Wilshire 4500 Index.

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities had been in a continuous loss position, were as follows as of March 31, 2021 and December 31, 2020:

	March 31, 2021		December 31, 2020	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
		(In Millions)		
Less than 12 months	$139.1	$6.8	$29.9	$0.3
More than 12 months	—	—	—	—
Total	$139.1	$6.8	$29.9	$0.3

The fair value of available-for-sale debt securities, summarized by contractual maturities, as of March 31, 2021 and December 31, 2020 were as follows:

	2021	2020
	(In Millions)	
Less than 1 year	$—	$—
1 year - 5 years	84.7	113.1
5 years - 10 years	179.2	189.8
10 years - 15 years	100.8	81.4
15 years - 20 years	26.7	28.5
20 years+	34.5	35.1
Total	$425.9	$447.9

During the three months ended March 31, 2021 and 2020, proceeds from the dispositions of available-for-sale securities amounted to $13.8 million and $48.6 million, respectively. During the three months ended March 31, 2021 and 2020, gross gains of $0.8 million and $4.5 million, respectively, and gross losses of $0.1 million and $0.2 million, respectively, related to available-for-sale securities were reclassified out of other regulatory liabilities/assets into earnings.

Entergy Louisiana

Entergy Louisiana holds equity securities and available-for-sale debt securities in nuclear decommissioning trust accounts. The available-for-sale securities held as of March 31, 2021 and December 31, 2020 are summarized as follows:

	Fair Value	Total Unrealized Gains	Total Unrealized Losses
		(In Millions)	
2021			
Debt Securities	$632.8	$31.2	$4.6
2020			
Debt Securities	$632.2	$51.3	$0.5

The amortized cost of available-for-sale debt securities was $606.3 million as of March 31, 2021 and $581.4 million as of December 31, 2020. As of March 31, 2021, the available-for-sale debt securities had an average coupon rate of approximately 3.25%, an average duration of approximately 6.59 years, and an average maturity of approximately 11.56 years.

The unrealized gains/(losses) recognized during the three months ended March 31, 2021 on equity securities still held as of March 31, 2021 was $64.9 million. The equity securities are generally held in funds that are designed to approximate the return of the Standard & Poor's 500 Index. A relatively small percentage of the equity securities are held in funds intended to replicate the return of the Wilshire 4500 Index.

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities had been in a continuous loss position, were as follows as of March 31, 2021 and December 31, 2020:

	March 31, 2021		December 31, 2020	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
		(In Millions)		
Less than 12 months	$171.7	$4.6	$36.4	$0.5
More than 12 months	2.3	—	0.8	—
Total	$174.0	$4.6	$37.2	$0.5

The fair value of available-for-sale debt securities, summarized by contractual maturities, as of March 31, 2021 and December 31, 2020 were as follows:

	2021	2020
	(In Millions)	
Less than 1 year	$—	$—
1 year - 5 years	89.3	117.0
5 years - 10 years	186.0	159.4
10 years - 15 years	113.7	101.2
15 years - 20 years	63.4	66.9
20 years+	180.4	187.7
Total	$632.8	$632.2

During the three months ended March 31, 2021 and 2020, proceeds from the dispositions of available-for-sale securities amounted to $108.4 million and $67.4 million, respectively. During the three months ended March 31, 2021 and 2020, gross gains of $3.3 million and $2.9 million, respectively, and gross losses of $3.2 million and $0.6 million, respectively, related to available-for-sale securities were reclassified out of other regulatory liabilities/assets into earnings.

System Energy

System Energy holds equity securities and available-for-sale debt securities in nuclear decommissioning trust accounts. The available-for-sale securities held as of March 31, 2021 and December 31, 2020 are summarized as follows:

	Fair Value	Total Unrealized Gains	Total Unrealized Losses
		(In Millions)	
2021			
Debt Securities	$406.4	$14.3	$5.0
2020			
Debt Securities	$427.7	$30.0	$0.8

The amortized cost of available-for-sale debt securities was $397 million as of March 31, 2021 and $398.4 million as of December 31, 2020. As of March 31, 2021, available-for-sale debt securities had an average coupon rate of approximately 2.36%, an average duration of approximately 6.31 years, and an average maturity of approximately 9.62 years.

The unrealized gains/(losses) recognized during the three months ended March 31, 2021 on equity securities still held as of March 31, 2021 was $43.1 million. The equity securities are generally held in funds that are designed to approximate the return of the Standard & Poor’s 500 Index. A relatively small percentage of the equity securities are held in funds intended to replicate the return of the Wilshire 4500 Index.

The fair value and gross unrealized losses of available-for-sale debt securities, summarized by length of time that the securities had been in a continuous loss position, were as follows as of March 31, 2021 and December 31, 2020:

	March 31, 2021		December 31, 2020	
	Fair Value	Gross Unrealized Losses	Fair Value	Gross Unrealized Losses
	(In Millions)			
Less than 12 months	$157.5	$5.0	$28.9	$0.8
More than 12 months	—	—	—	—
Total	$157.5	$5.0	$28.9	$0.8

The fair value of available-for-sale debt securities, summarized by contractual maturities, as of March 31, 2021 and December 31, 2020 were as follows:

	2021	2020
	(In Millions)	
Less than 1 year	$—	($1.1)
1 year - 5 years	136.2	134.7
5 years - 10 years	120.4	141.5
10 years - 15 years	35.1	31.5
15 years - 20 years	4.5	5.3
20 years+	110.2	115.8
Total	$406.4	$427.7

During the three months ended March 31, 2021 and 2020, proceeds from the dispositions of available-for-sale securities amounted to $74.1 million and $92 million, respectively. During the three months ended March 31, 2021 and 2020, gross gains of $1.2 million and $1.7 million, respectively, and gross losses of $1.6 million and $0.2 million, respectively, related to available-for-sale securities were reclassified out of other regulatory liabilities/assets into earnings.

Allowance for expected credit losses

Entergy estimates the expected credit losses for its available-for-sale securities based on the current credit rating and remaining life of the securities. To the extent an individual security is determined to be uncollectible it is written off against this allowance. Entergy's available-for-sale securities are held in trusts managed by third parties who operate in accordance with agreements that define investment guidelines and place restrictions on the purchases and sales of investments. Specifically, available-for-sale securities are subject to credit worthiness restrictions, with requirements for both the average credit rating of the portfolio and minimum credit ratings for individual debt securities. As of March 31, 2021 and December 31, 2020, Entergy's allowance for expected credit losses related to available-for-sale securities were $6.4 million and $0.1 million, respectively. Entergy did not record any impairments of available-for-sale debt securities for the three months ended March 31, 2021 and 2020.

NOTE 10. INCOME TAXES (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

See "**Income Tax Audits**" and "**Other Tax Matters**" in Note 3 to the financial statements in the Form 10-K for a discussion of income tax audits, the Tax Cuts and Jobs Act, and other income tax matters involving Entergy. The following are updates to that discussion.

Tax Cuts and Jobs Act

During the second quarter 2018, the Registrant Subsidiaries began returning unprotected excess accumulated deferred income taxes, associated with the effects of the Tax Cuts and Jobs Act, to their customers through rate riders and other means approved by their respective regulatory commissions. Return of the unprotected excess accumulated deferred income taxes results in a reduction in the regulatory liability for income taxes and a corresponding reduction in income tax expense. This manner of regulatory accounting affects the effective tax rate for the period as compared to the statutory tax rate. The return of unprotected excess accumulated deferred income taxes reduced Entergy's and the Registrant Subsidiaries' regulatory liability for income taxes as follows:

	Three Months Ended March 31,	
	2021	2020
	(In Millions)	
Entergy	$41	$30
Entergy Arkansas	$8	$13
Entergy Louisiana	$8	$8
Entergy New Orleans	$—	$3
Entergy Texas	$7	$6
System Energy	$18	$—

NOTE 11. PROPERTY, PLANT, AND EQUIPMENT (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Construction Expenditures in Accounts Payable

Construction expenditures included in accounts payable at March 31, 2021 were $496.4 million for Entergy, $39.6 million for Entergy Arkansas, $330.4 million for Entergy Louisiana, $24.1 million for Entergy Mississippi, $4 million for Entergy New Orleans, $44.6 million for Entergy Texas, and $17.7 million for System Energy. Construction expenditures included in accounts payable at December 31, 2020 were $745 million for Entergy, $59.7 million for Entergy Arkansas, $460.5 million for Entergy Louisiana, $31.4 million for Entergy Mississippi, $9.2 million for Entergy New Orleans, $116.8 million for Entergy Texas, and $17.7 million for System Energy.

NOTE 12. VARIABLE INTEREST ENTITIES (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

See Note 17 to the financial statements in the Form 10-K for a discussion of variable interest entities. See Note 4 to the financial statements herein for details of the nuclear fuel companies' credit facilities, commercial paper borrowings, and long-term debt.

System Energy is considered to hold a variable interest in the lessor from which it leases an undivided interest representing approximately 11.5% of the Grand Gulf nuclear plant. System Energy is the lessee under this arrangement, which is described in more detail in Note 5 to the financial statements in the Form 10-K. System Energy made payments under this arrangement, including interest, of $8.6 million in the three months ended March 31, 2021 and in the three months ended March 31, 2020.

NOTE 13. REVENUE (Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy)

Operating Revenues

See Note 19 to the financial statements in the Form 10-K for a discussion of revenue recognition. Entergy's total revenues for the three months ended March 31, 2021 and 2020 were as follows:

	2021	2020
	(In Thousands)	
Utility:		
Residential	$966,855	$798,028
Commercial	572,676	538,940
Industrial	597,652	557,515
Governmental	56,798	52,582
Total billed retail	2,193,981	1,947,065
Sales for resale (a)	205,075	53,725
Other electric revenues (b)	80,261	50,166
Revenues from contracts with customers	2,479,317	2,050,956
Other revenues (c)	59,103	(318)
Total electric revenues	2,538,420	2,050,638
Natural gas	58,168	43,976
Entergy Wholesale Commodities:		
Competitive businesses sales from contracts with customers (a)	232,113	216,002
Other revenues (c)	16,137	116,563
Total competitive businesses revenues	248,250	332,565
Total operating revenues	$2,844,838	$2,427,179

The Registrant Subsidiaries' total revenues for the three months ended March 31, 2021 and 2020 were as follows:

2021	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
Residential	$237,182	$335,760	$147,636	$66,427	$179,850
Commercial	106,416	224,649	97,936	47,799	95,876
Industrial	103,412	347,009	33,980	6,789	106,462
Governmental	4,256	18,616	10,543	16,380	7,003
Total billed retail	451,266	926,034	290,095	137,395	389,191
Sales for resale (a)	110,085	80,428	40,311	4,696	74,073
Other electric revenues (b)	19,583	43,910	3,950	(3,359)	17,529
Revenues from contracts with customers	580,934	1,050,372	334,356	138,732	480,793
Other revenues (c)	2,452	29,291	2,263	416	(573)
Total electric revenues	583,386	1,079,663	336,619	139,148	480,220
Natural gas	—	27,981	—	30,187	—
Total operating revenues	$583,386	$1,107,644	$336,619	$169,335	$480,220

2020	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
			(In Thousands)		
Residential	$219,688	$259,860	$127,102	$50,899	$140,480
Commercial	111,245	202,246	96,798	45,505	83,146
Industrial	101,088	322,342	36,390	7,347	90,348
Governmental	4,030	16,754	10,327	15,851	5,620
Total billed retail	436,051	801,202	270,617	119,602	319,594
Sales for resale (a)	41,140	78,530	14,422	10,170	8,629
Other electric revenues (b)	1,596	32,008	6,443	763	10,702
Revenues from contracts with customers	478,787	911,740	291,482	130,535	338,925
Other revenues (c)	3,125	801	2,440	(7,104)	411
Total electric revenues	481,912	912,541	293,922	123,431	339,336
Natural gas	—	18,106	—	25,871	—
Total operating revenues	$481,912	$930,647	$293,922	$149,302	$339,336

(a) Sales for resale and competitive businesses sales include day-ahead sales of energy in a market administered by an ISO. These sales represent financially binding commitments for the sale of physical energy the next day. These sales are adjusted to actual power generated and delivered in the real time market. Given the short duration of these transactions, Entergy does not consider them to be derivatives subject to fair value adjustments, and includes them as part of customer revenues.

(b) Other electric revenues consist primarily of transmission and ancillary services provided to participants of an ISO-administered market and unbilled revenue.

(c) Other revenues include the settlement of financial hedges, occasional sales of inventory, alternative revenue programs, provisions for revenue subject to refund, and late fees.

Allowance for doubtful accounts

The allowance for doubtful accounts reflects Entergy's best estimate of expected losses on its accounts receivable balances. Due to the essential nature of utility services, Entergy has historically experienced a low rate of default on its accounts receivables. Due to the effect of the COVID-19 pandemic on customer receivables, however, Entergy recorded increases in its allowance for doubtful accounts in 2020. The following table sets forth a reconciliation of changes in the allowance for doubtful accounts for the three months ended March 31, 2021 and 2020.

	Entergy	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
	(In Millions)					
Balance as of December 31, 2020	$117.7	$18.3	$45.7	$19.5	$17.4	$16.8
Provisions	3.2	2.4	2.3	(2.2)	1.8	(1.1)
Write-offs	(3.8)	(0.1)	(2.1)	(0.8)	—	(0.8)
Recoveries	1.9	0.6	0.7	0.3	0.2	0.1
Balance as of March 31, 2021	$119.0	$21.2	$46.6	$16.8	$19.4	$15.0

	Entergy	Entergy Arkansas	Entergy Louisiana	Entergy Mississippi	Entergy New Orleans	Entergy Texas
	(In Millions)					
Balance as of December 31, 2019	$7.4	$1.2	$1.9	$0.6	$3.2	$0.5
Provisions	6.6	1.2	3.0	0.9	0.8	0.7
Write-offs	(8.4)	(1.8)	(3.5)	(1.2)	(0.8)	(1.1)
Recoveries	2.9	0.9	1.1	0.3	0.2	0.5
Balance as of March 31, 2020	$8.5	$1.5	$2.5	$0.6	$3.4	$0.6

The allowance for currently expected credit losses is calculated as the historical rate of customer write-offs multiplied by the current accounts receivable balance, taking into account the length of time the receivable balances have been outstanding. Although the rate of customer write-offs has historically experienced minimal variation, management monitors the current condition of individual customer accounts to manage collections and ensure bad debt expense is recorded in a timely manner.

In the opinion of the management of Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy, the accompanying unaudited financial

statements contain all adjustments (consisting primarily of normal recurring accruals and reclassification of previously reported amounts to conform to current classifications) necessary for a fair statement of the results for the interim periods presented. Entergy's business is subject to seasonal fluctuations, however, with peak periods occurring typically during the first and third quarters. The results for the interim periods presented should not be used as a basis for estimating results of operations for a full year.

Part I, Item 3. Quantitative and Qualitative Disclosures About Market Risk

See "**Market and Credit Risk Sensitive Instruments**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis.

Part I, Item 4. Controls and Procedures

Disclosure Controls and Procedures

As of March 31, 2021, evaluations were performed under the supervision and with the participation of Entergy Corporation, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, Entergy New Orleans, Entergy Texas, and System Energy (individually "Registrant" and collectively the "Registrants") management, including their respective Principal Executive Officers (PEO) and Principal Financial Officers (PFO). The evaluations assessed the effectiveness of the Registrants' disclosure controls and procedures. Based on the evaluations, each PEO and PFO has concluded that, as to the Registrant or Registrants for which they serve as PEO or PFO, the Registrant's or Registrants' disclosure controls and procedures are effective to ensure that information required to be disclosed by each Registrant in reports that it files or submits under the Securities Exchange Act of 1934 is recorded, processed, summarized and reported within the time periods specified in Securities and Exchange Commission rules and forms; and that the Registrant's or Registrants' disclosure controls and procedures are also effective in reasonably assuring that such information is accumulated and communicated to the Registrant's or Registrants' management, including their respective PEOs and PFOs, as appropriate to allow timely decisions regarding required disclosure.

Changes in Internal Controls over Financial Reporting

Under the supervision and with the participation of each Registrants' management, including its respective PEO and PFO, each Registrant evaluated changes in internal control over financial reporting that occurred during the quarter ended March 31, 2021 and found no change that has materially affected, or is reasonably likely to materially affect, internal control over financial reporting.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

The COVID-19 Pandemic

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - The COVID-19 Pandemic**" in the Form 10-K for a discussion of the COVID-19 pandemic.

Winter Storm Uri

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - February 2021 Winter Storms**" in the Form 10-K for a discussion of the winter storms and extreme cold temperatures experienced in the United States, including Entergy Arkansas's service area, in February 2021 (Winter Storm Uri). Fuel and purchased power costs for Entergy Arkansas were approximately $145 million in February 2021 compared to approximately $40 million in February 2020. See Note 2 to the financial statements herein and in the Form 10-K for discussion of fuel cost recovery at Entergy Arkansas.

In March 2021 the APSC opened an investigation into Arkansas utilities' preparation, response, operational performance, and communication regarding the February 2021 extreme weather events. In April 2021, the Arkansas Attorney General notified utilities of its intent to conduct an investigation into the fuel costs that were charged during the February 2021 winter storms, specifically, whether there was price gouging by suppliers.

Results of Operations

Net Income

Net income increased $48.4 million primarily due to the reversal in 2021 of the remaining regulatory liability for the formula rate plan 2019 historical year netting adjustment and higher volume/weather, partially offset by a higher effective income tax rate.

Operating Revenues

Following is an analysis of the change in operating revenues comparing the first quarter 2021 to the first quarter 2020:

	Amount
	(In Millions)
2020 operating revenues	$481.9
Fuel, rider, and other revenues that do not significantly affect net income	63.4
Volume/weather	35.9
Return of unprotected excess accumulated deferred income taxes to customers	5.1
Retail electric price	(2.9)
2021 operating revenues	**$583.4**

Entergy Arkansas's results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not affect net income. "Fuel, rider, and other revenues that do not significantly affect net income" includes the revenue variance associated with these items.

The volume/weather variance is primarily due to an increase of 474 GWh, or 9%, in billed electricity usage, including the effect of more favorable weather on residential sales and increased industrial usage. The increase in industrial usage is primarily due to an increase in demand from expansion projects, primarily in the metals industry.

The return of unprotected excess accumulated deferred income taxes to customers resulted from the return of unprotected excess accumulated deferred income taxes through a tax adjustment rider beginning in April 2018. In first quarter 2021, $8 million was returned to customers as compared to $13.1 million in first quarter 2020. There is no effect on net income as the reduction in operating revenues in each period was offset by a reduction in income tax expense. See Note 2 to the financial statements in the Form 10-K for further discussion of regulatory activity regarding the Tax Cuts and Jobs Act.

Billed electric energy sales for Entergy Arkansas for the three months ended March 31, 2021 and 2020 are as follows:

	2021	2020	% Change
	(GWh)		
Residential	2,470	2,075	19
Commercial	1,266	1,284	(1)
Industrial	1,908	1,811	5
Governmental	54	54	—
Total retail	5,698	5,224	9
Sales for resale:			
Associated companies	597	403	48
Non-associated companies	2,030	1,146	77
Total	8,325	6,773	23

See Note 13 to the financial statements herein for additional discussion of Entergy Arkansas’s operating revenues.

Other Income Statement Variances

Other operation and maintenance expenses increased primarily due to lower nuclear insurance refunds of $5.8 million, partially offset by a decrease of $2.4 million in nuclear generation expenses primarily due to lower nuclear labor costs, including contract labor.

Depreciation and amortization expenses increased primarily due to additions to plant in service.

Other regulatory charges (credits) - net in the first quarter 2021 included the reversal of the remaining $38.8 million regulatory liability for the 2019 historical year netting adjustment as part of its 2020 formula rate plan proceeding. See Note 2 to the financial statements herein and in the Form 10-K for discussion of the 2020 formula rate plan filing.

Other income increased primarily due to changes in decommissioning trust fund investment activity.

Income Taxes

The effective income tax rate was 17.3% for the first quarter 2021. The difference in the effective income tax rate for the first quarter 2021 versus the federal statutory rate of 21% was primarily due to the amortization of excess accumulated deferred income taxes and certain book and tax differences related to utility plant items,

partially offset by state income taxes. See Note 10 to the financial statements herein and Note 3 to the financial statements in the Form 10-K for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act.

The effective income tax rate was (17.6%) for the first quarter 2020. The difference in the effective income tax rate for the first quarter 2020 versus the federal statutory rate of 21% was primarily due to the amortization of excess accumulated deferred income taxes, permanent differences related to income tax deductions for stock-based compensation, and certain book and tax differences related to utility plant items, partially offset by state income taxes. See Note 10 to the financial statements herein and Note 3 to the financial statements in the Form 10-K for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act. See Note 3 to the financial statements in the Form 10-K for discussion of the income tax deductions for stock-based compensation.

Liquidity and Capital Resources

Cash Flow

Cash flows for the three months ended March 31, 2021 and 2020 were as follows:

	2021	2020
	(In Thousands)	
Cash and cash equivalents at beginning of period	$192,128	$3,519
Cash flow provided by (used in):		
Operating activities	91,573	209,674
Investing activities	(162,611)	(190,551)
Financing activities	2,690	114,850
Net increase (decrease) in cash and cash equivalents	(68,348)	133,973
Cash and cash equivalents at end of period	$123,780	$137,492

Operating Activities

Net cash flow provided by operating activities decreased $118.1 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to:

- lower collections of receivables from customers, in part due to the COVID-19 pandemic;
- increased fuel costs as a result of Winter Storm Uri. See "**Winter Storm Uri**" above for discussion of the incremental fuel and purchased power costs incurred. See Note 2 to the financial statements herein and in the Form 10-K for a discussion of fuel and purchased power cost recovery;
- $25 million in proceeds received from the DOE in 2020 resulting from litigation regarding spent nuclear fuel storage costs that were previously expensed. See Note 8 to the financial statements in the Form 10-K for discussion of the spent nuclear fuel litigation; and
- an increase of $11.2 million in pension contributions in 2021. See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Critical Accounting Estimates**" in the Form 10-K and Note 6 to the financial statements herein for a discussion of qualified pension and other postretirement benefits funding.

