ADEQ
MINOR SOURCE
AIR PERMIT

Permit #:2129-A

IS ISSUED TO:

Arkansas Electric Coop Corp., Elkins Generating Station (CT Plant)
AR Highway 16 and Washington County Road 49
Elkins, AR 72727
Washington County
AFIN: 7201792

THIS PERMIT IS *Arkansas Electric Coop Corp., Elkins Generating Station (CT Plant),* AUTHORITY TO CONSTRUCT, MODIFY, OPERATE, AND/OR MAINTAIN THE EQUIPMENT AND/OR FACILITY IN THE MANNER AS SET FORTH IN THE DEPARTMENT'S MINOR SOURCE AIR PERMIT AND THE APPLICATION. THIS PERMIT IS ISSUED PURSUANT TO THE PROVISIONS OF THE ARKANSAS WATER AND AIR POLLUTION CONTROL ACT (ARK. CODE ANN. SEC. 8-4-101 *ET SEQ.*) AND THE REGULATIONS PROMULGATED THEREUNDER, AND IS SUBJECT TO ALL LIMITS AND CONDITIONS CONTAINED HEREIN.

Signed:

Mike Bates
Chief, Air Division

Date

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Section I: FACILITY INFORMATION

PERMITTEE:	Arkansas Electric Coop Corp., Elkins Generating Station (CT Plant) Located in Washington County P.O. Box 194208 Little Rock, AR 72219
AFIN:	7201792
PERMIT NUMBER:	2129-A
FACILITY ADDRESS:	AR Highway 16 and Washington County Rd 49, Elkins AR. 72727
COUNTY:	Washington County
CONTACT PERSON:	Stephen Cain (scain@aecc.com)
CONTACT POSITION	Senior Environmental Engineer
TELEPHONE NUMBER:	501-570-2420
REVIEWING ENGINEER:	James G. Siganos, P.E.
UTM Zone	15
UTM North-South (Y):	3981.005
UTM East-West (X):	409.688

Section II: INTRODUCTION

Summary of Permit Activity

Arkansas Electric Cooperative Corporation (AECC) applied for a minor source air permit to construct and operate a combustion turbine plant near Elkins, Arkansas. The plant will serve as a source of peaking electric power generation to support the transmission system in northwest Arkansas. There will be up to six (6) units consisting of combustion turbines (CTs), fired by natural gas, designated as SN-01 through SN-06. Each unit will be rated at approximately 20 megawatts (MW). Being less than 25 MW, these sources are not subject to EPA's Acid Rain regulations {40 CFR 72.7(a)(1)}. Also, AECC proposes to limit the plant's potential capacity in order to cap annual NOx emissions below the 100 ton per year Title V permit threshold. The CTs will be water injected for nitrogen oxides (NOx) emissions control.

AECC, which is an electric generation/transmission cooperative, is the wholesale (bulk power) supplier to 17 local distribution cooperatives. These cooperatives include Carroll Electric Cooperative Corporation and Ozarks Electric Cooperative Corporation whose service territories include Washington and Benton Counties where the transmission system is being overloaded.

Process Description

All six units are refurbished simple-cycle General Electric LM2500 CTs each capable of producing approximately twenty (20) megawatts of power during summer conditions (98° F). These particular units are trailer mounted which are suitable for temporary installations.

The CTs will be permitted to only burn a lean mixture of natural gas, as defined in Specific Condition #6, and compressed air. The hot, pressurized combustion gases expand through a series of rotating turbine wheel and blade assemblies that spin a shaft, resulting in shaft power which drives an electric generator and produces electricity. The hot exhaust gases are discharged from each of the six CTs through separate stacks, designated as SN-01 through SN-06. This configuration is known as "simple-cycle" since there is no heat recovery on the exhaust.

Electrical loads in the northwest Arkansas area have been at the capacity of the existing system for the last two summer load periods. To avoid the possibility of rotating blackouts, AECC proposes to purchase up to six portable CT generating units and transport and install them in its service area. (Initially, AECC proposes to locate three CTs at the site for a June 15, 2007 start-up date. A future expansion of up to three more similar units is possible.) The location proposed, approximately eight miles southeast of Fayetteville, was selected because it could provide immediate support to the 69 kV transmission network serving cooperative loads in Washington and Benton Counties in northwestern Arkansas.

