



Arkansas Department of Energy and the Environment Electric Sector Workshop

Entergy Arkansas, LLC
Utility Scale Generation Overview
November 14, 2023

Overview

Quick facts about Entergy Arkansas

110

years of service

736,000+

electric customers

63

counties served
(58% in
Disadvantaged
Communities)

~3,500

Entergy
employees in
Arkansas

Fully Integrated

Generation
Transmission
Distribution

~4,900

megawatts
of power
generation
capacity

502 lb CO₂/MWh

Average delivered
power CO₂ emission
rate in 2022

4,000 MW

of renewable
generation by
2030 including
2,000 MW under
construction or in
acquisition

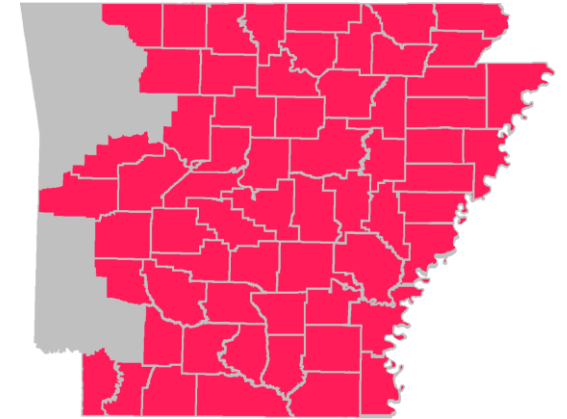
Dow Jones

Sustainability Index

21st Consecutive Year
1 of 4 Electric Utilities

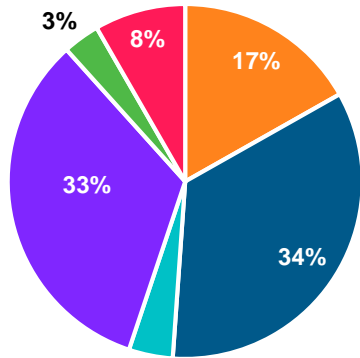
Carbon Reduction

50% Reduction by 2030
Net-Zero by 2050



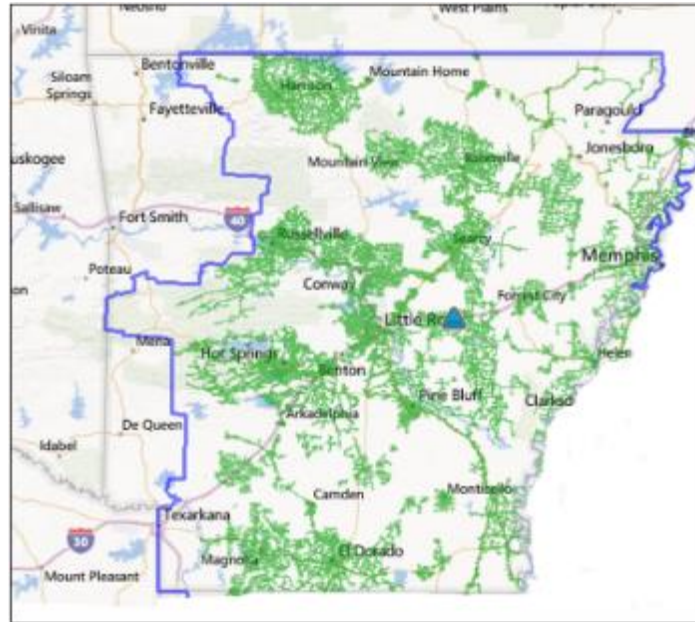
Entergy Arkansas capacity and fuel mix

2022 Capacity Mix*

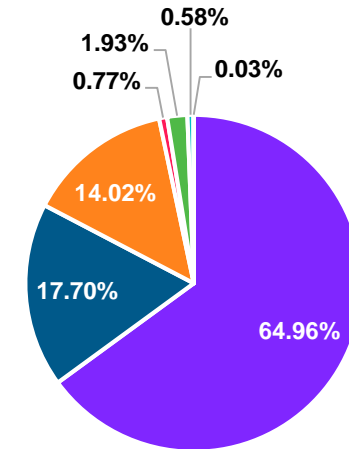


■ Coal ■ Gas ■ Hydro ■ Nuclear ■ Solar ■ LMR

2022 Customer Peak Load: 4,369 MW
 2022 Customer Energy Requirements: 23,734 GHW



2022 Fuel Mix*



■ Nuclear ■ Natural Gas
 ■ Coal ■ MISO Purchases

Solar % excludes green offering subscription of ~0.07% solar

Transmission Mileage: 4,967
 Distribution Mileage: 39,100

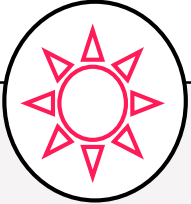
Entergy Arkansas – Hydro and Thermal Generation

Site	Unit	Fuel	Capability ¹ (MW)	Commercial Operation Year
Rommel Dam	1	Hydro	11	1925
Carpenter Dam	1	Hydro	62	1932
Lake Catherine	4	Gas – Steam	522	1970
Arkansas Nuclear One	1	Nuclear	836	1974
Arkansas Nuclear One	2	Nuclear	988	1980
White Bluff	1	Coal	465 / 815	1980
White Bluff	2	Coal	482 / 844	1981
Independence	1	Coal	263 / 835	1983
Grand Gulf Nuclear Station	1	Nuclear	516 / 1433	1985
Hot Spring Energy Facility	1	Gas – CCGT	600	2002
Ouachita	1	Gas – CCGT	242	2002