The decrease was partially offset by the timing of payments to vendors and a decrease of $6.3 million in spending on nuclear refueling outages in 2021.

Investing Activities

Net cash flow used in investing activities decreased $27.9 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to:

- a decrease of $33.4 million as a result of fluctuations in nuclear fuel activity because of variations from year to year in the timing and pricing of fuel reload requirements in the Utility business, material and service deliveries, and the timing of cash payments during the nuclear fuel cycle;
- a decrease of $14.3 million in nuclear construction expenditures primarily as a result of work performed in 2020 on various ANO 2 outage projects;
- a decrease of $13.4 million in transmission construction expenditures primarily due to a lower scope of work performed in 2021 as compared to 2020; and
- money pool activity.

The decrease was partially offset by $55 million in proceeds received from the DOE in 2020 resulting from litigation regarding spent nuclear fuel storage costs that were previously capitalized. See Note 8 to the financial statements in the Form 10-K for discussion of the spent nuclear fuel litigation.

Increases in Entergy Arkansas’s receivable from the money pool are a use of cash flow, and Entergy Arkansas’s receivable from the money pool increased by $12.5 million for the three months ended March 31, 2021 compared to increasing by $24.9 million for the three months ended March 31, 2020. The money pool is an inter-company borrowing arrangement designed to reduce the Utility subsidiaries’ need for external short-term borrowings.

Financing Activities

Net cash flow provided by financing activities decreased $112.2 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to:

- the repayment, at maturity, of $350 million of 3.75% Series mortgage bonds due February 2021;
- issuance of $100 million of 4.00% Series mortgage bonds in March 2020;
- the repayment, at maturity, of $45 million of 2.375% governmental bonds due January 2021; and
- net repayments of long-term borrowings of $7.4 million in 2021 compared to net long-term borrowings of $28.7 million in 2020 on the Entergy Arkansas nuclear fuel company variable interest entity credit facility.

The decrease was partially offset by the issuance of $400 million of 3.35% Series mortgage bonds in March 2021 and money pool activity.

Decreases in Entergy Arkansas’s payable to the money pool are a use of cash flow, and Entergy Arkansas’s payable to the money pool decreased by $21.6 million for the three months ended March 31, 2020.

See Note 4 to the financial statements herein and Note 5 to the financial statements in the Form 10-K for more details on long-term debt.

Capital Structure

Entergy Arkansas's debt to capital ratio is shown in the following table.

	March 31, 2021	December 31, 2020
Debt to capital	54.1 %	54.8 %
Effect of subtracting cash	(0.8 %)	(1.2 %)
Net debt to net capital	53.3 %	53.6 %

Net debt consists of debt less cash and cash equivalents. Debt consists of short-term borrowings, finance lease obligations, and long-term debt, including the currently maturing portion. Capital consists of debt and equity. Net capital consists of capital less cash and cash equivalents. Entergy Arkansas uses the debt to capital ratio in analyzing its financial condition and believes they provide useful information to its investors and creditors in evaluating Entergy Arkansas's financial condition. Entergy Arkansas also uses the net debt to net capital ratio in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy Arkansas's financial condition because net debt indicates Entergy Arkansas's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Uses and Sources of Capital

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources**" in the Form 10-K for a discussion of Entergy Arkansas's uses and sources of capital. Following are updates to the information provided in the Form 10-K.

Entergy Arkansas's receivables from or (payables to) the money pool were as follows:

March 31, 2021	December 31, 2020	March 31, 2020	December 31, 2019
	(In Thousands)		
$15,610	$3,110	$24,935	($21,634)

See Note 4 to the financial statements in the Form 10-K for a description of the money pool.

Entergy Arkansas has a credit facility in the amount of $150 million scheduled to expire in September 2024. Entergy Arkansas also has a $25 million credit facility scheduled to expire in April 2022. The $150 million credit facility includes fronting commitments for the issuance of letters of credit against $5 million of the borrowing capacity of the facility. As of March 31, 2021, no cash borrowings and no letters of credit were outstanding under the credit facilities. In addition, Entergy Arkansas is a party to an uncommitted letter of credit facility as a means to post collateral to support its obligations to MISO. As of March 31, 2021, a $1 million letter of credit was outstanding under Entergy Arkansas's uncommitted letter of credit facility. See Note 4 to the financial statements herein for additional discussion of the credit facilities.

The Entergy Arkansas nuclear fuel company variable interest entity has a credit facility in the amount of $80 million scheduled to expire in September 2022. As of March 31, 2021, $4.8 million in loans were outstanding under the credit facility for the Entergy Arkansas nuclear fuel company variable interest entity. See Note 4 to the financial statements herein for additional discussion of the nuclear fuel company variable interest entity credit facility.

State and Local Rate Regulation and Fuel-Cost Recovery

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – State and Local Rate Regulation and Fuel-Cost Recovery**" in the Form 10-K for a discussion of state and local rate regulation and fuel-cost recovery. The following are updates to that discussion.

Retail Rates

2020 Formula Rate Plan Filing

As discussed in the Form 10-K, in December 2020, Entergy Arkansas filed a petition for rehearing of the APSC's decision in the 2020 formula rate plan proceeding regarding the 2019 netting adjustment, and in January 2021 the APSC granted further consideration of Entergy Arkansas's petition. Based on the progress of the proceeding to date, in December 2020, Entergy Arkansas recorded a regulatory liability of $43.5 million to reflect the netting adjustment for 2019, as included in the APSC's December 2020 order, which would be returned to customers in 2021. Entergy Arkansas also requested an extension of the formula rate plan rider for a second five-year term. In March 2021, the Arkansas Governor signed HB1662 into law (Act 404). Act 404 clarified aspects of the original formula rate plan legislation enacted in 2015, including with respect to the extension of a formula rate plan, the methodology for the netting adjustment, and debt and equity levels; it also reaffirmed the customer protections of the original formula rate plan legislation, including the cap on annual formula rate plan rate changes. Pursuant to Act 404, Entergy Arkansas's formula rate plan rider is extended for a second five-year term. Entergy Arkansas filed a compliance tariff in its formula rate plan docket in April 2021 to effectuate the netting provisions of Act 404, which reflected a net change in required formula rate plan rider revenue of $39.8 million, effective with the first billing cycle of May 2021. In April 2021 the APSC issued an order approving the compliance tariff and recognizing the formula rate plan extension. Also in April 2021, Entergy Arkansas filed for approval of modifications to the formula rate plan tariff incorporating the provisions in Act 404, and the APSC approved the tariff modifications in April 2021. Given the APSC general staff's support for the expedited approval of these filings by the APSC, Entergy Arkansas supported an amendment to Act 404 to achieve a reduced return on equity from 9.75% to 9.65% to apply for years applicable to the extension term; that amendment was signed by the Arkansas Governor in April 2021 and is now Act 894. Based on the APSC's order issued in April 2021, in the first quarter 2021, Entergy Arkansas reversed the remaining regulatory liability for the netting adjustment for 2019.

Energy Cost Recovery Rider

In March 2021, Entergy Arkansas filed its annual redetermination of its energy cost rate pursuant to the energy cost recovery rider, which reflected a decrease from $0.01052 per kWh to $0.00959 per kWh. The redetermined rate calculation also included an adjustment to account for a portion of the increased fuel costs resulting from the February 2021 winter storms. The redetermined rate became effective with the first billing cycle in April 2021 through the normal operation of the tariff.

Opportunity Sales Proceeding

As discussed in the Form 10-K, in May 2019, Entergy Arkansas filed an application and supporting testimony with the APSC requesting approval of a special rider tariff to recover from its retail customers the costs of the opportunity sales payments made to the other Utility operating companies, and in July 2020 the APSC issued a decision finding that Entergy Arkansas's application is not in the public interest. In September 2020, Entergy Arkansas filed a complaint in the U.S. District Court for the Eastern District of Arkansas challenging the APSC's order denying Entergy Arkansas's request to recover the costs of these payments. The court held a hearing in February 2021 regarding issues addressed in the pre-trial conference report, and the parties await further instructions from the court.

Net Metering Legislation

See the Form 10-K for discussion of Arkansas net metering legislation and subsequent APSC net metering proceedings. In January 2021, Entergy Arkansas, pursuant to an APSC order, filed an updated net metering tariff, which was approved in February 2021.

COVID-19 Orders

See the Form 10-K for discussion of APSC orders issued in light of the COVID-19 pandemic. In March 2021 the APSC issued an order confirming the lifting of the moratorium on service disconnects effective in May 2021. As of March 31, 2021, Entergy Arkansas recorded a regulatory asset of $11.4 million for costs associated with the COVID-19 pandemic.

Federal Regulation

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – Federal Regulation**" in the Form 10-K for a discussion of federal regulation.

Nuclear Matters

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – Nuclear Matters**" in the Form 10-K for a discussion of nuclear matters.

Environmental Risks

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Environmental Risks**" in the Form 10-K for a discussion of environmental risks.

Critical Accounting Estimates

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Critical Accounting Estimates**" in the Form 10-K for a discussion of the estimates and judgments necessary in Entergy Arkansas's accounting for nuclear decommissioning costs, utility regulatory accounting, impairment of long-lived assets, taxation and uncertain tax positions, qualified pension and other postretirement benefits, and other contingencies.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements in the Form 10-K for a discussion of new accounting pronouncements.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
CONSOLIDATED INCOME STATEMENTS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING REVENUES		
Electric	$583,386	$481,912
OPERATING EXPENSES		
Operation and Maintenance:		
Fuel, fuel-related expenses, and gas purchased for resale	126,181	87,411
Purchased power	70,221	46,041
Nuclear refueling outage expenses	12,647	16,247
Other operation and maintenance	154,908	151,857
Decommissioning	19,000	17,941
Taxes other than income taxes	29,743	31,060
Depreciation and amortization	88,279	83,521
Other regulatory charges (credits) - net	(37,467)	(20,001)
TOTAL	463,512	414,077
OPERATING INCOME	119,874	67,835
OTHER INCOME		
Allowance for equity funds used during construction	2,993	2,917
Interest and investment income	27,887	7,938
Miscellaneous - net	(5,791)	(6,436)
TOTAL	25,089	4,419
INTEREST EXPENSE		
Interest expense	33,786	35,623
Allowance for borrowed funds used during construction	(1,290)	(1,281)
TOTAL	32,496	34,342
INCOME BEFORE INCOME TAXES	112,467	37,912
Income taxes	19,430	(6,683)
NET INCOME	$93,037	$44,595

See Notes to Financial Statements.

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ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING ACTIVITIES		
Net income	$93,037	$44,595
Adjustments to reconcile net income to net cash flow provided by operating activities:		
Depreciation, amortization, and decommissioning, including nuclear fuel amortization	126,630	123,160
Deferred income taxes, investment tax credits, and non-current taxes accrued	42,885	8,251
Changes in assets and liabilities:		
Receivables	(56,256)	32,820
Fuel inventory	17,930	(9,419)
Accounts payable	(21,622)	(42,694)
Taxes accrued	8,365	9,302
Interest accrued	18,837	16,839
Deferred fuel costs	(55,704)	23,594
Other working capital accounts	(8,025)	(2,691)
Provisions for estimated losses	(12,383)	4,695
Other regulatory assets	42,388	(13,187)
Other regulatory liabilities	(38,604)	(161,989)
Pension and other postretirement liabilities	(25,116)	11,704
Other assets and liabilities	(40,789)	164,694
Net cash flow provided by operating activities	91,573	209,674
INVESTING ACTIVITIES		
Construction expenditures	(146,334)	(179,117)
Allowance for equity funds used during construction	2,993	2,917
Nuclear fuel purchases	(17,621)	(52,211)
Proceeds from sale of nuclear fuel	16,059	17,210
Proceeds from nuclear decommissioning trust fund sales	143,575	115,030
Investment in nuclear decommissioning trust funds	(148,783)	(121,003)
Change in money pool receivable - net	(12,500)	(24,935)
Changes in securitization account	—	(3,443)
Litigation proceeds for reimbursement of spent nuclear fuel storage costs	—	55,001
Net cash flow used in investing activities	(162,611)	(190,551)
FINANCING ACTIVITIES		
Proceeds from the issuance of long-term debt	604,760	264,505
Retirement of long-term debt	(613,706)	(127,203)
Changes in money pool payable - net	—	(21,634)
Other	11,636	(818)
Net cash flow provided by financing activities	2,690	114,850
Net increase (decrease) in cash and cash equivalents	(68,348)	133,973
Cash and cash equivalents at beginning of period	192,128	3,519
Cash and cash equivalents at end of period	$123,780	$137,492
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid during the period for:		
Interest - net of amount capitalized	$14,359	$17,578

See Notes to Financial Statements.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
ASSETS
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$122	$24,108
Temporary cash investments	123,658	168,020
Total cash and cash equivalents	123,780	192,128
Accounts receivable:		
Customer	215,233	183,719
Allowance for doubtful accounts	(21,176)	(18,334)
Associated companies	56,711	34,216
Other	69,110	35,845
Accrued unbilled revenues	93,324	109,000
Total accounts receivable	413,202	344,446
Deferred fuel costs	2,506	—
Fuel inventory - at average cost	25,881	43,811
Materials and supplies - at average cost	243,721	237,640
Deferred nuclear refueling outage costs	26,613	32,692
Prepayments and other	15,134	13,296
TOTAL	850,837	864,013
OTHER PROPERTY AND INVESTMENTS		
Decommissioning trust funds	1,311,053	1,273,921
Other	340	341
TOTAL	1,311,393	1,274,262
UTILITY PLANT		
Electric	12,963,731	12,905,322
Construction work in progress	288,269	234,213
Nuclear fuel	143,835	163,044
TOTAL UTILITY PLANT	13,395,835	13,302,579
Less - accumulated depreciation and amortization	5,323,933	5,255,355
UTILITY PLANT - NET	8,071,902	8,047,224
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets	1,789,996	1,832,384
Deferred fuel costs	68,353	68,220
Other	20,675	14,028
TOTAL	1,879,024	1,914,632
TOTAL ASSETS	$12,113,156	$12,100,131

See Notes to Financial Statements.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
LIABILITIES AND EQUITY
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT LIABILITIES		
Currently maturing long-term debt	$90,000	$485,000
Accounts payable:		
Associated companies	39,361	59,448
Other	190,966	208,591
Customer deposits	92,626	98,506
Taxes accrued	90,202	81,837
Interest accrued	41,582	22,745
Deferred fuel costs	—	53,065
Other	40,776	40,628
TOTAL	585,513	1,049,820
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	1,326,518	1,286,123
Accumulated deferred investment tax credits	30,200	30,500
Regulatory liability for income taxes - net	452,987	467,031
Other regulatory liabilities	662,312	686,872
Decommissioning	1,333,159	1,314,160
Accumulated provisions	57,786	70,169
Pension and other postretirement liabilities	336,515	361,682
Long-term debt	3,868,751	3,482,507
Other	90,209	75,098
TOTAL	8,158,437	7,774,142
Commitments and Contingencies		
EQUITY		
Member's equity	3,369,206	3,276,169
TOTAL	3,369,206	3,276,169
TOTAL LIABILITIES AND EQUITY	$12,113,156	$12,100,131

See Notes to Financial Statements.

ENTERGY ARKANSAS, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN MEMBER'S EQUITY
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	Member's Equity (In Thousands)
Balance at December 31, 2019	$3,125,937
Net income	44,595
Balance at March 31, 2020	$3,170,532
Balance at December 31, 2020	$3,276,169
Net income	93,037
Balance at March 31, 2021	$3,369,206

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

The COVID-19 Pandemic

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - The COVID-19 Pandemic**" in the Form 10-K for a discussion of the COVID-19 pandemic.

Hurricane Laura, Hurricane Delta, and Hurricane Zeta

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Hurricane Laura, Hurricane Delta, and Hurricane Zeta**" in the Form 10-K for a discussion of Hurricane Laura, Hurricane Delta, and Hurricane Zeta, which caused significant damage to portions of Entergy Louisiana's service area. See Note 2 to the financial statements herein for discussion of storm cost recovery filings made by Entergy Louisiana in April 2021.

Winter Storm Uri

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - February 2021 Winter Storms**" in the Form 10-K for a discussion of the winter storms and extreme cold temperatures experienced in the United States, including Entergy Louisiana's service area, in February 2021 (Winter Storm Uri). Fuel and purchased power costs for Entergy Louisiana were approximately $285 million in February 2021 compared to approximately $95 million in February 2020. See Note 2 to the financial statements herein for discussion of the storm cost recovery filing made by Entergy Louisiana in April 2021. See Note 2 to the financial statements herein and in the Form 10-K for discussion of fuel cost recovery at Entergy Louisiana.

Results of Operations

Net Income

Net income decreased $22.8 million primarily due to the $58 million reduction in income tax expense resulting from an IRS settlement in the first quarter 2020 related to the uncertain tax position regarding the Hurricane Isaac Louisiana Act 55 financing, which also resulted in a $29 million ($21 million net-of-tax) regulatory charge to reflect Entergy Louisiana's agreement to share the savings with customers. Also contributing to the decrease was higher other operation and maintenance expenses, higher interest expense, and a higher effective income tax rate. The decrease was partially offset by higher retail electric price and higher volume/weather. See Note 3 to the financial statements in the Form 10-K for further discussion of the tax settlement.

Operating Revenues

Following is an analysis of the change in operating revenues comparing the first quarter 2021 to the first quarter 2020:

	Amount
	(In Millions)
2020 operating revenues	$930.6
Fuel, rider, and other revenues that do not significantly affect net income	88.1
Retail electric price	52.4
Volume/weather	36.5
2021 operating revenues	**$1,107.6**

Entergy Louisiana's results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not affect net income. "Fuel, rider, and other revenues that do not significantly affect net income" includes the revenue variance associated with these items.

The retail electric price variance is primarily due to:

- an interim increase in formula rate plan revenues effective April 2020 due to the inclusion of the first-year revenue requirement for the Lake Charles Power Station;
- an increase in formula rate plan revenues and an increase in the transmission recovery mechanism effective September 2020; and
- an interim increase in formula rate plan revenues effective December 2020 due to the inclusion of the first-year revenue requirement for the Washington Parish Energy Center.

See Note 2 to the financial statements herein and in the Form 10-K for further discussion of the formula rate plan proceedings.

The volume/weather variance is primarily due to the effect of more favorable weather on residential sales and an increase in usage during the unbilled sales period. The increase is partially offset by a decrease in industrial usage and decreased demand from mid to small customers. The decrease in industrial usage is primarily due to decreased demand from existing customers in the chemicals and petroleum refining industries as a result of the COVID-19 pandemic and plant shutdowns and operational issues. The decrease in industrial usage is partially offset by an increase in demand from expansion projects, primarily in the transportation and chemicals industries. See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - The COVID-19 Pandemic**" in the Form 10-K for a discussion of the COVID-19 pandemic.

Billed electric energy sales for Entergy Louisiana for the three months ended March 31, 2021 and 2020 are as follows:

	2021	2020	% Change
	(GWh)		
Residential	3,500	2,975	18
Commercial	2,409	2,459	(2)
Industrial	7,010	7,450	(6)
Governmental	197	199	(1)
Total retail	13,116	13,083	—
Sales for resale:			
Associated companies	959	1,341	(28)
Non-associated companies	386	457	(16)
Total	14,461	14,881	(3)

See Note 13 to the financial statements herein for additional discussion of Entergy Louisiana's operating revenues.

Other Income Statement Variances

Other operation and maintenance expenses increased primarily due to:

- an increase of $8.9 million in nuclear generation expenses primarily due to spending on sanitation and social distancing protocols, as a result of the COVID-19 pandemic;
- a decrease of $4.2 million in nuclear insurance refunds; and
- an increase of $1.5 million in non-nuclear generation expenses due to higher expenses associated with the Lake Charles Power Station, which began commercial operation in March 2020, partially offset by a lower scope of work performed during plant outages in 2021 as compared to the prior year.

Depreciation and amortization expenses increased primarily due to additions to plant in service, including the Lake Charles Power Station, which was placed in service in March 2020.

Other regulatory charges (credits) - net include regulatory charges of $29 million recorded in first quarter 2020 due to a settlement with the IRS related to the uncertain tax position regarding Hurricane Isaac Louisiana Act 55 financing because the savings will be shared with customers. See Note 3 in the Form 10-K for further discussion of the settlement and savings obligation.

Other income decreased primarily due to a decrease in the allowance for equity funds used during construction due to higher construction work in progress in 2020, including the Lake Charles Power Station project. The decrease was substantially offset by changes in decommissioning trust fund activity.

Interest expense increased primarily due to:

- the issuance of $350 million of 2.90% Series mortgage bonds in March 2020;
- the issuance of $1.1 billion of 0.62% Series mortgage bonds, $300 million of 2.90% Series mortgage bonds, and $300 million of 1.60% Series mortgage bonds, each in November 2020;
- the issuance of $500 million of 2.35% Series mortgage bonds and $500 million of 3.10% Series mortgage bonds, each in March 2021; and
- a decrease in the allowance for borrowed funds used during construction due to higher construction work in progress in 2020, including the Lake Charles Power Station project.

The increase was partially offset by the repayment of $200 million of 5.25% Series mortgage bonds and $100 million of 4.70% Series mortgage bonds, each in December 2020.

Income Taxes

The effective income tax rate was 18.5% for the first quarter 2021. The difference in the effective income tax rate for the first quarter 2021 versus the federal statutory rate of 21% was primarily due to book and tax differences related to the non-taxable income distributions earned on preferred membership interests, certain book and tax differences related to utility plant items, and the amortization of excess accumulated deferred income taxes, partially offset by state income taxes. See Note 10 to the financial statements herein and Notes 2 and 3 to the financial statements in the Form 10-K for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act.