A gas meter and a water meter will be installed for each CT, and AECC will comply with maintenance activities required by 40 CFR Part 60, Subpart KKKK. Information from the meters will be fed back to a data acquisition system on a computer located at the site. The computer will record the data, make the water injection to fuel input ratio calculation, and store the information for inspection, reports, etc.

The facility is not major source of HAPS therefore it is not subject to 40 CFR 63 Subpart YYYY, *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines* (CT)

The facility will also have a diesel fired 600 kilowatt – hour emergency generator designated as SN-07. The generator will be used for black start and emergency shut down conditions. and will be limited to 500 hundred hours of operation per consecutive 12-months.

Natural Gas Compressors (SN-07, SN-08, and SN-09)

Natural gas compressors to compress the natural gas fuel for the combustion turbines each driven by 370 hp natural-gas fired engines. Only two compressors will operate during plant operation – the third will be idle and used as a back-up. Operation of the three compressors will be cycled in order to keep the operating hours on each compressor nearly equal. (Compressors A and B will operate one period and Compressor C will be idle; during the next operating period, Compressors B and C will operate and Compressor A will be idle; and so forth.)

Regulations

Source No.	***Regulation Citations***
Facility	*The Arkansas Air Pollution Control Code* (Regulation 18)
Facility	*Regulations of the Arkansas Plan of Implementation for Air Pollution Control* (Regulation 19)
Facility	*Regulations of the Arkansas Operating Air Permit Program* (Regulation 26).
SN-01 through SN-06	*New Source Performance Standards (NSPS) - Standards of Performance for Stationary Combustion Turbines*, 40 CFR Part 60, Subpart KKKK

The following table is a summary of the facility's total emissions. This table in itself is not an enforceable condition of the permit.

Table 1 - Total Allowable Emissions

Total Allowable Emissions		
Pollutant	**Emissions Rates**	
	lb/hr	**tpy**
PM	8.5	4.3
PM_{10}	8.5	4.3
SO_2	78.1	36.5
VOC	3.1	9.1
CO	150.9	71.6
NO_x	203.6	94.4
Acrolein	<0.01	<0.01
Formaldehyde	0.89	0.443
Total HAPs	0.9	0.45

Section III: PERMIT HISTORY

This is the initial minor source air permit.

Section IV: EMISSION UNIT INFORMATION

Source Description

SN-01 through SN-06

Each of these units is a refurbished General Electric LM2500 simple-cycle combustion turbine (CT) without heat recovery. The generating capacity of each unit is estimated at 20 MW during summer conditions (98° F). The units will be used primarily to generate electricity for peak load purposes (i.e. when the demand for electricity is high). The units will be equipped with water injection for NOx control. The units will burn a lean mixture of natural gas and compressed air. The hot, pressurized combustion gases expand through a series of rotating turbine wheel and blade assemblies that spin a shaft, resulting in shaft power. The shaft is connected to a generator which generates electricity.

SN-08 through SN-10

The facility will have three (3) natural gas compressors on site with 370 hp natural-gas fired engines to compress the natural gas for the combustion turbines. Only two compressors will operate during plant operation – the third will be idle and used as a back-up. Operation of the three compressors will be cycled in order to keep the operating hours on each compressor nearly equal. Maximum hours of operation = 5172.

Specific Conditions

1. The permittee shall not exceed the emission rates set forth in the following table. Compliance with the ton per year limits will be demonstrated by compliance with Specific Condition # 6. [§19.501 *et seq.* of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control, effective May 28, 2006, (Regulation 19) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 2 - Criteria Pollutants

SN	Description	Pollutant	lb/hr	Tpy
01	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM_{10}	1.4	*3.7
		SO_2	12.5	*32.4
		VOC	0.5	*1.3
		CO	25.0	*64.7
		NO_x	32.2	*83.3

SN	Description	Pollutant	lb/hr	Tpy
02	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM_{10} SO_2 VOC CO NO_x	1.4 12.5 0.5 25.0 32.2	
03	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM_{10} SO_2 VOC CO NO_x	1.4 12.5 0.5 25.0 32.2	
04	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM_{10} SO_2 VOC CO NO_x	1.4 12.5 0.5 25.0 32.2	
05	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM_{10} SO_2 VOC CO NO_x	1.4 12.5 0.5 25.0 32.2	
06	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM_{10} SO_2 VOC CO NO_x	1.4 0.2 0.5 25.0 32.2	
07	Emergency Diesel Generator 600 Kw	PM_{10} SO_2 VOC CO NO_x	0.1 3.1 0.1 0.9 10.4	0.1 0.8 0.1 0.3 2.6

