

ADEQ

ARKANSAS
Department of Environmental Quality

September 26, 2014

Tracy Johnson
Senior Environmentalist Specialist
Entergy Arkansas, Inc. - Lake Catherine Plant
425 West Capitol Ave.
Little Rock, AR 72203

Dear Mr. Johnson:

In response to your Administrative Amendment permit application, you will find enclosed a copy of your final permit. Section 26.903 of the Regulations or the Arkansas Operating Air Permit Program do not require a public notice or public comment period for Administrative Amendments.

Sincerely,



Mike Bates
Chief, Air Division

Enclosures: Draft Permit

ADEQ OPERATING AIR PERMIT

Pursuant to the Regulations of the Arkansas Operating Air Permit Program, Regulation 26:

Permit No. : 1717-AOP-R6

IS ISSUED TO:


Entergy Arkansas, Inc. - Lake Catherine Plant
141 West County Line Road
Malvern, AR 72104
Hot Spring County
AFIN: 30-00011

THIS PERMIT AUTHORIZES THE ABOVE REFERENCED PERMITTEE TO INSTALL, OPERATE, AND MAINTAIN THE EQUIPMENT AND EMISSION UNITS DESCRIBED IN THE PERMIT APPLICATION AND ON THE FOLLOWING PAGES. THIS PERMIT IS VALID BETWEEN:

August 15, 2011 AND August 14, 2016

THE PERMITTEE IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:



Mike Bates
Chief, Air Division

September 26, 2014
Date

Entergy Arkansas, Inc. - Lake Catherine Plant
Permit #: 1717-AOP-R6
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List of Acronyms and Abbreviations

A.C.A.	Arkansas Code Annotated
AFIN	ADEQ Facility Identification Number
CFR	Code of Federal Regulations
CO	Carbon Monoxide
HAP	Hazardous Air Pollutant
lb/hr	Pound Per Hour
MVAC	Motor Vehicle Air Conditioner
No.	Number
NO _x	Nitrogen Oxide
PM	Particulate Matter
PM ₁₀	Particulate Matter Smaller Than Ten Microns
SNAP	Significant New Alternatives Program (SNAP)
SO ₂	Sulfur Dioxide
SSM	Startup, Shutdown, and Malfunction Plan
Tpy	Tons Per Year
UTM	Universal Transverse Mercator
VOC	Volatile Organic Compound

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SECTION I: FACILITY INFORMATION

PERMITTEE: Entergy Arkansas, Inc. - Lake Catherine Plant

AFIN: 30-00011

PERMIT NUMBER: 1717-AOP-R6

FACILITY ADDRESS: 141 West County Line Road
Malvern, AR 72104

MAILING ADDRESS: 425 West Capitol Ave.
Little Rock, AR 72203

COUNTY: Hot Spring County

CONTACT NAME: Tracy Johnson

CONTACT POSITION: Senior Environmentalist Specialist

TELEPHONE NUMBER: (501) 377-4033

REVIEWING ENGINEER: Derrick Brown

UTM North South (Y): Zone 15: 3810519.47 m

UTM East West (X): Zone 15: 509102.29 m

SECTION II: INTRODUCTION

Summary of Permit Activity

Entergy Services, Inc. – Lake Catherine Plant is a natural gas fired power generating station located at 141 West County Line Road in Malvern, Arkansas. This permit administrative amendment is prompted by the facility’s retiring of three units 1 (SN-01), 2 (SN-01), and 3 (SN-02). Facility emissions decreased by 80.1 tons of PM/PM₁₀, 862.1 tons of SO₂, 58.1 tons of VOC, 885.3 tons of CO, 6,101.2 tons of NO_x, and HAPs decreased by 79.7 tons per year.

Process Description

The Lake Catherine Plant belongs to the Major SIC group 499 – Electric, Gas and Sanitary Services. Specifically, the plant SIC code is 4911 – Electric Services. Lake Catherine is a one-unit electric generating station which generates electric energy for sale. Electricity is produced for sale by using natural gas as the only fuel in the boiler. The boiler produces steam to drive turbines which turn electric motors. Unit 4 exhausts to SN-03.

Air conditioning maintenance is not currently performed by plant personnel at the Lake Catherine Plant.

There are other emission-producing activities at the Lake Catherine Plant, but they are all in support of the primary process at the facility, which is the production of electricity as described above. These other emission-producing activities are necessary to maintain the power plant equipment and systems. These activities include, but are not limited to, painting, sandblasting, welding, boiler cleaning, and the use of temporary combustion devices to drive equipment during outages. Many of these maintenance activities are conducted by outside contractors, using equipment owned by the contractors. Furthermore, many of these maintenance activities are classified as insignificant.