The effective income tax rate was (36.0%) for the first quarter 2020. The difference in the effective income tax rate for the first quarter 2020 versus the federal statutory rate of 21% was primarily due to the settlement with the IRS on the treatment of funds received in conjunction with the Louisiana Act 55 financing of Hurricane Isaac storm costs, permanent differences related to income tax deductions for stock-based compensation, book and tax differences related to the non-taxable income distributions earned on preferred membership interests, certain book and tax differences related to utility plant items, book and tax differences related to the allowance for equity funds used during construction, and the amortization of excess accumulated deferred income taxes, partially offset by state income taxes. See Note 3 in the Form 10-K for discussion of the IRS settlement and the income tax deductions for stock-based compensation. See Note 10 to the financial statements herein and Notes 2 and 3 to the financial statements in the Form 10-K for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act.

Liquidity and Capital Resources

Cash Flow

Cash flows for the three months ended March 31, 2021 and 2020 were as follows:

	2021	2020
	(In Thousands)	
Cash and cash equivalents at beginning of period	$728,020	$2,006
Cash flow provided by (used in):		
Operating activities	(54,598)	313,799
Investing activities	(1,098,466)	(373,239)
Financing activities	1,026,860	522,828
Net increase (decrease) in cash and cash equivalents	(126,204)	463,388
Cash and cash equivalents at end of period	$601,816	$465,394

Operating Activities

Entergy Louisiana's operating activities used $54.6 million of cash for the three months ended March 31, 2021 compared to providing $313.8 million of cash for the three months ended March 31, 2020 primarily due to:

- an increase of approximately $170 million in storm spending in 2021, primarily due to Hurricane Laura, Hurricane Delta, and Hurricane Zeta restoration efforts. See "**Hurricane Laura, Hurricane Delta, and Hurricane Zeta**" above for discussion of storm restoration efforts;
- increased fuel costs as a result of Winter Storm Uri. See "**Winter Storm Uri**" above for discussion of the incremental fuel and purchased power costs incurred. See Note 2 to the financial statements herein and in the Form 10-K for a discussion of fuel and purchased power cost recovery;
- an increase of $24 million in spending on nuclear refueling outages;
- income tax refunds of $20.7 million in 2020. Entergy Louisiana had income tax refunds in 2020 as a result of a refund of an overpayment on a prior year state income tax return; and
- an increase of $20.5 million in pension contributions in 2021. See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Critical Accounting Estimates**" in the Form 10-K and Note 6 to the financial statements herein for a discussion of qualified pension and other postretirement benefits funding.

Investing Activities

Net cash flow used in investing activities increased $725.2 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to:

- an increase of 437.9 million in distribution construction expenditures primarily due to storm spending in 2021. See "**Hurricane Laura, Hurricane Delta, and Hurricane Zeta**" above for discussion of storm restoration efforts;
- an increase of $162.6 million in transmission construction expenditures primarily due to storm spending in 2021. See "**Hurricane Laura, Hurricane Delta, and Hurricane Zeta**" above for discussion of storm restoration efforts;
- an increase of $68.3 million as a result of fluctuations in nuclear fuel activity, primarily due to variations from year to year in the timing and pricing of fuel reload requirements, materials and services deliveries, and the timing of cash payments during the nuclear fuel cycle;
- $39.5 million in net receipts from storm reserve escrow accounts in the first quarter 2020; and
- an increase of $19.7 million in nuclear construction expenditures primarily due to increased spending on various projects in 2021.

The increase was partially offset by:

- a decrease of $19.7 million in non-nuclear generation construction expenditures due to a lower scope of work performed in 2021 as compared to 2020; and
- money pool activity.

Increases in Entergy Louisiana's receivable from the money pool are a use of cash flow, and Entergy Louisiana's receivable from the money pool increased by $62.3 million for the three months ended March 31, 2021 compared to increasing by $84.5 million for the three months ended March 31, 2020. The money pool is an inter-company borrowing arrangement designed to reduce the Utility subsidiaries' need for external short-term borrowings.

Financing Activities

Net cash flow provided by financing activities increased $504 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to:

- the issuance of $500 million of 2.35% Series mortgage bonds and $500 million of 3.10% Series mortgage bonds, each in March 2021, as compared to the issuances of $350 million of 2.90% Series mortgage bonds and $300 million of 4.20% Series mortgage bonds, each in March 2020;
- net long-term borrowings of $85.5 million in 2021 compared to net repayments of long-term borrowings of $28.5 million in 2020 on the nuclear fuel company variable interest entities' credit facilities;
- money pool activity; and
- the payment of $11.5 million in common equity distributions in March 2020 primarily to maintain Entergy Louisiana's capital structure.

The decrease was partially offset by the repayment of Entergy Louisiana Waterford VIE's $40 million of 3.92% Series H secured notes in February 2021.

Decreases in Entergy Louisiana's payable to the money pool are a use of cash flow, and Entergy Louisiana's payable to the money pool decreased by $82.8 million for the three months ended March 31, 2020.

See Note 4 to the financial statements herein and Note 5 to the financial statements in the Form 10-K for more details on long-term debt.

Capital Structure

Entergy Louisiana's debt to capital ratio is shown in the following table. The increase in the debt to capital ratio for Entergy Louisiana is primarily due to the issuance of $1 billion of mortgage bonds in March 2021.

	March 31, 2021	December 31, 2020
Debt to capital	56.9 %	54.8 %
Effect of excluding securitization bonds	0.0 %	0.0 %
Debt to capital, excluding securitization bonds (a)	56.9 %	54.8 %
Effect of subtracting cash	(1.5 %)	(2.1 %)
Net debt to net capital, excluding securitization bonds (a)	55.4 %	52.7 %

(a) Calculation excludes the securitization bonds, which are non-recourse to Entergy Louisiana.

Net debt consists of debt less cash and cash equivalents. Debt consists of short-term borrowings, finance lease obligations, and long-term debt, including the currently maturing portion. Capital consists of debt and common equity. Net capital consists of capital less cash and cash equivalents. Entergy Louisiana uses the debt to capital ratios excluding securitization bonds in analyzing its financial condition and believes they provide useful information to its investors and creditors in evaluating Entergy Louisiana's financial condition because the securitization bonds are non-recourse to Entergy Louisiana, as more fully described in Note 5 to the financial statements in the Form 10-K. Entergy Louisiana also uses the net debt to net capital ratio excluding securitization bonds in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy Louisiana's financial condition because net debt indicates Entergy Louisiana's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Uses and Sources of Capital

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources**" in the Form 10-K for a discussion of Entergy Louisiana's uses and sources of capital. Following are updates to the information provided in the Form 10-K.

Entergy Louisiana's receivables from or (payables to) the money pool were as follows:

March 31, 2021	December 31, 2020	March 31, 2020	December 31, 2019
	(In Thousands)		
$75,772	$13,426	$84,466	($82,826)

See Note 4 to the financial statements in the Form 10-K for a description of the money pool.

Entergy Louisiana has a credit facility in the amount of $350 million scheduled to expire in September 2024. The credit facility includes fronting commitments for the issuance of letters of credit against $15 million of the borrowing capacity of the facility. As of March 31, 2021, there were no cash borrowings and no letters of credit outstanding under the credit facility. In addition, Entergy Louisiana is a party to an uncommitted letter of credit facility as a means to post collateral to support its obligations to MISO. As of March 31, 2021, $12.8 million in letters of credit were outstanding under Entergy Louisiana's uncommitted letter of credit facility. See Note 4 to the financial statements herein for additional discussion of the credit facilities.

The Entergy Louisiana nuclear fuel company variable interest entities have two separate credit facilities, each in the amount of $105 million and scheduled to expire in September 2022. As of March 31, 2021, $70.5 million in loans were outstanding under the credit facility for the Entergy Louisiana River Bend nuclear fuel company variable interest entity. As of March 31, 2021, $73.2 million in loans were outstanding under the credit facility for the Entergy Louisiana Waterford nuclear fuel company variable interest entity. See Note 4 to the financial statements herein for additional discussion of the nuclear fuel company variable interest entity credit facilities.

State and Local Rate Regulation and Fuel-Cost Recovery

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – State and Local Rate Regulation and Fuel Cost Recovery**" in the Form 10-K for a discussion of state and local rate regulation and fuel cost recovery. The following are updates to that discussion.

Retail Rates - Electric

2017 Formula Rate Plan Filing

As discussed in the Form 10-K, in May 2019, Entergy Louisiana filed an update to its 2017 formula rate plan evaluation report to include the estimated first-year revenue requirement of $109.5 million associated with the J. Wayne Leonard Power Station (formerly St. Charles Power Station). In February 2021, LPSC staff filed testimony that substantially all the costs to construct J. Wayne Leonard Power Station were prudently incurred and eligible for recovery from customers. LPSC staff further recommended that the LPSC consider monitoring the remaining $3.1 million that was estimated to be incurred for completion of the project in the event the final costs exceed the estimated amounts. Settlement discussions are in progress.

Request for Extension and Modification of Formula Rate Plan

As discussed in the Form 10-K, in May 2020, Entergy Louisiana filed with the LPSC its application for authority to extend its formula rate plan. The parties reached a settlement in April 2021 regarding Entergy Louisiana's proposed FRP extension. Entergy Louisiana and the LPSC staff filed a joint motion asking the LPSC to consider and approve the uncontested settlement at the May 2021 LPSC meeting. Key terms of the settlement include: a three year term (test years 2020, 2021, and 2022) covering a rate-effective period of September 2021 through August 2024; a 9.50% return on equity, with a smaller, 50 basis point deadband above and below (9.0%-10.0%); elimination of sharing if earnings are outside the deadband; a $63 million rate increase for test year 2020 (exclusive of riders); continuation of existing riders (transmission, additional capacity, etc.); addition of a distribution recovery mechanism permitting $225 million per year of distribution investment above a baseline level to be recovered dollar for dollar; modification of the tax mechanism to allow timely rate changes in the event the federal corporate income tax rate is changed from 21%; a cumulative rate increase limit of $70 million (exclusive of riders) for test years 2021 and 2022; and deferral of up to $7 million per year in 2021 and 2022 of expenditures on vegetation management for outside of right of way hazard trees.

Hurricane Laura, Hurricane Delta, Hurricane Zeta, and Winter Storm Uri

In August 2020 and October 2020, Hurricane Laura, Hurricane Delta, and Hurricane Zeta caused significant damage to portions of Entergy Louisiana's service area. The storms resulted in widespread outages, significant damage to distribution and transmission infrastructure, and the loss of sales during the outages. Additionally, as a result of Hurricane Laura's extensive damage to the grid infrastructure serving the impacted area, large portions of the underlying transmission system required nearly a complete rebuild.

In October 2020, Entergy Louisiana filed an application at the LPSC seeking approval of certain ratemaking adjustments to facilitate issuance of shorter-term bonds to provide interim financing for restoration costs associated with Hurricane Laura, Hurricane Delta, and Hurricane Zeta. Subsequently, Entergy Louisiana and the LPSC staff filed a joint motion seeking approval to exclude from the derivation of Entergy Louisiana's capital structure and cost rate of debt for ratemaking purposes, including the allowance for funds used during construction, shorter-term debt up to $1.1 billion issued by Entergy Louisiana to fund costs associated with Hurricane Laura, Hurricane Delta, and Hurricane Zeta costs on an interim basis. In November 2020 the LPSC issued an order approving the joint motion, and Entergy Louisiana issued $1.1 billion of 0.62% Series mortgage bonds due November 2023. Also in November 2020, Entergy Louisiana drew $257 million from its funded storm reserves.

In February 2021, two winter storms (collectively, Winter Storm Uri) brought freezing rain and ice to Louisiana. Ice accumulation sagged or downed trees, limbs and power lines, causing damage to Entergy Louisiana's transmission and distribution systems. The additional weight of ice caused trees and limbs to fall into power lines and other electric equipment. When the ice melted, it affected vegetation and electrical equipment, causing incremental outages. As discussed above in "**Fuel and purchased power recovery**," Entergy Louisiana is recovering the incremental fuel costs associated with Winter Storm Uri over a five-month period from April 2021 through August 2021.

In April 2021, Entergy Louisiana filed an application with the LPSC relating to Hurricane Laura, Hurricane Delta, Hurricane Zeta, and Winter Storm Uri restoration costs. Total restoration costs for the repair and/or replacement of Entergy Louisiana's electric facilities damaged by the storms are currently estimated to be approximately $2.05 billion, including approximately $1.74 billion in capital costs and approximately $310 million in non-capital costs. Including carrying costs through January 2022, Entergy Louisiana is seeking an LPSC determination that $2.10 billion was prudently incurred and, therefore, is eligible for recovery from customers. Additionally, Entergy Louisiana is requesting that the LPSC determine that re-establishment of a storm escrow account to the previously authorized amount of $290 million is appropriate. Entergy Louisiana intends to supplement this application with a request regarding the financing and recovery of the recoverable storm restoration costs.

Fuel and purchased power recovery

In February 2021, Entergy Louisiana incurred extraordinary fuel costs associated with the February 2021 winter storms. To mitigate the effect of these costs on customer bills, in March 2021 Entergy Louisiana requested and the LPSC approved the deferral and recovery of $166 million in incremental fuel costs over five months beginning in April 2021. The incremental fuel costs remain subject to review for reasonableness and eligibility for recovery through the fuel adjustment clause mechanism. At its April 2021 meeting, the LPSC authorized its staff to review the prudence of February 2021 fuel costs incurred by all LPSC jurisdictional utilities.

In March 2021 the LPSC staff provided notice of an audit of Entergy Louisiana's purchased gas adjustment clause filings covering the period January 2018 through December 2020. The audit includes a review of the reasonableness of charges flowed through Entergy Louisiana's purchased gas adjustment clause for that period. No audit report has been filed.

COVID-19 Orders

As discussed in the Form 10-K, in April 2020 the LPSC issued an order authorizing utilities to record as a regulatory asset expenses incurred from the suspension of disconnections and collection of late fees imposed by LPSC orders associated with the COVID-19 pandemic. In addition, utilities may seek future recovery, subject to LPSC review and approval, of losses and expenses incurred due to compliance with the LPSC's COVID-19 orders. The suspension of late fees and disconnects for non-payment was extended until the first billing cycle after July 16, 2020. In January 2021, Entergy Louisiana resumed disconnections for customers in all customer classes with past-due balances that have not made payment arrangements. Utilities seeking to recover the regulatory asset must formally petition the LPSC to do so, identifying the direct and indirect costs for which recovery is sought. Any such request is subject to LPSC review and approval. As of March 31, 2021, Entergy Louisiana recorded a regulatory asset of $47.8 million for costs associated with the COVID-19 pandemic.

Industrial and Commercial Customers

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – Industrial and Commercial Customers**" in the Form 10-K for a discussion of industrial and commercial customers.

Federal Regulation

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – Federal Regulation**" in the Form 10-K for a discussion of federal regulation.

Nuclear Matters

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Nuclear Matters**" in the Form 10-K for a discussion of nuclear matters.

Environmental Risks

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Environmental Risks**" in the Form 10-K for a discussion of environmental risks.

Critical Accounting Estimates

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Critical Accounting Estimates**" in the Form 10-K for a discussion of the estimates and judgments necessary in Entergy Louisiana's accounting for nuclear decommissioning costs, utility regulatory accounting, impairment of long-lived assets, taxation and uncertain tax positions, qualified pension and other postretirement benefits, and other contingencies.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements in the Form 10-K for a discussion of new accounting pronouncements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED INCOME STATEMENTS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING REVENUES		
Electric	$1,079,663	$912,541
Natural gas	27,981	18,106
TOTAL	1,107,644	930,647
OPERATING EXPENSES		
Operation and Maintenance:		
Fuel, fuel-related expenses, and gas purchased for resale	145,234	144,492
Purchased power	209,961	160,743
Nuclear refueling outage expenses	13,282	13,630
Other operation and maintenance	237,483	222,658
Decommissioning	16,823	16,001
Taxes other than income taxes	52,484	50,077
Depreciation and amortization	160,813	145,135
Other regulatory charges (credits) - net	31,097	11,132
TOTAL	867,177	763,868
OPERATING INCOME	240,467	166,779
OTHER INCOME		
Allowance for equity funds used during construction	6,101	14,887
Interest and investment income	72,515	(19,669)
Miscellaneous - net	(34,638)	49,601
TOTAL	43,978	44,819
INTEREST EXPENSE		
Interest expense	82,806	79,517
Allowance for borrowed funds used during construction	(2,759)	(7,132)
TOTAL	80,047	72,385
INCOME BEFORE INCOME TAXES	204,398	139,213
Income taxes	37,772	(50,183)
NET INCOME	$166,626	$189,396

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF COMPREHENSIVE INCOME
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
Net Income	$166,626	$189,396
Other comprehensive income (loss)		
Pension and other postretirement liabilities (net of tax expense (benefit) of ($144) and $3,340)	(407)	9,467
Other comprehensive income (loss)	(407)	9,467
Comprehensive Income	$166,219	$198,863

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING ACTIVITIES		
Net income	$166,626	$189,396
Adjustments to reconcile net income to net cash flow provided by (used in) operating activities:		
Depreciation, amortization, and decommissioning, including nuclear fuel amortization	198,868	191,447
Deferred income taxes, investment tax credits, and non-current taxes accrued	67,823	(39,681)
Changes in working capital:		
Receivables	(13,080)	23,004
Fuel inventory	1,194	(456)
Accounts payable	(126,070)	(86,317)
Prepaid taxes and taxes accrued	20,619	48,840
Interest accrued	(9,163)	(2,384)
Deferred fuel costs	(203,815)	(18,280)
Other working capital accounts	(25,628)	(3,156)
Changes in provisions for estimated losses	(258)	(41,113)
Changes in other regulatory assets	(70,784)	55,539
Changes in other regulatory liabilities	22,503	(129,370)
Changes in pension and other postretirement liabilities	(30,745)	(22,806)
Other	(52,688)	149,136
Net cash flow provided by (used in) operating activities	(54,598)	313,799
INVESTING ACTIVITIES		
Construction expenditures	(945,831)	(344,522)
Allowance for equity funds used during construction	6,101	14,887
Nuclear fuel purchases	(52,435)	(18,052)
Proceeds from the sale of nuclear fuel	—	33,889
Receipts from storm reserve escrow account	—	40,589
Payments to storm reserve escrow account	—	(1,113)
Changes to securitization account	(6,050)	(5,348)
Proceeds from nuclear decommissioning trust fund sales	291,275	144,962
Investment in nuclear decommissioning trust funds	(329,180)	(154,065)
Changes in money pool receivable - net	(62,346)	(84,466)
Net cash flow used in investing activities	(1,098,466)	(373,239)
FINANCING ACTIVITIES		
Proceeds from the issuance of long-term debt	1,399,245	1,221,900
Retirement of long-term debt	(368,707)	(603,607)
Change in money pool payable - net	—	(82,826)
Common equity distributions paid	—	(11,500)
Other	(3,678)	(1,139)
Net cash flow provided by financing activities	1,026,860	522,828
Net increase (decrease) in cash and cash equivalents	(126,204)	463,388
Cash and cash equivalents at beginning of period	728,020	2,006
Cash and cash equivalents at end of period	$601,816	$465,394
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid (received) during the period for:		
Interest - net of amount capitalized	$89,432	$79,794
Income taxes	$—	($20,684)

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
ASSETS
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$233	$1,303
Temporary cash investments	601,583	726,717
Total cash and cash equivalents	601,816	728,020
Accounts receivable:		
Customer	326,475	317,905
Allowance for doubtful accounts	(46,655)	(45,693)
Associated companies	144,640	81,624
Other	39,401	41,760
Accrued unbilled revenues	186,001	178,840
Total accounts receivable	649,862	574,436
Deferred fuel costs	206,065	2,250
Fuel inventory	49,486	50,680
Materials and supplies - at average cost	433,841	437,933
Deferred nuclear refueling outage costs	75,916	48,407
Prepayments and other	41,100	36,813
TOTAL	2,058,086	1,878,539
OTHER PROPERTY AND INVESTMENTS		
Investment in affiliate preferred membership interests	1,390,587	1,390,587
Decommissioning trust funds	1,879,332	1,794,042
Non-utility property - at cost (less accumulated depreciation)	335,730	323,110
Other	13,521	13,399
TOTAL	3,619,170	3,521,138
UTILITY PLANT		
Electric	25,960,969	25,619,789
Natural gas	268,865	262,744
Construction work in progress	526,575	667,281
Nuclear fuel	252,555	210,128
TOTAL UTILITY PLANT	27,008,964	26,759,942
Less - accumulated depreciation and amortization	9,502,347	9,372,224
UTILITY PLANT - NET	17,506,617	17,387,718
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets (includes securitization property of $— as of March 31, 2021 and $5,088 as of December 31, 2020)	1,796,850	1,726,066
Deferred fuel costs	168,122	168,122
Other	32,212	23,924
TOTAL	1,997,184	1,918,112
TOTAL ASSETS	$25,181,057	$24,705,507

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
LIABILITIES AND EQUITY
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT LIABILITIES		
Currently maturing long-term debt	$200,000	$240,000
Accounts payable:		
Associated companies	75,431	103,148
Other	685,493	1,450,008
Customer deposits	151,307	152,612
Taxes accrued	63,236	42,617
Interest accrued	83,086	92,249
Current portion of unprotected excess accumulated deferred income taxes	31,138	31,138
Other	60,652	62,968
TOTAL	1,350,343	2,174,740
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	2,193,429	2,138,522
Accumulated deferred investment tax credits	106,135	107,317
Regulatory liability for income taxes - net	436,577	447,628
Other regulatory liabilities	951,847	918,293
Decommissioning	1,592,903	1,573,307
Accumulated provisions	24,681	24,939
Pension and other postretirement liabilities	661,999	692,728
Long-term debt (includes securitization bonds of $10,344 as of March 31, 2021 and $10,278 as of December 31, 2020)	9,859,885	8,787,451
Other	379,367	382,894
TOTAL	16,206,823	15,073,079
Commitments and Contingencies		
EQUITY		
Member's equity	7,619,971	7,453,361
Accumulated other comprehensive income	3,920	4,327
TOTAL	7,623,891	7,457,688
TOTAL LIABILITIES AND EQUITY	$25,181,057	$24,705,507

See Notes to Financial Statements.