SN	Description	Pollutant	lb/hr	Tpy
08	Natural Gas fired engine driving gas compressor used for pressurizing the natural gas fuel for the CTs. 2.62 MMBTU/hr	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.7 1.4 1.7	**0.2 **0.1 **3.8 **7.2 **8.5
09	Natural Gas fired engine driving gas compressor used for pressurizing the natural gas fuel for the CTs. 2.62 MMBTU/hr	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.7 1.4 1.7	
10	Natural Gas fired engine driving gas compressor used for pressurizing the natural gas fuel for the CTs. 2.62 MMBTU/hr	PM_{10} SO_2 VOC CO NO_x	0.1 0.1 0.7 1.4 1.7	

*Tpy emission rates for SN-01 through SN-06 are bubbled.

**Tpy emission rates for SN-08, SN-09 and SN-10 are bubbled

2. The permittee will not exceed the emission rates set forth in the following table. Compliance with the ton per year limits will be demonstrated by compliance with Specific Condition # 6. [§18.801 of the Arkansas Air Pollution Control Code, effective February 15, 1999 (Regulation 18) and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 3 - Non-Criteria Pollutants

SN	Description	Pollutant	lb/hr	tpy
01	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM	1.4	*3.7 *0.1 *0.45
		Acrolein	0.01	
		Formaldehyde	0.15	
02	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM	1.4	
		Acrolein	0.01	
		Formaldehyde	0.15	
03	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM	1.4	
		Acrolein	0.01	
		Formaldehyde	0.15	
04	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM	1.4	
		Acrolein	0.01	
		Formaldehyde	0.15	
05	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM	1.4	
		Acrolein	0.01	
		Formaldehyde	0.15	
06	GE LM2500 Combustion Turbine. Natural Gas Fired 208 MMBtu /hr	PM	1.4	
		Acrolein	0.01	
		Formaldehyde	0.15	
07	Emergency Diesel Generator 600 Kw	PM	0.1	0.1
08	Natural Gas fired engine driving gas compressor used for pressurizing the natural gas fuel for the CTs. 2.62 MMBTU/hr	PM	0.1	0.2
09	Natural Gas fired engine driving gas compressor used for pressurizing the natural gas fuel for the CTs. 2.62 MMBTU/hr	PM	0.1	
10	Natural Gas fired engine driving gas compressor used for pressurizing the natural gas fuel for the CTs. 2.62 MMBTU/hr	PM	0.1	

*Tpy emission rates for SN-01 through SN-06 are bubbled.

**Tpy emission rates for SN-08, SN-09 and SN-10 are bubbled

3. Visible emissions shall not exceed the limits specified in the following table of this permit as measured by EPA Reference Method 9. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

Table 4 - Visible Emissions

SN	Limit	Compliance Mechanism	Regulatory Citation
SN-01 through, SN-06	5%	(Burn natural gas fuel only)	§18.501
SN-07	20%	(Burn diesel fuel only)	§18.501
SN-08, SN-09 & SN-10	5%	(Burn natural gas fuel only)	§18.501

4. The permittee will not cause or permit the emission of air contaminants, including odors or water vapor and including an air contaminant whose emission is not otherwise prohibited by Regulation #18, if the emission of the air contaminant constitutes air pollution within the meaning of A.C.A. §8-4-303. [§18.801 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-31]

5. The permittee will not conduct operations in such a manner as to unnecessarily cause air contaminants and other pollutants to become airborne. [§18.901 of Regulation 18, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

6. The permittee shall not use more than **1,104** million standard cubic feet (MMscf) of natural gas (maximum natural gas usage for SN-01 through SN-06 and SN-08, 09 & 10) at the facility per consecutive 12 - month period. Compliance will be demonstrated by compliance with Specific Condition # 8. In accordance with §72.2, Definitions: ***Natural gas*** means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Natural gas contains 20 grains or less of total sulfur per 100 standard cubic feet. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot. [§19.705 of Regulation 19, 40 CFR Part 72 Subpart A, Definitions, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

