



Missouri Department of Natural Resources
Air Pollution Control Program

PART 70 PERMIT TO OPERATE

Under the authority of RSMo 643 and the Federal Clean Air Act the applicant is authorized to operate the air contaminant source(s) described below, in accordance with the laws, rules, and conditions set forth here in.

Operating Permit Number: OP2008-019
Expiration Date: MAR 24 2013
Installation ID: 069-0066
Project Number: 2006-09-053

Installation Name and Address

St. Francis Power Plant
Route 1, Box 441
Campbell, MO 63933
Dunklin County

Parent Company's Name and Address

Associated Electric Cooperative, Inc.
2814 South Golden
P.O. Box 754
Springfield, MO 65801

Installation Description:

Associated Electric operates two natural gas-fired combined cycle combustion turbines in western Dunklin County, Missouri. The installation has a combined total gross megawatt capacity (MW) of 536 MW (projected output of 268 MW, nominal 250 MW per turbine). Both units are permitted to burn natural gas. Other miscellaneous sources include a heat recovery steam generator, one natural gas-fired auxiliary boiler system, two gas water bath heaters, three 19.25 MMBtu/hr emergency diesel generators, and two cooling towers.

MAR 25 2008

Effective Date

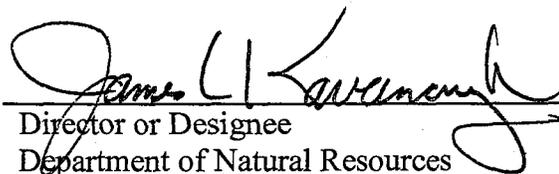

Director or Designee
Department of Natural Resources

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Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Associated Electric operates two natural gas-fired combined cycle combustion turbines in western Dunklin County, Missouri. The installation has a combined total gross megawatt capacity of 536 MW (projected output of 268 MW, nominal 250 MW per turbine). Both units are permitted to burn natural gas. However, Unit 1 is permitted to burn fuel oil as a back up fuel source. Other miscellaneous sources include a heat recovery steam generator, one natural gas-fired auxiliary boiler system (able also to burn No. 2 fuel oil), two gas water bath heaters, three 19.25 MMBtu/hr emergency diesel generators, and two cooling towers.

Reported Air Pollutant Emissions, tons per year							
Year	Particulate Matter ≤ Ten Microns (PM-10)	Sulfur Oxides (SO _x)	Nitrogen Oxides (NO _x)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2006	11.63	1.85	109.27	6.13	32.36	---	2.14
2005	11.02	1.68	105.83	5.38	32.75	---	1.94
2004	7.90	1.09	61.72	3.80	23.81	---	0.61
2003	7.4	0.95	52.84	3.55	25.15	---	0.52
2002	8.81	1.32	70.58	4.27	32.16	---	0.74
2001	13.81	1.81	85.53	5.43	32.64	---	1.04

EMISSION UNITS WITH LIMITATIONS

The following list provides a description of the equipment at this installation which emits air pollutants and which is identified as having unit-specific emission limitations.

Emission Unit #	Description of Emission Unit
EU0010	Combustion Turbine Unit #1
EU0020	Combustion Turbine Unit #2
EU0030	Auxiliary Boiler
EU0040	Diesel Generator #1
EU0050	Diesel Generator #2
EU0060	Diesel Generator #3

EMISSION UNITS WITHOUT LIMITATIONS

The following list provides a description of the equipment which does not have unit specific limitations at the time of permit issuance.

Description of Emission Source
Two Cooling Towers (4 cell forced draft)
Two 1MMBtu/hr (each) Cyclone Water Bath Heaters Fueled by Natural Gas
185 HP Diesel Fire Pump
Two 55 Gallon Hydrazine Storage Tanks (Drum)
Two 10,000 Gallon Aqueous Ammonia Storage Tanks
Two 75-Gallon Glycol Storage Tanks
Two 5,000-Gallon Lubricating Oil Storage Tanks

Two 6,000-Gallon Sulfuric Acid Tanks
Miscellaneous Hydraulic Equipment
5 to 10 27-Gallon Portable Parts Washers
Glycol Heater Vents
Six 1,000-Gallon Propane Storage Tanks
30 Gallons Per Day of Sodium Hypochlorite for Cooling Tower Treatment/Chemical Storage
Three 500-Gallon No. 2 Diesel Fuel Oil Storage Tanks

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) Construction Permit No. 0997-017A, Issued March 30, 1999
- 2) Construction Permit No. 0998-012, Issued August 19, 1998
- 3) Construction Permit No. 0799-012, Issued July 14, 1999
- 4) Amendment to Permit No. 0997-017A and 0799-012 (Dated October 29, 1999)
- 5) Construction Permit No. 042000-014, Issued April 5, 2000
- 6) EPA Region VII Letter of Approval of Custom Fuel Sampling Schedules, Dated January 7, 1998
- 7) Phase II Acid Rain Permits
- 8) NO_x Budget Permit
- 9) Clean Air Interstate Rule (CAIR) Permit

Plant Wide Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

None.

Emission Unit Specific Emission Limitations

The installation shall comply with each of the following emission limitations. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

EU0010 – Combustion Turbine Unit #1			
Emission Unit	Description	Manufacturer/Model #	2006 EIQ Reference #
EU0010	Combined-Cycle Gas Turbine Unit #1; 170 Megawatt (MW) Unit; Primary Fuel – Natural Gas (1673 MMBtu/hr)	Siemens/V84.3A	EP01

PERMIT CONDITION EU0010-001 10 CSR 10-6.060 Construction Permits Required Construction Permit No. 0997-017A – BACT Requirement for PM ₁₀

Emission Limitation:

St. Francis Power Plant shall not discharge into the atmosphere nor allow the emission rate of particulate matter less than ten microns (PM₁₀) from the operation of the combined-cycle gas turbine to exceed 0.01 lb/MMBtu when burning natural gas. Good combustion practices shall be utilized not to exceed the 0.01 lb/MMBtu PM₁₀ emission limit. [Special Condition No. 1]