Ouachita	2	Gas – CCGT	244	2002
Union Power Station	2	Gas – CCGT	498	2003

5 ¹ Entergy Arkansas-owned capability/Total unit capability (for co-owned units)

Entergy Arkansas – Solar Generation

Entergy Arkansas continues to develop a portfolio of renewable resources that complements existing generation and capabilities while maintaining affordable customer rates and providing benefits to our stakeholders.

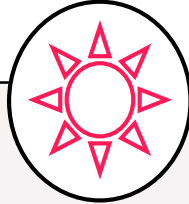


In Operation

Stuttgart - 2018
81 MW PPA
Arkansas County, AR

Chicot - 2020
100 MW PPA
Chicot County, AR

Searcy - 2022
100 MW Owned
(+ 10 MW Battery)
White County, AR

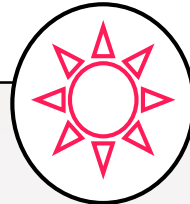


Under Construction

Driver (2024)
250 MW Owned
Mississippi County, AR

West Memphis (2024)
180 MW Owned
Crittenden County, AR

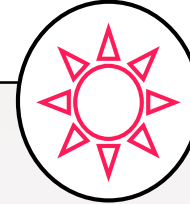
Walnut Bend (2024)
100 MW Owned
Lee County, AR



Approved

Flat Fork (2025)
200 MW PPA
St. Francis/Lee Counties, AR

Forgeview (2025)
200 MW PPA
Mississippi County, AR



Request for Proposals

2022 Request for Proposals
closed in Q1 2023

Targeted 1,000 MW
renewable capacity

Existing Entergy Arkansas programs

Open Green Tariffs

Green Promise

- Customers can subscribe to environmental attributes from solar facilities to meet renewable objectives
- Available to all customers (commercial, residential, low income)
- Charges monthly subscription and provides monthly credit based on output of included portfolio
 - Offsets up to 90% of customer energy usage
 - Included Solar Portfolio Designed to Expand
- Escalating bill credits: 2% annually for 5 years, 1% thereafter

Go ZERO

- 3 Options available to customers:
 - 1. Asset-backed RECs (new renewables)
 - 2. Alternative Energy Credits (existing nuclear and hydro)
 - 3. 24-7 Time Match Reporting (most advanced Scope 2 emissions reporting)