Regulations

The following table contains the regulations applicable to this permit.

Regulations
Arkansas Air Pollution Control Code, Regulation 18, effective June 18, 2010
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective September 13, 2014
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective November 18, 2012
40 CFR Part 75, Acid Rain Program

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Emission Summary

The following table is a summary of emissions from the facility. This table, in itself, is not an enforceable condition of the permit.

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
Total Allowable Emissions		PM	44.5	194.8
		PM ₁₀	44.5	194.8
		SO ₂	4.2	16.0
		VOC	32.8	141.6
		CO	140.4	615.0
		NO _x	3,393.0	14,861.4
HAPs		Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.43	1.92
		Hexane*	10.50	46.10
		Phenanthrene*	0.01	0.01
		2,3,7,8-TCD*	7.02 E-9	3.07 E-8
		Toluene*	0.01	0.08
		Arsenic*	0.01	0.01
		Beryllium*	0.01	0.01
		Cadmium*	0.01	0.01
		Cobalt*	0.01	0.01
		Chromium*	0.01	0.03
		Manganese*	0.01	0.01
		Mercury*	0.01	0.01
		Nickel*	0.01	0.05
		Selenium*	0.01	0.01

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EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
03	Unit 4 – Natural Gas	PM	44.5	194.8
		PM ₁₀	44.5	194.8
		SO ₂	3.6	15.4
		VOC	32.2	141.0
		CO	140.4	615.0
		NO _x	3393.0	14861.4
03	Unit 4 – (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.43	1.92
		Hexane*	10.50	46.10
		Phenanthrene*	0.01	0.01
		2,3,7,8-TCD*	7.02 E-9	3.07 E-8
		Toluene*	0.01	0.08
		Arsenic*	0.01	0.01
		Beryllium*	0.01	0.01
		Cadmium*	0.01	0.01
		Cobalt*	0.01	0.01
		Chromium*	0.01	0.03
		Manganese*	0.01	0.01
		Mercury*	0.01	0.01
		Nickel*	0.01	0.05
Selenium*	0.01	0.01		
04	Fuel Oil Day Tank #1 (T1)	VOC	0.1	0.1
05	Fuel Oil Day Tank #2 (T2)	VOC	0.1	0.1
06	Fuel Oil Day Tank #3 (T3)	VOC	0.1	0.1
07	Fuel Oil Day Tank #4 (T4)	VOC	0.1	0.1
08	Fuel Oil Day Tank #5 (T5)	VOC	0.1	0.1
09	Fuel Oil Day Tank #6 (T6)	VOC	0.1	0.1

*HAPs included in the VOC totals. Other HAPs are not included in any other totals unless specifically stated. TCD (Tetrachlorodibenzo-p-dioxin)

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SECTION III: PERMIT HISTORY

1717-AOP-R0 was the first operating air permit issued to Entergy- Arkansas, Inc. Lake Catherine. No physical changes in the method of operation at the facility occurred prompting this permit issuance.

The Lake Catherine facility had never been issued an air permit. These units were in existence prior to 1972, before the Air Code and SIP were promulgated, and have not undergone any modification. The units are considered to be “grandfathered.” The emission limits listed in the emission summary table are less than the potential to emit. The Lake Catherine facility is taking emission limits pursuant to Regulation 18 for fee purposes only. These limits are not being established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I or 40 CFR 51.166. These limits may be changed by the request of a permit modification if plant operating requirements change. Such a change may result in the facility paying higher permit fees. Appendix A outlines the potential to emit for the Lake Catherine facility. If this facility has a modification above the PSD significance level, Appendix A will be used as potential to emit pursuant to 40 CFR 52.21. The facility must meet the requirements of the Acid Rain Program and emissions from the facility must not violate the National Ambient Air Quality Standards (NAAQS).

1717-AOP-R1 was issued on May 8, 2001. After the issuance of the initial permit (1717-AOP-R0), it was discovered that the facility had potential problems with the permitted NO_x limits for short periods of time when the units were brought to maximum load. Also, it was found that Boiler #3 was exceeding the SO₂ limits. The exceedances were caused by low estimates of the heat input of the boilers. This modification allowed the facility to increase the estimated heat input for boilers and increased the permitted emission limits. No physical modifications were made to equipment at the facility.

Permit 1717-AO-R2 was issued on January 24, 2005. This was the first renewal of the Title V permit issued to this facility. There were no changes made in the physical operation of the facility, but the CO emissions were revised to reflect the use of AP-42 emission factors. Entergy believed these values to be more representative than the previous method used. Also, the particulate matter emission rates now account for both condensable and filterable fractions of particulate matter emissions. Also, hazardous air pollutants were listed in the permit for the first time.