Operation Limitation:

- 1) No fuels other than natural gas shall be combusted in the combined-cycle gas turbines at any time. [Special Condition No. 7]
- 2) During any startup/shutdown evolution(s), the St. Francis Power Plant will operate in the diffusion mode of operation no longer than four-hours. The PM₁₀ emission limitation shall be exempted during this period of time. [Special Condition No. 22]
- 3) During equipment breakdown or malfunction, the St Francis Power Plant shall immediately take practical steps to modify operations to reduce the emissions of air contaminants. The director of the Air Pollution Control Program may require feasible and practical modifications in the operation to reduce emissions of all air contaminants. [Special Condition No. 23]
- 4) The St. Francis Power Plant is prohibited sustained operation of the combined-cycle gas turbine at loads less than 60% when firing natural gas except during unit startup and shutdown. [Special Condition No. 24]

Monitoring:

Performance testing shall be conducted to demonstrate compliance with the Best Available Control Technology (BACT) emission rate when burning natural gas as required by the Construction Permit # 0997-017A.

Recordkeeping:

Maintain records of the performance test required by the Construction Permit #0997-017A.

Reporting:

- 1) The St. Francis Power Plant, shall report to the Air Pollution Control Programs' Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the end of the month, in which performance testing has been performed and indicates non-compliance with the PM₁₀ emission limitation.
- 2) St. Francis Power Plant shall report promptly any deviations from permit requirements, including those attributable to upsets no later than 15 days to the Air Pollution Control Programs' Enforcement Section. This report shall include the cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan. [Special Condition No. 11]

PERMIT CONDITION EU0010-002

10 CSR 10-6.060

Construction Permits Required

Construction Permit No. 0997-017A – SO_x Emission Limit

Emission Limitation:

The St. Francis Power Plant shall not discharge into the atmosphere more than 40 tons of SO_x during any 12-month rolling average when burning natural gas. The emissions of SO_x from the operation of this turbine are set by limiting the emissions of SO_x to the atmosphere below 40 tons per 12-month rolling average. [Special Condition No. 2]

Operation Limitation:

- 1) No fuels other than natural gas shall be combusted in the combined-cycle gas turbines at any time. [Special Condition No. 7]
- 2) During any startup/shutdown evolution(s), the St. Francis Power Plant will operate in the diffusion mode of operation no longer than four-hours. The SO_x emission limitation shall be exempted during this period of time. [Special Condition No. 22]
- 3) During equipment breakdown or malfunction, the St Francis Power Plant shall immediately take practical steps to modify operations to reduce the emissions of air contaminants. The director of the Air Pollution Control Program may require feasible and practical modifications in the operation to reduce emissions of all air contaminants. [Special Condition No. 23]
- 4) The St. Francis Power Plant is prohibited sustained operation of the combined-cycle gas turbine at loads less than 60% except during unit startup and shutdown. [Special Condition No. 24]

Monitoring:

- 1) Sulfur dioxide (SO₂) emissions from this operation shall be calculated based on fuel sulfur analysis and fuel flow. The sulfur content of the natural gas will initially be determined prior to completion of the compliance stack tests, and once per year, thereafter. [Special Condition No. 2]
- 2) Since natural gas contains low levels of sulfur, this source will be exempt from continuously monitoring the sulfur content of natural gas.

Recordkeeping:

The St. Francis Power Plant shall maintain an accurate record of the fuel consumption records and statements and emissions of SO_x emitted into the atmosphere from this installation. The St. Francis

Power Plant shall calculate the monthly sum of SO_x emissions (in tons) for natural gas from this installation. Attachment A, *Monthly SO_x Emissions Tracking Record* is suitable for this purpose. Equation 1 (see Attachment A) shall be utilized to calculate monthly emissions and to record annual emissions of SO_x (in tons) from this unit (EU0010) and the auxiliary boiler (EU0030). The use of Attachment A will begin after completion of the compliance stack tests with the 12-month rolling average. These records shall be kept on-site and shall be made immediately available to MDNR personnel upon request. [Special Condition No. 8]

Reporting:

- 1) The St. Francis Power Plant shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the end of the month, if records indicate that the source exceeded the SO_x limitation (40 tons of SO_x during any 12-month rolling average), after the commencement of operation. [Special Condition No. 10]
- 2) The St. Francis Power Plant shall report promptly any deviations from permit requirements, including those attributable to upsets no later than 15 days to the Air Pollution Control Program Enforcement Section. This report shall include the cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan. [Special Condition No. 11]

PERMIT CONDITION EU0010-003

10 CSR 10-6.060

Construction Permits Required

Construction Permit No. 0997-017A – BACT Requirement for NO_x

Amendment to Permit No 0997-017A Dated October 29, 1999

Emission Limitation:

The BACT for the emissions of NO_x from the operation of the combined-cycle gas turbine:

- 1) At turbine loads above 60% (to assure operations in the pre-mix mode) shall not exceed 4 parts per million (ppm) by volume, based on 30-day rolling average, corrected to 15 percent oxygen (O₂) or an equivalent percent carbon dioxide (CO₂) when burning natural gas. This limit shall be achieved by using selective catalytic reduction (SCR) along with the dry low-NO_x burners. The St. Francis Power Plant shall conduct performance test to demonstrate compliance with this emissions limitation. [Special Condition No. 4]
- 2) Exceptions: St. Francis Power Plant is exempt from (1) above when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine. “Ice Fog” is defined as an atmospheric suspension of highly reflective ice crystals. [Special Condition No. 15]

Operation Limitation:

- 1) No fuels other than natural shall be combusted in the combined-cycle gas turbines at any time. [Special Condition No. 7]
- 2) During any startup/shutdown evolution(s), the St. Francis Power Plant will operate in the diffusion mode of operation no longer than a combined total of four-hours for the start-up/shutdown evolution(s). The NO_x emission limitation shall be exempted during this period of time. NO_x emission data shall be collected by the continuous emission monitoring system (CEMS) in accordance with 40 CFR Part 75. [Special Condition No. 22]