ENTERGY LOUISIANA, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	Common Equity		
	Member's Equity	Accumulated Other Comprehensive Income	Total
	(In Thousands)		
Balance at December 31, 2019	$6,392,556	$4,562	$6,397,118
Net income	189,396	—	189,396
Other comprehensive income	—	9,467	9,467
Distributions declared on common equity	(11,500)	—	(11,500)
Other	(10)	—	(10)
Balance at March 31, 2020	$6,570,442	$14,029	$6,584,471
Balance at December 31, 2020	$7,453,361	$4,327	$7,457,688
Net income	166,626	—	166,626
Other comprehensive loss	—	(407)	(407)
Other	(16)	—	(16)
Balance at March 31, 2021	$7,619,971	$3,920	$7,623,891

See Notes to Financial Statements.

ENTERGY MISSISSIPPI, LLC

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

The COVID-19 Pandemic

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - The COVID-19 Pandemic**" in the Form 10-K for a discussion of the COVID-19 pandemic.

Winter Storm Uri

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - February 2021 Winter Storms**" in the Form 10-K for a discussion of the winter storms and extreme cold temperatures experienced in Entergy Mississippi's service area, in February 2021 (Winter Storm Uri). Fuel and purchased power costs for Entergy Mississippi were approximately $65 million in February 2021 compared to approximately $35 million in February 2020. See Note 2 to the financial statements in the Form 10-K for discussion of storm cost recovery and fuel cost recovery at Entergy Mississippi.

In February 2021 the MPSC announced that it would launch a comprehensive review of the condition and resiliency of the state's public utility infrastructure in response to the impacts of the February 2021 winter storms. Although the MPSC did not open a formal docket, the MPSC submitted data requests to Entergy Mississippi regarding the actions taken to ensure reliable operations of the electric network during the winter storm events and in anticipation of other future extreme weather events. In April 2021 the MPSC opened a docket to investigate Entergy Mississippi's membership in MISO. In the order, the MPSC noted the impact of the February 2021 winter storms, stating that it observed "excessive prices of natural gas and electricity" during the winter event. The MPSC has requested comments due 75 days after publication of the order.

Results of Operations

Net Income

Net income increased $3.4 million primarily due to higher retail electric price and higher volume/weather, partially offset by higher other operation and maintenance expenses, a higher effective income tax rate, and higher depreciation and amortization expenses.

Operating Revenues

Following is an analysis of the change in operating revenues comparing the first quarter 2021 to the first quarter 2020:

	Amount
	(In Millions)
2020 operating revenues	$293.9
Fuel, rider, and other revenues that do not significantly affect net income	22.9
Retail electric price	12.3
Volume/weather	7.5
2021 operating revenues	**$336.6**

Entergy Mississippi's results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not

affect net income. “Fuel, rider, and other revenues that do not significantly affect net income” includes the revenue variance associated with these items.

The retail electric price variance is primarily due to increases in formula rate plan rates effective with the first billing cycle of April 2020 and the implementation of a vegetation management rider effective with the April 2020 billing cycle. See Note 2 to the financial statements in the Form 10-K for further discussion of the formula rate plan filings and the vegetation management rider.

The volume/weather variance is primarily due to an increase of 213 GWh, or 7%, in billed electricity usage, including the effect of more favorable weather on residential sales, partially offset by a decrease in industrial usage.

Billed electric energy sales for Entergy Mississippi for the three months ended March 31, 2021 and 2020 are as follows:

	2021	2020	% Change
	(GWh)		
Residential	1,495	1,250	20
Commercial	1,009	1,006	—
Industrial	520	556	(6)
Governmental	95	94	1
Total retail	3,119	2,906	7
Sales for resale:			
Non-associated companies	1,452	827	76
Total	4,571	3,733	22

See Note 13 to the financial statements herein for additional discussion of Entergy Mississippi’s operating revenues.

Other Income Statement Variances

Other operation and maintenance expenses increased primarily due to:

- an increase of $4.1 million in vegetation maintenance costs;
- an increase of $1.4 million due to bad debt expense as a result of the COVID-19 pandemic; and
- an increase of $1.4 million as a result of the amount of transmission costs allocated by MISO. See Note 2 to the financial statements for further information on the recovery of these costs.

The increase was partially offset by a decrease of $1.1 million in energy efficiency costs.

Depreciation and amortization expenses increased primarily as a result of additions to plant in service.

Income Taxes

The effective income tax rate was 22.2% for the first quarter 2021. The difference in the effective income tax rate for the first quarter 2021 versus the federal statutory rate of 21% was primarily due to certain book and tax differences related to utility plant items, partially offset by state income taxes.

The effective income tax rate was 7.7% for the first quarter 2020. The difference in the effective income tax rate for the first quarter 2020 versus the federal statutory rate of 21% was primarily due to certain book and tax differences related to utility plant items and permanent differences related to income tax deductions for stock-based

compensation, partially offset by state income taxes. See Note 3 to the financial statements in the Form 10-K for a discussion of the income tax deductions for stock-based compensation.

Liquidity and Capital Resources

Cash Flow

Cash flows for the three months ended March 31, 2021 and 2020 were as follows:

	2021	2020
	(In Thousands)	
Cash and cash equivalents at beginning of period	$18	$51,601
Cash flow provided by (used in):		
Operating activities	54,311	33,261
Investing activities	(162,802)	(103,615)
Financing activities	185,189	18,772
Net increase (decrease) in cash and cash equivalents	76,698	(51,582)
Cash and cash equivalents at end of period	$76,716	$19

Operating Activities

Net cash flow provided by operating activities increased $21.1 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to the timing of payments to vendors. The increase was partially offset by increased fuel costs as a result of Winter Storm Uri and the timing of collections of receivables from customers, in part due to the COVID-19 pandemic. See "**Winter Storm Uri**" above for discussion of the incremental fuel and purchased power costs incurred. See Note 2 to the financial statements in the Form 10-K for a discussion of fuel and purchased power cost recovery.

Investing Activities

Net cash flow used in investing activities increased $59.2 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to money pool activity and an increase of $43.5 million in distribution construction expenditures primarily due to increased spending on the reliability and infrastructure of Entergy Mississippi's distribution system in 2021 as compared to 2020. The increase was partially offset by $24.6 million in plant upgrades for Choctaw Generating Station in March 2020.

Increases in Entergy Mississippi's receivable from the money pool are a use of cash flow, and Entergy Mississippi's receivable from the money pool increased by $9.7 million for the three months ended March 31, 2021 compared to decreasing $44.7 million for the three months ended March 31, 2020. The money pool is an inter-company borrowing arrangement designed to reduce the Utility's subsidiaries' need for external short-term borrowings.

Financing Activities

Net cash flow provided by financing activities increased $166.4 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to the issuance of $200 million of 3.5% Series mortgage bonds in March 2021, partially offset by money pool activity. See Note 4 to the financial statements herein and Note 5 to the financial statements in the Form 10-K for more details on long-term debt.

Decreases in Entergy Mississippi's payable to the money pool are a use of cash flow, and Entergy Mississippi's payable to the money pool decreased by $16.5 million for the three months ended March 31, 2021 compared to increasing by $19 million for the three months ended March 31, 2020.

Capital Structure

Entergy Mississippi's debt to capital ratio is shown in the following table. The increase in the debt to capital ratio for Entergy Mississippi is primarily due to the issuance of $200 million of mortgage bonds in March 2021.

	March 31, 2021	December 31, 2020
Debt to capital	54.0 %	51.7 %
Effect of subtracting cash	(1.0 %)	— %
Net debt to net capital	53.0 %	51.7 %

Net debt consists of debt less cash and cash equivalents. Debt consists of short-term borrowings, finance lease obligations, and long-term debt, including the currently maturing portion. Capital consists of debt and equity. Net capital consists of capital less cash and cash equivalents. Entergy Mississippi uses the debt to capital ratio in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy Mississippi's financial condition. Entergy Mississippi uses the net debt to net capital ratio in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy Mississippi's financial condition because net debt indicates Entergy Mississippi's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Uses and Sources of Capital

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources**" in the Form 10-K for a discussion of Entergy Mississippi's uses and sources of capital. Following are updates to the information provided in the Form 10-K.

Entergy Mississippi's receivables from or (payables to) the money pool were as follows:

March 31, 2021	December 31, 2020	March 31, 2020	December 31, 2019
	(In Thousands)		
$9,683	($16,516)	($19,006)	$44,693

See Note 4 to the financial statements in the Form 10-K for a description of the money pool.

Entergy Mississippi has three separate credit facilities in the aggregate amount of $82.5 million scheduled to expire in April 2022. No borrowings were outstanding under the credit facilities as of March 31, 2021. In addition, Entergy Mississippi is a party to an uncommitted letter of credit facility primarily as a means to post collateral to support its obligations to MISO. As of March 31, 2021, $1 million of MISO letters of credit and $1 million of non-MISO letters of credit were outstanding under this facility. See Note 4 to the financial statements herein for additional discussion of the credit facilities.

Entergy Mississippi has $33 million in its storm reserve escrow account at March 31, 2021.

State and Local Rate Regulation and Fuel-Cost Recovery

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - State and Local Rate Regulation and Fuel-Cost Recovery**" in the Form 10-K for a discussion of the formula rate plan and fuel and purchased power cost recovery. The following are updates to that discussion.

2021 Formula Rate Plan Filing

In March 2021, Entergy Mississippi submitted its formula rate plan 2021 test year filing and 2020 look-back filing showing Entergy Mississippi's earned return for the historical 2020 calendar year to be below the formula rate plan bandwidth and projected earned return for the 2021 calendar year to be below the formula rate plan bandwidth. The 2020 test year filing shows a $95.4 million rate increase is necessary to reset Entergy Mississippi's earned return on common equity to the specified point of adjustment of 6.69% return on rate base, within the formula rate plan bandwidth. The change in formula rate plan revenues, however, is capped at 4% of retail revenues, which equates to a revenue change of $44.3 million. The 2021 evaluation report also includes $3.9 million in demand side management costs for which the MPSC approved realignment of recovery from the energy efficiency rider to the formula rate plan. These costs are not subject to the 4% cap and result in a total change in formula rate plan revenues of $48.2 million. The 2020 look-back filing compares actual 2020 results to the approved benchmark return on rate base and reflects the need for a $16.8 million interim increase in formula rate plan revenues. In addition, the 2020 look-back filing includes an interim capacity adjustment true-up for the Choctaw Generating Station, which increases the look-back interim rate adjustment by $1.7 million. These interim rate adjustments total $18.5 million. In accordance with the provisions of the formula rate plan, Entergy Mississippi implemented a $22.1 million interim rate increase, reflecting a cap equal to 2% of 2020 retail revenues, effective with the April 2021 billing cycle, subject to refund, pending a final MPSC order. The $3.9 million of demand side management costs and the Choctaw Generating Station true-up of $1.7 million, which are not subject to the 2% cap of 2020 retail revenues, were included in the April 2021 rate adjustments. A final order is expected in the second quarter 2021, with the resulting final rates, including amounts above the 2% cap of 2020 retail revenues, effective July 2021.

COVID-19 Orders

As discussed in the Form 10-K, in April 2020 the MPSC issued an order authorizing utilities to defer incremental costs and expenses associated with COVID-19 compliance and to seek future recovery through rates of the prudently incurred incremental costs and expenses. In December 2020, Entergy Mississippi resumed disconnections for commercial, industrial, and governmental customers with past-due balances that have not made payment arrangements. In January 2021, Entergy Mississippi resumed disconnecting service for residential customers with past-due balances that have not made payment arrangements. As of March 31, 2021, Entergy Mississippi recorded a regulatory asset of $16.3 million for costs associated with the COVID-19 pandemic.

Federal Regulation

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – Federal Regulation**" in the Form 10-K for a discussion of federal regulation.

Nuclear Matters

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Nuclear Matters**" in the Form 10-K for a discussion of nuclear matters.

Environmental Risks

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – Environmental Risks**" in the Form 10-K for a discussion of environmental risks.

Critical Accounting Estimates

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Critical Accounting Estimates**" in the Form 10-K for a discussion of the estimates and judgments necessary in Entergy Mississippi's accounting for utility regulatory accounting, impairment of long-lived assets, taxation and uncertain tax positions, qualified pension and other postretirement benefits, and other contingencies.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements in the Form 10-K for a discussion of new accounting pronouncements.

ENTERGY MISSISSIPPI, LLC
INCOME STATEMENTS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING REVENUES		
Electric	$336,619	$293,922
OPERATING EXPENSES		
Operation and Maintenance:		
Fuel, fuel-related expenses, and gas purchased for resale	60,197	63,297
Purchased power	68,591	52,643
Other operation and maintenance	67,831	62,337
Taxes other than income taxes	25,899	27,190
Depreciation and amortization	55,036	51,155
Other regulatory charges (credits) - net	8,129	(3,881)
TOTAL	285,683	252,741
OPERATING INCOME	50,936	41,181
OTHER DEDUCTIONS		
Allowance for equity funds used during construction	1,668	1,439
Interest and investment income	42	120
Miscellaneous - net	(2,313)	(2,296)
TOTAL	(603)	(737)
INTEREST EXPENSE		
Interest expense	17,613	16,583
Allowance for borrowed funds used during construction	(677)	(551)
TOTAL	16,936	16,032
INCOME BEFORE INCOME TAXES	33,397	24,412
Income taxes	7,425	1,886
NET INCOME	$25,972	$22,526

See Notes to Financial Statements.

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ENTERGY MISSISSIPPI, LLC
STATEMENTS OF CASH FLOWS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING ACTIVITIES		
Net income	$25,972	$22,526
Adjustments to reconcile net income to net cash flow provided by operating activities:		
Depreciation and amortization	55,036	51,155
Deferred income taxes, investment tax credits, and non-current taxes accrued	22,593	2,762
Changes in assets and liabilities:		
Receivables	4,557	17,971
Fuel inventory	1,736	(3,266)
Accounts payable	26,391	(8,125)
Taxes accrued	(75,886)	(58,651)
Interest accrued	4,238	6,201
Deferred fuel costs	(25,722)	13,406
Other working capital accounts	(3,425)	7,849
Provisions for estimated losses	(7,689)	(47)
Other regulatory assets	11,015	(8,484)
Other regulatory liabilities	19,147	(5,532)
Pension and other postretirement liabilities	(5,668)	(2,482)
Other assets and liabilities	2,016	(2,022)
Net cash flow provided by operating activities	54,311	33,261
INVESTING ACTIVITIES		
Construction expenditures	(154,788)	(124,986)
Allowance for equity funds used during construction	1,668	1,439
Changes in money pool receivable - net	(9,683)	44,693
Payment for the purchase of plant or assets	—	(24,633)
Other	1	(128)
Net cash flow used in investing activities	(162,802)	(103,615)
FINANCING ACTIVITIES		
Proceeds from the issuance of long-term debt	200,573	—
Changes in money pool payable - net	(16,516)	19,006
Common equity distributions paid	—	(2,500)
Other	1,132	2,266
Net cash flow provided by financing activities	185,189	18,772
Net increase (decrease) in cash and cash equivalents	76,698	(51,582)
Cash and cash equivalents at beginning of period	18	51,601
Cash and cash equivalents at end of period	$76,716	$19
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid (received) during the period for:		
Interest - net of amount capitalized	$12,757	$9,800
Income taxes	($8,045)	$—

See Notes to Financial Statements.

ENTERGY MISSISSIPPI, LLC
BALANCE SHEETS
ASSETS
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$11	$11
Temporary cash investments	76,705	7
Total cash and cash equivalents	76,716	18
Accounts receivable:		
Customer	104,649	105,732
Allowance for doubtful accounts	(16,771)	(19,527)
Associated companies	13,857	2,740
Other	13,596	11,821
Accrued unbilled revenues	50,075	59,514
Total accounts receivable	165,406	160,280
Deferred fuel costs	11,031	—
Fuel inventory - at average cost	15,381	17,117
Materials and supplies - at average cost	61,336	59,542
Prepayments and other	3,792	4,876
TOTAL	333,662	241,833
OTHER PROPERTY AND INVESTMENTS		
Non-utility property - at cost (less accumulated depreciation)	4,539	4,543
Escrow accounts	64,637	64,635
TOTAL	69,176	69,178
UTILITY PLANT		
Electric	6,151,971	6,084,730
Construction work in progress	192,649	134,854
TOTAL UTILITY PLANT	6,344,620	6,219,584
Less - accumulated depreciation and amortization	2,046,216	2,005,087
UTILITY PLANT - NET	4,298,404	4,214,497
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets	456,326	467,341
Other	19,886	14,413
TOTAL	476,212	481,754
TOTAL ASSETS	$5,177,454	$5,007,262

See Notes to Financial Statements.

ENTERGY MISSISSIPPI, LLC
BALANCE SHEETS
LIABILITIES AND EQUITY
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT LIABILITIES		
Accounts payable:		
Associated companies	$37,053	$61,727
Other	144,652	117,629
Customer deposits	85,953	86,200
Taxes accrued	32,198	108,084
Interest accrued	25,127	20,889
Deferred fuel costs	—	14,691
Other	32,239	34,270
TOTAL	357,222	443,490
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	664,704	646,674
Accumulated deferred investment tax credits	11,080	9,062
Regulatory liability for income taxes - net	222,078	224,000
Other regulatory liabilities	36,897	15,828
Asset retirement cost liabilities	9,898	9,762
Accumulated provisions	38,815	46,504
Pension and other postretirement liabilities	105,176	110,901
Long-term debt	1,981,429	1,780,577
Other	51,449	47,730
TOTAL	3,121,526	2,891,038
Commitments and Contingencies		
EQUITY		
Member's equity	1,698,706	1,672,734
TOTAL	1,698,706	1,672,734
TOTAL LIABILITIES AND EQUITY	$5,177,454	$5,007,262

See Notes to Financial Statements.

ENTERGY MISSISSIPPI, LLC
STATEMENTS OF CHANGES IN MEMBER'S EQUITY
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	Member's Equity (In Thousands)
Balance at December 31, 2019	$1,542,151
Net income	22,526
Common equity distributions	(2,500)
Balance at March 31, 2020	$1,562,177
Balance at December 31, 2020	$1,672,734
Net income	25,972
Balance at March 31, 2021	$1,698,706

See Notes to Financial Statements.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

The COVID-19 Pandemic

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - The COVID-19 Pandemic**" in the Form 10-K for a discussion of the COVID-19 pandemic.

Hurricane Zeta

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Hurricane Zeta**" in the Form 10-K for a discussion of Hurricane Zeta, which caused significant damage to Entergy New Orleans's service area. In March 2021, Entergy New Orleans withdrew $44 million from its funded storm reserves. Entergy New Orleans expects to initiate its storm cost recovery proceeding in May 2021.

Winter Storm Uri

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - February 2021 Winter Storms**" in the Form 10-K for a discussion of the winter storms and extreme cold temperatures experienced in the United States, including Entergy New Orleans's service area, in February 2021 (Winter Storm Uri). Fuel and purchased power costs for Entergy New Orleans were approximately $35 million in February 2021 compared to approximately $25 million in February 2020. See Note 2 to the financial statements in the Form 10-K for discussion of fuel cost recovery at Entergy New Orleans. See "**Load Shed Investigation**" below for discussion of the investigation initiated by the City Council in February 2021 .

Results of Operations

Net Income

Net income decreased $9.4 million primarily due to higher other operation and maintenance expenses, partially offset by higher retail electric price.

Operating Revenues

Following is an analysis of the change in operating revenues comparing first quarter 2021 to first quarter 2020:

	Amount
	(In Millions)
2020 operating revenues	$149.3
Fuel, rider, and other revenues that do not significantly affect net income	5.3
Retail electric price	15.2
Volume/weather	(0.5)
2021 operating revenues	**$169.3**

Entergy New Orleans's results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not affect net income. "Fuel, rider, and other revenues that do not significantly affect net income" includes the revenue variance associated with these items.

The retail electric price variance is primarily due to an increase in formula rate plan revenues resulting from the recovery of New Orleans Power Station costs, effective November 2020. See Note 2 to the financial statements herein and in the Form 10-K for further discussion of the rate case resolution.

The volume/weather variance is primarily due to decreased commercial and residential usage and the effect of decreased usage during the unbilled sales period, significantly offset by more favorable weather on residential sales.

Billed electric energy sales for Entergy New Orleans for the three months ended March 31, 2021 and 2020 are as follows:

	2021	2020	% Change
	(GWh)		
Residential	595	501	19
Commercial	450	496	(9)
Industrial	92	102	(10)
Governmental	171	184	(7)
Total retail	1,308	1,283	2
Sales for resale:			
Non-associated companies	89	601	(85)
Total	1,397	1,884	(26)

See Note 13 to the financial statements herein for additional discussion of Entergy New Orleans’s operating revenues.

Other Income Statement Variances

Other operation and maintenance expenses increased primarily due to an increase of $3.6 million in energy efficiency costs and an increase of $3.5 million in non-nuclear generation expenses primarily due to the timing of the scope of work performed during plant outages as compared to the same period in 2020 and the New Orleans Power Station, which was placed in service in May 2020.

Depreciation and amortization expenses increased primarily due to additions to plant in service, including the New Orleans Power Station, which was placed in service in May 2020.

Other regulatory charges (credits) - net include regulatory credits recorded in first quarter 2020 to reflect compliance with terms of the 2018 combined rate case resolution approved by the City Council in February 2020. See Note 2 to the financial statements in the Form 10-K for discussion of the rate case resolution.

Income Taxes

The effective income tax rate was 33.9% for first quarter 2021. The difference in the effective income tax rate for first quarter 2021 versus the federal statutory rate of 21% was primarily due to the provision for uncertain tax positions and state income taxes, partially offset by certain book and tax differences related to utility plant items.

The effective income tax rate was (32.4%) for first quarter 2020. The difference in the effective income tax rate for first quarter 2020 versus the federal statutory rate of 21% was primarily due to the amortization of excess accumulated deferred income taxes, permanent differences related to income tax deductions for stock-based compensation, certain book and tax differences related to utility plant items, and book and tax differences related to

the allowance for equity funds used during construction, partially offset by the provision for uncertain tax positions. See Note 10 to the financial statements herein and Notes 2 and 3 to the financial statements in the Form 10-K for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act. See Note 3 to the financial statements in the Form 10-K for discussion of the income tax deductions for stock-based compensation.