Permit 1717-AOP-R3 was issued November 29, 2007. This modification will allowed Entergy-Lake Catherine Unit 4 to be considered a peaking unit and operated according to 40 CFR Part 75, Appendix E. No changes were made in the permitted emission rates.

Permit 1717-AOP-R4 was issued April 4, 2009. This permit modification was issued to incorporate the facility’s Clean Air interstate Rule (CAIR) permit application. There were no permitted emission changes associated with this permitting action.

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Permit 1717-AOP-R5 was issued August 15, 2011. This permit incorporated the facility's renewal permit application. This action decreased SO₂ emissions by 1049.1 tons per year. There were also changes of emissions of NO_x, PM and PM₁₀.

SECTION IV: SPECIFIC CONDITIONS

SN-03
 Boiler

Source Description

The Lake Catherine facility is a one-unit electric generating station which generates electric energy for sale. The Unit 4 is a boiler capable of 5850 MMBtu/hr (nominal rating 560 MWg (megawatts gross). Electricity is produced by using natural gas as fuel in the boiler to produce steam. The steam is used to drive the turbines which turn the electric generators.

The emission limits in this permit are established pursuant to Regulation 18, §18.801. The limits are not established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I, or 40 CFR 51.166. Therefore, the facility is not subject to PSD if the hours of operation are to be increased.

No control devices are associated with these units.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. Compliance with SO₂ emissions shall be demonstrated through compliance with Specific Condition 7. Compliance with SN-03 NO_x emission rate shall be demonstrated by compliance with Specific Condition 8. Compliance with PM₁₀, CO, and VOC emissions shall be demonstrated through compliance with Specific Condition 4. Compliance is based on a 24-hour block average. [Regulation 19 §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
03	Unit 4 – Natural Gas	PM ₁₀	44.5	194.8
		SO ₂	3.6	15.4
		VOC	32.2	141.0
		CO	140.4	615.0
		NO _x	3393.0	14,861.4

2. The permittee shall not exceed the emission rates set forth in the following table. Compliance with PM emissions shall be demonstrated through compliance with Specific Condition 4. The HAP emissions listed for these sources are based upon published emission factors at the time of permit issuance. Any change in these emission factors will not constitute a violation of the HAP emission rates listed below. [Regulation 18 §18.801 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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SN	Description	Pollutant	lb/hr	tpy
03	Unit 4 – Natural Gas	PM	44.5	194.8
	Unit 4 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.43	1.92
		Hexane*	10.50	46.10
		Phenanthrene*	0.01	0.01
		2,3,7,8-TCD*	7.02 E-9	3.07 E-8
		Toluene*	0.01	0.08
		Arsenic*	0.01	0.01
		Beryllium*	0.01	0.01
		Cadmium*	0.01	0.01
		Cobalt*	0.01	0.01
		Chromium*	0.01	0.03
		Manganese*	0.01	0.01
		Mercury*	0.01	0.01
		Nickel*	0.01	0.05
		Selenium*	0.01	0.01

3. The permittee shall not exceed 40 percent opacity from SN-03 as measured by EPA Reference Method 9 when firing natural gas. Compliance with the opacity shall be demonstrated by burning natural gas in the boiler. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]
4. The permittee shall install, operate, and maintain O₂ monitors on the boilers. The permittee shall show a positive O₂ reading when the boilers are in operation. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
5. The permittee shall update, twice per day, records which demonstrate compliance with Specific Condition 4. These records shall be kept on site, and shall be made available to Department personnel upon request. Each individual month's readings shall be submitted in accordance with General Provision 7. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
6. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition shall be demonstrated by burning 100% natural gas. The permittee is accepting these limits for fee purposes only. These limits are not being established pursuant to 40 CFR 52.21 or under regulations approved pursuant to 40 CFR 51, Subpart I or 40 CFR 51.166. [Regulation 19, §19.501 et seq and 40 CFR Part 52, Subpart E]

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SN	Description	Pollutant	tpy
03	Unit 4	PM	194.8
		PM ₁₀	194.8
		SO ₂	15.4
		VOC	141.0
		CO	615.0
		NO _x	14,861.4

7. The permittee shall determine SO₂ emissions using the optional SO₂ emissions data protocol procedures in 40 CFR Part 75, Appendix D, Section 2.2 and 2.3. The records may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
8. The permittee shall determine NO_x emissions for unit 4 (SN-03) using the optional NO_x emissions data protocol procedure in 40 CFR Part 75, Appendix E, section 2.4. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
9. In the event that Unit 4 exceeds the level required to be a peaking unit as defined in 40 CFR 72.2, the permittee shall maintain records, using CEMS for NO_x for the applicable unit(s), which demonstrate compliance with the limit set forth in this permit. If CEMS is required, it will be installed in accordance with 40 CFR Part 75, Appendix E, §1.1 which requires a NO_x CEMS to be installed and certified no later than December 31st of the calendar year following the year in which the peaking status was lost. The records may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each individual month's data shall be submitted in accordance with General Provision 7. [Regulation 19, §19.703, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]
10. The permittee shall submit an excess emissions report for SO₂ and NO_x for the source every six (6) months. The report may be submitted to the Department with the report described in General Provision 7. The report shall include the magnitude of excess emissions computed from the 40 CFR Part 75 monitoring data in pounds per hour, any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. [Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