- 3) During equipment breakdown or malfunction, the St Francis Power Plant shall immediately take practical steps to modify operations to reduce the emissions of air contaminants. The director of the Air Pollution Control Program may require feasible and practical modifications in the operation to reduce emissions of all air contaminants. [Special Condition No. 23]
- 4) The St. Francis Power Plant is prohibited sustained operation of the combined-cycle gas turbine at loads less than 60% except during unit startup and shutdown. [Special Condition No. 24]

Monitoring:

- 1) The St. Francis Power Plant, shall install and operate a CEMS in accordance with 40 CFR Part 75 requirements to monitor and record the emissions rate (for NO_x) and the fuel consumption in the turbine. [Special Condition No. 12]
- 2) Performance testing shall be conducted to demonstrate compliance with the BACT emission rate when burning natural gas as required by the Construction Permit # 0997-017A.
- 3) The permittee shall conduct on the frequency required in Part 75, Appendix B, a Relative Accuracy Test on the continuous emission monitoring system, pursuant to 40 CFR Part 75, in 40 CFR Part 60, Appendix A, using appropriate Reference Methods for NO_x, or equivalent Environmental Protection Agency (EPA) approved method.

Recordkeeping:

- 1) Record the corrected NO_x concentration, and the fuel consumption records and statements. The notification and recordkeeping requirements of 40 CFR 60.7(c) shall be adhered to as they pertain to 40 CFR 60.334(c)(1), except the NO_x emission limitation should be replaced with 4 ppm by volume when operating on natural gas. Briefly, this requires that quarterly reports be submitted to the director of the Air Pollution Control Program, within 30- days after the end of each quarter, detailing any exceedances of applicable emission limits. [Special Condition No. 13]
- 2) The permittee shall use Attachment B or an equivalent recordkeeping form to record any exceedances or monitor downtime events as indicated by the continuous emission monitoring system.

Reporting:

- 1) St. Francis Power Plant shall report promptly any deviations from permit requirements, including those attributable to upsets no later than 15 days to the Air Pollution Control Programs' Enforcement Section. This report shall include the cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan. [Special Condition No. 11]
- 2) Excess emissions reports shall be submitted to the Air Pollution Control Program on a quarterly basis. If any exceedances were recorded, the quarterly report should give the day and duration of how long the emission unit was out of the limitations set forth in this rule. Additionally, the report shall give a detailed explanation of why the plant was in exceedance and corrective action taken by St. Francis Power Plant to bring the emission unit back into the limitations set forth in this rule.
- 3) The permittee shall report quarterly when the monitoring system is down due to inoperative periods, repairs, malfunctions or monitor adjustments. The report shall give a reason as to why the monitor was down, the duration of the downtime event, and provide the percent of the total operating period the monitor experienced downtime. The report shall distinguish between those downtime events that were due to Quality Assurance (QA) activities and those events that occurred for other reasons. However, if no excess emissions occurred within the quarter and the continuous NO_x monitoring system has not been inoperative, repaired, or adjusted, that information shall be included in the report. All quarterly reports shall be postmarked by the thirtieth day following the end of each calendar quarter.

PERMIT CONDITION EU0010-004

10 CSR 10-6.060

Construction Permits Required

Construction Permit No. 0997-017A – BACT Requirement for VOC

Emission Limitation:

- 1) The St. Francis Power Plant shall not discharge into the atmosphere nor allow the emission rate of VOC from the operation of the combined-cycle gas turbine to exceed 0.01 lb/MMBTU when firing natural gas at turbine loads above 60%.
- 2) Good combustion practices shall be utilized not to exceed the above VOCs emissions limit. [Special Condition No. 3]

Operation Limitation:

- 1) No fuels other than natural gas shall be combusted in the combined-cycle gas turbines at any time. [Special Condition No. 7]
- 2) During any startup/shutdown evolution(s), the St. Francis Power Plant will operate in the diffusion mode of operation no longer than four-hours. The VOC emission limitation shall be exempted during this period of time. [Special Condition No. 22]
- 3) During equipment breakdown or malfunction, the St Francis Power Plant shall immediately take practical steps to modify operations to reduce the emissions of air contaminants. The director of the Air Pollution Control Program may require feasible and practical modifications in the operation to reduce emissions of all air contaminants. [Special Condition No. 23]

- 4) The St. Francis Power Plant is prohibited sustained operation of the combined-cycle gas turbine at loads less than 60% except during unit startup and shutdown. [Special Condition No. 24]

Monitoring:

Performance testing shall be conducted to demonstrate compliance with the BACT emission rate when burning natural gas as required by the Construction Permit # 0997-017A.

Recordkeeping:

Maintain records of the performance test required by the Construction Permit #0997-017A.

Reporting:

- 1) St. Francis Power Plant, shall report to the Air Pollution Control Programs' Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the end of the month, in which performance testing has been performed and indicates non-compliance with the VOC emission limitation.
- 2) St. Francis Power Plant shall report promptly any deviations from permit requirements, including those attributable to upsets no later than 15 days to the Air Pollution Control Programs' Enforcement Section. This report shall include the cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan. [Special Condition No. 11]

PERMIT CONDITION EU0010-005

10 CSR 10-6.060

Construction Permits Required

Construction Permit No. 0997-017A – BACT Requirement for CO

Emission Limitation:

The St. Francis Power Plant, shall not discharge into the atmosphere nor allow the emission rate of CO from the operation of the combined-cycle gas turbine at turbine loads above 60% to exceed 10 ppm by volume when firing natural gas. Good combustion practices shall be utilized not to exceed the 10-ppm CO emissions limit. [Special Condition No. 6]

Operation Limitation:

- 1) No fuels other than natural gas shall be combusted in the combined-cycle gas turbines at any time. [Special Condition No. 7]
- 2) During any startup/shutdown evolution(s), the St. Francis Power Plant will operate in the diffusion mode of operation no longer than four-hours. The CO emission limitation shall be exempted during this period of time. [Special Condition No. 22]
- 3) During equipment breakdown or malfunction, the St Francis Power Plant shall immediately take practical steps to modify operations to reduce the emissions of air contaminants. The director of the Air Pollution Control Program may require feasible and practical modifications in the operation to reduce emissions of all air contaminants. [Special Condition No. 23]
- 4) The St. Francis Power Plant is prohibited sustained operation of the combined-cycle gas turbine at loads less than 60% except during unit startup and shutdown. [Special Condition No. 24]

Monitoring:

Performance testing shall be conducted to demonstrate compliance with the BACT emission rate when burning natural gas as required by the Construction Permit # 0997-017A.

