# ADEQ OPERATING AIR PERMIT

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

Permit No. : 1860-AOP-R2 Renewal #1 IS ISSUED TO: Arkansas Electric Coop - CT1 100 AECC Road Fulton, AR 71838 Hempstead County AFIN: 29-00304

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:

AND

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

Signed:

Michael Bonds Chief, Air Division Date

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A.C.A.	Arkansas Code Annotated		
AFIN	ADEQ Facility Identification Number		
CFR	Code of Federal Regulations		
СО	Carbon Monoxide		
HAP	Hazardous Air Pollutant		
lb/hr	Pound Per Hour		
MVAC	Motor Vehicle Air Conditioner		
No.	Number		
NO <sub>x</sub>	Nitrogen Oxide		
PM	Particulate Matter		
PM10	Particulate Matter Smaller Than Ten Microns		
SNAP	Significant New Alternatives Program (SNAP)		
$SO_2$	Sulfur Dioxide		
SSM	Startup, Shutdown, and Malfunction Plan		
Тру	Tons Per Year		
UTM	Universal Transverse Mercator		
VOC	Volatile Organic Compound		

# SECTION I: FACILITY INFORMATION

PERMITTEE:	Arkansas Electric Coop - CT1
AFIN:	29-00304
PERMIT NUMBER:	1860-AOP-R2
FACILITY ADDRESS:	100 AECC Road Fulton, AR 71838
MAILING ADDRESS:	PO Box 194208 Little Rock, AR 72219-4208
COUNTY:	Hempstead
CONTACT POSITION:	Stephen Cain
TELEPHONE NUMBER:	(501) 570-2420
REVIEWING ENGINEER:	Bryan Leamons
UTM North South (Y):	3710.0
UTM East West (X):	426.5
Zone:	15

#### **SECTION II: INTRODUCTION**

#### **Summary of Permit Activity**

Issuance of this permit completes Title V renewal requirements. This is the first renewal to the permit. No modifications are taking place.

The first renewal permits typically involve the inclusion of applicable requirements of 40 CFR, Part 64, *Compliance Assurance Monitoring* (CAM) to affected units. This facility has no CAM affected units; there is no control equipment with pre-control emissions greater than 100 tons per year.

#### **Process Description**

Arkansas Electric Cooperative Corporation (AECC) operates an electric power station in Hempstead County near Fulton, Arkansas. The facility is capable of producing 153 megawatts (MW) of electricity in summertime conditions.

AECC operates a Siemens simple cycle combustion turbine with natural gas as the only fuel. Pollutants from this facility consist of combustion products, predominately nitrogen oxides  $(NO_x)$  at a permitted rate of 245 tons per year (tpy). Other pollutants from this facility are particulate matter (PM and PM<sub>10</sub>), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur dioxides (SO<sub>2</sub>). Also, acrolein and formaldehyde, hazardous air pollutants (HAPs), are permitted at a rate of 0.02 and 1.72 tpy, respectively.

Estimations of hazardous air pollutant (HAP) emission rates are based on the AP-42 emission factors.

#### Regulations

The following table contains the regulations applicable to this permit.

Regulations				
Arkansas Air Pollution Control Code, Regulation 18, effective February 15, 1999				
Regulations of the Arkansas Plan of Implementation for Air Pollution Control, Regulation 19, effective December 19, 2004				
Regulations of the Arkansas Operating Air Permit Program, Regulation 26, effective September 26, 2002				
40 CFR Part 60, Subpart GG, Standards of Performance for Stationary Gas Turbines				
Acid Rain Program, 40 CFR Parts 72, 73, and 75				

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	Description	Pollutant	Emission Rates	
Number	Description	Fonutant	lb/hr	tpy
		PM	70.9	101.0
		$PM_{10}$	70.9	101.0
Tata	l Allewshie Emissions	$SO_2$	1.1	1.6
Total Allowable Emissions	VOC	40.6	57.9	
	СО	42.0	59.9	
		NO <sub>X</sub>	172.0	245.0
HAPs		acrolein* formaldehyde*	0.02 1.21	0.02 1.72
01	Siemens V84.3A2 Simple Cycle Combustion Turbine	$\begin{array}{c} PM \\ PM_{10} \\ SO_2 \\ VOC \\ CO \\ NO_x \\ acrolein \\ formaldehyde \end{array}$	70.9 70.9 1.1 40.6 42.0 172.0 0.02 1.21	101.0 101.0 1.6 57.9 59.9 245.0 0.02 1.72

# **Emission Summary**

\*HAPs included in the VOC totals.