Liquidity and Capital Resources

Cash Flow

Cash flows for the three months ended March 31, 2021 and 2020 were as follows:

	2021	2020
	(In Thousands)	
Cash and cash equivalents at beginning of period	$26	$6,017
Cash flow provided by (used in):		
Operating activities	(14,114)	17,318
Investing activities	14,875	(68,691)
Financing activities	14,825	118,671
Net increase in cash and cash equivalents	15,586	67,298
Cash and cash equivalents at end of period	$15,612	$73,315

Operating Activities

Entergy New Orleans's operating activities used $14.1 million of cash for the three months ended March 31, 2021 compared to providing $17.3 million of cash for the three months ended March 31, 2020 primarily due to the following activity:

- the timing of payments to vendors;
- increased fuel costs as a result of Winter Storm Uri. See "**Winter Storm Uri**" above for discussion of the incremental fuel and purchased power costs incurred. See Note 2 to the financial statements in the Form 10-K for a discussion of fuel and purchased power cost recovery;
- the timing of collection of receivables from customers, in part due to the COVID-19 pandemic; and
- an increase of approximately $5 million in storm spending in 2021, primarily due to Hurricane Zeta restoration efforts. See "**Hurricane Zeta**" above for discussion of hurricane restoration efforts.

Investing Activities

Entergy New Orleans's investing activities provided $14.9 million of cash for the three months ended March 31, 2021 compared to using $68.7 million of cash for the three months ended March 31, 2020 primarily due to the following activity:

- $44.2 million in receipts from storm reserve escrow accounts in 2021; and
- a decrease of $33.8 million in construction expenditures primarily due to lower spending in 2021 on the New Orleans Power Station and the New Orleans Solar Station projects and lower spending in 2021 on advanced metering infrastructure, partially offset by storm spending in 2021. See "**Hurricane Zeta**" above for discussion of hurricane restoration efforts.

Financing Activities

Net cash flow provided by financing activities decreased $103.8 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to the issuance of $78 million of 3.00% Series mortgage bonds and the issuance of $62 million of 3.75% Series mortgage bonds, each in March 2020. The decrease was partially offset by $20 million in repayments on long-term credit borrowings in 2020 and money pool activity.

Increases in Entergy New Orleans's payable to the money pool are a source of cash flow, and Entergy New Orleans's payable to the money pool increased $15 million for the three months ended March 31, 2021. The money pool is an inter-company borrowing arrangement designed to reduce the Utility subsidiaries' need for external short-term borrowings.

See Note 4 to the financial statements herein and Note 5 to the financial statements in the Form 10-K for more details on long-term debt.

Capital Structure

Entergy New Orleans's debt to capital ratio is shown in the following table.

	March 31, 2021	December 31, 2020
Debt to capital	51.5 %	51.5 %
Effect of excluding securitization bonds	(1.7 %)	(1.6 %)
Debt to capital, excluding securitization bonds (a)	49.8 %	49.9 %
Effect of subtracting cash	(0.6 %)	— %
Net debt to net capital, excluding securitization bonds (a)	49.2 %	49.9 %

(a) Calculation excludes the securitization bonds, which are non-recourse to Entergy New Orleans.

Net debt consists of debt less cash and cash equivalents. Debt consists of short-term borrowings, finance lease obligations, long-term debt, including the currently maturing portion, and the long-term payable due to an associated company. Capital consists of debt and equity. Net capital consists of capital less cash and cash equivalents. Entergy New Orleans uses the debt to capital ratios excluding securitization bonds in analyzing its financial condition and believes they provide useful information to its investors and creditors in evaluating Entergy New Orleans's financial condition because the securitization bonds are non-recourse to Entergy New Orleans, as more fully described in Note 5 to the financial statements in the Form 10-K. Entergy New Orleans also uses the net debt to net capital ratio excluding securitization bonds in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy New Orleans's financial condition because net debt indicates Entergy New Orleans's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Uses and Sources of Capital

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources**" in the Form 10-K for a discussion of Entergy New Orleans's uses and sources of capital. Following are updates to the information provided in the Form 10-K.

Entergy New Orleans's receivables from or (payables to) the money pool were as follows:

March 31, 2021	December 31, 2020	March 31, 2020	December 31, 2019
	(In Thousands)		
($25,229)	($10,190)	$13,170	$5,191

See Note 4 to the financial statements in the Form 10-K for a description of the money pool.

Entergy New Orleans has a credit facility in the amount of $25 million scheduled to expire in November 2021. The credit facility includes fronting commitments for the issuance of letters of credit against $10 million of the borrowing capacity of the facility. As of March 31, 2021, there were no cash borrowings and no letters of credit outstanding under the facility. In addition, Entergy New Orleans is a party to an uncommitted letter of credit facility as a means to post collateral to support its obligations to MISO. As of March 31, 2021, a $2 million letter of credit was outstanding under Entergy New Orleans's uncommitted letter of credit facility. See Note 4 to the financial statements herein for additional discussion of the credit facilities.

Entergy New Orleans has $38.8 million in its storm reserve escrow account at March 31, 2021.

State and Local Rate Regulation

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – State and Local Rate Regulation**" in the Form 10-K for a discussion of state and local rate regulation. The following are updates to that discussion.

Retail Rates

COVID-19 Orders

As discussed in the Form 10-K, in June 2020 the City Council established the City Council Cares Program and directed Entergy New Orleans to use the approximately $7 million refund received from the Entergy Arkansas opportunity sales FERC proceeding, currently being held in escrow, and approximately $15 million of non-securitized storm reserves to fund this program, which was intended to provide temporary bill relief to customers who became unemployed during the COVID-19 pandemic. The program became effective July 1, 2020 and offered qualifying residential customers bill credits of $100 per month for up to four months, for a maximum of $400 in residential customer bill credits. As of March 31, 2021 the program expired and credits of $4.3 million have been applied to customer bills under the City Council Cares Program.

Additionally, as discussed in the Form 10-K, in February 2021 the City Council adopted a resolution suspending residential customer disconnections for non-payment of utility bills and suspending the assessment and accumulation of late fees on residential customers with past-due balances through May 15, 2021. As of March 31, 2021, Entergy New Orleans recorded a regulatory asset of $14.8 million for costs associated with the COVID-19 pandemic.

Hurricane Zeta

In October 2020, Hurricane Zeta caused significant damage to Entergy New Orleans's service area. The storm resulted in widespread power outages, significant damage to distribution and transmission infrastructure, and the loss of sales during the power outages. Total restoration costs for the repair and/or replacement of Entergy New Orleans's electric facilities damaged by Hurricane Zeta are currently estimated to be approximately $36 million, including approximately $28 million in capital costs and approximately $8 million in non-capital costs. In March

2021, Entergy New Orleans withdrew $44 million from its funded storm reserves. Entergy New Orleans expects to initiate its storm cost recovery proceeding in May 2021.

Load Shed Investigation

On February 16, 2021, due to high customer demand and limited generation, MISO issued an order requiring load-serving entities throughout its southern region to shed load to protect the integrity of the bulk electric system. Entergy New Orleans was required to shed load of at least 26 MW, but due to certain complications with its automated load shed program and certain load measurement issues, it inadvertently shed approximately 105 MW of load in its service area. The maximum time any customer was without power due to the load shed event was one hour and forty minutes. In late February 2021 the City Council ordered its advisors to conduct an investigation into the load shed event and to issue a report, which was completed and filed in April 2021. The report recommended that the City Council open an additional docket to determine whether any of Entergy New Orleans's actions were imprudent, and the City Council Utility Committee Chairperson has made statements in the media that the City Council may seek to impose a fine on Entergy New Orleans. Entergy New Orleans would oppose any attempt to levy a fine under the circumstances presented.

Federal Regulation

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – Federal Regulation**" in the Form 10-K for a discussion of federal regulation.

Nuclear Matters

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Nuclear Matters**" in the Form 10-K for further discussion of nuclear matters.

Environmental Risks

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Environmental Risks**" in the Form 10-K for a discussion of environmental risks.

Critical Accounting Estimates

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Critical Accounting Estimates**" in the Form 10-K for a discussion of the estimates and judgments necessary in Entergy New Orleans's accounting for utility regulatory accounting, impairment of long-lived assets, taxation and uncertain tax positions, qualified pension and other postretirement benefits, and other contingencies.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements in the Form 10-K for a discussion of new accounting pronouncements.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
CONSOLIDATED INCOME STATEMENTS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING REVENUES		
Electric	$139,148	$123,431
Natural gas	30,187	25,871
TOTAL	169,335	149,302
OPERATING EXPENSES		
Operation and Maintenance:		
Fuel, fuel-related expenses, and gas purchased for resale	19,012	27,495
Purchased power	68,670	56,467
Other operation and maintenance	38,178	30,704
Taxes other than income taxes	12,556	13,206
Depreciation and amortization	18,161	15,075
Other regulatory charges (credits) - net	3,130	(5,736)
TOTAL	159,707	137,211
OPERATING INCOME	9,628	12,091
OTHER INCOME (DEDUCTIONS)		
Allowance for equity funds used during construction	258	2,485
Interest and investment income	9	53
Miscellaneous - net	(302)	(738)
TOTAL	(35)	1,800
INTEREST EXPENSE		
Interest expense	7,029	6,640
Allowance for borrowed funds used during construction	(116)	(1,195)
TOTAL	6,913	5,445
INCOME BEFORE INCOME TAXES	2,680	8,446
Income taxes	909	(2,740)
NET INCOME	$1,771	$11,186

See Notes to Financial Statements.

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ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING ACTIVITIES		
Net income	$1,771	$11,186
Adjustments to reconcile net income to net cash flow provided by (used in) operating activities:		
Depreciation and amortization	18,161	15,075
Deferred income taxes, investment tax credits, and non-current taxes accrued	4,572	1,339
Changes in assets and liabilities:		
Receivables	(1,975)	4,039
Fuel inventory	2,234	(25)
Accounts payable	(27,777)	(5,291)
Taxes accrued	13	122
Interest accrued	(3,203)	(929)
Deferred fuel costs	(4,886)	3,702
Other working capital accounts	(11,103)	(10,795)
Provisions for estimated losses	(40,680)	923
Other regulatory assets	28,879	1,867
Other regulatory liabilities	8,728	(9,599)
Pension and other postretirement liabilities	(4,397)	(4,878)
Other assets and liabilities	15,549	10,582
Net cash flow provided by (used in) operating activities	(14,114)	17,318
INVESTING ACTIVITIES		
Construction expenditures	(26,165)	(60,001)
Allowance for equity funds used during construction	258	2,485
Changes in money pool receivable - net	—	(7,979)
Receipts from storm reserve escrow account	44,200	—
Payments to storm reserve escrow account	(3)	(314)
Changes in securitization account	(3,415)	(2,882)
Net cash flow provided by (used in) investing activities	14,875	(68,691)
FINANCING ACTIVITIES		
Proceeds from the issuance of long-term debt	—	139,116
Retirement of long-term debt	—	(20,000)
Change in money pool payable - net	15,039	—
Other	(214)	(445)
Net cash flow provided by financing activities	14,825	118,671
Net increase in cash and cash equivalents	15,586	67,298
Cash and cash equivalents at beginning of period	26	6,017
Cash and cash equivalents at end of period	$15,612	$73,315
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid during the period for:		
Interest - net of amount capitalized	$9,921	$7,275

See Notes to Financial Statements.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
ASSETS
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$15,612	$26
Total cash and cash equivalents	15,612	26
Securitization recovery trust account	6,779	3,364
Accounts receivable:		
Customer	82,902	70,694
Allowance for doubtful accounts	(19,365)	(17,430)
Associated companies	1,331	2,381
Other	5,060	4,248
Accrued unbilled revenues	23,009	31,069
Total accounts receivable	92,937	90,962
Deferred fuel costs	7,016	2,130
Fuel inventory - at average cost	—	1,978
Materials and supplies - at average cost	16,434	16,550
Prepayments and other	14,733	3,715
TOTAL	153,511	118,725
OTHER PROPERTY AND INVESTMENTS		
Non-utility property at cost (less accumulated depreciation)	1,016	1,016
Storm reserve escrow account	38,841	83,038
TOTAL	39,857	84,054
UTILITY PLANT		
Electric	1,806,961	1,821,638
Natural gas	352,817	348,024
Construction work in progress	26,927	12,460
TOTAL UTILITY PLANT	2,186,705	2,182,122
Less - accumulated depreciation and amortization	751,117	740,796
UTILITY PLANT - NET	1,435,588	1,441,326
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Deferred fuel costs	4,080	4,080
Other regulatory assets (includes securitization property of $32,859 as of March 31, 2021 and $35,559 as of December 31, 2020)	237,911	266,790
Other	29,864	23,931
TOTAL	271,855	294,801
TOTAL ASSETS	$1,900,811	$1,938,906

See Notes to Financial Statements.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
LIABILITIES AND EQUITY
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT LIABILITIES		
Payable due to associated company	$1,618	$1,618
Accounts payable:		
Associated companies	66,122	54,234
Other	40,944	60,766
Customer deposits	27,315	27,912
Taxes accrued	4,713	4,700
Interest accrued	4,892	8,095
Current portion of unprotected excess accumulated deferred income taxes	3,327	3,296
Other	6,160	5,462
TOTAL	155,091	166,083
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	341,217	338,714
Accumulated deferred investment tax credits	16,081	16,095
Regulatory liability for income taxes - net	55,180	55,675
Asset retirement cost liabilities	3,833	3,768
Accumulated provisions	49,218	89,898
Long-term debt (includes securitization bonds of $41,352 as of March 31, 2021 and $41,291 as of December 31, 2020)	629,883	629,704
Long-term payable due to associated company	10,911	10,911
Other	30,709	21,141
TOTAL	1,137,032	1,165,906
Commitments and Contingencies		
EQUITY		
Member's equity	608,688	606,917
TOTAL	608,688	606,917
TOTAL LIABILITIES AND EQUITY	$1,900,811	$1,938,906

See Notes to Financial Statements.

ENTERGY NEW ORLEANS, LLC AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN MEMBER'S EQUITY
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	Member's Equity (In Thousands)
Balance at December 31, 2019	$497,579
Net income	11,186
Balance at March 31, 2020	$508,765
Balance at December 31, 2020	$606,917
Net income	1,771
Balance at March 31, 2021	$608,688

See Notes to Financial Statements.

ENTERGY TEXAS, INC. AND SUBSIDIARIES

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

The COVID-19 Pandemic

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - The COVID-19 Pandemic**" in the Form 10-K for a discussion of the COVID-19 pandemic.

Hurricane Laura and Hurricane Delta

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Hurricane Laura and Hurricane Delta**" in the Form 10-K for a discussion of Hurricane Laura and Hurricane Delta, which caused significant damage to portions of Entergy Texas's service territory. See Note 2 to the financial statements herein for discussion of storm cost recovery filings made by Entergy Texas in April 2021.

Winter Storm Uri

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - February 2021 Winter Storms**" in the Form 10-K for a discussion of the winter storms and extreme cold temperatures experienced in the United States, including Entergy Texas's service area, in February 2021 (Winter Storm Uri). Fuel and purchased power costs for Entergy Texas were approximately $185 million in February 2021 compared to approximately $50 million in February 2020. See Note 2 to the financial statements herein for discussion of the storm cost recovery filing made by Entergy Texas in April 2021. See Note 2 to the financial statements herein and in the Form 10-K for discussion of fuel cost recovery at Entergy Texas.

Results of Operations

Net Income

Net income increased $17.4 million primarily due to higher retail electric price and higher volume/weather. The increase was partially offset by a higher effective tax rate, lower other income, and higher depreciation and amortization expenses.

Operating Revenues

Following is an analysis of the change in operating revenues comparing the first quarter 2021 to the first quarter 2020:

	Amount
	(In Millions)
2020 operating revenues	$339.3
Fuel, rider, and other revenues that do not significantly affect net income	105.9
Retail electric price	19.1
Volume/weather	17.3
Return of unprotected excess accumulated deferred income taxes to customers	(1.4)
2021 operating revenues	**$480.2**

Entergy Texas's results include revenues from rate mechanisms designed to recover fuel, purchased power, and other costs such that the revenues and expenses associated with these items generally offset and do not affect net income. "Fuel, rider, and other revenues that do not significantly affect net income" includes the revenue variance associated with these items.

The retail electric price variance is primarily due to the implementation of the generation cost recovery rider effective January 2021, an increase in the transmission cost recovery factor rider effective March 2021, and an increase in the distribution cost recovery factor rider effective March 2021. See Note 2 to the financial statements herein and in the Form 10-K for further discussion of the generation cost recovery rider and transmission and distribution cost recovery factor rider filings.

The volume/weather variance is primarily due to the effect of more favorable weather on residential sales.

The return of unprotected excess accumulated deferred income taxes to customers resulted from the return of unprotected excess accumulated deferred income taxes through a rider effective October 2018. In first quarter 2021, $7.1 million was returned to customers as compared to $5.7 million in first quarter 2020. There is no effect on net income as the reduction in operating revenues is offset by a reduction in income tax expense. See Note 2 to the financial statements in the Form 10-K for further discussion of regulatory activity regarding the Tax Cuts and Jobs Act.

Billed electric energy sales for Entergy Texas for the three months ended March 31, 2021 and 2020 are as follows:

	2021	2020	% Change
	(GWh)		
Residential	1,539	1,326	16
Commercial	1,000	1,000	—
Industrial	1,928	1,897	2
Governmental	62	64	(3)
Total retail	4,529	4,287	6
Sales for resale:			
Associated companies	296	244	21
Non-associated companies	341	85	301
Total	5,166	4,616	12

See Note 13 to the financial statements herein for additional discussion of Entergy Texas's operating revenues.

Other Income Statement Variances

Other operation and maintenance expenses increased primarily due to:

- an increase of $1.3 million due to bad debt expense as a result of the COVID-19 pandemic;
- an increase of $1.3 million in non-nuclear generation expenses primarily due to higher expenses associated with the Montgomery County Power Station, which was placed in service in January 2021, and a higher scope of work performed in 2021 as compared to the same period in 2020; and
- several individually insignificant items.

Taxes other than income taxes increased primarily due to an increase in ad valorem taxes as a result of higher estimated ad valorem taxes associated with the Montgomery County Power Station.

Depreciation and amortization expenses increased primarily due to additions to plant in service, including the Montgomery County Power Station, which was placed in service in January 2021.

Other income decreased primarily due to a decrease in the allowance for equity funds used during construction due to higher construction work in progress in 2020, including the Montgomery County Power Station project, as compared to the same period in 2021.

Interest expense increased primarily due to a decrease in the allowance for borrowed funds used during construction due to higher construction work in progress in 2020, including the Montgomery County Power Station project, as compared to the same period in 2021.

Income Taxes

The effective income tax rate was 9.1% for the first quarter 2021. The difference in the effective income tax rate for the first quarter 2021 versus the federal statutory rate of 21% was primarily due to the amortization of excess accumulated deferred income taxes and certain book and tax differences related to utility plant items. See Note 10 to the financial statements herein and Notes 2 and 3 to the financial statements in the Form 10-K for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act.

The effective income tax rate was (14.8%) for the first quarter 2020. The difference in the effective income tax rate for the first quarter 2020 versus the federal statutory rate of 21% was primarily due to the amortization of excess accumulated deferred income taxes, permanent differences related to income tax deductions for stock-based compensation, book and tax differences related to the allowance for equity funds used during construction, and certain book and tax differences related to utility plant items. See Note 10 to the financial statements herein and Notes 2 and 3 to the financial statements in the Form 10-K for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act. See Note 3 to the financial statements in the Form 10-K for discussion of the income tax deductions for stock-based compensation.

Liquidity and Capital Resources

Cash Flow

Cash flows for the three months ended March 31, 2021 and 2020 were as follows:

	2021	2020
	(In Thousands)	
Cash and cash equivalents at beginning of period	$248,596	$12,929
Cash flow provided by (used in):		
Operating activities	(28,864)	37,114
Investing activities	(223,696)	(232,650)
Financing activities	3,989	342,320
Net increase (decrease) in cash and cash equivalents	(248,571)	146,784
Cash and cash equivalents at end of period	$25	$159,713

Operating Activities

Entergy Texas's operating activities used $28.9 million of cash for the three months ended March 31, 2021 compared to providing $37.1 million of cash for the three months ended March 31, 2020 primarily due to increased fuel costs as a result of Winter Storm Uri and an increase of approximately $25 million in storm spending in 2021, primarily due to Hurricane Laura and Hurricane Delta restoration efforts. See "**Winter Storm Uri**" above for discussion of the incremental fuel and purchased power costs incurred. See Note 2 to the financial statements herein and in the Form 10-K for a discussion of fuel and purchased power cost recovery. See "**Hurricane Laura and Hurricane Delta**" above for discussion of hurricane restoration efforts.

Investing Activities

Net cash flow used in investing activities decreased $9.0 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to a decrease of $42.9 million in non-nuclear generation construction expenditures, primarily due to higher spending in 2020 on the Montgomery County Power Station project, and money pool activity. The decrease was partially offset by an increase of $50.7 million in distribution construction expenditures primarily due to storm spending in 2021. See "**Hurricane Laura and Hurricane Delta**" above for discussion of hurricane restoration efforts.

Decreases in Entergy Texas's receivable from the money pool are a source of cash flow, and Entergy Texas's receivable from the money pool decreased $4.6 million for the three months ended March 31, 2021 compared to increasing $17.9 million for the three months ended March 31, 2020. The money pool is an inter-company borrowing arrangement designed to reduce the Utility subsidiaries' need for external short-term borrowings.

Financing Activities

Net cash flow provided by financing activities decreased $338.3 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to a capital contribution of $175 million received from Entergy Corporation in March 2020 in anticipation of upcoming expenditures, including Montgomery County Power Station, and the issuance of $175 million of 3.55% Series mortgage bonds in March 2020. The decrease was partially offset by money pool activity.

Increases in Entergy Texas's payable to the money pool are a source of cash flow, and Entergy Texas's payable to the money pool increased by $30.9 million for the three months ended March 31, 2021.