7. The permittee shall limit the operation of the emergency diesel generator (SN-07) to five hundred (500) hours per consecutive 12 month period. Compliance with this condition will be demonstrated by maintaining a twelve month rolling total and each individual month's data on-site and made available to Department personnel upon request. The permittee will update the records by the fifteenth day of the month following the month to which the records pertain. [§18.1004 of Regulation 18, §19.705 of Regulation 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

8. The permittee will maintain monthly records of natural gas fuel usage which demonstrate compliance with Specific Condition #6. The permittee will maintain a twelve month rolling total and each individual month's data on-site and made available to Department personnel upon request. The permittee will update the records by the fifteenth day of the month following the month to which the records pertain. [§19.705 of Regulation 19 and A.C.A.§8-4-203 as referenced by §8-4-304 and §8-4-311]

NSPS REQUIREMENTS

9. The Combustion Turbines (CTs) designated as SN-01 through SN-06 are subject to and shall comply with applicable requirements of 40 CFR Part 60, Subpart A (*General Provisions)*, and 40 CFR Part 60, Subpart KKKK (*Standards of Performance for Stationary Combustion Turbines)*, with a peak load heat input greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel (natural gas) which commenced construction, modification, or reconstruction after February 18, 2005. Applicable provisions of Subpart KKKK (copy provided in Appendix A) include but are not limited to Specific Conditions #10 to #21. [§19.304 of Regulation 19 and 40 CFR Part 60, Subpart KKKK]

10. The permittee must meet the NO_X emission limits for SN-01 through SN-06 according to the provisions in §60.4320, Table 1. (More specifically, the NO_x emission limit applies to a modified or reconstructed combustion turbine having a heat input value at peak load greater than 50 MMBtu/hr and les than or equal to 850 MMBtu/hr and a NO_x emission standard of 42 ppm @ 15% O_2 or 250 ng/J of useful output (2.0 lb NO_X/MWh). [§19.304 of Regulation 19 and 40 CFR Part 60, Subpart KKKK]

11. The permittee must not burn, in SN-01 through SN-06, any fuel which contains total potential sulfur emissions in excess of 26 ng SO_2/J (0.060 lb SO_2/MMBtu, which is equivalent to 20 grains of sulfur per 100 standard cubic feet of natural gas) heat input. [§19.304 of Regulation 19 and §60.4330(a)(2) of 40 CFR Part 60, Subpart KKKK]

General Compliance Requirements

12. The permittee must operate and maintain each CT's (SN-01 through SN-06) air pollution control equipment and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown and maintenance. [§19.304 of Regulation 19 and §60.4333(a) of 40 CFR Part 60, Subpart KKKK]

MONITORING

Demonstrating compliance for NOx emissions by using water injection.

13. The permittee shall control NOx emissions by installing, calibrating, maintaining and operating a continuous monitoring system (CMS) to monitor and record the fuel consumption and the ratio of water to fuel fired in each turbine when burning fuel that requires water injection for compliance. All Flowmeters shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions.) [§19.304 of Regulation 19 and 60.4335(a) of 40 CFR Part 60, Subpart KKKK]

Establishing and documenting a proper parameter monitoring plan.

14. The permittee shall continuously monitor the water to fuel ratio as described in §60.4335(a) during the performance test required under §60.8, in order to establish acceptable values and ranges for the CMS. The permittee may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The permittee must develop and submit to the Department for review and/or approval, within 90 days of the initial performance test, a parameter monitoring plan which explains the procedures used to document proper operation of the NO_X emission controls. The monitoring plan must also be kept on site and shall include all applicable data under 40 CFR 60.4355(a)(1) through (a)(6) as indicated below: [§19.304 of Regulation 19 and §60.4355 of 40 CFR Part 60, Subpart KKKK]

(1) Include the indicators to be monitored and show there is a significant relationship to emissions and proper operation of the NO_X emission controls,

(2) Pick ranges (or designated conditions) of the indicators, or describe the process by which such range (or designated condition) will be established,

(3) Explain the process the permittee will use to make certain that the permittee obtains data that are representative of the emissions or parameters being monitored (such as detector location, installation specification if applicable),

(4) Describe quality assurance and control practices that are adequate to ensure the continuing validity of the data,

(5) Describe the frequency of monitoring and the data collection procedures which the permittee will use (e.g., the permittee are using a computerized data acquisition over a number of discrete data points with the average (or maximum value) being used for purposes of determining whether an exceedance has occurred), and

