

RESPONSE TO COMMENTS

ENTERGY SERVICES, INC. - LAKE CATHERINE PLANT PERMIT #1717-AOP-R5 AFIN: 30-00011

On February 4, 2011, the Director of the Arkansas Department of Environmental Quality gave notice of a draft permitting decision for the above referenced facility. During the comment period, written comments on the draft permitting decision were submitted by Mark Bowles, on behalf of the facility. The Department's response to these issues follows.

Note: The following page numbers and condition numbers refer to the draft permit. These references may have changed in the final permit based on changes made during the comment period.

Comment #1: Specific Condition 1, Please reword as follows:

“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 14. Compliance with SN-01, SN-02, and SN-03 NO_x emissions shall be demonstrated through compliance with Specific Condition 15. Compliance with PM₁₀, CO, and VOC emissions shall be demonstrated through compliance with Specific Condition 9. Compliance is based on a 24 hour block average. [Regulation 19, §19.501 et seq., effective June 18, 2010 and 40 CFR Part 52, Subpart E]”

Also, the originally submitted PM₁₀ Fuel Oil emissions did not include the condensable portion, please revise the Specific Condition 1 table and as follows:

SN	Description	Pollutant	lb/hr	tpy
01	Unit 1 – Natural Gas	PM ₁₀	5.0	21.9
		SO ₂	0.4	1.7 1.8
		VOC	3.6 3.7	15.9
		CO	55.3	242.1
		NO _x	381.0	1668.7
	Unit 1 – No. 6 Fuel Oil	PM ₁₀	38.6 45.2	8.5 9.9
		SO ₂	344.4*	75.4 75.5
		VOC	4.6	1.0
		CO	21.9 22.0	4.8
		NO _x	381.0	83.4
	Unit 2 – Natural Gas	PM ₁₀	5.0	21.9
		SO ₂	0.4	1.7 1.8
		VOC	3.6 3.7	15.9
		CO	55.3	242.1
		NO _x	381.0	1668.7

SN	Description	Pollutant	lb/hr	tpy
	Unit 2 – No. 6 Fuel Oil	PM ₁₀	38.6 45.2	8.5 9.9
		SO ₂	344.4*	75.4 75.5
		VOC	4.6	1.0
		CO	21.9 22.0	4.8
		NO _x	381.0	83.4
02	Unit 3 – Natural Gas	PM ₁₀	8.3	36.3
		SO ₂	0.7	2.9
		VOC	6.0	26.3
		CO	91.6	401.0 401.1
		NO _x	631.0	2763.8
	Unit 3 – No. 6 Fuel Oil	PM ₁₀	66.9 78.3	14.6 17.2
		SO ₂	597.2*	130.8
		VOC	7.9 8.0	1.7 1.8
		CO	38.0 38.1	8.3 8.4
		NO _x	631.0	138.2
03	Unit 4 – Natural Gas	PM ₁₀	44.5	194.7 194.8
		SO ₂	3.5 3.6	15.4
		VOC	32.2	140.9 141.0
		CO	140.4	615.0
		NO _x	3393.0	14861.3 14861.4
	Unit 4 – No. 6 Fuel Oil	PM ₁₀	304.9 357.0	66.8 78.2
		SO ₂	2000.0*	596.3
		VOC	36.1	7.9
		CO	173.4 173.5	38.0
		NO _x	3393.0	743.1

Response #1:

The above requested changes have been made. The changes were from including the condensable for PM and rounding for other pollutants.

Comment #2: Specific Condition 2, please revise the Specific Condition 2 Table as follows:

SN	Description	Pollutant	lb/hr	tpy
01	Unit 1 – Natural Gas	PM	5.0	21.9
	Unit 1 – No. 6 Fuel Oil	PM	61.0 61.1	13.4
	Unit 2 – Natural Gas	PM	5.0	21.9
	Unit 2 – No. 6 Fuel Oil	PM	61.0 61.1	13.4
	Unit 1 & Unit 2 (HAPs)	Acenaphthene*	0.01	0.01
	Fluoranthene*	0.01	0.01	
	Fluorene*	0.01	0.01	
	Formaldehyde*	0.2 0.38	0.3 1.7	

SN	Description	Pollutant	lb/hr	tpy
		Hexane*	2.5	11.0
		Hydrogen Chloride*	3.2	13.7
		Phenanthrene*	0.01	0.01
		POM*	0.01 0.02	0.05
		2,3,7,8-TCD*	1.09E-8	4.78E-8
		Toluene*	0.06	0.24
		Antimony*	0.02 0.05	0.01 0.21
		Arsenic*	0.01 0.02	0.01
		Beryllium*	0.01	0.01
		Cadmium*	0.01	0.02
		Cobalt*	0.03 0.06	0.01 0.24
		Manganese*	0.03	0.12
		Mercury*	0.01	0.01
		Nickel*	0.75	3.3
		Selenium*	0.01	0.03
02	Unit 3 – Natural Gas	PM	8.3	36.3
	Unit 3 – No. 6 Fuel Oil	PM	105.8 105.9	23.2
	Unit 3 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.26 0.33	1.1 1.5
		Hexane*	2.1	9.1
		Hydrogen Chloride*	2.7	11.9
		Phenanthrene*	0.01	0.01
		POM*	0.01	0.04 0.05
		2,3,7,8-TCD*	9.47E-9	4.15E-8
		Toluene*	0.05	0.21
		Antimony*	0.04	0.18
		Arsenic*	0.01	0.05
		Beryllium*	0.02 0.01	0.01
		Cadmium*	0.01	0.02
		Cobalt*	0.05	0.2
		Manganese*	0.03	0.1
		Mercury*	0.01	0.01
Nickel*	0.65	2.82		
Selenium*	0.01	0.03		
03	Unit 4 – Natural Gas	PM	44.5	194.7 194.8
	Unit 4 – No. 6 Fuel Oil	PM	482.5	105.7
	Unit 4 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
Formaldehyde*		1.2 1.5	5.02 6.53	

SN	Description	Pollutant	lb/hr	tpy
		Hexane*	9.9 10.5	43.2 46.1
		Hydrogen Chloride*	12.4	54.1
		Phenanthrene*	0.01	0.01
		POM*	0.05	0.19 0.20
		2,3,7,8-TCD*	4.32E-8	1.89E-7
		Toluene*	0.22	0.95
		Antimony*	0.19	0.80
		Arsenic*	0.05	0.21
		Beryllium*	0.01	0.01
		Cadmium*	0.02	0.06 0.07
		Cobalt*	0.21	0.92
		Manganese*	0.11	0.46
		Mercury*	0.01	0.02
		Nickel*	2.92 2.93	12.9
		Selenium*	0.03	0.11

Response #2: The above requested changes have been made. The changes were from including the condensable for PM and rounding for other pollutants.

Comment #3: Specific Condition 25, Please reword as shown below to clarify this requirement must be completed within 180 operating days from the permit 1717-AOP-R2 issue date. Additionally, please note as shown below that SN-03 completed this requirement on May 24 and 25, 2006.

“The permittee shall conduct a one-time stack test to verify compliance with the CO emission rates listed for these sources (SN-01 and SN-02). This test shall be completed within the first 180 operating days after issuance of permit 1717-AOP-R2 (January 5, 2005). A copy of the results of these tests shall be kept on site and made available to Department personnel upon request. The test results shall be submitted to the Department in accordance with General Provision 7. SN-03 completed this requirement on May 24 and 25, 2006. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]”

Response #3: The above requested revisions have been made.