See Note 4 to the financial statements herein and Note 5 to the financial statements in the Form 10-K for more details on long-term debt.

Capital Structure

Entergy Texas's debt to capital ratio is shown in the following table.

	March 31, 2021	December 31, 2020
Debt to capital	52.8 %	53.7 %
Effect of excluding the securitization bonds	(0.9 %)	(1.3 %)
Debt to capital, excluding securitization bonds (a)	51.9 %	52.4 %
Effect of subtracting cash	— %	(2.7 %)
Net debt to net capital, excluding securitization bonds (a)	51.9 %	49.7 %

(a) Calculation excludes the securitization bonds, which are non-recourse to Entergy Texas.

Net debt consists of debt less cash and cash equivalents. Debt consists of finance lease obligations and long-term debt, including the currently maturing portion. Capital consists of debt and equity. Net capital consists of capital less cash and cash equivalents. Entergy Texas uses the debt to capital ratios excluding securitization bonds in analyzing its financial condition and believes they provide useful information to its investors and creditors in evaluating Entergy Texas's financial condition because the securitization bonds are non-recourse to Entergy Texas, as more fully described in Note 5 to the financial statements in the Form 10-K. Entergy Texas also uses the net debt to net capital ratio excluding securitization bonds in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating Entergy Texas's financial condition because net debt indicates Entergy Texas's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Uses and Sources of Capital

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources**" in the Form 10-K for a discussion of Entergy Texas's uses and sources of capital. Following are updates to information provided in the Form 10-K.

Entergy Texas's receivables from or (payables to) the money pool were as follows:

March 31, 2021	December 31, 2020	March 31, 2020	December 31, 2019
	(In Thousands)		
($30,858)	$4,601	$29,092	$11,181

See Note 4 to the financial statements in the Form 10-K for a description of the money pool.

Entergy Texas has a credit facility in the amount of $150 million scheduled to expire in September 2024. The credit facility includes fronting commitments for the issuance of letters of credit against $30 million of the borrowing capacity of the facility. As of March 31, 2021, there were no cash borrowings and $1.3 million of letters of credit outstanding under the credit facility. In addition, Entergy Texas is a party to an uncommitted letter of credit facility as a means to post collateral to support its obligations to MISO. As of March 31, 2021, $30.2 million in letters of credit were outstanding under Entergy Texas's uncommitted letter of credit facility. See Note 4 to the financial statements herein for additional discussion of the credit facilities.

Liberty County Solar Facility

In September 2020, Entergy Texas filed an application seeking PUCT approval to amend Entergy Texas's certificate of convenience and necessity to acquire the 100 MW Liberty County Solar Facility and a determination that Entergy Texas's acquisition of the facility through a tax equity partnership is in the public interest. In its preliminary order, the PUCT determined that, in considering Entergy Texas's application, it would not specifically address whether Entergy Texas's use of a tax equity partnership is in the public interest. In March 2021 intervenors and PUCT staff filed testimony, and Entergy Texas filed rebuttal testimony in April 2021. A hearing on the merits was held in April 2021. Post-hearing briefs and reply briefs are due in May 2021. Closing is expected to occur in 2023.

Hardin County Peaking Facility

In April 2020, Entergy Texas and East Texas Electric Cooperative, Inc. filed a joint report and application seeking PUCT approvals related to two transactions: (1) Entergy Texas's acquisition of the Hardin County Peaking Facility from East Texas Electric Cooperative, Inc.; and (2) Entergy Texas's sale of a 7.56% partial interest in the Montgomery County Power Station to East Texas Electric Cooperative, Inc. The two transactions, currently

expected to close in June 2021, are interdependent. In October 2020, Entergy Texas filed an unopposed settlement agreement supporting approval of the transactions. Key provisions of the settlement include: Entergy Texas will propose to depreciate its investment in Hardin County Peaking Facility through the end of 2041; Entergy Texas's recovery of its investment in Hardin County Peaking Facility will be capped at approximately $36 million; and Entergy Texas will not seek recovery of an acquisition adjustment, if any, or transaction costs for either transaction. The settlement was approved by the PUCT in April 2021.

State and Local Rate Regulation and Fuel-Cost Recovery

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - State and Local Rate Regulation and Fuel-Cost Recovery**" in the Form 10-K for a discussion of state and local rate regulation and fuel-cost recovery. The following are updates to that discussion.

Distribution Cost Recovery Factor (DCRF) Rider

As discussed in the Form 10-K, in October 2020, Entergy Texas filed with the PUCT a request to amend its DCRF rider. The proposed rider is designed to collect from Entergy Texas's retail customers approximately $26.3 million annually, or $6.8 million in incremental annual revenues beyond Entergy Texas's currently effective DCRF rider based on its capital invested in distribution between January 1, 2020 and August 31, 2020. In February 2021 the administrative law judge with the State Office of Administrative Hearings approved Entergy Texas's agreed motion for interim rates, which went into effect in March 2021. In March 2021 the parties filed an unopposed settlement recommending that Entergy Texas be allowed to collect its full requested DCRF revenue requirement and resolving all issues in the proceeding. This case has been remanded to the PUCT for consideration of a final order at a future open meeting.

Transmission Cost Recovery Factor (TCRF) Rider

As discussed in the Form 10-K, in October 2020, Entergy Texas filed with the PUCT a request to amend its TCRF rider. The proposed rider is designed to collect from Entergy Texas's retail customers approximately $51 million annually, or $31.6 million in incremental annual revenues beyond Entergy Texas's currently effective TCRF rider based on its capital invested in transmission between July 1, 2019 and August 31, 2020. A procedural schedule was established with a hearing scheduled in March 2021. In February 2021, Entergy Texas filed an agreed motion to abate the procedural schedule, noting that the parties had reached a settlement in principle, and the administrative law judge granted the motion to abate. In March 2021 the parties filed an unopposed settlement recommending that Entergy Texas be allowed to collect its full requested TCRF revenue requirement with interim rates effective March 2021 and resolving all issues in the proceeding. In March 2021 the administrative law judge granted the motion for interim rates, admitted evidence, and remanded this case to the PUCT for consideration of a final order at a future open meeting.

Fuel and purchased power recovery

In February 2021, Entergy Texas filed an application to implement a fuel refund for a cumulative over-recovery of approximately $75 million that is primarily attributable to settlements received by Entergy Texas from MISO related to Hurricane Laura. Entergy Texas planned to issue the refund over the period of March through August 2021. On February 22, 2021, Entergy Texas filed a motion to abate its fuel refund proceeding to assess how the February 2021 winter storm impacted Entergy Texas's fuel over-recovery position. In March 2021, Entergy Texas withdrew its application to implement the fuel refund. Entergy Texas is continuing to evaluate its fuel balance and will file a subsequent refund or surcharge application consistent with the requirements of the PUCT's rules.

COVID-19 Orders

As discussed in the Form 10-K, in March 2020 the PUCT authorized electric utilities to record as a regulatory asset expenses resulting from the effects of the COVID-19 pandemic. In future proceedings the PUCT will consider whether each utility's request for recovery of these regulatory assets is reasonable and necessary, the appropriate period of recovery, and any amount of carrying costs thereon. In March 2020 the PUCT ordered a moratorium on disconnections for nonpayment for all customer classes, but, in April 2020, revised the disconnect moratorium to apply only to residential customers. The PUCT allowed the moratorium to expire on June 13, 2020, but on July 17, 2020, the PUCT re-established the disconnect moratorium for residential customers until August 31, 2020. In January 2021, Entergy Texas resumed disconnections for customers with past-due balances that have not made payment arrangements. As of March 31, 2021, Entergy Texas recorded a regulatory asset of $10.7 million for costs associated with the COVID-19 pandemic.

Generation Cost Recovery Rider

As discussed in the Form 10-K, in October 2020, Entergy Texas filed an application to establish a generation cost recovery rider with an initial annual revenue requirement of approximately $91 million to begin recovering a return of and on its capital investment in the Montgomery County Power Station through August 31, 2020. In December 2020, Entergy Texas filed an unopposed settlement supporting a generation cost recovery rider with an annual revenue requirement of approximately $86 million. On January 14, 2021, the PUCT approved the generation cost recovery rider settlement rates on an interim basis and abated the proceeding. In March 2021, Entergy Texas filed to update its generation cost recovery rider to include investment in Montgomery County Power Station after August 31, 2020. In April 2021 the ALJ issued an order unabating the proceeding to consider Entergy Texas’s updated application and establishing a procedural schedule that will result in administrative approval of Entergy Texas’s application in June 2021 if it is unopposed by parties to the proceeding.

In December 2020, Entergy Texas also filed an application to amend its generation cost recovery rider to reflect its acquisition of the Hardin County Peaking Facility, which is expected to close in June 2021. The initial generation cost recovery rider rates proposed in the application represent no change from the generation cost recovery rider rates to be established in Entergy Texas’s previous generation cost recovery rider proceeding. Once Entergy Texas has acquired the Hardin County Peaking Facility, its investment in the facility will be reflected in an updated filing to Entergy Texas’s application, which will be made within 60 days of the acquisition’s closing.

Hurricane Laura, Hurricane Delta, and Winter Storm Uri

In August 2020 and October 2020, Hurricane Laura and Hurricane Delta caused extensive damage to Entergy Texas’s service area. In February 2021, Winter Storm Uri also caused damage to Entergy Texas’s service area. The storms resulted in widespread power outages, significant damage primarily to distribution and transmission infrastructure, and the loss of sales during the power outages. In April 2021, Entergy Texas filed an application with the PUCT requesting a determination that its system restoration costs associated with Hurricane Laura, Hurricane Delta, and Winter Storm Uri of approximately $250 million, including approximately $200 million in capital costs and approximately $50 million in non-capital costs were reasonable and necessary to enable Entergy Texas to restore electric service to its customers and Entergy Texas’s electric utility infrastructure. The filing currently includes only a portion of the Winter Storm Uri costs. Entergy Texas expects to initiate a proceeding later in 2021 to securitize the costs approved by the PUCT.

Federal Regulation

See “**MANAGEMENT’S FINANCIAL DISCUSSION AND ANALYSIS – Federal Regulation**” in the Form 10-K for a discussion of federal regulation.

Nuclear Matters

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Nuclear Matters**" in the Form 10-K for discussion of nuclear matters.

Industrial and Commercial Customers

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – Industrial and Commercial Customers**" in the Form 10-K for a discussion of industrial and commercial customers.

Environmental Risks

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Environmental Risks**" in the Form 10-K for a discussion of environmental risks.

Critical Accounting Estimates

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Critical Accounting Estimates**" in the Form 10-K for a discussion of utility regulatory accounting, impairment of long-lived assets, taxation and uncertain tax positions, qualified pension and other postretirement benefits, and other contingencies.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements in the Form 10-K for a discussion of new accounting pronouncements.

ENTERGY TEXAS, INC. AND SUBSIDIARIES
CONSOLIDATED INCOME STATEMENTS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING REVENUES		
Electric	$480,220	$339,336
OPERATING EXPENSES		
Operation and Maintenance:		
Fuel, fuel-related expenses, and gas purchased for resale	112,396	41,346
Purchased power	141,362	119,791
Other operation and maintenance	62,955	58,933
Taxes other than income taxes	21,875	19,272
Depreciation and amortization	50,936	42,566
Other regulatory charges (credits) - net	15,840	21,368
TOTAL	405,364	303,276
OPERATING INCOME	74,856	36,060
OTHER INCOME		
Allowance for equity funds used during construction	2,445	10,641
Interest and investment income	224	429
Miscellaneous - net	(423)	(346)
TOTAL	2,246	10,724
INTEREST EXPENSE		
Interest expense	23,038	22,858
Allowance for borrowed funds used during construction	(984)	(4,573)
TOTAL	22,054	18,285
INCOME BEFORE INCOME TAXES	55,048	28,499
Income taxes	4,990	(4,208)
NET INCOME	50,058	32,707
Preferred dividend requirements	470	470
EARNINGS APPLICABLE TO COMMON STOCK	$49,588	$32,237

See Notes to Financial Statements.

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ENTERGY TEXAS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CASH FLOWS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING ACTIVITIES		
Net income	$50,058	$32,707
Adjustments to reconcile net income to net cash flow provided by (used in) operating activities:		
Depreciation and amortization	50,936	42,566
Deferred income taxes, investment tax credits, and non-current taxes accrued	(1,522)	3,921
Changes in assets and liabilities:		
Receivables	(16,424)	1,221
Fuel inventory	3,509	(1,127)
Accounts payable	(42,511)	(35,288)
Taxes accrued	(5,123)	(20,597)
Interest accrued	(10,989)	(7,380)
Deferred fuel costs	(62,970)	8,138
Other working capital accounts	1,118	5,004
Provisions for estimated losses	(31)	5
Other regulatory assets	40,484	34,309
Other regulatory liabilities	(13,649)	(8,854)
Pension and other postretirement liabilities	(5,434)	(9,086)
Other assets and liabilities	(16,316)	(8,425)
Net cash flow provided by (used in) operating activities	(28,864)	37,114
INVESTING ACTIVITIES		
Construction expenditures	(238,903)	(236,984)
Allowance for equity funds used during construction	2,445	10,641
Changes in money pool receivable - net	4,601	(17,911)
Changes in securitization account	8,161	11,604
Net cash flow used in investing activities	(223,696)	(232,650)
FINANCING ACTIVITIES		
Proceeds from the issuance of long-term debt	—	194,631
Retirement of long-term debt	(27,951)	(26,864)
Capital contribution from parent	—	175,000
Change in money pool payable - net	30,858	—
Preferred stock dividends paid	(470)	(653)
Other	1,552	206
Net cash flow provided by financing activities	3,989	342,320
Net increase (decrease) in cash and cash equivalents	(248,571)	146,784
Cash and cash equivalents at beginning of period	248,596	12,929
Cash and cash equivalents at end of period	$25	$159,713
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid (received) during the period for:		
Interest - net of amount capitalized	$33,394	$29,699
Income taxes	($836)	($2,358)

See Notes to Financial Statements.

ENTERGY TEXAS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
ASSETS
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$25	$26
Temporary cash investments	—	248,570
Total cash and cash equivalents	25	248,596
Securitization recovery trust account	28,072	36,233
Accounts receivable:		
Customer	108,152	103,221
Allowance for doubtful accounts	(15,058)	(16,810)
Associated companies	14,385	18,892
Other	14,995	11,780
Accrued unbilled revenues	62,845	56,411
Total accounts receivable	185,319	173,494
Fuel inventory - at average cost	50,022	53,531
Materials and supplies - at average cost	60,011	56,227
Prepayments and other	12,493	20,165
TOTAL	335,942	588,246
OTHER PROPERTY AND INVESTMENTS		
Investments in affiliates - at equity	336	349
Non-utility property - at cost (less accumulated depreciation)	376	376
Other	17,552	19,889
TOTAL	18,264	20,614
UTILITY PLANT		
Electric	6,771,662	6,007,687
Construction work in progress	178,917	879,908
TOTAL UTILITY PLANT	6,950,579	6,887,595
Less - accumulated depreciation and amortization	1,898,407	1,864,494
UTILITY PLANT - NET	5,052,172	5,023,101
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets (includes securitization property of $60,618 as of March 31, 2021 and $78,590 as of December 31, 2020)	484,229	524,713
Other	78,654	70,397
TOTAL	562,883	595,110
TOTAL ASSETS	$5,969,261	$6,227,071

See Notes to Financial Statements.

ENTERGY TEXAS, INC. AND SUBSIDIARIES
CONSOLIDATED BALANCE SHEETS
LIABILITIES AND EQUITY
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT LIABILITIES		
Currently maturing long-term debt	$200,000	$200,000
Accounts payable:		
Associated companies	81,613	55,944
Other	139,190	350,947
Customer deposits	33,831	36,282
Taxes accrued	47,315	52,438
Interest accrued	9,867	20,856
Current portion of unprotected excess accumulated deferred income taxes	30,591	29,249
Deferred fuel costs	22,386	85,356
Other	12,377	12,370
TOTAL	577,170	843,442
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	635,212	639,422
Accumulated deferred investment tax credits	9,788	9,942
Regulatory liability for income taxes - net	164,680	175,594
Other regulatory liabilities	28,220	32,297
Asset retirement cost liabilities	8,175	8,063
Accumulated provisions	8,351	8,382
Long-term debt (includes securitization bonds of $95,185 as of March 31, 2021 and $123,066 as of December 31, 2020)	2,265,827	2,293,708
Other	64,672	58,643
TOTAL	3,184,925	3,226,051
Commitments and Contingencies		
EQUITY		
Common stock, no par value, authorized 200,000,000 shares; issued and outstanding 46,525,000 shares in 2021 and 2020	49,452	49,452
Paid-in capital	955,162	955,162
Retained earnings	1,167,552	1,117,964
Total common shareholder's equity	2,172,166	2,122,578
Preferred stock without sinking fund	35,000	35,000
TOTAL	2,207,166	2,157,578
TOTAL LIABILITIES AND EQUITY	$5,969,261	$6,227,071

See Notes to Financial Statements.

ENTERGY TEXAS, INC. AND SUBSIDIARIES
CONSOLIDATED STATEMENTS OF CHANGES IN EQUITY
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

		Common Equity			
	Preferred Stock	Common Stock	Paid-in Capital	Retained Earnings	Total
			(In Thousands)		
Balance at December 31, 2019	$35,000	$49,452	$780,182	$934,773	$1,799,407
Net income	—	—	—	32,707	32,707
Capital contribution from parent	—	—	175,000	—	175,000
Preferred stock dividends	—	—	—	(470)	(470)
Balance at March 31, 2020	$35,000	$49,452	$955,182	$967,010	$2,006,644
Balance at December 31, 2020	$35,000	$49,452	$955,162	$1,117,964	$2,157,578
Net income	—	—	—	50,058	50,058
Preferred stock dividends	—	—	—	(470)	(470)
Balance at March 31, 2021	$ 35,000	$ 49,452	$ 955,162	$ 1,167,552	$ 2,207,166

See Notes to Financial Statements.

SYSTEM ENERGY RESOURCES, INC.

MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS

System Energy's principal asset currently consists of an ownership interest and a leasehold interest in Grand Gulf. The capacity and energy from its 90% interest is sold under the Unit Power Sales Agreement to its only four customers, Entergy Arkansas, Entergy Louisiana, Entergy Mississippi, and Entergy New Orleans. System Energy's operating revenues are derived from the allocation of the capacity, energy, and related costs associated with its 90% interest in Grand Gulf pursuant to the Unit Power Sales Agreement. Payments under the Unit Power Sales Agreement are System Energy's only source of operating revenues.

Results of Operations

Net Income

Net income decreased $4.6 million primarily due to a decrease in the allowance for equity funds used during construction resulting from higher spending in 2020 including the scheduled 2020 Grand Gulf refueling outage.

Income Taxes

The effective income tax rate was (79.5%) for the first quarter 2021. The difference in the effective income tax rate for the first quarter 2021 versus the federal statutory rate of 21% was primarily due to the amortization of excess accumulated deferred income taxes, certain book and tax differences related to utility plant items, the amortization of investment tax credits, and book and tax differences related to the allowance for equity funds used during construction, partially offset by state income taxes. See Notes 2 and 10 to the financial statements herein and Notes 2 and 3 to the financial statements in the Form 10-K for a discussion of the effects and regulatory activity regarding the Tax Cuts and Jobs Act.

The effective income tax rate was 16% for the first quarter 2020. The difference in the effective income tax rate for the first quarter 2020 versus the federal statutory rate of 21% was primarily due to certain book and tax differences related to utility plant items, permanent differences related to income tax deductions for stock-based compensation, and book and tax differences related to the allowance for equity funds used during construction, partially offset by state income taxes. See Note 3 to the financial statements in the Form 10-K for discussion of the income tax deductions for stock-based compensation.

Liquidity and Capital Resources

Cash Flow

Cash flows for the three months ended March 31, 2021 and 2020 were as follows:

	2021	2020
	(In Thousands)	
Cash and cash equivalents at beginning of period	$242,469	$68,534
Cash flow provided by (used in):		
Operating activities	(29,242)	60,442
Investing activities	(23,437)	(79,532)
Financing activities	(57,563)	43,002
Net increase (decrease) in cash and cash equivalents	(110,242)	23,912
Cash and cash equivalents at end of period	$132,227	$92,446

Operating Activities

System Energy's operating activities used $29.2 million of cash for the three months ended March 31, 2021 compared to providing $60.4 million of cash for the three months ended March 31, 2020 primarily due to income tax payments of $39.1 million in 2021 and timing of payments to vendors, partially offset by a decrease in spending of $18 million on nuclear refueling outages in 2021 as compared to the same period in 2020. System Energy had income tax payments in 2021 as a result of the amended Mississippi tax returns filed based on federal adjustments related to the resolution of the 2014-2015 IRS audit, as well as a portion of the payments made in accordance with an intercompany income tax allocation agreement. See Note 3 to the financial statements in the Form 10-K for discussion of the 2014-2015 IRS audit.

Investing Activities

Net cash flow used in investing activities decreased $56.1 million for the three months ended March 31, 2021 compared to the three months ended March 31, 2020 primarily due to:

- an increase of $67.4 million as a result of fluctuations in nuclear fuel activity because of variations from year to year in the timing and pricing of fuel reload requirements in the Utility business, material and services deliveries, and the timing of cash payments during the nuclear fuel cycle; and
- a decrease of $46.4 million in nuclear construction expenditures as a result of spending in 2020 on Grand Gulf outage projects and upgrades.

The decrease was partially offset by money pool activity.

Increases in System Energy's receivable from the money pool are a use of cash flow and System Energy's receivable from the money pool increased by $12.7 million for the three months ended March 31, 2021 compared to decreasing by $42.5 million for the three months ended March 31, 2020. The money pool is an inter-company borrowing arrangement designed to reduce the Utility subsidiaries' need for external short-term borrowings.

Financing Activities

System Energy's financing activities used $57.6 million of cash for the three months ended March 31, 2021 compared to providing $43 million of cash for the three months ended March 31, 2020 primarily due to the repayment in February 2021 of $100 million of 3.42% Series J notes by the System Energy nuclear fuel company variable interest entity.