## **SECTION III: PERMIT HISTORY**

Permit #1860-AOP-R0, issued February 3, 2000, was the initial permit for a single combustion turbine electric generating station.

Permit #1860-AOP-R1, issued January 23, 2001, implemented a minor modification to adjust HAP emission rates. Administrative changes included the addition of a fuel pre-heater, an emergency generator, and a diesel storage tank.

#### SECTION IV: SPECIFIC CONDITIONS

#### SN-01 Siemens V84.3A2 Simple Cycle Combustion Turbine

AECC operates one Siemens V84.3A2 simple cycle combustion turbine to drive electric generating equipment. The overall generating capacity of the unit is estimated at 153 MW during summer conditions (98° F).

The unit fires a mixture of compressed air and pipeline quality natural gas only. The unit is equipped with dry low  $NO_x$  (DLN) burners designed to limit the amount of  $NO_x$  produced during the combustion process. Hot, pressurized exhaust gases produced by the DLN burners expand through a series of rotating turbine wheel and blade assemblies resulting in shaft power. Exhaust gases are uncontrolled and exit through an 18-foot diameter, 90-foot tall stack (SN-01).

#### **Specific Conditions**

1. The permittee shall not exceed the emission rates set forth in the following table. Compliance with this condition shall be demonstrated by the fuel limit of Specific Condition 4 and the continuous emission monitoring system (CEMS) required by Specific Condition 7. [Regulation 19, §19.501 et seq., effective December 19, 2004, and 40 CFR Part 52, Subpart E]

Pollutant	lb/hr	tpy
$PM_{10}$	70.9	101.0
SO <sub>2</sub>	1.1	1.6
VOC	40.6	57.9
СО	42.0	59.9
NO <sub>x</sub>	172.0	245.0

The permittee shall not exceed the emission rates set forth in the following table. Initial compliance has been determined through successful stack testing completed in May 2001. Ongoing compliance with this condition shall be demonstrated by the fuel limit of Specific Condition 4. [Regulation 18, §18.801, effective February 15, 1999, and A.C.A. §8-4-203 as referenced by A.C.A. §8-4-304 and §8-4-311]

Pollutant	lb/hr	tpy
PM	70.9	101.0

Pollutant	lb/hr	tpy
HAPs		
acrolein formaldehyde	0.02 1.21	0.02 1.72

- 3. The permittee shall not exceed an opacity of 5% from SN-01. Compliance shall be demonstrated by burning pipeline quality natural gas only. [§18.501 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 4. The permittee shall not consume more than 5,832 million SCF of pipeline quality natural gas per 12 consecutive months. [§19.705, A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311, and 40 CFR §70.6]
- 5. The permittee shall maintain monthly records which demonstrate compliance with Specific Condition 4. Records must contain a twelve month rolling total of monthly fuel usage along with usage records from each individual month. Records must be updated by the fifteenth day of the month following the month to which the records pertain. Records must be kept on-site and made available to the Department upon request. Reports of the twelve month rolling total shall be submitted to the Department in accordance with General Provision 7 of this permit. [§19.705 and 40 CFR 52]
- 6. The permittee shall not exceed from SN-01 a NO<sub>x</sub> emission concentration of 25 ppmvd corrected to 15% O<sub>2</sub> at ISO conditions. Compliance with this limit shall be determined as the average volumetric concentration (arithmetic average of three contiguous one hour periods) of NO<sub>x</sub> corrected to 15% O<sub>2</sub> as measured by a CEMS. [§19.501 and 40 CFR Part 52, Subpart E]
- 7. The permittee shall install, operate, and maintain continuous emission monitoring systems (CEMS) for NO<sub>x</sub> at SN-01 in accordance with the ADEQ CEMS Conditions which are included in Appendix A of this permit. Compliance with the hourly limit set in Specific Condition 1 shall be determined as the average emissions (arithmetic average of three contiguous one hour periods) of NO<sub>x</sub> as measured by a CEMS and converted to pounds per hour using corresponding average (arithmetic average of three contiguous one hour periods) stack gas flow rates. [§19.703, 40 CFR Part 52, and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]
- 8. For the purposes of this permit, "upset condition" reports as required by §19.601 of Regulation 19 shall not be required for periods of startup excess emissions from SN-01 unless such periods of excess startup emissions exceed a two-hour period. Reports shall not be required for exceedances that occur during a one-hour period that begins immediately after shutdown is initiated. This shall only apply for "upset conditions" which directly result from the start-up and/or shut down of the combustion turbine units (SN-01). All other "upset conditions" must be reported as required by Regulation 19.