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11. The permittee shall determine CO₂ emissions based on the measured carbon content of the fuel and the procedures in appendix G of 40 CFR Part 75 to estimate CO₂ emissions (in ton/day) discharged to the atmosphere. [Regulation 19, §19.304 and 40 CFR 75.10 (a)(3)]
12. SN-03 is considered a gas-fired unit and is exempt from Part 75 opacity monitoring as per 40 CFR Part 75.10 (a) (4). [Regulation 19, §19.304 and 40 CFR 72.2]
13. In the event a gas-fired unit is recategorized as another type of unit by changing its fuel mix, the owner or operator shall install, operate, and certify a continuous opacity monitoring system. Each continuous opacity monitoring system shall meet the design, installation, equipment, and performance specifications in Performance Specifications 1 in appendix B to part 60. [Regulation 19, §19.304 and 40 CFR 74.14]
14. The permittee shall ensure that all required continuous emission monitoring systems are in operation and monitoring all unit emissions at all times that the affected unit combusts any fuel, except during periods of calibration, quality assurance, preventative maintenance or repair. A copy of the CEM monitoring requirements can be found in Appendix B of this permit. [Regulation 19, §19.703 and 40 CFR 75.10]
15. The permittee shall submit the required quarterly monitoring reports to EPA headquarters. [Regulation 19, §19.304 and 40 CFR Part 75.10]
16. The permittee shall perform Relative Accuracy tests if applicable. [Regulation 19, §19.304 and 40 CFR 75]
17. The permittee shall determine and record the heat input to each affected unit for every hour or part of an hour any fuel is combusted following the procedures in Appendix F of 40 CFR Part 75. [Regulation 19, §19.304 and 40 CFR 75.10 (c)]
18. The affected unit (SN-03) is subject to and shall comply with applicable provisions of the Acid Rain Program [40 CFR Parts 72, 73, and 75].
19. The Notice of CEMS certification testing is required at least 21 days prior to the CEMS certification testing. Test results must be submitted within 45 days after completion of the certification test. [40 CFR Part 75 Continuous Emission Monitoring Subpart G]
20. A monitoring plan is required to be submitted for NO_x, SO₂, and O₂ or CO₂ monitoring. [40 CFR Part 75 – Continuous Emission Monitoring Subpart G]
21. The initial NO_x, and O₂ or CO₂ CEMS certification testing is to occur no later than 90 days after the unit commences commercial operation except the testing must occur prior to the date this unit is declared commercial in accordance with DOE Form EIA-860. [40 CFR Part 75 Subpart A]

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22. The permittee shall ensure that the continuous emissions monitoring systems are in operation and monitoring all unit emissions at all times when combusting fuel, except during periods of calibration, quality assurance, preventative maintenance or repair. [40 CFR Part 75.10]

SN-04 through SN-09
 Storage Tanks

Source Description

No. 6 fuel oil is stored in six storage tanks on site. The tanks have a capacity ranging from 401,900 gallons to 11,681,200 gallons. These tanks are designated as Fuel Oil Day Tank #1 (SN-04), Fuel Oil Day Tank #2 (SN-05), Fuel Oil Tank #3 (SN-06), Fuel Oil Tank #4 (SN-07), Fuel Oil Tank #5 (SN-08), and Fuel Oil Tank #6 (SN-09). The tanks and their connecting lines do not currently contain oil. Fuel Oil Day Tank #1 (SN-04) is occasionally used for temporary waste water storage.

Specific Conditions

23. The permittee shall not exceed the emission rates set forth in the following table. The permittee shall demonstrate compliance with this condition through compliance with Specific Condition 24 and 25. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
04	Storage Tanks	VOC	0.1	0.1
05		VOC	0.1	0.1
06		VOC	0.1	0.1
07		VOC	0.1	0.1
08		VOC	0.1	0.1
09		VOC	0.1	0.1

24. The permittee shall store only No. 6 fuel oil in storage tanks SN-05 thru SN-09. SN-04 may be used for temporary waste water storage. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6]
25. The permittee shall not exceed the annual throughput of 213,192,120 gallons of No. 6 fuel oil in each of the storage tanks during any consecutive twelve month period. [Regulation 19, §19.705, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6]
26. The permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 25. These records may be used by the Department for enforcement purposes. The records shall be updated on a monthly basis, shall be kept on site, and shall be provided to Department personnel upon request. An annual total and each

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individual month's data shall be submitted in accordance with General Provision 7.
[Regulation 19, §19.705 and 40 CFR Part 52, Subpart E]

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SECTION V: COMPLIANCE PLAN AND SCHEDULE

Entergy Arkansas, Inc. - Lake Catherine Plant will continue to operate in compliance with those identified regulatory provisions. The facility will examine and analyze future regulations that may apply and determine their applicability with any necessary action taken on a timely basis.