Capital Structure

System Energy's debt to capital ratio is shown in the following table. The decrease in the debt to capital ratio is primarily due to the net repayment of long-term debt in 2021.

	March 31, 2021	December 31, 2020
Debt to capital	41.5 %	42.7 %
Effect of subtracting cash	(4.5 %)	(8.5 %)
Net debt to net capital	37.0 %	34.2 %

Net debt consists of debt less cash and cash equivalents. Debt consists of short-term borrowings and long-term debt, including the currently maturing portion. Capital consists of debt and common equity. Net capital consists of capital less cash and cash equivalents. System Energy uses the debt to capital ratio in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating System Energy's financial condition. System Energy uses the net debt to net capital ratio in analyzing its financial condition and believes it provides useful information to its investors and creditors in evaluating System Energy's financial condition because net debt indicates System Energy's outstanding debt position that could not be readily satisfied by cash and cash equivalents on hand.

Uses and Sources of Capital

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Liquidity and Capital Resources**" in the Form 10-K for a discussion of System Energy's uses and sources of capital. Following are updates to the information provided in the Form 10-K.

System Energy's receivables from the money pool were as follows:

March 31, 2021	December 31, 2020	March 31, 2020	December 31, 2019
	(In Thousands)		
$16,682	$4,004	$16,819	$59,298

See Note 4 to the financial statements in the Form 10-K for a description of the money pool.

The System Energy nuclear fuel company variable interest entity has a credit facility in the amount of $120 million scheduled to expire in September 2022. As of March 31, 2021, $63.4 million in loans were outstanding under the System Energy nuclear fuel company variable interest entity credit facility. See Note 4 to the financial statements herein for additional discussion of the variable interest entity credit facility.

Federal Regulation

See the "**Rate, Cost-recovery, and Other Regulation** - **Federal Regulation**" section of Entergy Corporation and Subsidiaries Management's Financial Discussion and Analysis in the Form 10-K and Note 2 to the financial statements herein and in the Form 10-K for a discussion of federal regulation.

Complaints Against System Energy

Return on Equity and Capital Structure Complaints

As discussed in the Form 10-K, in May 2020 the FERC issued an order on rehearing of Opinion No. 569 (Opinion No. 569-A). In June 2020 the procedural schedule in the System Energy proceeding was further revised in order to allow parties to address the Opinion No. 569-A methodology. The parties and FERC trial staff filed final rounds of testimony in August 2020. The hearing before a FERC ALJ occurred in late-September through early-October 2020, post-hearing briefing took place in November and December 2020. System Energy recorded a provision against revenue for the potential outcome of this proceeding.

In March 2021 the FERC ALJ issued an initial decision. With regard to System Energy's authorized return on equity, the ALJ determined that the existing return on equity of 10.94% is no longer just and reasonable, and that the replacement authorized return on equity, based on application of the Opinion No. 569-A methodology, should be 9.32%. The ALJ further determined that System Energy should pay refunds for a fifteen-month refund period (January 2017-April 2018) based on the difference between the current return on equity and the replacement authorized return on equity. The ALJ determined that the April 2018 complaint concerning the authorized return on equity should be dismissed, and that no refunds for a second fifteen-month refund period should be due. With regard to System Energy's capital structure, the ALJ determined that System Energy's actual equity ratio is excessive and that the just and reasonable equity ratio is 48.15% equity, based on the average equity ratio of the proxy group used to evaluate the return on equity for the second complaint. The ALJ further determined that System Energy should pay refunds for a fifteen-month refund period (September 2018-December 2019) based on the difference between the actual equity ratio and the 48.15% equity ratio. If the ALJ's initial decision is upheld, the estimated refund for this proceeding is approximately $59 million, which includes interest through March 31, 2021, and the estimated resulting annual rate reduction would be approximately $46 million. The estimated refund will continue to accrue interest until a final FERC decision is issued. Based on the course of the proceeding to date, System Energy has recorded a provision of $36 million, including interest, as of March 31, 2021.

The ALJ initial decision is an interim step in the FERC litigation process. In April 2021, System Energy filed its brief on exceptions, in which it challenged the initial decision's findings on both the return on equity and capital structure issues. Also in April 2021, the LPSC, APSC, MPSC, City Council, and the FERC trial staff filed briefs on exceptions. Reply briefs opposing exceptions are due in May 2021.

Grand Gulf Sale-leaseback Renewal Complaint and Uncertain Tax Position Rate Base Issue

As discussed in the Form 10-K, in May 2018 the LPSC filed a complaint against System Energy and Entergy Services related to System Energy's renewal of a sale-leaseback transaction originally entered into in December 1988 for an 11.5% undivided interest in Grand Gulf Unit 1. A hearing was held before a FERC ALJ in November 2019. In April 2020 the ALJ issued the initial decision. Among other things, the ALJ determined that refunds were due on three main issues. First, with regard to the lease renewal payments, the ALJ determined that System Energy is recovering an unjust acquisition premium through the lease renewal payments, and that System Energy's recovery from customers through rates should be limited to the cost of service based on the remaining net book value of the leased assets, which is approximately $70 million. The ALJ found that the remedy for this issue should be the refund of lease payments (approximately $17.2 million per year since July 2015) with interest determined at the FERC quarterly interest rate, which would be offset by the addition of the net book value of the leased assets in the cost of service. The ALJ did not calculate a value for the refund expected as a result of this

remedy. In addition, System Energy would no longer recover the lease payments in rates prospectively. Second, with regard to the liabilities associated with uncertain tax positions, the ALJ determined that the liabilities are accumulated deferred income taxes and that System Energy's rate base should have been reduced for those liabilities. If the ALJ's initial decision is upheld, the estimated refund for this issue through March 31, 2021, is approximately $422 million, plus interest, which is approximately $115 million through March 31, 2021. The ALJ also found that System Energy should include liabilities associated with uncertain tax positions as a rate base reduction going forward. Third, with regard to the depreciation expense adjustments, the ALJ found that System Energy should correct for the error in re-billings retroactively and prospectively, but that System Energy should not be permitted to recover interest on any retroactive return on enhanced rate base resulting from such corrections. If the initial decision is affirmed on this issue, System Energy estimates refunds of approximately $19 million, which includes interest through March 31, 2021.

The ALJ initial decision is an interim step in the FERC litigation process, and an ALJ's determinations made in an initial decision are not controlling on the FERC. The ALJ in the initial decision acknowledges that these are issues of first impression before the FERC. The case is pending before the FERC, which will review the case and issue an order on the proceeding, and the FERC may accept, reject, or modify the ALJ's initial decision in whole or in part. Refunds, if any, that might be required will only become due after the FERC issues its order reviewing the initial decision.

Also as discussed in the Form 10-K, in November 2020 the IRS issued a Revenue Agent's Report (RAR) for the 2014/2015 tax year and in December 2020 Entergy executed it. The RAR contained an adjustment to System Energy's uncertain nuclear decommissioning tax position. As a result of the RAR, in December 2020, System Energy filed amendments to its new Federal Power Act section 205 filings to establish an ongoing rate base credit for the accumulated deferred income taxes resulting from the decommissioning uncertain tax position and to credit excess accumulated deferred income taxes arising from the successful portion of the decommissioning uncertain tax position. The amendments both propose the inclusion of the RAR as support for the filings. In December 2020 the LPSC, APSC, and City Council filed a protest in response to the amendments, reiterating their prior objections to the filings. In February 2021 the FERC issued an order accepting System Energy's Federal Power Act section 205 filings subject to refund, setting them for hearing, and holding the hearing in abeyance.

In December 2020, System Energy filed a new Federal Power Act section 205 filing to provide a one-time, historical credit to customers of $25.2 million for the accumulated deferred income taxes that would have been created by the decommissioning uncertain tax position if the IRS's decision had been known in 2016. In January 2021 the LPSC, APSC, MPSC, and City Council filed a protest to the filing. In February 2021, the FERC issued an order accepting System Energy's Federal Power Act section 205 filing subject to refund, setting it for hearing, and holding the hearing in abeyance. The one-time credit was made during the first quarter 2021.

LPSC Authorization of Additional Complaints

As discussed in the Form 10-K, in May 2020 the LPSC authorized its staff to file additional complaints at FERC related to the rates charged by System Energy for Grand Gulf energy and capacity supplied to Entergy Louisiana under the Unit Power Sales Agreement, and the first of the additional complaints was filed by the LPSC, the APSC, the MPSC and the City Council in September 2020. The second of the additional complaints was filed at the FERC in March 2021 by the LPSC, the APSC, and the City Council against System Energy, Entergy Services, Entergy Operations, and Entergy Corporation. The second complaint contains two primary allegations. First, it alleges that, based on the plant's capacity factor and alleged safety performance, System Energy and the other respondents imprudently operated Grand Gulf during the period 2016-2020, and it seeks refunds of at least $360 million in alleged replacement energy costs, in addition to other costs, including those that can only be identified upon further investigation. Second, it alleges that the performance and/or management of the 2012 extended power uprate of Grand Gulf was imprudent, and it seeks refunds of all costs of the 2012 uprate that are determined to result from imprudent planning or management of the project. In addition to the requested refunds, the complaint asks that the FERC modify the Unit Power Sales Agreement to provide for full cost recovery only if certain performance

indicators are met and to require pre-authorization of capital improvement projects in excess of $125 million before related costs may be passed through to customers in rates. In April 2021, System Energy and the other respondents filed their motion to dismiss and answer to the complaint. System Energy requested that the FERC dismiss the claims within the complaint. With respect to the claim concerning operations, System Energy argues that the complaint does not meet its legal burden because, among other reasons, it fails to allege any specific imprudent conduct. With respect to the claim concerning the uprate, System Energy argues that the complaint fails because, among other reasons, the complainants' own conduct prevents them from raising a serious doubt as to the prudence of the uprate. System Energy also requests that the FERC dismiss other elements of the complaint, including the proposed modifications to the Unit Power Sales Agreement, because they are not warranted.

Nuclear Matters

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – Nuclear Matters**" in the Form 10-K for a discussion of nuclear matters. Following is an update to that discussion

NRC Reactor Oversight Process

As discussed in the Form 10-K, the NRC's Reactor Oversight Process is a program to collect information about plant performance, assess the information for its safety significance, and provide for appropriate licensee and NRC response. The NRC evaluates plant performance by analyzing two distinct inputs: inspection findings resulting from the NRC's inspection program and performance indicators reported by the licensee. The evaluations result in the placement of each plant in one of the NRC's Reactor Oversight Process Action Matrix columns: "licensee response column," or Column 1, "regulatory response column," or Column 2, "degraded cornerstone column," or Column 3, and "multiple/repetitive degraded cornerstone column," or Column 4. Plants in Column 1 are subject to normal NRC inspection activities. Plants in Column 2, Column 3, or Column 4 are subject to progressively increasing levels of inspection by the NRC with, in general, progressively increasing levels of associated costs.

In March 2021 the NRC placed Grand Gulf in Column 3 based on the incidence of five unplanned plant scrams during calendar year 2020, some of which were related to upgrades made to the plant's turbine control system during the spring 2020 refueling outage. The NRC plans to conduct a supplemental inspection of Grand Gulf in accordance with its inspection procedures for nuclear plants in Column 3.

Environmental Risks

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS – Environmental Risks**" in the Form 10-K for a discussion of environmental risks.

Critical Accounting Estimates

See "**MANAGEMENT'S FINANCIAL DISCUSSION AND ANALYSIS - Critical Accounting Estimates**" in the Form 10-K for a discussion of the estimates and judgments necessary in System Energy's accounting for nuclear decommissioning costs, utility regulatory accounting, impairment of long-lived assets, taxation and uncertain tax positions, qualified pension and other postretirement benefits, and other contingencies.

New Accounting Pronouncements

See "**New Accounting Pronouncements**" section of Note 1 to the financial statements in the Form 10-K for a discussion of new accounting pronouncements.

SYSTEM ENERGY RESOURCES, INC.
INCOME STATEMENTS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING REVENUES		
Electric	$117,746	$130,664
OPERATING EXPENSES		
Operation and Maintenance:		
Fuel, fuel-related expenses, and gas purchased for resale	16,859	13,143
Nuclear refueling outage expenses	6,718	8,272
Other operation and maintenance	41,960	40,471
Decommissioning	9,529	9,157
Taxes other than income taxes	6,825	7,973
Depreciation and amortization	28,194	26,899
Other regulatory charges (credits) - net	11,550	(10,560)
TOTAL	121,635	95,355
OPERATING INCOME (LOSS)	(3,889)	35,309
OTHER INCOME		
Allowance for equity funds used during construction	1,111	3,584
Interest and investment income	27,442	5,338
Miscellaneous - net	(2,024)	(2,460)
TOTAL	26,529	6,462
INTEREST EXPENSE		
Interest expense	9,535	8,540
Allowance for borrowed funds used during construction	(188)	(711)
TOTAL	9,347	7,829
INCOME BEFORE INCOME TAXES	13,293	33,942
Income taxes	(10,571)	5,429
NET INCOME	$23,864	$28,513

See Notes to Financial Statements.

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SYSTEM ENERGY RESOURCES, INC.
STATEMENTS OF CASH FLOWS
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	2021	2020
	(In Thousands)	
OPERATING ACTIVITIES		
Net income	$23,864	$28,513
Adjustments to reconcile net income to net cash flow provided by (used in) operating activities:		
Depreciation, amortization, and decommissioning, including nuclear fuel amortization	53,433	47,041
Deferred income taxes, investment tax credits, and non-current taxes accrued	(10,197)	(5,764)
Changes in assets and liabilities:		
Receivables	9,255	22,292
Accounts payable	(21,296)	15,049
Taxes accrued	(33,364)	(3,590)
Interest accrued	(1,088)	(201)
Other working capital accounts	2,347	(30,385)
Other regulatory assets	20,923	(3,893)
Other regulatory liabilities	(12,591)	(135,561)
Pension and other postretirement liabilities	(7,424)	(2,587)
Other assets and liabilities	(53,104)	129,528
Net cash flow provided by (used in) operating activities	(29,242)	60,442
INVESTING ACTIVITIES		
Construction expenditures	(14,890)	(60,551)
Allowance for equity funds used during construction	1,111	3,584
Nuclear fuel purchases	(4,745)	(69,022)
Proceeds from the sale of nuclear fuel	12,626	9,503
Proceeds from nuclear decommissioning trust fund sales	211,481	132,661
Investment in nuclear decommissioning trust funds	(216,342)	(138,186)
Changes in money pool receivable - net	(12,678)	42,479
Net cash flow used in investing activities	(23,437)	(79,532)
FINANCING ACTIVITIES		
Proceeds from the issuance of long-term debt	189,244	243,559
Retirement of long-term debt	(225,807)	(186,904)
Common stock dividends and distributions paid	(21,000)	(13,653)
Net cash flow provided by (used in) financing activities	(57,563)	43,002
Net increase (decrease) in cash and cash equivalents	(110,242)	23,912
Cash and cash equivalents at beginning of period	242,469	68,534
Cash and cash equivalents at end of period	$132,227	$92,446
SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:		
Cash paid during the period for:		
Interest - net of amount capitalized	$10,720	$8,598
Income taxes	$39,085	$—

See Notes to Financial Statements.

SYSTEM ENERGY RESOURCES, INC.
BALANCE SHEETS
ASSETS
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT ASSETS		
Cash and cash equivalents:		
Cash	$78	$26,086
Temporary cash investments	132,149	216,383
Total cash and cash equivalents	132,227	242,469
Accounts receivable:		
Associated companies	59,422	57,743
Other	4,294	2,550
Total accounts receivable	63,716	60,293
Materials and supplies - at average cost	126,444	123,006
Deferred nuclear refueling outage costs	27,932	34,459
Prepayments and other	7,605	6,864
TOTAL	357,924	467,091
OTHER PROPERTY AND INVESTMENTS		
Decommissioning trust funds	1,249,846	1,215,868
TOTAL	1,249,846	1,215,868
UTILITY PLANT		
Electric	5,310,445	5,309,458
Construction work in progress	73,360	59,831
Nuclear fuel	150,948	175,005
TOTAL UTILITY PLANT	5,534,753	5,544,294
Less - accumulated depreciation and amortization	3,381,583	3,355,367
UTILITY PLANT - NET	2,153,170	2,188,927
DEFERRED DEBITS AND OTHER ASSETS		
Regulatory assets:		
Other regulatory assets	518,040	538,963
Other	2,441	3,119
TOTAL	520,481	542,082
TOTAL ASSETS	$4,281,421	$4,413,968

See Notes to Financial Statements.

SYSTEM ENERGY RESOURCES, INC.
BALANCE SHEETS
LIABILITIES AND EQUITY
March 31, 2021 and December 31, 2020
(Unaudited)

	2021	2020
	(In Thousands)	
CURRENT LIABILITIES		
Currently maturing long-term debt	$19	$100,015
Accounts payable:		
Associated companies	4,644	15,309
Other	36,849	41,313
Taxes accrued	49,613	82,977
Interest accrued	11,634	12,722
Other	4,247	4,248
TOTAL	107,006	256,584
NON-CURRENT LIABILITIES		
Accumulated deferred income taxes and taxes accrued	340,689	359,835
Accumulated deferred investment tax credits	43,963	38,902
Regulatory liability for income taxes - net	134,350	151,829
Other regulatory liabilities	670,284	665,396
Decommissioning	978,439	968,910
Pension and other postretirement liabilities	117,988	125,412
Long-term debt	768,950	705,259
Other	36,342	61,295
TOTAL	3,091,005	3,076,838
Commitments and Contingencies		
COMMON EQUITY		
Common stock, no par value, authorized 1,000,000 shares; issued and outstanding 789,350 shares in 2021 and 2020	951,850	951,850
Retained earnings	131,560	128,696
TOTAL	1,083,410	1,080,546
TOTAL LIABILITIES AND EQUITY	$4,281,421	$4,413,968

See Notes to Financial Statements.

SYSTEM ENERGY RESOURCES, INC.
STATEMENTS OF CHANGES IN COMMON EQUITY
For the Three Months Ended March 31, 2021 and 2020
(Unaudited)

	Common Equity		
	Common Stock	Retained Earnings	Total
		(In Thousands)	
Balance at December 31, 2019	$601,850	$110,218	$712,068
Net income	—	28,513	28,513
Common stock dividends and distributions	—	(13,653)	(13,653)
Balance at March 31, 2020	$601,850	$125,078	$726,928
Balance at December 31, 2020	$951,850	$128,696	$1,080,546
Net income	—	23,864	23,864
Common stock dividends and distributions	—	(21,000)	(21,000)
Balance at March 31, 2021	$951,850	$131,560	$1,083,410

See Notes to Financial Statements.

ENTERGY CORPORATION AND SUBSIDIARIES
PART II. OTHER INFORMATION

Item 1. Legal Proceedings

See "**PART I, Item 1, Litigation**" in the Form 10-K for a discussion of legal, administrative, and other regulatory proceedings affecting Entergy. Also see Notes 1 and 2 to the financial statements herein and "**Item 5, Other Information, Environmental Regulation**" below for updates regarding environmental proceedings and regulation.

Item 1A. Risk Factors

There have been no material changes to the risk factors discussed in "**PART I, Item 1A, Risk Factors**" in the Form 10-K.

Item 2. Unregistered Sales of Equity Securities and Use of Proceeds

Issuer Purchases of Equity Securities (a)

Period	Total Number of Shares Purchased	Average Price Paid per Share	Total Number of Shares Purchased as Part of a Publicly Announced Plan	Maximum $ Amount of Shares that May Yet be Purchased Under a Plan (b)
1/01/2021-1/31/2021	—	$—	—	$350,052,918
2/01/2021-2/28/2021	—	$—	—	$350,052,918
3/01/2021-3/31/2021	—	$—	—	$350,052,918
Total	—	$—	—	

In accordance with Entergy's stock-based compensation plans, Entergy periodically grants stock options to key employees, which may be exercised to obtain shares of Entergy's common stock. According to the plans, these shares can be newly issued shares, treasury stock, or shares purchased on the open market. Entergy's management has been authorized by the Board to repurchase on the open market shares up to an amount sufficient to fund the exercise of grants under the plans. In addition to this authority, the Board has authorized share repurchase programs to enable opportunistic purchases in response to market conditions. In October 2010 the Board granted authority for a $500 million share repurchase program. The amount of share repurchases under these programs may vary as a result of material changes in business results or capital spending or new investment opportunities. In addition, in the first quarter 2021, Entergy withheld 81,434 shares of its common stock at $95.12 per share, 40,476 shares of its common stock at $95.15 per share, 36,804 shares of its common stock at $94.75 per share, 36,347 shares of its common stock at $95.33 per share, 1,188 shares of its common stock at $91.16 per share, 853 shares of its common stock at $96.47 per share, 719 shares of its common stock at $98.01 per share, 678 shares of its common stock at $92.70 per share, 584 shares of its common stock at $94.69 per share, 118 shares of its common stock at $95 per share, and 10 shares of its common stock at $95.25 per share to pay income taxes due upon vesting of restricted stock granted and payout of performance units as part of its long-term incentive program.

(a) See Note 12 to the financial statements in the Form 10-K for additional discussion of the stock-based compensation plans.
(b) Maximum amount of shares that may yet be repurchased relates only to the $500 million plan and does not include an estimate of the amount of shares that may be purchased to fund the exercise of grants under the stock-based compensation plans.

Item 5. Other Information

Regulation of the Nuclear Power Industry

Following is an update to the "**Regulation of the Nuclear Power Industry**" section of Part I, Item 1 of the Form 10-K.

Nuclear Waste Policy Act of 1982

Nuclear Plant Decommissioning

In March 2021 filings with the NRC were made reporting on decommissioning funding for all of Entergy subsidiaries' nuclear plants. Those reports showed that decommissioning funding for each of the nuclear plants met the NRC's financial assurance requirements.

NRC Reactor Oversight Process

In March 2021 the NRC placed Grand Gulf in Column 3 based on the incidence of five unplanned plant scrams during calendar year 2020, some of which were related to upgrades made to the plant's turbine control system during the spring 2020 refueling outage. The NRC plans to conduct a supplemental inspection of Grand Gulf in accordance with its inspection procedures for nuclear plants in Column 3.