(6) Submit justification for the proposed elements of the monitoring. If a proposed performance specification differs from manufacturer recommendation, the permittee must explain the reasons for the differences. The permittee must submit the data supporting the justification, but the permittee may refer to generally available sources of information used to support the justification. The permittee may rely on engineering assessments and other data, provided the permittee demonstrates factors which assure compliance or explain why performance testing is unnecessary to establish indicator ranges. When establishing indicator ranges, the permittee may choose to simplify the process by treating the parameters as if they were correlated. Using this assumption, testing can be divided into two cases:

(i) All indicators are significant only on one end of range (e.g., for a thermal incinerator controlling volatile organic compounds (VOC) it is only important to insure a minimum temperature, not a maximum). In this case, the permittee may conduct the study so that each parameter is at the significant limit of its range while the permittee conduct the emissions testing. If the emissions tests show that the source is in compliance at the significant limit of each parameter, then as long as each parameter is within its limit, the permittee are presumed to be in compliance.

(ii) Some or all indicators are significant on both ends of the range. In this case, the permittee may conduct the study so that each parameter that is significant at both ends of its range assumes its extreme values in all possible combinations of the extreme values (either single or double) of all of the other parameters. For example, if there were only two parameters, A and B, and A had a range of values while B had only a minimum value, the combinations would be A high with B minimum and A low with B minimum. If both A and B had a range, the combinations would be A high and B high, A low and B low, A high and B low, A low and B high. For the case of four parameters all having a range, there are 16 possible combinations.

[§19.304 of Regulation 19 and 60.4355 of 40 CFR Part 60, Subpart KKKK]

Determining the total sulfur content of the fuel.

15. The permittee must monitor the total sulfur content of the fuel being fired in SN-01 through SN-06, except as provided in §60.4365. [§19.304 of Regulation 19 and §60.4360 of 40 CFR Part 60, Subpart KKKK]

Exemption from monitoring total sulfur content of the fuel.

16. If the permittee elects not to monitor the total sulfur content of the fuel combusted in SN-01 through SN-06, then the permittee shall demonstrate compliance with this condition (fuel quality characteristics) by **maintaining on site a current, valid purchase contract, tariff sheet or transportation contract for the natural gas** or other appropriate documentation, specifying that the total sulfur content for the natural gas fuel is 20 grains of sulfur or less per 100 standard cubic feet, has potential sulfur emissions of less than 26 ng SO_2/J (0.060 lb SO_2/MMBtu) heat input. The permittee must use the source of information described under 40 CFR 60.4365 (a) to make the required demonstration. Should the permittee elect to demonstrate compliance as stated in this specific condition, then the permittee is exempt from Specific Conditions #17 & #18. [§19.304 of Regulation 19, and §60.4365 of 40 CFR Part 60, Subpart KKKK, §72.2, and 40 CFR Part 75.]

Frequency of determining the sulfur content of the fuel.

17. The frequency of determining the sulfur content of the fuel must be demonstrated by the permittee in accordance with §60.4370(b) & (c). The permittee shall maintain documentation on site, and make such documentation available to Department personnel upon request, verifying the fuel used in SN-01 to SN-06 qualifies as natural gas. [§19.304 of Regulation 19 and §60.4370 of 40 CFR Part 60, Subpart KKKK]

REPORTING

Required reporting

18. The permittee must submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions must be reported for all periods of unit operation, including start-up, shutdown, and malfunction. [§19.304 of Regulation 19 and §60.4375 of 40 CFR Part 60, Subpart KKKK]

Excess emissions and monitor downtime defined for NOx

19. The permittee must report periods of excess emissions for NOx and monitor downtime according to the applicable requirements under §60.4380(a).

For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that must be reported are defined as follows:

(a) For turbines using water to fuel ratio monitoring:

(1) An excess emission is any unit operating hour for which the 4-hour rolling average water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable water to fuel ratio needed to demonstrate compliance with §60.4320 **Table 1**, (Modified or reconstructed CTs having a heat input value at peak load greater than 50 MMBtu/hr and les than 850 MMBtu/h and an emission standard of 42 ppm @ 15% O_2 or 250 ng/J of useful output (2.0 lb NO_X/MWhr) as established during the performance test required in §60.8. Any unit operating hour in which water is not being injected into the turbine when a fuel is being burned that requires water injection for NO_X control will also be considered an excess emission.

(2) A period of monitor downtime is any unit operating hour in which water is injected into the turbine, but the essential parametric data needed to determine the water to fuel ratio are unavailable or invalid.