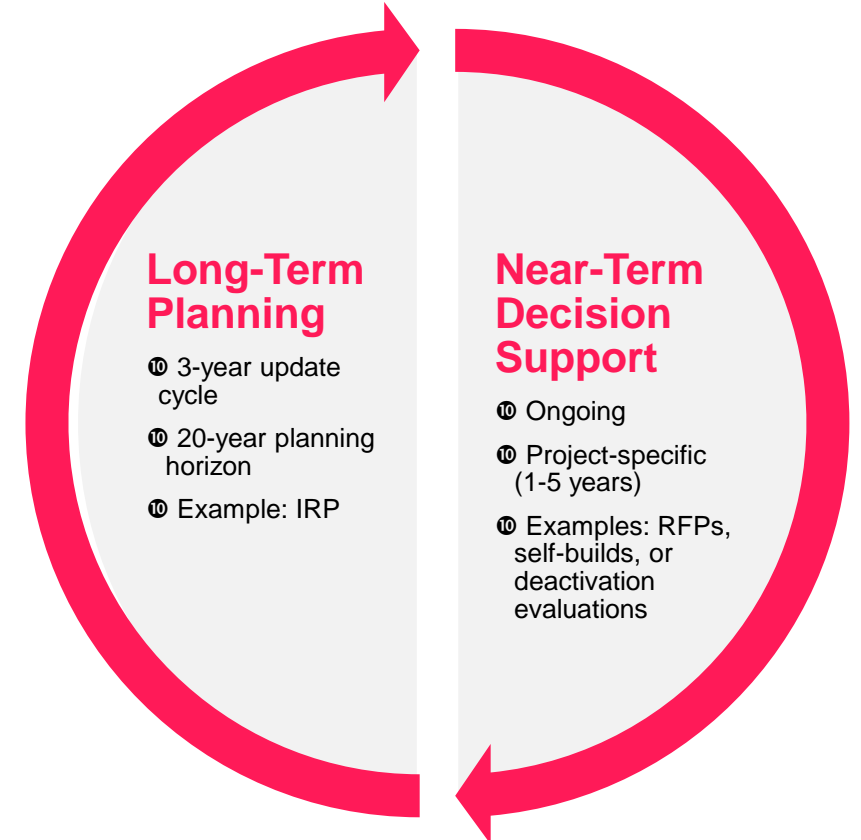
Integrated Resource Plan Overview

Integrated Resource Planning Overview

Entergy Arkansas' IRP guides long-term generation decisions

Entergy Arkansas updates its IRP on a three-year cycle, consistent with Section 6.1 of Attachment 1 to the Arkansas Public Service Commission Order No. 6 in Docket No. 06-028-R, "Resource Planning Guidelines for Electric Utilities."¹ Entergy Arkansas has begun development of its next IRP, which is estimated to be filed with the Commission in Q3/Q4 2024.