Comment #4: Specific Condition 27, Please reword as shown below. 40 CFR Part 75, Subpart G only requires 21 days notice for CEMS certification testing (75.61 (a)(1)(i)). Test results must be submitted within 45 days after completion of the certification test (75.63 (a)(2)(ii)). Additionally, Specific Condition 28 addresses the monitoring plan, so it does not need to be addressed in condition 27.

“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]”

Response #4: The above requested revisions have been made.

Comment #5: Specific Condition 30, Please reword as shown below. 40 CFR Part 75.10 requires CEMS to be operated, “at all times that the affected unit combust any fuel ...” (75.10(d)). The language below clarifies the CEMS is not required to be operated when the unit is shut down and no fuel is being combusted,

“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]”

Response #5: Specific Condition 30 has been revised as requested.

Comment #6: Compliance Plan and Schedule, please reword as shown below and correct the typo. The Arkansas Pollution Control and Ecology Commission granted a variance from the September 27, 2013 compliance date due to EPA’s failure to approve the Arkansas Regional Haze SIP, therefore the date should be removed.

Per the following excerpt from minute order passed 03/26/2010:

“The sources subject-to-BART listed at Regulation 19.1504(A) is granted a variance from the October 15, 2013, deadline imposed by Regulation 19.1504(B), and, instead, the sources subject-to-BART shall be required to comply with BART as expeditiously as practicable but in no event later than five (5) years after EPA approval of the Arkansas Regional HAZE SIP.”

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.

Response #6: The “Compliance Plan and Schedule,” has been revised as requested.

Comment #7: Plantwide Condition 8, Second to the last sentence, replace Iv with IV.

Response #7: The above requested revision has been made.

Comment #8: Appendix A, Please update the Maximum Capacity Emission Rates in Appendix A as follows:

Maximum Capacity Emission Rates				
			100% Natural Gas (tpy)	100% Fuel Oil (tpy)
01 (C1)	Unit 1	PM	23.0 21.9	271.6 267.3
		PM ₁₀	17.3 21.9	198.0
		SO ₂	2.2 1.8	3017.8 1508.3
		VOC	16.7 15.9	20.1
		CO	255.0 242.1	96.4
		NO _x	1669.0 1668.7	903.2 1668.7
	Unit 2	PM	23.0 21.9	271.6 267.3
		PM ₁₀	17.3 21.9	198.0
		SO ₂	2.2 1.8	3017.8 1508.3
		VOC	16.7 15.9	20.1
		CO	255.0 242.1	96.4
		NO _x	1669.0 1668.7	903.2 1668.7
02 (C3)	Unit 3	PM	38.1 36.3	461.7 463.4
		PM ₁₀	29.0 36.3	343.4 342.9
		SO ₂	4.4 2.9	5230.2 2615.4
		VOC	28.0 26.3	34.6
		CO	422.0 401.1	166.4 166.6
		NO _x	2764.0 2763.8	1568.0 2763.7
03 (C4)	Unit 4	PM	197.1 194.8	2376.2 2113.3
		PM ₁₀	146.0 194.8	1763.0 1563.5
		SO ₂	15.4	26818.7 11926.3
		VOC	141.0	177.8 158.0
		CO	615.0	854.1 759.6
		NO _x	14861.0 14861.4	5466.2 14861.3

Response #8:

The above requested changes have been made. The changes were from including the condensable for PM and rounding for other pollutants.

Comment #9: Appendix C and D, Please replace the Acid Rain and CAIR Permit Applications with the more current ones submitted in 2009. Copies are attached for your convenience.

Response #9:

Appendix C and D have been replaced as requested.

Department Comments:

Comment #1: The second to the last sentence of the Summary of Permit Activity, Page 5, has been revised to read as follows:

“Criteria pollutant emissions are permitted at 274.9 tons per year of PM, 274.9 tons per year of PM₁₀, 878.1 tons per year of SO₂, 199.7 tons per year of VOC, 1500.3 tons per year of CO, 20,962.6 tons per year of NO_x and Hazardous Air Pollutants at major source levels.”

This is necessary due to facility revisions made.

Response #1:

The above requested change has been made.

Comment #2:

Chromium and Chromium VI were listed as pollutants in the application.

Response #2:

Chromium and Chromium VI have been added to the permit with the following emission rates:

SN	Description	Pollutant	lb/hr	tpy
01	Unit 1 & Unit 2 (HAPs)	Chromium*	0.01	0.03
		Chromium IV*	0.01	0.01
02	Unit 3 (HAPs)	Chromium*	0.01	0.03
		Chromium IV*	0.01	0.01
03	Unit 4 (HAPs)	Chromium*	0.03	0.13
		Chromium IV*	0.01	0.04

ADEQ

ARKANSAS
Department of Environmental Quality

AUG 15 2011

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

Dear Mr. Johnson:

The enclosed Permit No. 1717-AOP-R5 is your authority to construct, operate, and maintain the equipment and/or control apparatus as set forth in your application initially received on 6/16/2009.

After considering the facts and requirements of A.C.A. §8-4-101 et seq., and implementing regulations, I have determined that Permit No. 1717-AOP-R5 for the construction, operation and maintenance of an air pollution control system for Entergy Services, Inc. - Lake Catherine Plant to be issued and effective on the date specified in the permit, unless a Commission review has been properly requested under Arkansas Department of Pollution Control & Ecology Commission's Administrative Procedures, Regulation 8, within thirty (30) days after service of this decision.

The applicant or permittee and any other person submitting public comments on the record may request an adjudicatory hearing and Commission review of the final permitting decisions as provided under Chapter Six of Regulation No. 8, Administrative Procedures, Arkansas Pollution Control and Ecology Commission. Such a request shall be in the form and manner required by Regulation 8.603, including filing a written Request for Hearing with the APC&E Commission Secretary at 101 E. Capitol Ave., Suite 205, Little Rock, Arkansas 72201. If you have any questions about filing the request, please call the Commission at 501-682-7890.

Sincerely,



Mike Bates
Chief, Air Division

ADEQ OPERATING AIR PERMIT

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

Permit No. : 1717-AOP-R5

IS ISSUED TO:

Entergy Services, 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

AUG 15 2011

Date

Entergy Services, Inc. - Lake Catherine Plant
Permit #: 1717-AOP-R5
AFIN: 30-00011

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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

Entergy Services, Inc. - Lake Catherine Plant
Permit #: 1717-AOP-R5
AFIN: 30-00011

SECTION I: FACILITY INFORMATION

PERMITTEE: Entergy Services, Inc. - Lake Catherine Plant

AFIN: 30-00011

PERMIT NUMBER: 1717-AOP-R5

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 72104. This permit issuance was prompted by the facility’s renewal permit application. Due to modeling issues with SO₂ during fuel oil combustion, this permit incorporates a bubbled maximum plant wide SO₂ emission limit of 2000 pounds per hour when combusting fuel oil, which resulted in a decrease of emissions. The largest decrease being SO₂ at 1049.1 tons per year. Criteria pollutant emissions are permitted at 274.9 tons per year of PM, 274.9 tons per year of PM₁₀, 878.1 tons per year of SO₂, 199.7 tons per year of VOC, 1500.3 tons per year of CO, 20,962.6 tons per year of NO_x and Hazardous Air Pollutants at major source levels. Changes in emissions of NO_x, PM and PM₁₀ are due to emission factors.