The Lake Catherine Plant will continue to operate in compliance with those identified regulatory provisions. Lake Catherine Unit 4 (SN-03) will be required to comply with the Regional Haze requirements listed in Arkansas Regulation 19 Chapter 15, Section 19.1505 (N). While no additional future regulatory requirements were specifically identified at the time of submittal of this application, the facility will meet any future regulations that apply on a timely basis.

Existing Monitoring: Lake Catherine Plant currently monitors SO₂ and NO_x under Acid Rain requirements of 40 CFR Part 75. Emission reports are submitted quarterly to EPA and semi-annually to ADEQ.

SECTION VI: PLANTWIDE CONDITIONS

1. The permittee shall notify the Director in writing within thirty (30) days after commencing construction, completing construction, first placing the equipment and/or facility in operation, and reaching the equipment and/or facility target production rate. [Regulation 19 §19.704, 40 CFR Part 52, Subpart E, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
2. If the permittee fails to start construction within eighteen months or suspends construction for eighteen months or more, the Director may cancel all or part of this permit. [Regulation 19 §19.410(B) and 40 CFR Part 52, Subpart E]
3. The permittee must test any equipment scheduled for testing, unless otherwise stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) new equipment or newly modified equipment within sixty (60) days of achieving the maximum production rate, but no later than 180 days after initial start up of the permitted source or (2) operating equipment according to the time frames set forth by the Department or within 180 days of permit issuance if no date is specified. The permittee must notify the Department of the scheduled date of compliance testing at least fifteen (15) business days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) calendar days after completing the testing. [Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
4. The permittee must provide:
 - a. Sampling ports adequate for applicable test methods;
 - b. Safe sampling platforms;
 - c. Safe access to sampling platforms; and
 - d. Utilities for sampling and testing equipment.

[Regulation 19 §19.702 and/or Regulation 18 §18.1002 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
5. The permittee must operate the equipment, control apparatus and emission monitoring equipment within the design limitations. The permittee shall maintain the equipment in good condition at all times. [Regulation 19 §19.303 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
6. This permit subsumes and incorporates all previously issued air permits for this facility. [Regulation 26 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

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Permit Shield

7. Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements, as of the date of permit issuance, included in and specifically identified in the following table of this condition. The permit specifically identifies the following as applicable requirements based upon the information submitted by the permittee in an application dated October 15, 2003.

Applicable Regulations		
Source No.	Regulation	Description
01-03	Regulation 26 Section 3	Regulations of the Arkansas Operating Air Permit Program
40 CFR 72 Subpart A-D	Acid Rain Permit Regulations	Acid Rain Permit Regulations
40 CFR 73 Subpart B	SO ₂ Allowance Allocations	SO ₂ Allowance Allocations
40 CFR 75 Subpart A-D, F, and G	Continuous Emission Monitoring	Continuous Emissions Monitoring
40 CFR 77	Excess Emissions	Excess Emissions

Acid Rain (Title V)

8. Director prohibits the permittee to cause any emissions exceeding any allowances the source lawfully holds under Title IV of the Act or the regulations promulgated under the Act. No permit revision is required for increases in emissions allowed by allowances acquired pursuant to the acid rain program, if such increases do not require a permit revision under any other applicable requirement. This permit establishes no limit on the number of allowances held by the permittee. However, the source may not use allowances as a defense for noncompliance with any other applicable requirement of this permit or the Act. The permittee will account for any such allowance according to the procedures established in regulations promulgated under Title IV of the Act. A copy of the facility's Acid Rain Permit is attached in an appendix to this Title V permit. [Regulation 26, §26.701 and 40 CFR 70.6(a)(4)]
9. The permittee shall comply with the monitoring, reporting, and recordkeeping requirements of subpart HHHH of 40 CFR Part 96. The permittee shall comply with the requirements established under CAIR. The permittee shall report and maintain records required by Subpart HHHH of 40 CFR Part 96. A copy of the CAIR permit is attached to this Title V permit. [Regulation 19, §19.1401 and 40 CFR Part 52, Subpart E]

SECTION VII: INSIGNIFICANT ACTIVITIES

The following sources are insignificant activities. Any activity that has a state or federal applicable requirement shall be considered a significant activity even if this activity meets the criteria of §26.304 of Regulation 26 or listed in the table below. Insignificant activity determinations rely upon the information submitted by the permittee in an application dated June 16, 2009.