(3) Each report must include the average water to fuel ratio, average fuel consumption, and the combustion turbine load during each excess emission.

[§19.304 of Regulation 19 and §60.4380 of 40 CFR Part 60, Subpart KKKK]

Report Submittal Date

20. The permittee must submit all reports required under §60.7(c). The report submittal must be postmarked by the 30th day following the end of each 6-month period. [§19.304 of Regulation 19 and §60.4395 of 40 CFR Part 60, Subpart KKKK]

PERFORMANCE TESTING

Conducting the initial and subsequent performance tests, regarding NOx

21. The permittee must conduct an initial performance test, as required in §60.8, and must use one of the applicable methods outlined in §60.4400(a) & (b). Subsequent NO_X performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test) unless the units have not operated.

a. If a unit has not operated for more than 14 consecutive calendar months since its last performance tests, then testing is not required until that unit operates. If this is the case, then a performance test shall be conducted within 60 days of operation after a downtime period of 14 consecutive months or longer.

b. CTs SN-01 through SN-06 have a NO_X standard greater than 15 ppm @ 15% O_2. {Modified or reconstructed combustion turbine having a heat input value at peak load >50 MMBtu/h and ≤850 MMBtu/h and an emission standard of 42 ppm @ 15% O_2 or 250 ng/J of useful output (2.0 lb NO_X/MWh)}. Therefore, the permittee may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point NO_X concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3ppm or ±0.3 percent CO_2 (or O_2) from the mean for all traverse points.

c. In accordance with §60.4400(b) the performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. Testing may be performed at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. Conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.

d. By using water injection to control NO_X with no additional post-combustion NO_X control, and the water to fuel ratio is monitored in accordance with §60.4335, then the permittee must operate the monitoring system concurrently with each EPA Method 20 run and must be used to determine the fuel consumption and the water to fuel ratio necessary to comply with the applicable NO_X emission limit in §60.4320 and Specific Condition #10.

e. Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average NO_X emission rate at each tested level meets the applicable emission limit in §60.4320.

f. The ambient temperature must be greater than 0 °F during the performance test.

g. The water to fuel ratio used during each test, at 100 percent of peak load, shall be submitted with the report.

[§19.304 of Regulation 19, and §60.4400 of 40 CFR Part 60, Subpart KKKK]

22. During the initial performance test as noted in Specific Condition #21, the permittee shall simultaneously measure emissions for CO using EPA Method 10 from one of the CTs (SN-01 through SN-06) while using natural gas. Each CT shall be tested at least once every five (5) years for CO emissions. Performance test results shall be submitted to the Department (Compliance Section Manager) within 30 days after the completion of the testing. [§19.702 of Regulation 19, and 40 CFR, Part 52, Subpart E]

Section V: INSIGNIFICANT ACTIVITIES

The Department deems the following types of activities or emissions as insignificant on the basis of size, emission rate, production rate, or activity in accordance with Group A of the Insignificant Activities list found in Regulation 18 and 19 Appendix A. Insignificant activity emission determinations rely upon the information submitted by the permittee in an application dated **December 6, 2006, comments dated 4/9/07 and revisions dated 4/13/07 to account for Sources SN-08, SN-09 & SN-10.**

Table 5 - Insignificant Activities

Description	Category
500-Gallon Diesel Fuel Tank. Less than 10,000 gallons. Diesel fuel (No. 2 fuel oil) has a vapor pressure of less than 0.5 psia.	A3

Section VI: GENERAL CONDITIONS

1. Any terms or conditions included in this permit that 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 that 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.

2. This permit does not relieve the owner or operator of the equipment and/or the facility from compliance with all applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated under the Act. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

3. The permittee will notify the Department in writing within thirty (30) days after commencement of construction, completion of construction, first operation of equipment and/or facility, and first attainment of the equipment and/or facility target production rate. [§19.704 of the Regulations of the Arkansas Plan of Implementation for Air Pollution Control (Regulation 19) and/or A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

4. Construction or modification must commence within eighteen (18) months from the date of permit issuance. [§19.410(B) of Regulation 19 and/or §18.309(B) of the Arkansas Air Pollution Control Code (Regulation 18) and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