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 four-unit electric generating station which generates electric energy for sale. Electricity for sale is produced by using natural gas as their primary and No. 6 fuel oil as the secondary fuel in both boilers. The boilers produce steam to drive turbines which turn the electric generators.

Unit 1 and 2 boilers exhausts out of one stack, SN-01. Unit 3 and Unit 4 boilers exhausts stacks SN-02 & SN-03 respectively. The No. 6 fuel oil is stored in six tanks on site. These tanks are designated as Fuel Oil Day Tank #3 (SN-06), Fuel Oil Storage Tank #4 (SN-07), Fuel Oil Storage Tanks #5 (SN-08), and Fuel Oil Storage Tank #6 (SN-09). While the tanks and their connecting lines do not currently contain oil, Entergy maintains this equipment and retains the right to burn oil in this permit until further notice or revision.

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 July 18, 2009
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective January 25, 2009
40 CFR Part 75, Acid Rain Program

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	710.6	274.9
		PM ₁₀	525.7	274.9
		SO ₂	2000.0**	878.1
		VOC	53.9	199.7
		CO	375.7	1500.3
		NO _x	4786.0	20962.6
HAPs*		2,3,7,8 – TCD*	6.36E-8	2.78E-7
		Acenaphthene*	0.12	0.12
		Antimony*	0.28	1.19
		Arsenic*	0.08	0.27
		Beryllium*	0.02	0.03
		Cadimium*	0.04	0.11
		Cobalt*	0.32	1.36
		Chromium*	0.05	0.19
		Chromium IV*	0.03	0.06
		Fluoranthene*	0.03	0.03
		Fluorene*	0.03	0.03

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Formaldehyde*	2.21	9.73
		Hexane*	15.10	66.20
		Hydrogen Chloride*	18.22	79.7
		Manganese*	0.17	0.68
		Mercury*	0.03	0.04
		Nickel*	4.33	19.0
		Phenanthrene*	0.03	0.03
		POM*	0.08	0.30
		Selenium*	0.05	0.17
		Toluene*	0.33	1.40
01 (C1)	Unit 1 – Natural Gas (100% Consumption)	PM	5.0	21.9
		PM ₁₀	5.0	21.9
		SO ₂	0.4	1.8
		VOC	3.7	15.9
		CO	55.3	242.1
		NO _x	381.0	1668.7
	Unit – 1 No. 6 Fuel Oil	PM	61.1	13.4
		PM ₁₀	45.2	9.9
		SO ₂	344.4**	75.5
		VOC	4.6	1.0
		CO	22.0	4.8
		NO _x	381.0	83.4
	Unit 2 – Natural Gas	PM	5.0	21.9
		PM ₁₀	5.0	21.9
		SO ₂	0.4	1.8
		VOC	3.7	15.9
		CO	55.3	242.1
		NO _x	381.0	1668.7
	Unit 2 – No. 6 Fuel Oil	PM	61.1	13.4
		PM ₁₀	45.2	9.9
		SO ₂	344.4**	75.5
		VOC	4.6	1.0
		CO	22.0	4.8
		NO _x	381.0	83.4
01	Unit 1 & 2 (HAPs)	2,3,7,8 – TCD*	1.09E-8	4.78E-8
		Acenaphthene*	0.01	0.01
		Antimony*	0.05	0.21
		Arsenic*	0.02	0.01
		Beryllium*	0.01	0.01
		Cadimum*	0.01	0.02

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Cobalt*	0.06	0.24
		Chromium*	0.01	0.03
		Chromium IV*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.38	1.70
		Hexane*	2.50	11.00
		Hydrogen Chloride*	3.12	13.70
		Manganese*	0.03	0.12
		Mercury*	0.01	0.01
		Nickel*	0.75	3.30
		Phenanthrene*	0.01	0.01
		POM*	0.02	0.05
		Selenium*	0.01	0.03
		Toluene*	0.06	0.24
02 (C3)	Unit 3 – Natural Gas	PM	8.3	36.3
		PM ₁₀	8.3	36.3
		SO ₂	0.7	2.9
		VOC	6.0	26.3
		CO	91.6	401.1
		NO _x	631.0	2763.8
	Unit 3 – No. 6 Fuel Oil	PM	105.9	23.2
		PM ₁₀	78.3	17.2
		SO ₂	597.2**	130.8
		VOC	8.0	1.8
		CO	38.1	8.4
		NO _x	631.0	138.2
02	Unit 3 (HAPs)	2,3,7,8 – TCD*	9.47E-9	4.15E-8
		Acenaphthene*	0.01	0.01
		Antimony*	0.04	0.18
		Arsenic*	0.01	0.05
		Beryllium*	0.01	0.01
		Cadimium*	0.01	0.02
		Cobalt*	0.05	0.20
		Chromium*	0.01	0.03
		Chromium IV*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.33	1.50
Hexane*	2.10	9.10		

EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Hydrogen Chloride*	2.70	11.90
		Manganese*	0.03	0.10
		Mercury*	0.01	0.01
		Nickel*	0.65	2.82
		Phenanthrene*	0.01	0.01
		POM*	0.01	0.05
		Selenium*	0.01	0.03
		Toluene*	0.05	0.21
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
	Unit 4 – No. 6 Fuel Oil	PM	482.5	105.7
		PM ₁₀	357.0	78.2
		SO ₂	2000.0**	596.3
		VOC	36.1	7.9
		CO	173.5	38.0
		NO _x	3393.0	743.1
03	Unit 4 – (HAPs)	2,3,7,8 – TCD*	4.32E-8	1.89E-7
		Acenaphthene*	0.01	0.01
		Antimony*	0.19	0.80
		Arsenic*	0.05	0.21
		Beryllium*	0.01	0.01
		Cadimium*	0.02	0.07
		Cobalt*	0.21	0.92
		Chromium*	0.03	0.13
		Chromium IV*	0.01	0.04
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	1.50	6.53
		Hexane*	10.50	46.10
		Hydrogen Chloride*	12.40	54.10
		Manganese*	0.11	0.46
		Mercury*	0.01	0.02
		Nickel*	2.93	12.90
		Phenanthrene*	0.01	0.01
		POM*	0.05	0.20
		Selenium*	0.03	0.11

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EMISSION SUMMARY				
Source Number	Description	Pollutant	Emission Rates	
			lb/hr	tpy
		Toluene*	0.22	0.95
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 – TCD (Tetrachlorodibenzo-p-dioxin)

**Plantwide limit of 2000 lb/hr for SN-01 through SN-03 when firing No. 6 Fuel Oil also subject to Specific condition 4.

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.

SECTION IV: SPECIFIC CONDITIONS

SN-01, SN-02, SN-03
 Boilers

Source Description

The Lake Catherine facility is a four-unit electric generating station which generates electric energy for sale. Unit 1 and Unit 2 boilers (SN-01) are 658 MMBtu/hr boilers. SN-02 or Unit 3 boiler is a 1090 MMBtu/hr boiler and SN-03 or Unit 4 is a boiler capable of 5850 MMBtu/hr (nominal rating 560 MWg (megawatts gross)). Electricity is produced by using natural gas as the primary fuel and No. 6 fuel oil as the secondary fuel in all four boilers 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.