Description	Category
Kerosene Fired Steam Cleaner	A-1
Units 1 & 2 BFW Pump LO Reservoir	A-2
Units 1 & 2 BFW Pump LO Reservoir	
Units 1 & 2 BFW Pump LO Reservoir	
Unit 3 BFW Pump LO Reservoir	
Unit 3 BFW Pump LO Reservoir	
Unit 3 BFW Pump LO Reservoir	
Unit 4 FD Fan LO Reservoir	
Unit 4 BFW LO Reservoir	
Unit 4 BFW LO Reservoir	
Unit 4 BFW LO Reservoir	
Unit 4 BFW LO Reservoir	
Unit 4 BFP LO Reservoir	
Emergency Diesel Generator Tank	
Used Oil Storage Tank	
Used Kerosene Drum	
Waste Oil/ Solvent Storage	
Oil/Water Separator (Oil Section)	
Units 1, 2, & 3 Lube Oil Batch Tank #1	A-3
Units 1, 2, & 3 Lube Oil Batch Tank #2	
Units 1, 2, & 3 Lube Oil Batch Tank #3	
Unit 1 Lube Oil Reservoir	

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Description	Category
Unit 1 Lube Oil Filter Tank	
Unit 2 Lube Oil Reservoir	
Unit 2 Lube Oil Filter Tank	
Unit 3 Lube Oil Reservoir	
Unit 3 Lube Oil Filter Tank	
Unit 3 Seal Oil Tank	
Unit 4 LO Filter Tank	
Unit 4 Seal Oil Tank	
Unit 4 FD Fan LO Reservoir	
Fuel Oil Additive Tank	
Oil Drum Storage	
Diesel Tank	
Diesel Emergency Generator	
Unit 4 LO Batch Tanks (2 - 12,000 gal)	A-13
Unit 4 LO Reservoir (12,000 gal)	
500 gallon Gasoline Tank	
Degreaser	
Unit 3 Welding Area (1 machine)	
Diesel Fuel Oil Dispensing Station	
Unleaded Gasoline Dispensing Station	
Unit 4 Bead Blaster	
Grit Blaster	
Aerosol Lubricant Fugitives	
Aerosol Degreaser Fugitives	
Aerosol Insecticides	
Welding Shop (2 machines)	
Aerosol Puncture Station	

SECTION VIII: GENERAL PROVISIONS

1. Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the sole origin of and authority for the terms or conditions are not required under the Clean Air Act or any of its applicable requirements, and are not federally enforceable under the Clean Air Act. Arkansas Pollution Control & Ecology Commission Regulation 18 was adopted pursuant to the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.). Any terms or conditions included in this permit which specify and reference Arkansas Pollution Control & Ecology Commission Regulation 18 or the Arkansas Water and Air Pollution Control Act (A.C.A. §8-4-101 et seq.) as the origin of and authority for the terms or conditions are enforceable under this Arkansas statute. [40 CFR 70.6(b)(2)]
2. This permit shall be valid for a period of five (5) years beginning on the date this permit becomes effective and ending five (5) years later. [40 CFR 70.6(a)(2) and Regulation 26 §26.701(B)]
3. The permittee must submit a complete application for permit renewal at least six (6) months before permit expiration. Permit expiration terminates the permittee's right to operate unless the permittee submitted a complete renewal application at least six (6) months before permit expiration. If the permittee submits a complete application, the existing permit will remain in effect until the Department takes final action on the renewal application. The Department will not necessarily notify the permittee when the permit renewal application is due. [Regulation 26 §26.406]
4. Where an applicable requirement of the Clean Air Act, as amended, 42 U.S.C. 7401, et seq. (Act) is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, the permit incorporates both provisions into the permit, and the Director or the Administrator can enforce both provisions. [40 CFR 70.6(a)(1)(ii) and Regulation 26 §26.701(A)(2)]
5. The permittee must maintain the following records of monitoring information as required by this permit.
 - a. The date, place as defined in this permit, and time of sampling or measurements;
 - b. The date(s) analyses performed;
 - c. The company or entity performing the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of such analyses; and
 - f. The operating conditions existing at the time of sampling or measurement.