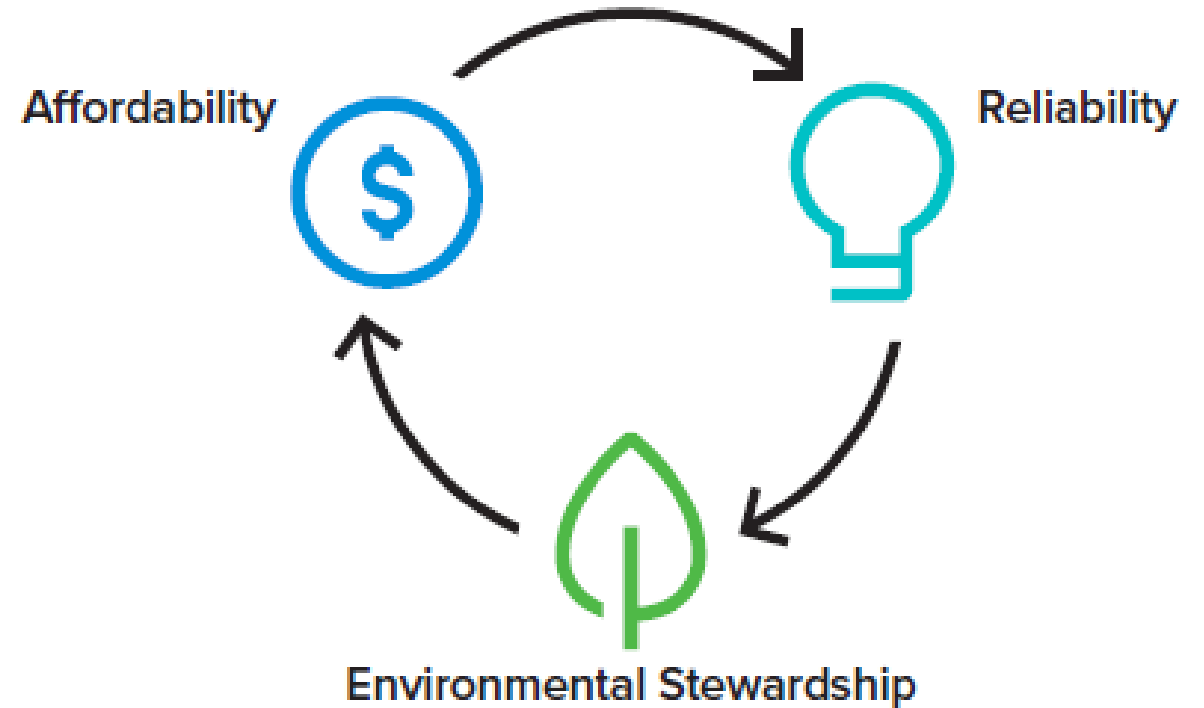
- Entergy Arkansas' IRP helps guide the necessary steps the company takes to continue to enhance reliability, affordability, and environmental stewardship for its customers. This approach also provides the flexibility Entergy Arkansas requires to respond and adapt to changing customer needs and expectations.
- Near-term decisions around new generation or deactivation of existing generation are project-specific and are handled on a case-by-case basis.
- The IRP encompasses longer-term trends that inform long-term planning decisions regarding Entergy Arkansas' generation portfolio.



1. http://www.apscservices.info/pdf/06/06-028-r_57_1.pdf

Key resource planning objectives

The resource planning process is based on a set of principles designed to reliably meet customer power needs considering reasonable cost while reducing emissions, improving reliability and resiliency, and mitigating customer risk exposure. While the landscape within the electric utility industry is changing, these principles remain the consistent factors underpinning Entergy Arkansas' long-term planning strategy.



Integrated Resource Planning process

Each component of the IRP process is critical to create an informative and effective IRP:

An Integrated Resource Plan is a planning process and framework in which the costs and benefits of supply-side and demand-side alternatives are evaluated to develop resource portfolio options that help meet Entergy Arkansas' planning objectives. Results of the IRP are not intended as static plans or pre-determined schedules for resource additions and deactivations.



Planning and design

Building future scenarios, assumptions, and ranges of risk factors.



Stakeholder engagement

Sharing information, receiving feedback, and facilitating Stakeholder Group.



Modeling and analysis

Market modeling, Entergy Arkansas' portfolio optimization, production cost projections.



Conclusions and action plan

Identifying themes and opportunities, establishing a mid-term, actionable plan.



Publishing and filing the report

Organizing information, displaying results, and communicating Entergy Arkansas' story.

Entergy Arkansas

We have been part of the state for more than 100 years—and we're planning for the next 100.

- **Strengthen and protect Arkansas' communities**—now, and for the long term.
- **Invest in cost-effective long-term solutions**, not short-term trends.
- **Make sure everyone gets to enjoy the benefits** of renewable energy.
- **Maintain price stability for our customers** while moving to a cleaner energy mix.
- **Promote economic development and job creation** thru maintaining our low rates.