The boilers are permitted to operate under alternating scenarios. Scenario I represents combustion from natural gas and Scenario II represents combustion from natural gas and No. 6 fuel oil. Lake Catherine may also burn residual oil, and non-hazardous boiler chemical cleaning wastes. Currently all fuel is natural gas. No control devices are associated with these units.

Specific Conditions

- 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 14. Compliance with SN-01, SN-02, and SN-03 NO_x emissions shall be demonstrated through compliance with Specific Condition 15. Compliance with PM₁₀, CO, and VOC emissions shall be demonstrated through compliance with Specific Condition 9. Compliance is based on a 24 hour block average. [Regulation 19, §19.501 et seq., effective June 18, 2010 and 40 CFR Part 52, Subpart E]

SN	Description	Pollutant	lb/hr	tpy
01	Unit 1 – Natural Gas	PM ₁₀	5.0	21.9
		SO ₂	0.4	1.8
		VOC	3.7	15.9
		CO	55.3	242.1
		NO _x	381.0	1668.7
	Unit 1 – No. 6 Fuel Oil	PM ₁₀	45.2	9.9
		SO ₂	344.4*	75.5
		VOC	4.6	1.0
		CO	22.0	4.8

SN	Description	Pollutant	lb/hr	tpy
	Unit 2 – Natural Gas	NO _x	381.0	83.4
		PM ₁₀	5.0	21.9
		SO ₂	0.4	1.8
		VOC	3.7	15.9
		CO	55.3	242.1
	Unit 2 – No. 6 Fuel Oil	NO _x	381.0	1668.7
		PM ₁₀	45.2	9.9
		SO ₂	344.4*	75.5
		VOC	4.6	1.0
		CO	22.0	4.8
02	Unit 3 – Natural Gas	NO _x	381.0	83.4
		PM ₁₀	8.3	36.3
		SO ₂	0.7	2.9
		VOC	6.0	26.3
		CO	91.6	401.1
	Unit 3 – No. 6 Fuel Oil	NO _x	631.0	2763.8
		PM ₁₀	78.3	17.2
		SO ₂	597.2*	130.8
		VOC	8.0	1.8
		CO	38.1	8.4
03	Unit 4 – Natural Gas	NO _x	631.0	138.2
		PM ₁₀	44.5	194.8
		SO ₂	3.6	15.4
		VOC	32.2	141.0
		CO	140.4	615.0
	Unit 4 – No. 6 Fuel Oil	NO _x	3393.0	14861.4
		PM ₁₀	357.0	78.2
		SO ₂	2000.0*	596.3
		VOC	36.1	7.9
		CO	173.5	38.0
		NO _x	3393.0	743.1

*Also subject to Specific Condition 4.

- 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 9. 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, effective June 18, 2010, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

SN	Description	Pollutant	lb/hr	tpy
01	Unit 1 – Natural Gas	PM	5.0	21.9
	Unit 1 – No. 6 Fuel Oil	PM	61.1	13.4
	Unit 2 – Natural Gas	PM	5.0	21.9
	Unit 2 – No. 6 Fuel Oil	PM	61.1	13.4
	Unit 1 & Unit 2 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.38	1.7
		Hexane*	2.50	11.0
		Hydrogen Chloride*	3.20	13.7
		Phenanthrene*	0.01	0.01
		POM*	0.02	0.05
		2,3,7,8-TCD*	1.09E-8	4.78E-8
		Toluene*	0.06	0.24
		Antimony*	0.05	0.21
		Arsenic*	0.02	0.01
		Beryllium*	0.01	0.01
		Cadmium*	0.01	0.02
		Cobalt*	0.06	0.24
Chromium*	0.10	0.10		
Chromium IV*	0.10	0.10		
Manganese*	0.03	0.12		
Mercury*	0.01	0.01		
Nickel*	0.75	3.3		
Selenium*	0.01	0.03		
02	Unit 3 – Natural Gas	PM	8.3	36.3
	Unit 3 – No. 6 Fuel Oil	PM	105.9	23.2
	Unit 3 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	0.33	1.50
		Hexane*	2.10	9.10
		Hydrogen Chloride*	2.70	11.90
		Phenanthrene*	0.01	0.01
		POM*	0.01	0.05
		2,3,7,8-TCD*	9.47E-9	4.15E-8
		Toluene*	0.05	0.21
		Antimony*	0.04	0.18
Arsenic*	0.01	0.05		

SN	Description	Pollutant	lb/hr	tpy
		Beryllium*	0.01	0.01
		Cadmium*	0.01	0.02
		Cobalt*	0.05	0.20
		Chromium*	0.10	0.03
		Chromium IV*	0.10	0.01
		Manganese*	0.03	0.10
		Mercury*	0.01	0.01
		Nickel*	0.65	2.82
		Selenium*	0.01	0.03
	Unit 4 – Natural Gas	PM	44.5	194.8
	Unit 4 – No. 6 Fuel Oil	PM	482.5	105.7
03	Unit 4 (HAPs)	Acenaphthene*	0.01	0.01
		Fluoranthene*	0.01	0.01
		Fluorene*	0.01	0.01
		Formaldehyde*	1.50	6.53
		Hexane*	10.50	46.10
		Hydrogen Chloride*	12.40	54.10
		Phenanthrene*	0.01	0.01
		POM*	0.05	0.20
		2,3,7,8-TCDD*	4.32E-8	1.89E-7
		Toluene*	0.22	0.95
		Antimony*	0.19	0.80
		Arsenic*	0.05	0.21
		Beryllium*	0.01	0.01
		Cadmium*	0.02	0.07
		Cobalt*	0.21	0.92
		Chromium*	0.03	0.13
		Chromium IV*	0.01	0.04
Manganese*	0.11	0.46		
Mercury*	0.01	0.02		
Nickel*	2.93	12.90		
Selenium*	0.03	0.11		

- 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 scenario under which the facility or source is operating. [Regulation 26, §26.701 and 40 CFR 70.6]
- The permittee shall not exceed an emission rate of 2000 pounds per hour of SO₂ at SN-01 through SN-03 combined. The permittee shall use the method used in Specific Condition 14 and the hourly record thereof to determine compliance with this condition. These records shall be maintained on site and made available to Department personnel upon request. [Regulation 19, §19.501 et seq & 40 CFR Part 52, Subpart E]

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5. The permittee shall not exceed a Sulfur content of 0.5% for fuel oil when firing fuel oil. [Regulation 19, §190705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
6. The permittee shall not exceed 40 percent opacity from SN-01, SN-02, and 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 boilers and complying with Specific Condition 3. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]
7. The permittee shall not exceed 40 percent opacity from SN-01, SN-02, and SN-03 as measured by EPA Reference Method 9 when firing No. 6 fuel oil. Compliance with this condition shall be demonstrated by complying with Specific Condition 8. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]
8. The permittee shall conduct daily observations of the opacity from SN-01 thru SN-03 when burning No. 6 fuel oil. If visible emissions are in excess of 40%, then the permittee shall conduct a 6-minute opacity reading in accordance with EPA Reference Method 9 and document the results that day. The facility shall certify weekly that observations were made each day and the results of the observations. The results of these observations shall be kept on site and made available for inspection upon request. [Regulation 19, §19.503 and 40 CFR Part 52, Subpart E]
9. 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]
10. The permittee shall update, twice per day, records which demonstrate compliance with Specific Condition 9. 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]
11. Fuel oil usage shall not exceed 22,230,000 gallons during any consecutive twelve month period. 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, §19.705, A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR 70.6]
12. The permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 11. 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 individual month's data shall be submitted in accordance with General Provision 7.