Additionally, the following conditions must be met during start up and shut down periods.

- a. All CEM systems for SN-01 must be operating during start up and shut down. The emissions recorded during these periods shall count toward the annual ton per year permit limits.
- b. The permittee shall maintain a log or equivalent electronic data storage which shall indicate the date, start time, and duration of each start up and shut down procedure. "Start up" shall be defined the period of time beginning with the first fire within the combustion turbine firing chamber until the unit is in "premix" mode or a maximum of two hours. "Shut down" shall be defined as the period of time beginning when the unit drops below "premix" mode until no more combustion in the combustion turbine firing chamber. This log or equivalent electronic data storage shall be made available to Department personnel upon request.
- c. Opacity is not included. If any occurrences should ever occur, "upset condition" reporting is required.
- d. The permittee shall comply with all requirements of 40 CFR 60.7 and ADEQ CEMS Conditions.

[§19.601 and A.C.A. §8-4-203 as referenced by §8-4-304 and §8-4-311]

9. The permittee shall perform a one time stack test for all detectable HAPs using Reference Method 18. Testing shall be performed in accordance with Plantwide Condition 3. This requirement was completed in May 2001. [§18.1002 and A.C.A as referenced by §8-4-304 and §8-4-311]

## **NSPS Requirements**

- The Combustion Turbine (SN-01) is subject to and shall comply with applicable provisions of 40 CFR Part 60 Subpart A – General Provisions and 40 CFR Part 60 Subpart GG – Standards of Performance for Stationary Gas Turbines. A copy of Subpart GG is provided in Appendix B. Applicable provisions of Subpart GG include, but are not limited to, the following:
  - a. NO<sub>x</sub> emissions shall not exceed 109.4 ppmvd at 15% O<sub>2</sub> at ISO conditions. Compliance will be demonstrated by compliance with Specific Condition 7. [\$19.304 and 40 CFR \$60.332(a)(1)]
  - b. The permittee shall not burn any fuel which contains sulfur in excess of 0.8 percent by weight. [§19.304 and 40 CFR §60.333(b)]
  - c. Natural gas sulfur and nitrogen content shall be determined as specified by the fuel monitoring protocol outlined in Appendix C. Alternatively, the permittee may provide sulfur certifications or representative data in accordance with 40 CFR §60.334(h)(3)(i or ii) to meet the sulfur monitoring requirements. Records of fuel monitoring or alternative data shall be submitted to the Department

postmarked within 30 days of each calendar half and in accordance with General Provision 7. [§19.304, 40 CFR §60.334, and 40 CFR §60.8]

- d. The permittee shall file reports for periods of excess emissions for any period during which the fuel bound sulfur is greater than 0.8% by weight. Reports shall be submitted to the Department postmarked by the 30<sup>th</sup> day following each calendar half and in accordance with General Provision 7. [§19.304 and 40 CFR §60.8]
- e. Initial compliance testing for  $NO_x$  is required within 180 days after start-up. The  $NO_x$  testing shall be conducted in accordance with tests methods in 40 CFR Part 60 Appendix A or alternative approved methods. The testing shall be conducted, at four points in the normal operating range of the turbine. [§19.304 and 40 CFR §60.8]