[40 CFR 70.6(a)(3)(ii)(A) and Regulation 26 §26.701(C)(2)]

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6. The permittee must retain the records of all required monitoring data and support information for at least five (5) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. [40 CFR 70.6(a)(3)(ii)(B) and Regulation 26 §26.701(C)(2)(b)]
7. The permittee must submit reports of all required monitoring every six (6) months. If the permit establishes no other reporting period, the reporting period shall end on the last day of the month six months after the issuance of the initial Title V permit and every six months thereafter. The report is due on the first day of the second month after the end of the reporting period. The first report due after issuance of the initial Title V permit shall contain six months of data and each report thereafter shall contain 12 months of data. The report shall contain data for all monitoring requirements in effect during the reporting period. If a monitoring requirement is not in effect for the entire reporting period, only those months of data in which the monitoring requirement was in effect are required to be reported. The report must clearly identify all instances of deviations from permit requirements. A responsible official as defined in Regulation No. 26, §26.2 must certify all required reports. The permittee will send the reports to the address below:

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
5301 Northshore Drive
North Little Rock, AR 72118-5317

[40 CFR 70.6(a)(3)(iii)(A) and Regulation 26 §26.701(C)(3)(a)]

8. The permittee shall report to the Department all deviations from permit requirements, including those attributable to upset conditions as defined in the permit.
 - a. For all upset conditions (as defined in Regulation 19, § 19.601), the permittee will make an initial report to the Department by the next business day after the discovery of the occurrence. The initial report may be made by telephone and shall include:
 - i. The facility name and location;
 - ii. The process unit or emission source deviating from the permit limit;
 - iii. The permit limit, including the identification of pollutants, from which deviation occurs;
 - iv. The date and time the deviation started;
 - v. The duration of the deviation;
 - vi. The average emissions during the deviation;
 - vii. The probable cause of such deviations;

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- viii. Any corrective actions or preventive measures taken or being taken to prevent such deviations in the future; and
- ix. The name of the person submitting the report.

The permittee shall make a full report in writing to the Department within five (5) business days of discovery of the occurrence. The report must include, in addition to the information required by the initial report, a schedule of actions taken or planned to eliminate future occurrences and/or to minimize the amount the permit's limits were exceeded and to reduce the length of time the limits were exceeded. The permittee may submit a full report in writing (by facsimile, overnight courier, or other means) by the next business day after discovery of the occurrence, and the report will serve as both the initial report and full report.

- b. For all deviations, the permittee shall report such events in semi-annual reporting and annual certifications required in this permit. This includes all upset conditions reported in 8a above. The semi-annual report must include all the information as required by the initial and full reports required in 8a.

[Regulation 19 §19.601 and §19.602, Regulation 26 §26.701(C)(3)(b), and 40 CFR 70.6(a)(3)(iii)(B)]

- 9. If any provision of the permit or the application thereof to any person or circumstance is held invalid, such invalidity will not affect other provisions or applications hereof which can be given effect without the invalid provision or application, and to this end, provisions of this Regulation are declared to be separable and severable. [40 CFR 70.6(a)(5), Regulation 26 §26.701(E), and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 10. The permittee must comply with all conditions of this Part 70 permit. Any permit noncompliance with applicable requirements as defined in Regulation 26 constitutes a violation of the Clean Air Act, as amended, 42 U.S.C. §7401, et seq. and is grounds for enforcement action; for permit termination, revocation and reissuance, for permit modification; or for denial of a permit renewal application. [40 CFR 70.6(a)(6)(i) and Regulation 26 §26.701(F)(1)]
- 11. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity to maintain compliance with the conditions of this permit. [40 CFR 70.6(a)(6)(ii) and Regulation 26 §26.701(F)(2)]
- 12. The Department may modify, revoke, reopen and reissue the permit or terminate the permit for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition. [40 CFR 70.6(a)(6)(iii) and Regulation 26 §26.701(F)(3)]

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13. This permit does not convey any property rights of any sort, or any exclusive privilege. [40 CFR 70.6(a)(6)(iv) and Regulation 26 §26.701(F)(4)]
14. The permittee must furnish to the Director, within the time specified by the Director, any information that the Director may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee must also furnish to the Director copies of records required by the permit. For information the permittee claims confidentiality, the Department may require the permittee to furnish such records directly to the Director along with a claim of confidentiality. [40 CFR 70.6(a)(6)(v) and Regulation 26 §26.701(F)(5)]
15. The permittee must pay all permit fees in accordance with the procedures established in Regulation 9. [40 CFR 70.6(a)(7) and Regulation 26 §26.701(G)]
16. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading and other similar programs or processes for changes provided for elsewhere in this permit. [40 CFR 70.6(a)(8) and Regulation 26 §26.701(H)]
17. If the permit allows different operating scenarios, the permittee shall, contemporaneously with making a change from one operating scenario to another, record in a log at the permitted facility a record of the operational scenario. [40 CFR 70.6(a)(9)(i) and Regulation 26 §26.701(I)(1)]
18. The Administrator and citizens may enforce under the Act all terms and conditions in this permit, including any provisions designed to limit a source's potential to emit, unless the Department specifically designates terms and conditions of the permit as being federally unenforceable under the Act or under any of its applicable requirements. [40 CFR 70.6(b) and Regulation 26 §26.702(A) and (B)]
19. Any document (including reports) required by this permit must contain a certification by a responsible official as defined in Regulation 26, §26.2. [40 CFR 70.6(c)(1) and Regulation 26 §26.703(A)]
20. The permittee must allow an authorized representative of the Department, upon presentation of credentials, to perform the following: [40 CFR 70.6(c)(2) and Regulation 26 §26.703(B)]
 - a. Enter upon the permittee's premises where the permitted source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records required under the conditions of this permit;