Recordkeeping:

Maintain records of the performance test required by the Construction Permit #0997-017A.

Reporting:

- 1) St. Francis Power Plant, shall report to the Air Pollution Control Programs' Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the end of the month, in which performance testing has been performed and indicates non-compliance with the CO emission limitation.
- 2) St. Francis Power Plant shall report promptly any deviations from permit requirements, including those attributable to upsets no later than 15 days to the Air Pollution Control Programs' Enforcement Section. This report shall include the cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan. [Special Condition No. 11]

PERMIT CONDITION EU0010-006

10 CSR 10-6.070

New Source Performance Regulations

40 CFR Part 60 Subpart GG

Standards of Performance for Stationary Gas Turbines – Nitrogen Oxides (NOX)

EPA Region VII Approval of Custom Fuel Sampling Schedules, Letter Dated January 07, 1998

Emission Limitation:

Standard for Nitrogen Oxides:

NOTE: This combustion turbine (EU0010) is subject to the requirements of §60.333(a)(1) of 40 CFR Part 60 Subpart GG. Since the NO_x emission standards of Subpart GG (87 ppmv when burning natural gas, at 15% O₂ dry basis as determined by §60.332(a)(1)) are less stringent than the NO_x emission limits of Permit No. 0997-017A (Permit Condition EU0010-003), the NSPS §60.332(a)(1) standards are not listed as permit conditions to this unit. Compliance with the NO_x BACT limits will assure compliance with the §60.332(a)(1) standards.

Monitoring:

- 1) The owner or operator of any stationary gas turbine subject to the provisions of 40 CFR 60, Subpart GG and using water injection to control NO_x emissions shall install and operate a continuous monitoring system to monitor and record the fuel consumption in the turbine. [\[40 CFR 60.334\(a\)\]](#)
- 2) The permittee shall comply with the EPA Region VII's approved custom fuel sulfur and/or nitrogen content monitoring schedule and associated provisions. [\[40 CFR 60.334\(b\)\(2\)\]](#)
 - a) The custom schedule is valid for only those periods of time when the unit fires pipeline-quality natural gas.

Recordkeeping

St. Francis Power Plant shall maintain records on-site for the most recent 60 months of all records required by this permit and shall immediately make such records available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

- 1) For the purposes of reports under §60.7(c) where applicable, periods of excess emissions that shall be reported are defined as follows: [\[§60.334\(c\)\]](#)
 - a) *Nitrogen oxides*. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in 40 CFR 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in 40 CFR 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a). [\[40 CFR 60.334\(c\)\(1\)\]](#)
 - b) *Ice fog*. Each period during which an exemption provided in 40 CFR 60.332(g) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. [\[40 CFR 60.334\(c\)\(3\)\]](#)
 - c) *Emergency fuel*. Each period during which an exemption provided in 40 CFR 60.332(k) is in effect shall be included in the report required in 40 CFR 60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported. [\[40 CFR 60.334\(c\)\(4\)\]](#)

PERMIT CONDITION EU0010-007

10 CSR 10-6.070

New Source Performance Regulations

40 CFR Part 60 Subpart GG

Standards of Performance for Stationary Gas Turbines – Sulfur Dioxide (SO₂)

EPA Region VII Approval of Custom Fuel Sampling Schedules, Letter Dated January 07, 1998

Emission Limitation:

Standard for Sulfur Dioxide:

The permittee shall comply with one or the other of the following conditions:

- 1) The permittee shall not cause to be discharged into the atmosphere from this gas turbine any gases which contain sulfur dioxide in excess of 0.015% by volume at 15% oxygen and on a dry basis. [40 CFR 60.333(a)]; or
- 2) No fuels shall be burned at this source which contain sulfur in excess of 0.8% by weight. [40 CFR 60.333(b)]

Monitoring:

- 1) The permittee shall comply with the EPA Region VII's approved custom fuel sulfur and/or nitrogen content monitoring schedule and associated provisions. [40 CFR 60.334(b)(2)]
 - a) The custom schedule is valid for only those periods of time when the unit fires pipeline-quality natural gas.
 - b) During periods of oil firing, or as needed, the permittee must measure on a daily (or on a transfer to bulk storage) basis the sulfur and the nitrogen content of the oil to be fired in the unit. If the permittee plans to use a measurement method other than one of those mentioned in New Source Performance Standard (NSPS), Subpart GG, the permittee shall obtain EPA's prior approval of the method.
- 2) The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: [40 CFR 60.335(d)], and as necessary
 - a) ASTM D 2880-96 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, D 3246-92, or D6667-01 shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17).
 - b) The applicable ranges of some American Society for Testing and Materials (ASTM) methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the administrator.
 - c) Analysis for fuel sulfur content of the natural gas shall be conducted using an approved alternative method. The approved alternative method shall mean the following:
The Gas Processors Association's (GPA's) Standard 2377 (Test for Hydrogen Sulfide and Carbon Dioxide in Natural Gas Using Length of Stain Tubes), as currently in effect and as may be revised from time-to-time by the GPA.
[Custom Schedule Condition 1a.]