5. The permittee must keep records for five years to enable the Department to determine compliance with the terms of this permit; such as hours of operation, throughput, upset conditions, and continuous monitoring data. The Department may use the records, at the discretion of the Department, to determine compliance with the conditions of the permit. [§19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

6. A responsible official must certify any reports required by any condition contained in this permit and submit any reports to the Department at the address below. [§19.705 of Regulation 19 and/or §18.1004 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Arkansas Department of Environmental Quality
Air Division
ATTN: Compliance Inspector Supervisor
Post Office Box 8913
Little Rock, AR 72219

7. The permittee will test any equipment scheduled for testing, unless stated in the Specific Conditions of this permit or by any federally regulated requirements, within the following time frames: (1) newly constructed or 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) existing equipment already operating according to the time frames set forth by the Department. 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 must submit compliance test results to the Department within thirty (30) days after the completion of testing. [§19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

8. The permittee will provide: [§19.702 of Regulation 19 and/or §18.1002 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

   a. Sampling ports adequate for applicable test methods;

   b. Safe sampling platforms;

   c. Safe access to sampling platforms;

   d. Utilities for sampling and testing equipment.

9. The permittee will operate equipment, control apparatus and emission monitoring equipment within their design limitations. The permittee will maintain in good condition at all times equipment, control apparatus and emission monitoring equipment. [§19.303 of Regulation 19 and/or §18.1104 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

10. If the permittee exceeds an emission limit established by this permit, the permittee will be deemed in violation of said permit and will be subject to enforcement action. The Department may forego enforcement action for emissions exceeding any limits established by this permit provided the following requirements are met: [§19.601 of Regulation 19 and/or §18.1101 of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

    a. The permittee demonstrates to the satisfaction of the Department that the emissions resulted from an equipment malfunction or upset and are not the result of negligence or improper maintenance, and the permittee took all reasonable measures to immediately minimize or eliminate the excess emissions.

b. The permittee reports the occurrence or upset or breakdown of equipment (by telephone, facsimile, or overnight delivery) to the Department by the end of the next business day after the occurrence or the discovery of the occurrence.

c. The permittee must submit to the Department, within five business days after the occurrence or the discovery of the occurrence, a full, written report of such occurrence, including a statement of all known causes and of the scheduling and nature of the actions to be taken to minimize or eliminate future occurrences, including, but not limited to, action to reduce the frequency of occurrence of such conditions, to minimize the amount by which said limits are exceeded, and to reduce the length of time for which said limits are exceeded. If the information is included in the initial report, the information need not be submitted again.

11. The permittee will allow representatives of the Department upon the presentation of credentials: [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

a. To enter upon the permittee's premises, or other premises under the control of the permittee, where an air pollutant source is located or in which any records are required to be kept under the terms and conditions of this permit;

b. To have access to and copy any records required to be kept under the terms and conditions of this permit, or the Act;

c. To inspect any monitoring equipment or monitoring method required in this permit;

d. To sample any emission of pollutants; and

e. To perform an operation and maintenance inspection of the permitted source.

12. The Department issued this permit in reliance upon the statements and presentations made in the permit application. The Department has no responsibility for the adequacy or proper functioning of the equipment or control apparatus. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

13. The Department may revoke or modify this permit when, in the judgment of the Department, such revocation or modification is necessary to comply with the applicable provisions of the Arkansas Water and Air Pollution Control Act and the regulations promulgated the Arkansas Water and Air Pollution Control Act. [§19.410(A) of Regulation 19 and/or §18.309(A) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

14. This permit may be transferred. An applicant for a transfer must submit a written request for transfer of the permit on a form provided by the Department and submit the disclosure statement required by Arkansas Code Annotated §8-1-106 at least thirty (30) days in advance of the proposed transfer date. The permit will be automatically

transferred to the new permittee unless the Department denies the request to transfer within thirty (30) days of the receipt of the disclosure statement. The Department may deny a transfer on the basis of the information revealed in the disclosure statement or other investigation or, deliberate falsification or omission of relevant information. [§19.407(B) of Regulation 19 and/or §18.307(B) of Regulation 18 and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

15. This permit shall be available for inspection on the premises where the control apparatus is located. [A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

16. This permit authorizes only those pollutant emitting activities addressed herein. [A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

17. This permit supersedes and voids all previously issued air permits for this facility. [Regulation 18 and 19 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

18. The permittee must pay all permit fees in accordance with the procedures established in Regulation No. 9. [A.C.A §8-1-105(c)]