[Regulation 19, §19.705 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

13. 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 or No. 6 fuel oil as set forth in Specific Condition 11 and 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]

SN	Description	Pollutant	tpy
01	Unit 1	PM	21.9
		PM ₁₀	21.9
		SO ₂	75.5
		VOC	15.9
		CO	242.1
	Unit 2	NO _x	1668.7
		PM	21.9
		PM ₁₀	21.9
		SO ₂	75.5
		VOC	15.9
02	Unit 3	CO	242.1
		NO _x	1668.7
		PM	36.3
		PM ₁₀	36.3
		SO ₂	130.8
03	Unit 4	VOC	26.3
		CO	401.1
		NO _x	2763.8
		PM	194.8
		PM ₁₀	194.8
		SO ₂	596.3
		VOC	141.0
		CO	615.0
		NO _x	14861.4

14. 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]

15. The permittee shall determine NO_x emissions for units 1, 2, 3 and 4 (SN-01, SN-02 and 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]
16. In the event that Units 1, 2, 3 or 4 exceed the levels required to be peaking units 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]
17. The permittee shall submit an excess emissions report for SO₂ and NO_x for these sources 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]
18. The permittee shall determine CO₂ emissions based on the measured carbon content of the fuel and 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)]
19. SN 1, 2, and 3 are considered gas-fired units and are exempt from Part 75 opacity monitoring as per 40 CFR Part 75.10 (a) (4). [Regulation 19, §19.304 and 40 CFR 72.2]
20. 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]
21. 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

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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]

22. The permittee shall submit the required quarterly monitoring reports to EPA headquarters. [Regulation 19, §19.304 and 40 CFR Part 75.10]
23. The permittee shall perform Relative Accuracy tests if applicable. [Regulation 19, §19.304 and 40 CFR 75]
24. 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)]
25. The permittee shall conduct a one-time stack test to verify compliance with the CO emission rates listed for these sources (SN-01 and SN-02). This test shall be completed within the first 180 operating days after issuance of permit 1717-AOP-R2 (January 5, 2005). A copy of the results of these tests shall be kept on site and made available to Department personnel upon request. The test results shall be submitted to the Department in accordance with General Provision 7. SN-03 completed this requirement on May 24 and 25, 2006. [Regulation 19, §19.702 and 40 CFR Part 52, Subpart E]

Acid Rain Program

26. The affected units (SN-01 through SN-03) are subject to and shall comply with applicable provisions of the Acid Rain Program (40 CFR Parts 72, 73, and 75).
27. 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]
28. 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]
29. 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]
30. 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

31. 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 32 and 33. [Regulation 19, §19.501 et seq. and 40 CFR Part 52, Subpart E]

SN	Pollutant	lb/hr	tpy
04	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

32. 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]
33. 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]
34. The permittee shall maintain records which demonstrate compliance with the limit set in Specific Condition 33. 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 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 Services, 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 A.C.A. §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) days in advance of such test. The permittee shall submit the compliance test results to the Department within thirty (30) 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 A.C.A. §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 A.C.A. §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 A.C.A. §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 A.C.A. §8-4-304 and §8-4-311]

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 IV)

8. The 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	Group A-1
Units 1 & 2 BFW Pump LO Reservoir	Group 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	Group 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	

Entergy Services, Inc. - Lake Catherine Plant
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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		Group A-12
Unit 4 LO Batch Tanks (2 - 12,000 gal)		Group 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 §26.701(B) of the Regulations of the Arkansas Operating Air Permit Program (Regulation 26)]
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)]

Entergy Services, Inc. - Lake Catherine Plant

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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 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 within thirty (30) days of the end of the reporting period. Although the reports are due every six months, each report shall contain a full year of data. 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 C.F.R. 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;
 - 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 A.C.A. §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)]
- 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;
 - 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 within 30 days following the last day of the anniversary month of the initial Title V permit. 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 A.C.A. §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:
 - 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 A.C.A. §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 A.C.A. §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.

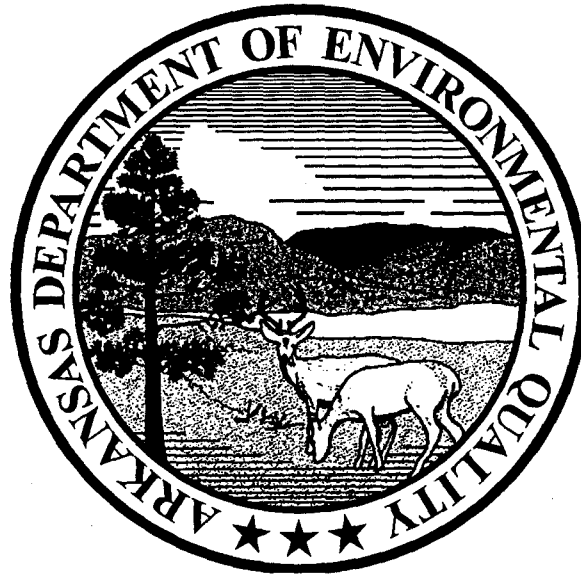
[Regulation 18, §18.314(C), Regulation 19, §19.416(C), Regulation 26, §26.1013(C), A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311, and 40 CFR Part 52, Subpart E]

APPENDIX A
Maximum Capacity Emission Rates

Maximum Capacity Emission Rates				
			100% Natural Gas (tpy)	100% Fuel Oil (tpy)
01 (C1)	Unit 1	PM	21.9	267.3
		PM ₁₀	21.9	198.0
		SO ₂	1.8	1508.3
		VOC	15.9	20.1
		CO	242.1	96.4
		NO _x	1668.7	1668.7
	Unit 2	PM	21.9	267.3
		PM ₁₀	21.9	198.0
		SO ₂	1.8	1508.3
		VOC	15.9	20.1
		CO	242.1	96.4
		NO _x	1668.7	1668.7
02 (C3)	Unit 3	PM	36.3	463.4
		PM ₁₀	36.3	342.4
		SO ₂	2.9	2615.4
		VOC	26.3	34.6
		CO	401.1	166.6
		NO _x	2763.8	2763.7
03 (C4)	Unit 4	PM	194.8	2113.3
		PM ₁₀	194.8	1563.5
		SO ₂	15.4	11926.3
		VOC	141.0	158.0
		CO	615.0	759.6
		NO _x	14861.4	14861.3

APPENDIX B
ADEQ CEMS Conditions

Arkansas Department of Environmental Quality



CONTINUOUS EMISSION MONITORING SYSTEMS CONDITIONS

Revised August 2004

PREAMBLE

These conditions are intended to outline the requirements for facilities required to operate Continuous Emission Monitoring Systems/Continuous Opacity Monitoring Systems (CEMS/COMS). Generally there are three types of sources required to operate CEMS/COMS:

1. CEMS/COMS required by 40 CFR Part 60 or 63,
2. CEMS required by 40 CFR Part 75,
3. CEMS/COMS required by ADEQ permit for reasons other than Part 60, 63 or 75.