## Acid Rain Requirements

- 11. The Combustion Turbine (SN-01) is subject to and shall comply with all applicable provisions of the Acid Rain Program (40 CFR Parts 72, 73, and 75). A copy of 40 CFR Part 75 is provided in Appendix D.
  - a. The submission of the NO<sub>x</sub>, SO<sub>2</sub>, and O<sub>2</sub> or CO<sub>2</sub> monitoring plans and notice of CEMS certification testing is required at least 45 days prior to the CEMS certification testing. [40 CFR Part 75 Continuous Emission Monitoring Subpart G]
  - A monitoring plan is required to be submitted for NO<sub>x</sub>, SO<sub>2</sub>, and O<sub>2</sub> or CO<sub>2</sub> monitoring. An SO<sub>2</sub> CEM shall be required pending approval by the agency of an optional SO<sub>2</sub> emission data protocol. [40 CFR Part 75 – Continuous Emission Monitoring Subpart G]
  - c. The initial  $NO_x$ ,  $SO_2$ , and  $O_2$  or  $CO_2$  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]
  - d. The permittee shall ensure that the continuous emissions monitoring systems are in operation and monitoring all unit emissions at all times, except during periods of calibration, quality assurance, preventative maintenance or repair. [40 CFR §75.10]

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

## SECTION V: COMPLIANCE PLAN AND SCHEDULE

Arkansas Electric Coop - CT1 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.

## SECTION VI: PLANTWIDE CONDITIONS

- 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 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: [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]
  - 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.
- 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]

#### Acid Rain (Title IV)

7. 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. [Regulation 26, §26.701 and 40 CFR 70.6(a)(4)]

## Title VI Provisions

- 8. The permittee must comply with the standards for labeling of products using ozonedepleting substances. [40 CFR Part 82, Subpart E]
  - a. All containers containing a class I or class II substance stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced to interstate commerce pursuant to §82.106.
  - b. The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c. The form of the label bearing the required warning must comply with the requirements pursuant to §82.110.
  - d. No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 9. The permittee must comply with the standards for recycling and emissions reduction, except as provided for MVACs in Subpart B. [40 CFR Part 82, Subpart F]
  - a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to \$82.158.
  - c. Persons performing maintenance, service repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d. Persons disposing of small appliances, MVACs, and MVAC like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC like appliance" as defined at §82.152)
  - e. Persons owning commercial or industrial process refrigeration equipment must comply with leak repair requirements pursuant to §82.156.
  - f. Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.

- 10. If the permittee manufactures, transforms, destroys, imports, or exports a class I or class II substance, the permittee is subject to all requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 11. If the permittee performs a service on motor (fleet) vehicles when this service involves ozone depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR part 82, Subpart B, Servicing of Motor Vehicle Air Conditioners.

The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air tight sealed refrigeration system used as refrigerated cargo, or the system used on passenger buses using HCFC 22 refrigerant.

12. The permittee can switch from any ozone depleting substance to any alternative listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G.

## 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 August 18, 2004.

Description	Category
250 kW Emergency Diesel Generator	A-12
500 Gallon Diesel Storage Tank	A-3
3.75 MMBtu/hr Fuel Heater	A-1

### 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 & 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), effective August 10, 2000]
- 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. [40 CFR 70.6(a)(3)(ii)(A) and Regulation 26, §26.701(C)(2)]
  - 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.
- 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: [40 C.F.R. 70.6(a)(3)(iii)(A) and Regulation 26, §26.701(C)(3)(a)]

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

- 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 Regulation19, § 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 my 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;
- e. and 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]