Recordkeeping

- 1) St. Francis Power Plant shall maintain records of reports required under §60.7(c) and §60.334(c)(2), or pursuant to an approved custom fuel schedule.
- 2) St. Francis Power Plant shall maintain records on-site for the most recent 60 months of all records required by this permit and shall immediately make such records available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

- 1) For the purposes of reports under §60.7(c), periods of excess emissions that shall be reported are defined as follows:
[§60.334(c)]
 - a) *Sulfur dioxide*. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8%.

[40 CFR 60.334(c)(2)]

Compliance with the approved custom fuel schedule is said to demonstrate compliance with this applicable standard.

- b) *Emergency fuel*. Each period during which an exemption provided in 40 CFR 60.332(k) is in effect shall be included in the report required in 40 CFR 60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.

[40 CFR 60.334(c)(4)]

- 2) The permittee shall report to the Air Pollution Control Programs' Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the custom fuel schedule record keeping indicates an exceedance with the applicable standard pursuant to the regulation.

PERMIT CONDITION EU0010-008

10 CSR 10-6.350

Emission Limitations and Emission Trading of Oxides of Nitrogen

Emission Limitation:

The permittee shall limit the emissions of NO_x to the emission limits set forth by Permit No. 0997-017A (Permit Condition EU0010-003). Additionally, the emission limitation stated, above, in no way precludes the permittee from participating in acquiring banked NO_x allowance and early reduction credits as proposed under subsection (3)(B)5A.-C.

Note: The permitted (Permit No. 0997-017A) NO_x emission level is more stringent than the 0.25 pounds per million BTU of heat input during the control period limitation proposed by this rule. Compliance with the state permit condition is said to meet compliance with the provision of this regulation.

Monitoring:

- 1) A certified CEMS shall be installed pursuant to 40 CFR Part 75.
- 2) The CEMS shall be capable of monitoring measured parameters at least once every 15 minutes and shall record and monitor the NO_x emissions (i.e., in tons/hour).
- 3) Test methods and monitoring shall be complied with those methods pursuant to 10 CSR 10-6.350(5)(D).

Recordkeeping:

Each owner or operator of an affected unit subject to section (3) of this rule shall maintain records of the following (10 CSR 10-6.350 requirements):

- 1) Total fuel consumed during the control period;
- 2) The total heat input for each emissions unit during the control period;
- 3) Reports of all stack testing conducted to meet the requirements of this rule;
- 4) All other data collected by a CEMS necessary to convert the monitoring data to the units of the applicable emission limitation;
- 5) All performance evaluations conducted in the past year;
- 6) All monitoring device calibration checks;
- 7) All monitoring system, monitoring device and performance testing measurements;
- 8) Records of adjustments and maintenance performed on monitoring systems and devices; and
- 9) A log identifying each period during which the CEMS or alternate procedure was inoperative, except for zero and span checks, and the nature of the repairs and adjustments performed to make the system operative.

Reporting:

A compliance certification report for each affected unit shall be submitted to the department by October 31 following each control period pursuant to 10 CSR 10-6.350(4)(A). Any non-compliance with the provisions of this rule, the permittee shall report to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after any exceedance of the terms imposed by this regulation, following the applicable annual ozone season.

PERMIT CONDITION EU0010-009

10 CSR 10-6.360

Control of NO_x Emissions From Electric Generating Units and Non-Electric Generating Boilers

Emission Limitation:

The permittee shall obtain a NO_x Budget Permit for the combustion turbine generator EU0010 pursuant to Title V of the Clean Air Act.

A NO_x Budget Permit (Missouri Department of Natural Resources project 2007-07-088, ORIS Code 7604) is being issued to the permittee in conjunction with this Title V permit.

Monitoring/Recordkeeping:

The permittee shall retain the most current NO_x Budget permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

Annual Compliance Certification.

The permittee shall report any deviations of the monitoring/recordkeeping requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION EU0010-010

10 CSR 10-6.270 Acid Rain Source Permits Required

Emission Limitation:

The permittee shall obtain an Acid Rain Source Permit for the combustion turbine generator EU0010 pursuant to Title IV of the Clean Air Act.

An acid rain permit (Missouri Department of Natural Resources project 2004-03-159, ORIS Code 7604) is being issued to the permittee in conjunction with this Title V permit. SO₂ limitations are referenced in this Title IV: Phase II Acid Rain Permit for the installation.

Monitoring/Recordkeeping:

The permittee shall retain the most current acid rain permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

Annual Compliance Certification.

The permittee shall report any deviations of the monitoring/recordkeeping requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION EU0010– 011

10 CSR 10-6.362 Clean Air Interstate Rule Annual NOx Trading Program
10 CSR 10-6.364 Clean Air Interstate Rule Seasonal NOx Trading Program
10 CSR 10-6.366 Clean Air Interstate Rule SOx Trading Program

Emission Limitation:

The permittee shall obtain a Clean Air Interstate Rule (CAIR) Source Permit for the combustion turbine generator EU0010.

A CAIR Permit (Missouri Department of Natural Resources project 2007-07-095, ORIS Code 7604) is being issued to the permittee in conjunction with this Title V permit. (See Attachment G)

Monitoring/Recordkeeping:

The permittee shall retain the most current CAIR permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

Annual Compliance Certification.

The permittee shall report any deviations of the monitoring/recordkeeping requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

EU0020 – Combustion Turbine Unit #2			
Emission Unit	Description	Manufacturer/Model #	2006 EIQ Reference #
EU0020	Combined-Cycle Gas Turbine Unit #2; 170 Megawatt (MW) Unit; Primary Fuel – Natural Gas (1673 MMBtu/hr)	Siemens/V84.3A	EP-05

PERMIT CONDITION EU0020-001
 10 CSR 10-6.060
 Construction Permits Required
 Construction Permit No. 0799-012 – BACT Requirement for PM₁₀

Emission Limitation:

St. Francis Power Plant shall not discharge into the atmosphere nor allow the emission rate of particulate matter less than ten microns (PM₁₀) from the operation of the combined-cycle gas turbine Unit #2 to exceed 0.003 lb/MMBtu when burning natural gas. Good combustion practices shall be utilized not to exceed the 0.003 lb/MMBtu PM₁₀ emission limit. [Special Condition No.1]