These CEMS/COMS conditions are not intended to supercede Part 60, 63 or 75 requirements.

- Only CEMS/COMS in the third category (those required by ADEQ permit for reasons other than Part 60, 63, or 75) shall comply with SECTION II, MONITORING REQUIREMENTS and SECTION IV, QUALITY ASSURANCE/QUALITY CONTROL.
- All CEMS/COMS shall comply with Section III, NOTIFICATION AND RECORDKEEPING.

SECTION I

DEFINITIONS

Continuous Emission Monitoring System (CEMS) - The total equipment required for the determination of a gas concentration and/or emission rate so as to include sampling, analysis and recording of emission data.

Continuous Opacity Monitoring System (COMS) - The total equipment required for the determination of opacity as to include sampling, analysis and recording of emission data.

Calibration Drift (CD) - The difference in the CEMS output reading from the established reference value after a stated period of operation during which no unscheduled maintenance, repair, or adjustments took place.

Back-up CEMS (Secondary CEMS) - A CEMS with the ability to sample, analyze and record stack pollutant to determine gas concentration and/or emission rate. This CEMS is to serve as a back-up to the primary CEMS to minimize monitor downtime.

Excess Emissions - Any period in which the emissions exceed the permit limits.

Monitor Downtime - Any period during which the CEMS/COMS is unable to sample, analyze and record a minimum of four evenly spaced data points over an hour, except during one daily zero-span check during which two data points per hour are sufficient.

Out-of-Control Period - Begins with the time corresponding to the completion of the fifth, consecutive, daily CD check with a CD in excess of two times the allowable limit, or the time corresponding to the completion of the daily CD check preceding the daily CD check that results in a CD in excess of four times the allowable limit and the time corresponding to the completion of the sampling for the RATA, RAA, or CGA which exceeds the limits outlined in Section IV. Out-of-Control Period ends with the time corresponding to the completion of the CD check following corrective action with the results being within the allowable CD limit or the completion of the sampling of the subsequent successful RATA, RAA, or CGA.

Primary CEMS - The main reporting CEMS with the ability to sample, analyze, and record stack pollutant to determine gas concentration and/or emission rate.

Relative Accuracy (RA) - The absolute mean difference between the gas concentration or emission rate determined by the CEMS and the value determined by the reference method plus the 2.5 percent error confidence coefficient of a series of tests divided by the mean of the reference method tests of the applicable emission limit.

Span Value - The upper limit of a gas concentration measurement range.

SECTION II

MONITORING REQUIREMENTS

- A. For new sources, the installation date for the CEMS/COMS shall be no later than thirty (30) days from the date of start-up of the source.
- B. For existing sources, the installation date for the CEMS/COMS shall be no later than sixty (60) days from the issuance of the permit unless the permit requires a specific date.
- C. Within sixty (60) days of installation of a CEMS/COMS, a performance specification test (PST) must be completed. PST's are defined in 40 CFR, Part 60, Appendix B, PS 1-9. The Department may accept alternate PST's for pollutants not covered by Appendix B on a case-by-case basis. Alternate PST's shall be approved, in writing, by the ADEQ CEM Coordinator prior to testing.
- D. Each CEMS/COMS shall have, as a minimum, a daily zero-span check. The zero-span shall be adjusted whenever the 24-hour zero or 24-hour span drift exceeds two times the limits in the applicable performance specification in 40 CFR, Part 60, Appendix B. Before any adjustments are made to either the zero or span drifts measured at the 24-hour interval the excess zero and span drifts measured must be quantified and recorded.
- E. All CEMS/COMS shall be in continuous operation and shall meet minimum frequency of operation requirements of 95% up-time for each quarter for each pollutant measured. Percent of monitor down-time is calculated by dividing the total minutes the monitor is not in operation by the total time in the calendar quarter and multiplying by one hundred. Failure to maintain operation time shall constitute a violation of the CEMS conditions.
- F. Percent of excess emissions are calculated by dividing the total minutes of excess emissions by the total time the source operated and multiplying by one hundred. Failure to maintain compliance may constitute a violation of the CEMS conditions.
- G. All CEMS measuring emissions shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive fifteen minute period unless more cycles are required by the permit. For each CEMS, one-hour averages shall be computed from four or more data points equally spaced over each one hour period unless more data points are required by the permit.
- H. All COMS shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- I. When the pollutant from a single affected facility is released through more than one point, a CEMS/COMS shall be installed on each point unless installation of fewer systems is approved, in writing, by the ADEQ CEM Coordinator. When more than one CEM/COM is used to monitor emissions from one affected facility the owner or operator shall report the results as required from each CEMS/COMS.

SECTION III

NOTIFICATION AND RECORD KEEPING

- A. When requested to do so by an owner or operator, the ADEQ CEM Coordinator will review plans for installation or modification for the purpose of providing technical advice to the owner or operator.
- B. Each facility which operates a CEMS/COMS shall notify the ADEQ CEM Coordinator of the date for which the demonstration of the CEMS/COMS performance will commence (i.e. PST, RATA, RAA, CGA). Notification shall be received in writing no less than 15 days prior to testing. Performance test results shall be submitted to the Department within thirty days after completion of testing.
- C. Each facility which operates a CEMS/COMS shall maintain records of the occurrence and duration of start up/shut down, cleaning/soot blowing, process problems, fuel problems, or other malfunction in the operation of the affected facility which causes excess emissions. This includes any malfunction of the air pollution control equipment or any period during which a continuous monitoring device/system is inoperative.
- D. Except for Part 75 CEMs, each facility required to install a CEMS/COMS shall submit an excess emission and monitoring system performance report to the Department (Attention: Air Division, CEM Coordinator) at least quarterly, unless more frequent submittals are warranted to assess the compliance status of the facility. Quarterly reports shall be postmarked no later than the 30th day of the month following the end of each calendar quarter. Part 75 CEMs shall submit this information semi-annually and as part of Title V six (6) month reporting requirement if the facility is a Title V facility.
- E. All excess emissions shall be reported in terms of the applicable standard. Each report shall be submitted on ADEQ Quarterly Excess Emission Report Forms. Alternate forms may be used with prior written approval from the Department.
- F. Each facility which operates a CEMS/COMS must maintain on site a file of CEMS/COMS data including all raw data, corrected and adjusted, repair logs, calibration checks, adjustments, and test audits. This file must be retained for a period of at least five years, and is required to be maintained in such a condition that it can easily be audited by an inspector.
- G. Except for Part 75 CEMs, quarterly reports shall be used by the Department to determine compliance with the permit. For Part 75 CEMs, the semi-annual report shall be used.