# APPENDIX A

**ADEQ CEMS Conditions** 

# **APPENDIX B**

40 CFR Part 60, Subpart GG

# **APPENDIX C**

**Fuel Monitoring Protocol for Stationary Gas Turbines** 

## Fuel Monitoring Protocol for Stationary Turbines Subject to 40 CFR Part 60, Subpart GG

- 1. Monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.
- 2. Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The approved reference methods are: ASTM D1072-80; ASTM D3031-81; ASTM D3246-81; and ASTM D4084-82 as referenced in 40 CFR 60.335(b)(2). The Gas Processors Association (GPA) test method entitled "Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes" (GPA Standard 2377-86) is an approved alternative method.
- 3. The fuel supply shall be initially sampled daily for a period of two weeks to establish that the pipeline quality natural gas fuel supply is low in sulfur content.
- 4. After the monitoring required in item 3 above, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters.
- 5. If after the monitoring required in item 4 above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
- 6. Should any sulfur analysis as required in items 4 or 5 above indicate noncompliance with40 CFR 60.333, the owner or operator shall notify the ADEQ of such excess emissions and the custom schedule shall be re-examined. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- 7. If there is a change in fuel supply (supplier), the fuel shall be sampled daily for a period of two weeks to re-establish for the record that the fuel supply is low in sulfur content. If the fuel supply's low sulfur content is re-established, then the custom fuel monitoring schedule can be resumed.
- 8. Stationary gas turbines that use the same supply of pipeline quality natural gas to fuel multiple gas turbines may monitor the fuel sulfur content at a single common location.
- 9. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of three years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

## **APPENDIX D**

40 CFR, Part 75, Continuous Emissions Monitoring

Request for PDS Invoice	
Invoice Number (assigned when invoice printed)	PDS-

AFIN *	29-00304			
Name (for confirmation only)	Arkansas Electric Coop - CT1			
Invoice Type (pick one) 苯	Initial Mod Variance			
	Annual	Renewal XX	Interim Authority	
Permit Number <b>*</b>	1860-AOP-I	R2		
Media Code <b>*</b>	A			
Fee Code or Pmt Type <b>*</b>	Т5			
Fee Description (for confirmation only)	Title V			
Amount Due <b>*</b> (whole dollar amount only)	\$0			
Printed Comment (600 characters maximum)	No charge,	renewal only.		

Note: The information below is for use by the requesting division if desired; it will not print on the invoice.			
Engineer	Bryan Leamons		
Paid? (yes/no)			
Check number			
Comments			

**\* Required data**(See "g:\Misc\PDS\_FeeCodes.wpd" for descriptions and discussions of fee codes)

Request submitted by:		Date:	
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#### Public Notice

Pursuant to the Arkansas Operating Air Permit Program (Regulation #26) Section 602, the Air Division of the Arkansas Department of Environmental Quality gives the following notice:

Arkansas Electric Coop – CT1, located at 100 AECC Road, Fulton, Arkansas 71838, has applied for renewal of their existing Title V Operating Air Permit (AFIN: 29-00304). Upon final approval and issuance by the Department, the permittee will be issued a renewal permit for the operation of the combustion turbine electric generation station. Permitted emissions are unchanged with this renewal.

The application has been reviewed by the staff of the Department and has received the Department's tentative approval subject to the terms of this notice.

Citizens wishing to examine the permit application and staff findings and recommendations may do so by contacting Doug Szenher, Public Affairs Supervisor. Citizens desiring technical information concerning the application or permit should contact Bryan Leamons, Engineer. Both Doug Szenher and Bryan Leamons can be reached at the Department's central office, 8001 National Drive, Little Rock, Arkansas 72209, telephone: (501) 682-0744.

The draft permit and permit application are available for copying at the above address. A copy of the draft permit has also been placed at the Hempstead County Public Library located at 500 South Elm Street, Hope, Arkansas. This information may be reviewed during normal business hours.

Interested or affected persons may also submit written comments or request a hearing on the proposal, or the proposed modification, to the Department at the above address - Attention: Doug Szenher. In order to be considered, the comments must be submitted within thirty (30) days of publication of this notice. Although the Department is not proposing to conduct a public hearing, one will be scheduled if significant comments on the permit provisions are received. If a hearing is scheduled, adequate public notice will be given in the newspaper of largest circulation in the county in which the facility in question is, or will be, located.

The Director shall make a final decision to issue or deny this application or to impose special conditions in accordance with Section 2.1 of the Arkansas Pollution Control and Ecology Commission's Administrative Procedures (Regulation #8) and Regulation #26.

Dated this

Marcus C. Devine Director