Operation Limitation:

- 1) No fuels other than pipeline grade natural gas shall be combusted in the combined-cycle gas turbine Unit #2 at any time. [Special Condition No. 5]
- 2) During any startup/shutdown evolution(s), the St. Francis Power Plant will operate in the diffusion mode of operation no longer than four-hours. The PM₁₀ emission limitation shall be exempted during this period of time. [Special Condition No. 18]
- 3) During equipment breakdown or malfunction, the St. Francis Power Plant shall immediately take practical steps to modify operations to reduce the emissions of air contaminants. The director of the Air Pollution Control Program may require feasible and practical modifications in the operation to reduce emissions of all air contaminants. [Special Condition No. 19]
- 4) The St. Francis Power Plant is prohibited to sustain operation of the combined-cycle gas turbine at loads less than 60% when firing natural gas except during unit startup and shutdown. [Special Condition No. 20]

Monitoring/Recordkeeping:

- 1) The permittee shall maintain records of the performance test required by the Construction Permit #0799-012.
- 2) The St. Francis Power Plant shall maintain records during periods of start-up and shutdown, that include the amount of time required for each cycle and time that the turbines are operated at least less than the 60% load. [Special Condition No. 21]

Reporting:

- 1) St. Francis Power Plant, shall report to the Air Pollution Control Programs’ Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the end of the month, in which performance testing has been performed and indicates non-compliance with the PM₁₀ emission limitation. [Special Condition No. 7]
- 2) St. Francis Power Plant shall report promptly to the Air Pollution Control Program’s Enforcement Section any deviations from permit requirements, including those attributable to upsets, within 15 days of said deviation. This report shall include the cause of such deviations and any corrective

actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan. [Special Condition No. 8]

PERMIT CONDITION EU0020-002

10 CSR 10-6.060

Construction Permits Required

Construction Permit No. 0799-012 – BACT Requirement for VOC

Emission Limitation:

The St. Francis Power Plant shall not discharge into the atmosphere nor allow the emission rate of VOCs from the operation of the combined-cycle gas turbine Unit #2 to exceed 0.01 lb/MMBTU when firing natural gas at turbine loads above 60% to assure operation in the pre-mix mode. Good combustion practices shall be utilized not to exceed the above VOCs emissions limit. [Special Condition No. 2]

Operation Limitation:

- 1) No fuels other than natural gas shall be combusted in the combined-cycle gas turbine Unit #2 at any time. [Special Condition No. 5]
- 2) During any startup/shutdown evolution(s), the St. Francis Power Plant will operate in the diffusion mode of operation no longer than four-hours. The VOC emission limitation shall be exempted during this period of time. [Special Condition NO. 18]
- 3) During equipment breakdown or malfunction, the St. Francis Power Plant shall immediately take practical steps to modify operations to reduce the emissions of air contaminants. The director of the Air Pollution Control Program may require feasible and practical modifications in the operation to reduce emissions of all air contaminants. [Special Condition No. 19]
- 4) The St. Francis Power Plant is prohibited from operating the combined-cycle gas turbine at a sustained load of less than 60% when firing natural gas except during unit startup and shutdown. [Special Condition No. 20]

Monitoring/Recordkeeping:

- 1) The permittee shall maintain records of the performance test required by the Construction Permit #0799-012.
- 2) The St. Francis Power Plant shall maintain records during periods of start-up and shutdown, that include the amount of time required for each cycle and time that the turbines are operated at least less than the 60% load. [Special Condition No. 21]

Reporting:

- 1) St. Francis Power Plant, shall report to the Air Pollution Control Programs' Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the end of the month, in which performance testing has been performed and indicates non-compliance with the VOC emission limitation. [Special Condition No. 7]
- 2) St. Francis Power Plant shall report promptly any deviations from permit requirements, including those attributable to upsets no later than 15 days to the Air Pollution Control Programs' Enforcement Section. This report shall include the cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for

additional stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan. [Special Condition No. 8]

PERMIT CONDITION EU0020-003

10 CSR 10-6.060

Construction Permits Required

Construction Permit No. 0799-012 – BACT Requirement for NO_x

Amendment to Permit No. 0799-012 Dated October 29, 1999

Emission Limitation:

- 1) The BACT for the emissions of NO_x from the operation of the combined-cycle gas turbine Unit #2 at turbine loads above 60% shall not exceed 4.5 parts per million (ppm) by volume, based on three-hour rolling average, corrected to 15% O₂ or an equivalent percent CO₂ when burning natural gas. This limit shall be achieved by using SCR along with the dry low-NO_x burners. The St. Francis Power Plant shall conduct performance tests to demonstrate compliance with this emissions limitation. [Special Condition No. 3]
- 2) Exceptions: St. Francis Power Plant is exempt from (1) above when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine. “Ice Fog” is defined as an atmospheric suspension of highly reflective ice crystals. [Special Condition No. 11]

Operation Limitation:

- 1) No fuels other than natural gas shall be combusted in the combined-cycle gas turbine Unit #2 at any time. [Special Condition No. 5]
- 2) During any startup/shutdown evolution(s), the St. Francis Power Plant will operate in the diffusion mode of operation no longer than a combined total of four-hours for the startup/shutdown evolution(s). The NO_x emission limitation shall be exempted during this period of time. NO_x emission data shall be collected by the CEMS in accordance with 40 CFR Part 75. [Special Condition No. 18]
- 3) During equipment breakdown or malfunction, the St Francis Power Plant shall immediately take practical steps to modify operations to reduce the emissions of air contaminants. The director of the Air Pollution Control Program may require feasible and practical modifications in the operation to reduce emissions of all air contaminants. [Special Condition No. 19]
- 4) The St. Francis Power Plant is prohibited sustained operation of the combined-cycle gas turbine at loads less than 60% when firing natural gas except during unit startup and shutdown. [Special Condition No. 20]

Monitoring:

- 1) The St. Francis Power Plant shall install, operate and maintain a CEMS in accordance with 40 CFR Part 75 requirements to monitor and record the emissions rate (for NO_x) and the fuel consumption in the combined-cycle gas turbine #2.