SECTION IV

QUALITY ASSURANCE/QUALITY CONTROL

- A. For each CEMS/COMS a Quality Assurance/Quality Control (QA/QC) plan shall be submitted to the Department (Attn.: Air Division, CEM Coordinator). CEMS quality assurance procedures are defined in 40 CFR, Part 60, Appendix F. This plan shall be submitted within 180 days of the CEMS/COMS installation. A QA/QC plan shall consist of procedure and practices which assures acceptable level of monitor data accuracy, precision, representativeness, and availability.
- B. The submitted QA/QC plan for each CEMS/COMS shall not be considered as accepted until the facility receives a written notification of acceptance from the Department.
- C. Facilities responsible for one, or more, CEMS/COMS used for compliance monitoring shall meet these minimum requirements and are encouraged to develop and implement a more extensive QA/QC program, or to continue such programs where they already exist. Each QA/QC program must include written procedures which should describe in detail, complete, step-by-step procedures and operations for each of the following activities:
1. Calibration of CEMS/COMS
 - a. Daily calibrations (including the approximate time(s) that the daily zero and span drifts will be checked and the time required to perform these checks and return to stable operation)
 2. Calibration drift determination and adjustment of CEMS/COMS
 - a. Out-of-control period determination
 - b. Steps of corrective action
 3. Preventive maintenance of CEMS/COMS
 - a. CEMS/COMS information
 - 1) Manufacture
 - 2) Model number
 - 3) Serial number
 - b. Scheduled activities (check list)
 - c. Spare part inventory
 4. Data recording, calculations, and reporting
 5. Accuracy audit procedures including sampling and analysis methods
 6. Program of corrective action for malfunctioning CEMS/COMS
- D. A Relative Accuracy Test Audit (RATA), shall be conducted at least once every four calendar quarters. A Relative Accuracy Audit (RAA), or a Cylinder Gas Audit (CGA), may be conducted in the other three quarters but in no more than three quarters in succession. The RATA should be conducted in accordance with the applicable test procedure in 40 CFR Part 60 Appendix A and calculated in accordance with the applicable performance specification in 40 CFR Part 60 Appendix B. CGA's and RAA's should be conducted and the data calculated in accordance with the procedures outlined on 40 CFR Part 60 Appendix F.

If alternative testing procedures or methods of calculation are to be used in the RATA, RAA or CGA audits prior authorization must be obtained from the ADEQ CEM Coordinator.

E. Criteria for excessive audit inaccuracy.

RATA

All Pollutants except Carbon Monoxide	> 20% Relative Accuracy
Carbon Monoxide	> 10% Relative Accuracy
All Pollutants except Carbon Monoxide	> 10% of the Applicable Standard
Carbon Monoxide	> 5% of the Applicable Standard
Diluent (O ₂ & CO ₂)	> 1.0 % O ₂ or CO ₂
Flow	> 20% Relative Accuracy

CGA

Pollutant	> 15% of average audit value or 5 ppm difference
Diluent (O ₂ & CO ₂)	> 15% of average audit value or 5 ppm difference

RAA

Pollutant	> 15% of the three run average or > 7.5 % of the applicable standard
Diluent (O ₂ & CO ₂)	> 15% of the three run average or > 7.5 % of the applicable standard

- F. If either the zero or span drift results exceed two times the applicable drift specification in 40 CFR, Part 60, Appendix B for five consecutive, daily periods, the CEMS is out-of-control. If either the zero or span drift results exceed four times the applicable drift specification in Appendix B during a calibration drift check, the CEMS is out-of-control. If the CEMS exceeds the audit inaccuracies listed above, the CEMS is out-of-control. If a CEMS is out-of-control, the data from that out-of-control period is not counted towards meeting the minimum data availability as required and described in the applicable subpart. The end of the out-of-control period is the time corresponding to the completion of the successful daily zero or span drift or completion of the successful CGA, RAA or RATA.
- G. A back-up monitor may be placed on an emission source to minimize monitor downtime. This back-up CEMS is subject to the same QA/QC procedure and practices as the primary CEMS. The back-up CEMS shall be certified by a PST. Daily zero-span checks must be performed and recorded in accordance with standard practices. When the primary CEMS goes down, the back-up CEMS may then be engaged to sample, analyze and record the emission source pollutant until repairs are made and the primary unit is placed back in service. Records must be maintained on site when the back-up CEMS is placed in service, these records shall include at a minimum the reason the primary CEMS is out of service, the date and time the primary CEMS was out of service and the date and time the primary CEMS was placed back in service.

APPENDIX C
Acid Rain Program – Acid Rain Permit Application

Facility Name: Lake Catherine

Permit Requirements

STEP 3

Read the standard requirements.

- (1) The designated representative of each affected source and each affected unit at the source shall:
 - (i) Submit a complete Acid Rain permit application (including a compliance plan) under 40 CFR part 72 in accordance with the deadlines specified in 40 CFR 72.30; and
 - (ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review an Acid Rain permit application and issue or deny an Acid Rain permit;
- (2) The owners and operators of each affected source and each affected unit at the source shall:
 - (i) Operate the unit in compliance with a complete Acid Rain permit application or a superseding Acid Rain permit issued by the permitting authority; and
 - (ii) Have an Acid Rain Permit.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each affected source and each affected unit at the source shall comply with the monitoring requirements as provided in 40 CFR part 75.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR part 75 shall be used to determine compliance by the source or unit, as appropriate, with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.

Sulfur Dioxide Requirements

- (1) The owners and operators of each source and each affected unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the source's compliance account (after deductions under 40 CFR 73.34(c)), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the affected units at the source; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An affected unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an affected unit under 40 CFR 72.6(a)(2); or
 - (ii) Starting on the later of January 1, 2000 or the deadline for monitor certification under 40 CFR part 75, an affected unit under 40 CFR 72.6(a)(3).

Facility Name: Lake Catherine

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
- (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
- (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

The owners and operators of the source and each affected unit at the source shall comply with the applicable Acid Rain emissions limitation for nitrogen oxides.

Excess Emissions Requirements

- (1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.
- (2) The owners and operators of an affected source that has excess emissions in any calendar year shall:
- (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
 - (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

- (1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:
- (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;

Facility Name: Lake Catherine

Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

- (ii) All emissions monitoring information, in accordance with 40 CFR part 75, provided that to the extent that 40 CFR part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply.
 - (iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain permit application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.
- (2) The designated representative of an affected source and each affected unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR part 72 subpart I and 40 CFR part 75.

Liability

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
- (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
- (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
- (4) Each affected source and each affected unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an affected source (including a provision applicable to the designated representative of an affected source) shall also apply to the owners and operators of such source and of the affected units at the source.
- (6) Any provision of the Acid Rain Program that applies to an affected unit (including a provision applicable to the designated representative of an affected unit) shall also apply to the owners and operators of such unit.
- (7) Each violation of a provision of 40 CFR parts 72, 73, 74, 75, 76, 77, and 78 by an affected source or affected unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities

No provision of the Acid Rain Program, an Acid Rain permit application, an Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 shall be construed as:

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating

Facility Name: Lake Catherine

Effect on Other Authorities, Cont'd.

STEP 3, Cont'd.

- to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;
 - (3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;
 - (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
 - (5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

STEP 4
Read the certification statement, sign, and date.