Environmental Regulation

Following are updates to the "**Environmental Regulation**" section of Part I, Item 1 of the Form 10-K.

Clean Air Act and Subsequent Amendments

See the Form 10-K for discussion of the Clean Air Act and Subsequent Amendments set by the EPA in accordance with the Clean Air Act. Following are updates to that discussion.

New Source Review

As discussed in the Form 10-K, in January and February 2018, Entergy Arkansas, Entergy Mississippi, Entergy Power, and other co-owners received 60-day notice of intent to sue letters from the Sierra Club and the National Parks Conservation Association concerning allegations of violations of new source review and permitting provisions of the Clean Air Act at the Independence and White Bluff coal-burning units, respectively. In November 2018, following extensive negotiations, Entergy Arkansas, Entergy Mississippi, and Entergy Power entered a proposed settlement resolving those claims as well as other issues facing Entergy Arkansas's fossil generation plants. The settlement, which formally resolves a complaint filed by the Sierra Club and the National Parks Conservation Association, was subject to approval by the U.S. District Court for the Eastern District of Arkansas. In March 2021 the District Court approved and entered the proposed settlement. For further information about the settlement, see "Regional Haze" discussed below.

National Ambient Air Quality Standards

See the Form 10-K for discussion of the National Ambient Air Quality Standards set by the EPA in accordance with the Clean Air Act. Following are updates to that discussion.

Hazardous Air Pollutants

The EPA released the final Mercury and Air Toxics Standard (MATS) rule in December 2011, which had a compliance date, with a widely granted one-year extension, of April 2016. The required controls have been installed and are operational at all affected Entergy units. In May 2020 the EPA finalized a rule that finds that it is not "appropriate and necessary" to regulate hazardous air pollutants from electric steam generating units under the provisions of section 112(n) of the Clean Air Act. This is a reversal of the EPA's previous finding requiring such regulation. The final appropriate and necessary finding does not revise the underlying MATS rule. Several lawsuits have been filed challenging the appropriate and necessary finding. In February 2021 the D.C. Circuit granted the EPA's motion to hold the litigation in abeyance pending the agency's review of the appropriate and necessary rule. The EPA must file status reports with the court every 120 days. Entergy will continue to monitor this situation.

Cross-State Air Pollution

As discussed in the Form 10-K, for 12 states, including Louisiana, the EPA proposes additional emission reductions through proposed reductions in the number of NO_x emission allowances allocated to each state. Entergy, through its various trade associations, filed comments on the proposal. In March 2021 the EPA released the prepublication version of the final rule which further decreases the Louisiana ozone season emissions budget from that in the proposed rule. Entergy is currently analyzing the potential impact on its facilities in Louisiana. Preliminary analysis indicates that ozone season NO_x allowances may become significantly more expensive in Louisiana, which could impact the cost of dispatching Entergy's generating units located in Louisiana.

Regional Haze

As discussed in the Form 10-K, in January and February 2018, Entergy Arkansas, Entergy Mississippi, Entergy Power, and other co-owners received 60-day notice of intent to sue letters from the Sierra Club and the National Parks Conservation Association concerning allegations of violations of new source review and permitting provisions of the Clean Air Act at the Independence and White Bluff coal-burning units, respectively. In November 2018, following extensive negotiations, Entergy Arkansas, Entergy Mississippi, and Entergy Power entered a proposed settlement resolving those claims and reducing the risk that Entergy Arkansas, as operator of Independence and White Bluff, might be compelled under the Clean Air Act's regional haze program to install costly emissions control technologies. Consistent with the terms of the settlement and in many cases also the Part II state implementation plan (SIP), Entergy Arkansas, along with co-owners, will begin using only low-sulfur coal at Independence and White Bluff by mid-2021; cease to use coal at White Bluff and Independence by the end of 2028 and 2030, respectively; cease operation of the remaining gas unit at Lake Catherine by the end of 2027; reserve the option to develop new generating sources at each plant site; and commit to install or propose to regulators at least 800 MWs of renewable generation by the end of 2027, with at least half installed or proposed by the end of 2022 (which includes two existing Entergy Arkansas projects) and with all qualifying co-owner projects counting toward satisfaction of the obligation. Under the settlement, the Sierra Club and the National Parks Conservation Association also waive certain potential existing claims under federal and state environmental law with respect to specified generating plants. The settlement, which formally resolves a complaint filed by the Sierra Club and the National Parks Conservation Association, was subject to approval by the U.S. District Court for the Eastern District of Arkansas. In November 2020 the court denied motions by the Arkansas Attorney General and the Arkansas Affordable Energy Coalition to intervene and to stay the proceedings. The proposed intervenors did not appeal the ruling. The District Court approved and entered the proposed settlement in March 2021.

The second planning period (2018-2028) for the regional haze program requires states to examine sources for impacts on visibility and to prepare SIPs by July 31, 2021. Entergy has received information collection requests from Arkansas and Louisiana requesting an evaluation of technical and economic feasibility of various NO_x and SO_2 control technologies for Independence, Nelson 6, and Ninemile. Responses to the information requests have been submitted to the respective state agencies.

New and Existing Source Performance Standards for Greenhouse Gas Emissions

As discussed in the Form 10-K, in January 2021 the U.S. Court of Appeals for the D.C. Circuit vacated the Affordable Clean Energy Rule (ACE). The court held that ACE relied on an incorrect interpretation of the Clean Air Act that the statute expressly forecloses emission reduction approaches, such as emissions trading and generating shifting, that cannot be applied at and to the individual source. The court remanded ACE to the EPA for further consideration and also vacated the repeal of the Clean Power Plan. In March 2021 the D.C. Circuit issued a partial mandate vacating the ACE rule, but withheld the mandate vacating the repeal of the Clean Power Plan pending the EPA's new rulemaking to regulate greenhouse gas emissions. Thus, the Clean Power Plan will not take effect during the rulemaking process and there currently is no regulation in place with respect to greenhouse gas emissions from electric generating units and states are not expected to take further action to develop and submit plans at this time.

Coal Combustion Residuals

As discussed in the Form 10-K, in late 2017, Entergy determined that certain in-ground wastewater treatment system recycle ponds at its White Bluff and Independence facilities require management under the new EPA regulations. Each site has commenced closure of its two recycle ponds (four ponds total), prior to the April 11, 2021 deadline under the finalized CCR rule for unlined recycle ponds.

Other Environmental Matters

Entergy Texas

As discussed in the Form 10-K, due to COVID-19 pandemic delays, the Texas Commission on Environmental Quality (TCEQ) extended the Affected Property Assessment Report (APAR) and Ecological Risk Assessment submittal dates to December 2020, which Entergy timely met. Following the TCEQ's review of the APAR and Ecological Risk Assessment, the TCEQ issued a No Further Action determination for the site in March 2021.

Item 6. Exhibits

4(a) -	Officer's Certificate for Entergy Corporation relating to 1.90% Senior Notes due June 15, 2028 (4.02(a) to Form 8-K filed March 5, 2021 in 1-11299).
4(b) -	Officer's Certificate for Entergy Corporation relating to 2.40% Senior Notes due June 15, 2031 (4.02(b) to Form 8-K filed March 5, 2021 in 1-11299).
4(c) -	Eighty-fourth Supplemental Indenture, dated as of March 1, 2021, to Entergy Arkansas Mortgage and Deed of Trust, dated as of October 1, 1944 (4.49 to Form 8-K filed March 30, 2021 in 1-10764).
4(d) -	Ninety-fifth Supplemental Indenture, dated as of March 1, 2021, to Entergy Louisiana Mortgage and Deed of Trust, dated as of April 1, 1944 (4.53 to Form 8-K filed March 10, 2021 in 1-32718).
4(e) -	Ninety-fourth Supplemental Indenture, dated as of March 1, 2021, to Entergy Louisiana Indenture of Mortgage, dated September 1, 1926 (4.52 to Form 8-K filed March 10, 2021 in 1-32718).
4(f) -	Fifteenth Supplemental Indenture, dated as of March 1, 2021, to Entergy Louisiana Mortgage and Deed of Trust, dated as of November 1, 2015 (4.51 to Form 8-K filed March 10, 2021 in 1-32718).
4(g) -	Sixteenth Supplemental Indenture, dated as of April 1, 2021, to Entergy Louisiana Mortgage and Deed of Trust, dated as of November 1, 2015 (4(b) to Form 8-K filed April 1, 2021 in 1-32718).

4(h) -	Officer's Certificate No. 21-B-15, dated March 1, 2021, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.50(a) to Form 8-K filed March 10, 2021 in 1-32718).
4(i) -	Officer's Certificate No. 21-B-16, dated March 1, 2021, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4.50(b) to Form 8-K filed March 10, 2021 in 1-32718).
4(j) -	Officer's Certificate No. 22-B-17, dated April 1, 2021, supplemental to Mortgage and Deed of Trust of Entergy Louisiana, dated as of November 1, 2015 (4(a) to Form 8-K filed April 1, 2021 in 1-32718).
4(k) -	Loan Agreement, dated as of April 1, 2021, between the Louisiana Local Government Environmental Facilities and Community Development Authority and Entergy Louisiana relating to Revenue Refunding Bonds (Entergy Louisiana, LLC Project) Series 2021A (4(c) to Form 8-K filed April 1, 2021 in 1-32718).
4(l) -	Trust Indenture, dated as of April 1, 2021, between the Louisiana Local Government Environmental Facilities and Community Development Authority and The Bank of New York Mellon authorizing Revenue Refunding Bonds (Entergy Louisiana, LLC Project) Series 2021A (4(d) to Form 8-K filed April 1, 2021 in 1-32718).
4(m) -	Loan Agreement, dated as of April 1, 2021, between the Louisiana Local Government Environmental Facilities and Community Development Authority and Entergy Louisiana relating to Revenue Refunding Bonds (Entergy Louisiana, LLC Project) Series 2021B (4(e) to Form 8-K filed April 1, 2021 in 1-32718).
4(n) -	Trust Indenture, dated as of April 1, 2021, between the Louisiana Local Government Environmental Facilities and Community Development Authority and The Bank of New York Mellon authorizing Revenue Refunding Bonds (Entergy Louisiana, LLC Project) Series 2021B (4(f) to Form 8-K filed April 1, 2021 in 1-32718).
*31(a) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy Corporation.
*31(b) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy Corporation.
*31(c) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy Arkansas.
*31(d) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy Arkansas.
*31(e) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy Louisiana.
*31(f) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy Louisiana.
*31(g) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy Mississippi.
*31(h) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy Mississippi.
*31(i) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy New Orleans.
*31(j) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy New Orleans.
*31(k) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy Texas.
*31(l) -	Rule 13a-14(a)/15d-14(a) Certification for Entergy Texas.
*31(m) -	Rule 13a-14(a)/15d-14(a) Certification for System Energy.
*31(n) -	Rule 13a-14(a)/15d-14(a) Certification for System Energy.
**32(a) -	Section 1350 Certification for Entergy Corporation.
**32(b) -	Section 1350 Certification for Entergy Corporation.
**32(c) -	Section 1350 Certification for Entergy Arkansas.
**32(d) -	Section 1350 Certification for Entergy Arkansas.
**32(e) -	Section 1350 Certification for Entergy Louisiana.

**32(f) -	Section 1350 Certification for Entergy Louisiana.
**32(g) -	Section 1350 Certification for Entergy Mississippi.
**32(h) -	Section 1350 Certification for Entergy Mississippi.
**32(i) -	Section 1350 Certification for Entergy New Orleans.
**32(j) -	Section 1350 Certification for Entergy New Orleans.
**32(k) -	Section 1350 Certification for Entergy Texas.
**32(l) -	Section 1350 Certification for Entergy Texas.
**32(m) -	Section 1350 Certification for System Energy.
**32(n) -	Section 1350 Certification for System Energy.
99(a) -	Equity Distribution Sales Agreement, dated January 11, 2021 by and among Entergy Corporation and BofA Securities, Inc., Citigroup Global Markets Inc., J.P. Morgan Securities LLC, Mizuho Securities USA LLC and Wells Fargo Securities, LLC, as sales agents and as forward sellers, and Bank of America, N.A., Citibank, N.A., JPMorgan Chase Bank, National Association, New York Branch, Mizuho Markets Americas LLC (with Mizuho Securities USA LLC acting as agent) and Wells Fargo Bank, National Association, as forward purchasers (1.01 to Form 8-K filed January 11, 2021 in 1-11299).
99(b) -	Master Forward Confirmation, dated January 11, 2021, between Entergy Corporation and Bank of America, N.A. (99.01 to Form 8-K filed January 11, 2021 in 1-11299).
99(c) -	Master Forward Confirmation, dated January 11, 2021, between Entergy Corporation and Citigroup Global Markets Inc. (99.02 to Form 8-K filed January 11, 2021 in 1-11299).
99(d) -	Master Forward Confirmation, dated January 11, 2021, between Entergy Corporation and JPMorgan Chase Bank, National Association (99.03 to Form 8-K filed January 11, 2021 in 1-11299).
99(e) -	Master Forward Confirmation, dated January 11, 2021, between Entergy Corporation and Mizuho Markets Americas LLC (with Mizuho Securities USA LLC acting as agent) (99.04 to Form 8-K filed January 11, 2021 in 1-11299).
99(f) -	Master Forward Confirmation, dated January 11, 2021, between Entergy Corporation and Wells Fargo Bank, National Association (99.05 to Form 8-K filed January 11, 2021 in 1-11299).
*101 INS -	Inline XBRL Instance Document - The instance document does not appear in the Interactive Data File because its XBRL tags are embedded within the Inline XBRL document.
*101 SCH -	Inline XBRL Schema Document.
*101 PRE -	Inline XBRL Presentation Linkbase Document.
*101 LAB -	Inline XBRL Label Linkbase Document.
*101 CAL -	Inline XBRL Calculation Linkbase Document.
*101 DEF -	Inline XBRL Definition Linkbase Document.
*104 -	Cover Page Interactive Data File (formatted in Inline XBRL and contained in Exhibits 101).

Pursuant to Item 601(b)(4)(iii) of Regulation S-K, Entergy Corporation agrees to furnish to the Commission upon request any instrument with respect to long-term debt that is not registered or listed herein as an Exhibit because the total amount of securities authorized under such agreement does not exceed ten percent of the total assets of Entergy Corporation and its subsidiaries on a consolidated basis.

* Filed herewith.

** Furnished, not filed, herewith.

SIGNATURE

Pursuant to the requirements of the Securities Exchange Act of 1934, each registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized. The signature for each undersigned company shall be deemed to relate only to matters having reference to such company or its subsidiaries.

ENTERGY CORPORATION
ENTERGY ARKANSAS, LLC
ENTERGY LOUISIANA, LLC
ENTERGY MISSISSIPPI, LLC
ENTERGY NEW ORLEANS, LLC
ENTERGY TEXAS, INC.
SYSTEM ENERGY RESOURCES, INC.

/s/ Kimberly A. Fontan

Kimberly A. Fontan
Senior Vice President and Chief Accounting Officer
(For each Registrant and for each as
Principal Accounting Officer)

Date: May 6, 2021

Exhibit 31(a)

CERTIFICATIONS

I, Leo P. Denault, certify that:

I have reviewed this quarterly report on Form 10-Q of Entergy Corporation;

1. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
2. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
3. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
4. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Leo P. Denault

Leo P. Denault
Chairman of the Board and Chief Executive Officer
of Entergy Corporation

Date: May 6, 2021

Exhibit 31(b)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

I have reviewed this quarterly report on Form 10-Q of Entergy Corporation;

1. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
2. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
3. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
4. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Corporation

Date: May 6, 2021

Exhibit 31(c)

CERTIFICATIONS

I, Laura R. Landreaux, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Entergy Arkansas, LLC;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Laura R. Landreaux

Laura R. Landreaux
Chair of the Board, President, and
Chief Executive Officer of Entergy Arkansas, LLC

Date: May 6, 2021

Exhibit 31(d)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Entergy Arkansas, LLC;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Arkansas, LLC

Date: May 6, 2021

Exhibit 31(e)

CERTIFICATIONS

I, Phillip R. May, Jr., certify that:

1. I have reviewed this quarterly report on Form 10-Q of Entergy Louisiana, LLC;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Phillip R. May, Jr.

Phillip R. May, Jr.
Chairman of the Board, President, and Chief Executive
Officer of Entergy Louisiana, LLC

Date: May 6, 2021

Exhibit 31(f)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Entergy Louisiana, LLC;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Louisiana, LLC

Date: May 6, 2021

Exhibit 31(g)

CERTIFICATIONS

I, Haley R. Fisackerly, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Entergy Mississippi, LLC;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Haley R. Fisackerly

Haley R. Fisackerly
Chairman of the Board, President, and Chief Executive Officer
of Entergy Mississippi, LLC

Date: May 6, 2021

Exhibit 31(h)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Entergy Mississippi, LLC;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Mississippi, LLC

Date: May 6, 2021

Exhibit 31(i)

CERTIFICATIONS

I, David D. Ellis, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Entergy New Orleans, LLC;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ David D. Ellis

David D. Ellis
Chairman of the Board, President, and Chief Executive Officer
of Entergy New Orleans, LLC

Date: May 6, 2021

Exhibit 31(j)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Entergy New Orleans, LLC;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy New Orleans, LLC

Date: May 6, 2021

Exhibit 31(k)

CERTIFICATIONS

I, Sallie T. Rainer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Entergy Texas, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Sallie T. Rainer

Sallie T. Rainer
Chair of the Board, President, and Chief Executive Officer
of Entergy Texas, Inc.

Date: May 6, 2021

Exhibit 31(l)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Entergy Texas, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Texas, Inc.

Date: May 6, 2021

Exhibit 31(m)

CERTIFICATIONS

I, Roderick K. West, certify that:

1. I have reviewed this quarterly report on Form 10-Q of System Energy Resources, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Roderick K. West

Roderick K. West
Chairman of the Board, President, and Chief Executive Officer
of System Energy Resources, Inc.

Date: May 6, 2021

Exhibit 31(n)

CERTIFICATIONS

I, Andrew S. Marsh, certify that:

1. I have reviewed this quarterly report on Form 10-Q of System Energy Resources, Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer(s) and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:
    a. Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
    b. Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
    c. Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and
    d. Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and
5. The registrant's other certifying officer(s) and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
    a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
    b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

/s/ Andrew S. Marsh

Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of System Energy Resources, Inc.

Date: May 6, 2021

Exhibit 32(a)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Leo P. Denault, Chairman of the Board and Chief Executive Officer of Entergy Corporation (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Leo P. Denault

Leo P. Denault
Chairman of the Board and Chief Executive Officer
of Entergy Corporation

Date: May 6, 2021

Exhibit 32(b)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy Corporation (the “Company”), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and
(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh
Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Corporation

Date: May 6, 2021

Exhibit 32(c)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Laura R. Landreaux, Chair of the Board, President, and Chief Executive Officer of Entergy Arkansas, LLC (the “Company”), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Laura R. Landreaux

Laura R. Landreaux
Chair of the Board, President, and Chief Executive
Officer of Entergy Arkansas, LLC

Date: May 6, 2021

Exhibit 32(d)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy Arkansas, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh
Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Arkansas, LLC

Date: May 6, 2021

Exhibit 32(e)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Phillip R. May, Jr., Chairman of the Board, President, and Chief Executive Officer of Entergy Louisiana, LLC (the “Company”), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Phillip R. May, Jr.

Phillip R. May, Jr.
Chairman of the Board, President, and Chief Executive
Officer of Entergy Louisiana, LLC

Date: May 6, 2021

Exhibit 32(f)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy Louisiana, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh
Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Louisiana, LLC

Date: May 6, 2021

Exhibit 32(g)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Haley R. Fisackerly, Chairman of the Board, President, and Chief Executive Officer of Entergy Mississippi, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Haley R. Fisackerly

Haley R. Fisackerly
Chairman of the Board, President, and Chief Executive
Officer of Entergy Mississippi, LLC

Date: May 6, 2021

Exhibit 32(h)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy Mississippi, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh
Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Mississippi, LLC

Date: May 6, 2021

Exhibit 32(i)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, David D. Ellis, Chairman of the Board, President, and Chief Executive Officer of Entergy New Orleans, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ David D. Ellis

David D. Ellis
Chairman of the Board, President, and Chief Executive
Officer of Entergy New Orleans, LLC

Date: May 6, 2021

Exhibit 32(j)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy New Orleans, LLC (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh
Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy New Orleans, LLC

Date: May 6, 2021

Exhibit 32(k)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Sallie T. Rainer, Chair of the Board, President, and Chief Executive Officer of Entergy Texas, Inc. (the “Company”), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Sallie T. Rainer

Sallie T. Rainer
Chair of the Board, President, and Chief Executive Officer
of Entergy Texas, Inc.

Date: May 6, 2021

Exhibit 32(l)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of Entergy Texas, Inc. (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh
Andrew S. Marsh
Executive Vice President and Chief Financial Officer
of Entergy Texas, Inc.

Date: May 6, 2021

Exhibit 32(m)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Roderick K. West, Chairman of the Board, President, and Chief Executive Officer of System Energy Resources, Inc. (the “Company”), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Roderick K. West
Roderick K. West
Chairman of the Board, President, and Chief Executive Officer
of System Energy Resources, Inc.

Date: May 6, 2021

Exhibit 32(n)

CERTIFICATION PURSUANT TO
18 U.S.C. SECTION 1350, AS ADOPTED PURSUANT TO
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002

I, Andrew S. Marsh, Executive Vice President and Chief Financial Officer of System Energy Resources, Inc. (the "Company"), certify pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

(1) The Quarterly Report on Form 10-Q of the Company for the quarter ended March 31, 2021 (the "Report") fully complies with the requirements of Section 13(a) or 15(d) of the Securities Exchange Act of 1934; and

(2) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company as of the dates and for the periods presented in the Report.

/s/ Andrew S. Marsh
Andrew S. Marsh
Executive Vice President and Chief Financial
Officer of System Energy Resources, Inc.

Date: May 6, 2021