Recordkeeping:

- 1) Using CEMS, record the corrected NO_x concentration and the fuel consumption in the turbine. The notification and record keeping requirements of 40 CFR 60.7(c) shall be adhered to as they pertain to 40 CFR 60.334(c)(1), except the NO_x emission limitation should be replaced with 4.5 ppm by volume when operating on natural gas. Briefly, this requires that quarterly reports be submitted to the director of the Air Pollution Control Program, within 30 days after the end of each quarter, detailing any exceedances of the applicable emission limits.
- 2) The permittee shall use Attachment D or an equivalent recordkeeping form to record any exceedances or monitor downtime events as indicated by the continuous emission monitoring system.
- 3) The permittee shall maintain records of the performance test required by the Construction Permit #0799-012.
- 4) The St. Francis Power Plant shall maintain records during periods of start-up and shutdown, that include the amount of time required for each cycle and time that the turbines are operated at least less than the 60% load. [Special Condition No. 21]

Reporting:

- 1) St. Francis Power Plant, shall report to the Air Pollution Control Programs' Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the end of the month, in which performance testing has been performed and indicates non-compliance with the NO_x emission limitation. [Special Condition No. 7]
- 2) St. Francis Power Plant shall report promptly any deviations from permit requirements, including those attributable to upsets no later than 15 days to the Air Pollution Control Programs' Enforcement Section. This report shall include the cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan. [Special Condition No. 8]
- 3) Excess emissions reports shall be submitted to the Air Pollution Control Program on a quarterly basis. If any exceedances were recorded, the quarterly report should give the day and duration of how long the emission unit was out of the limitations set forth in this rule. Additionally, the report shall give a detailed explanation of why the plant was in exceedance and corrective action taken by St. Francis Power Plant to bring the emission unit back into the limitations set forth in this rule.
- 4) The permittee shall report quarterly when the monitoring system is down due to inoperative periods, repairs, malfunctions or monitor adjustments. The report shall give a reason as to why the monitor was down, the duration of the downtime event, and provide the percent of the total operating period the monitor experienced downtime. The report shall distinguish between those downtime events that were due to QA activities and those events that occurred for other reasons. However, if no excess emissions occurred within the quarter and the continuous NO_x monitoring system has not been inoperative, repaired, or adjusted, that information shall be included in the report. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.

PERMIT CONDITION EU0020-004

10 CSR 10-6.060

Construction Permits Required

Construction Permit No. 0799-012 – BACT Requirement for CO

Emission Limitation:

- 1) St. Francis Power Plant, shall not discharge into the atmosphere nor allow the emission rate of CO from the operation of the combined-cycle gas turbine at turbine loads above 60% to exceed ten ppm by volume when firing natural gas. Good combustion practices shall be utilized not to exceed the ten-ppm CO emissions limit. [Special Condition No. 4]
- 2) Exceptions: St. Francis Power Plant is exempt from (1) above when ice fog is deemed a traffic hazard by the owner or operator of the gas turbine. “Ice Fog” is defined as an atmospheric suspension of highly reflective ice crystals. [Special Condition No. 11]

Operation Limitation:

- 1) No fuels other than natural gas shall be combusted in the combined-cycle gas turbine Unit #2 at any time. [Special Condition No. 5]
- 2) During any startup/shutdown evolution(s), the St. Francis Power Plant will operate in the diffusion mode of operation no longer than four-hours. The CO emission limitation shall be exempted during this period of time. [Special Condition No. 18]
- 3) During equipment breakdown or malfunction, the St. Francis Power Plant shall immediately take practical steps to modify operations to reduce the emissions of air contaminants. The director of the Air Pollution Control Program may require feasible and practical modifications in the operation to reduce emissions of all air contaminants. [Special Condition No. 19]
- 4) The St. Francis Power Plant is prohibited sustained operation of the combined-cycle gas turbine at loads less than 60% when firing natural gas except during unit startup and shutdown. [Special Condition No. 20]

Monitoring/Recordkeeping:

- 1) The permittee shall maintain records of the performance test required by the Construction Permit #0799-012.
- 2) The St. Francis Power Plant shall maintain records during periods of startup and shutdown, that include the amount of time required for each cycle and time that the turbines are operated at least less than the 60% load. [Special Condition No. 21]

Reporting:

- 1) St. Francis Power Plant, shall report to the Air Pollution Control Programs’ Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the end of the month, in which performance testing has been performed and indicates non-compliance with the CO emission limitation. [Special Condition No. 7]
- 2) St. Francis Power Plant shall report promptly any deviations from permit requirements, including those attributable to upsets no later than 15 days to the Air Pollution Control Programs’ Enforcement Section. This report shall include the cause of such deviations and any corrective actions or preventive measures taken. Corrective actions may include a requirement for additional stack testing or more frequent monitoring, or could trigger implementation of a corrective action plan. [Special Condition No. 8]

PERMIT CONDITION EU0020-005

10 CSR 10-6.070

New Source Performance Regulations

40 CFR Part 60 Subpart GG

Standards of Performance for Stationary Gas Turbines – Nitrogen Oxides (NO_x)

EPA Region VII Approval of Custom Fuel Sampling Schedules, Letter Dated January 7, 1999

Emission Limitation:

Standard for Nitrogen Oxides:

NOTE: This combustion turbine (EU0020) is subject to the requirements of §60.333(a)(1) of 40 CFR Part 60 Subpart GG. Since the NO_x emission standards of Subpart GG (87 ppmv when burning natural gas at 15% O₂ dry basis as determined by §60.332(a)(1)) is less stringent than the NO_x emission limit of Permit No. 0799-012 (Permit Condition EU0020-003), the NSPS §60.332(a)(1) standards are not listed as permit conditions to this unit. Compliance with the NO_x BACT limits will assure compliance with the §60.332(a)(1) standards.