I am authorized to make this submission on behalf of the owners and operators of the affected source or affected units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name: Myra Glover	
Signature <i>Myra Glover</i>	Date 6-9-09

APPENDIX D
Clean Air Interstate Rule (CAIR) Permit Application

8111.14.1



Arkansas Environmental Support
425 West Capitol Avenue
A-TCBY-22D
Little Rock, AR 72203
Tel 501-377-3958
Fax 281-297-6132
Mark C. Bowles, Manager

AR-09-077

October 22, 2009

Mr. Thomas Rheume
Air Division - Permits Branch
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118

Subject: **Entergy Arkansas, Inc. – Lake Catherine Plant, AFIN #30-00011**
Entergy Arkansas, Inc. – Moses Plant, AFIN #62-00010
CAIR Permit Renewal Applications

Dear Mr. Rheume,

Entergy is submitting the original and one copy of the CAIR Permit Renewal Applications for Entergy's Lake Catherine and Moses Plants. Per our earlier discussion, this submittal is to synchronize the renewal schedule for the Title V, Acid Rain, and CAIR Permits. Title V Permit Renewal Applications for these facilities were submitted earlier this year and have not been finalized. Entergy requests these new CAIR Permit Applications replace the ones in the appendices of the current Title V permits.

If we can provide any additional information, please call me at 501-377-3958 or Tracy Johnson at 501-377-4033.

Sincerely,

A handwritten signature in cursive script, appearing to read "Mark C. Bowles".

Mark Bowles
Manager
Arkansas Environmental Support

Cc: Derrick Brown ADEQ

**TITLE V PERMIT
SUPPLEMENTAL PACKAGE
CLEAN AIR INTERSTATE RULE PERMIT APPLICATION**

AFIN:	30-00011	Date:	9/22/2009
1. UNIT INFORMATION			
Enter the Source ID and Description (as identified in your Arkansas Title V Permit).			
Source Number	Description		
SN-01	Unit 1 Boiler		
SN-01	Unit 2 Boiler		
SN-02	Unit 3 Boiler		
SN-03	Unit 4 Boiler		

2. STANDARD REQUIREMENTS

Read the standard requirements and the certification. Enter the name of the CAIR designated representative, and sign and date. Include the supplemental application along with a completed Arkansas Operating Permit (Major Source) General Information Forms (pages 1-6). The Department will process a modification to the facility's Title V permit to incorporate these CAIR requirements.

NO_x Ozone Season Emission Requirements

§ 96.306 Standard requirements

(a) *Permit requirements.*

(1) The CAIR designated representative of each CAIR NO_x Ozone Season source required to have a title V operating permit and each CAIR NO_x Ozone Season unit required to have a title V operating permit at the source shall:

(i) Submit to the permitting authority a complete CAIR permit application under §96.322 in accordance with the deadlines specified in §96.321(a) and (b); and

(ii) Submit in a timely manner any supplemental information that the permitting authority determines is necessary in order to review a CAIR permit application and issue or deny a CAIR permit.

(2) The owners and operators of each CAIR NO_x Ozone Season source required to have a title V operating permit and each CAIR NO_x Ozone Season unit required to have a title V operating permit at the source shall have a CAIR permit issued by the permitting authority under subpart CCCC of 40 CFR part 96 for the source and operate the source and the unit in compliance with such CAIR permit.

(3) Except as provided in subpart IIII of 40 CFR part 96, the owners and operators of a CAIR NO_x Ozone Season source that is not otherwise required to have a title V operating permit and each CAIR NO_x Ozone Season unit that is not otherwise required to have a title V operating

permit are not required to submit a CAIR permit application, and to have a CAIR permit, under subpart CCCC of 40 CFR part 96 for such CAIR NO_x Ozone Season source and such CAIR NO_x Ozone Season unit.

(b) Monitoring, reporting, and recordkeeping requirements.

- (1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subpart HHHH of 40 CFR part 96.
- (2) The emissions measurements recorded and reported in accordance with subpart HHHH of 40 CFR part 96 shall be used to determine compliance by each CAIR NO_x Ozone Season source with the CAIR NO_x Ozone Season emissions limitation under paragraph (c) of this §96.306.

(c) Nitrogen oxides ozone season emission requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_x Ozone Season allowances available for compliance deductions for the control period under §96.354(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x Ozone Season units at the source, as determined in accordance with subpart HHHH of this part.
- (2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of this §96.306 starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.370(b)(1), (2), (3), or (7) and for each control period thereafter.
- (3) A CAIR NO_x Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.306, for a control period in a calendar year before the year for which the CAIR NO_x Ozone Season allowance was allocated.
- (4) CAIR NO_x Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Ozone Season Allowance Tracking System accounts in accordance with subparts, FFFF, GGGG of 40 CFR part 96 and Chapter 14 of the Arkansas Pollution Control and Ecology Commission Regulation 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control.
- (5) A CAIR NO_x Ozone Season allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.305 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.
- (6) A CAIR NO_x Ozone Season allowance does not constitute a property right.
- (7) Upon recordation by the Administrator under subpart FFFF, GGGG of this part or Chapter 14 of the Arkansas Pollution Control and Ecology Commission Regulation 19, Regulations of the Arkansas Plan of Implementation for Air Pollution Control, every allocation, transfer, or deduction of a CAIR NO_x Ozone Season allowance to or from a CAIR NO_x Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

(d) Excess emissions requirements.

(1) If a CAIR NO_x Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO_x Ozone Season emissions limitation, then:

- (i) The owners and operators of the source and each CAIR NO_x Ozone Season unit at the source shall surrender the CAIR NO_x Ozone Season allowances required for deduction under §96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable State law; and
- (ii) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of this subpart, the Clean Air Act, and applicable State law.

(e) Recordkeeping and reporting requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the permitting authority or the Administrator.

(i) The certificate of representation under §96.313 for the CAIR designated representative for the source and each CAIR NO_x Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under §96.313 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with subpart HHHH of 40 CFR part 96, provided that to the extent that subpart HHHH of 40 CFR part 96 provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_x Ozone Season Trading Program.

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_x Ozone Season Trading Program.

(2) The CAIR designated representative of a CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall submit the reports required under the CAIR NO_x Ozone Season Trading Program, including those under subpart HHHH of 40 CFR part 96.

(f) Liability.

(1) Each CAIR NO_x Ozone Season source and each CAIR NO_x Ozone Season unit shall meet the requirements of the CAIR NO_x Ozone Season Trading Program.

(2) Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season source or the CAIR designated representative of a CAIR NO_x Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_x Ozone Season units at the source.

(3) Any provision of the CAIR NO_x Ozone Season Trading Program that applies to a CAIR NO_x Ozone Season unit or the CAIR designated representative of a CAIR NO_x Ozone Season unit shall also apply to the owners and operators of such unit.

(g) Effect on other authorities.

No provision of the CAIR NO_x Ozone Season Trading Program, a CAIR permit application, a CAIR permit, or an exemption under §96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x Ozone Season source or CAIR NO_x Ozone Season unit from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

3. CERTIFICATION

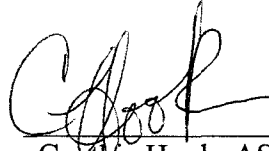
I am authorized to make this submission on behalf of the owners and operators of the source or units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

CAIR Designated Representative

Myra H. Glover Name (Print)	
Signature <i>Myra Glover</i>	Date <i>9/24/09</i>

CERTIFICATE OF SERVICE

I, Cynthia Hook, hereby certify that a copy of this permit has been mailed by first class mail to Entergy Services, Inc. - Lake Catherine Plant, 425 West Capitol Ave., Little Rock, AR, 72203, on this 15th day of August, 2011.

A handwritten signature in black ink, appearing to read 'C. Hook', written over a horizontal line.

Cynthia Hook, ASIII, Air Division