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- c. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
 - d. As authorized by the Act, sample or monitor at reasonable times substances or parameters for assuring compliance with this permit or applicable requirements.
- 21. The permittee shall submit a compliance certification with the terms and conditions contained in the permit, including emission limitations, standards, or work practices. The permittee must submit the compliance certification annually. If the permit establishes no other reporting period, the reporting period shall end on the last day of the anniversary month of the initial Title V permit. The report is due on the first day of the second month after the end of the reporting period. The permittee must also submit the compliance certification to the Administrator as well as to the Department. All compliance certifications required by this permit must include the following: [40 CFR 70.6(c)(5) and Regulation 26 §26.703(E)(3)]
 - a. The identification of each term or condition of the permit that is the basis of the certification;
 - b. The compliance status;
 - c. Whether compliance was continuous or intermittent;
 - d. The method(s) used for determining the compliance status of the source, currently and over the reporting period established by the monitoring requirements of this permit; and
 - e. Such other facts as the Department may require elsewhere in this permit or by §114(a)(3) and §504(b) of the Act.
- 22. Nothing in this permit will alter or affect the following: [Regulation 26 §26.704(C)]
 - a. The provisions of Section 303 of the Act (emergency orders), including the authority of the Administrator under that section;
 - b. The liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance;
 - c. The applicable requirements of the acid rain program, consistent with §408(a) of the Act; or
 - d. The ability of EPA to obtain information from a source pursuant to §114 of the Act.
- 23. This permit authorizes only those pollutant emitting activities addressed in this permit. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 24. The permittee may request in writing and at least 15 days in advance of the deadline, an extension to any testing, compliance or other dates in this permit. No such extensions are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion in the following circumstances:

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- a. Such an extension does not violate a federal requirement;
- b. The permittee demonstrates the need for the extension; and
- c. The permittee documents that all reasonable measures have been taken to meet the current deadline and documents reasons it cannot be met.

[Regulation 18 §18.314(A), Regulation 19 §19.416(A), Regulation 26 §26.1013(A), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

25. The permittee may request in writing and at least 30 days in advance, temporary emissions and/or testing that would otherwise exceed an emission rate, throughput requirement, or other limit in this permit. No such activities are authorized until the permittee receives written Department approval. Any such emissions shall be included in the facility's total emissions and reported as such. The Department may grant such a request, at its discretion under the following conditions:

- a. Such a request does not violate a federal requirement;
- b. Such a request is temporary in nature;
- c. Such a request will not result in a condition of air pollution;
- d. The request contains such information necessary for the Department to evaluate the request, including but not limited to, quantification of such emissions and the date/time such emission will occur;
- e. Such a request will result in increased emissions less than five tons of any individual criteria pollutant, one ton of any single HAP and 2.5 tons of total HAPs; and
- f. The permittee maintains records of the dates and results of such temporary emissions/testing.

[Regulation 18 §18.314(B), Regulation 19 §19.416(B), Regulation 26 §26.1013(B), A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

26. The permittee may request in writing and at least 30 days in advance, an alternative to the specified monitoring in this permit. No such alternatives are authorized until the permittee receives written Department approval. The Department may grant such a request, at its discretion under the following conditions:

- a. The request does not violate a federal requirement;
- b. The request provides an equivalent or greater degree of actual monitoring to the current requirements; and
- c. Any such request, if approved, is incorporated in the next permit modification application by the permittee.

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[Regulation 18 §18.314(C), Regulation 19 §19.416(C), Regulation 26 §26.1013(C),
A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart
E]

CERTIFICATE OF SERVICE

I, Pamela Owen, hereby certify that a copy of this permit has been mailed by first class mail to Entergy Arkansas, Inc. - Lake Catherine Plant, 425 West Capitol Ave., Little Rock, AR, 72203, on this 26th day of September, 2014.

Pamela Owen

Pamela Owen, AAI, Air Division