Monitoring:

Pursuant to the EPA Region VII's approved custom fuel schedule, monitoring of fuel nitrogen content shall not be required while natural gas is the only fuel fired in the gas turbine.

NOTE: The custom schedule is valid for only those periods of time when the unit fires pipeline-quality natural gas.

Test methods and procedures. [40 CFR 60.335]

1) In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in this permit, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph 40 CFR 60.335(f).

[40 CFR 60.335(b)]

2) The owner or operator shall determine compliance with the nitrogen oxides standards in 40 CFR 60.332 follows:

a) The nitrogen oxides emission rate (NO_x) shall be computed for each run using the following equation:

$$NO_X = (NO_{XO}) \left[\frac{P_r}{P_o} \right]^{0.5} e^{19(H_o - 0.00633)} \left[\frac{288^o K}{T_a} \right]^{1.53}$$

where:

NO_x = emission rate of NO_x at 15 percent O₂ and ISO standard ambient conditions, volume percent.

No_{xO} = observed NO_x concentration, ppm by volume.

P_r = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

P_O = observed combustor inlet absolute pressure at test, mm Hg.

H_O = observed humidity of ambient air, g H₂O/g air.

e = transcendental constant, 2.718.

T_a = ambient temperature, °K.

[40 CFR 60.335(c)(1)]

- b) The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. The manufacturer shall correct all loads to ISO conditions using the appropriate equations supplied.

[40 CFR 60.335(c)(2)]

- c) U.S. EPA. Method 20 (40 CFR 60, Appendix A) shall be used to determine the nitrogen oxides and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NO_x emissions shall be determined at each of the load specified in 40 CFR 60.335(c)(2).

[40 CFR 60.335(c)(3)]

- 3) The owner or operator may use the following as alternatives to the reference methods and procedures specified in 40 CFR 60.335:
- a) Instead of using the equation in paragraph 40 CFR 60.335(c)(1), manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in 40 CFR 60.8 to ISO standard day conditions. These factors are developed for each gas turbine model they manufacture in terms of combustion inlet pressure, ambient air pressure, ambient air humidity, and ambient air temperature. They shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by 40 CFR 60.8. Notices of approval of custom ambient condition correction factors will be published in the Federal Register.

[40 CFR 60.335(f)(1)]

Recordkeeping

St. Francis Power Plant shall maintain records on-site for the most recent 60 months of all records required by this permit and shall immediately make such records available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

For the purposes of reports under §60.7(c), periods of excess emissions that shall be reported are defined as follows: [§60.334(c)]

- 1) *Ice fog*. Each period during which an exemption provided in 40 CFR 60.332(g) is in effect shall be reported in writing to the Administrator quarterly. For each period the ambient conditions existing during the period, the date and time the air pollution control system was deactivated, and the date and time the air pollution control system was reactivated shall be reported. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.

[40 CFR 60.334(c)(3)]

- 2) *Emergency fuel*. Each period during which an exemption provided in 40 CFR 60.332(k) is in effect shall be included in the report required in 40 CFR 60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.

[40 CFR 60.334(c)(4)]

PERMIT CONDITION EU0020-006

10 CSR 10-6.070

New Source Performance Regulations

40 CFR Part 60 Subpart GG

Standards of Performance for Stationary Gas Turbines – Sulfur Dioxide (SO₂)

EPA Region VII Approval of Custom Fuel Sampling Schedules, Letter Dated January 7, 1999

Emission Limitation:

Standard for Sulfur Dioxide:

The permittee shall comply with one or the other of the following conditions:

- 1) The permittee shall not cause to be discharged into the atmosphere from this gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15% oxygen and on a dry basis. [40 CFR 60.333(a)]
- 2) No fuels shall be burned at this source which contain sulfur in excess of 0.8% by weight. [40 CFR 60.333(b)]

Monitoring:

The permittee shall comply with the EPA Region VII's approved custom fuel sulfur content monitoring schedule and associated provisions. [40 CFR 60.334(b)(2)]

The custom schedule is valid for only those periods of time when the unit fires pipeline-quality natural gas.

Test methods and procedures. [40 CFR 60.335]

- 1) In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of 40 CFR 60 or other methods and procedures as specified in this permit, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph 40 CFR 60.335(f). [40 CFR 60.335(b)]
 - a) U.S. EPA Method 20 (40 CFR 60, Appendix A) shall be used to determine sulfur dioxide concentrations. [40 CFR 60.335(c)(3)]
- 2) The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: [40 CFR 60.335(d)]
 - a) ASTM D 2880-96 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-90(94)E-1, D 3031-81(86), D 4084-94, or D 3246-92 shall be used for the sulfur content of gaseous fuels (incorporated by reference-see 40 CFR 60.17).
 - b) The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.
- 3) To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in 40 CFR 60.335(d) to determine the sulfur contents of the fuel being burned. The owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency may perform the analysis. [40 CFR 60.335(e)]

Recordkeeping

- 1) St. Francis Power Plant shall maintain records of reports required under §60.7(c) and §60.334(c)(2), sulfur content of fuel being fired in the turbine on a daily basis if the turbine is supplied its fuel without intermediate bulk storage.
- 2) St. Francis Power Plant shall maintain records on-site for the most recent 60 months of all records required by this permit and shall immediately make such records available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

- 1) For the purposes of reports under §60.7(c), periods of excess emissions that shall be reported are defined as follows: [\[§60.334\(c\)\]](#)
 - a) *Sulfur dioxide*. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent. [\[40 CFR 60.334\(c\)\(2\)\]](#)
Compliance with the approved custom fuel schedule is said to demonstrate compliance with this applicable standard.
 - b) *Emergency fuel*. Each period during which an exemption provided in 40 CFR 60.332(k) is in effect shall be included in the report required in 40 CFR 60.7(c). For each period, the type, reasons, and duration of the firing of the emergency fuel shall be reported.
[\[40 CFR 60.334\(c\)\(4\)\]](#)
- 2) The permittee shall report to the Air Pollution Control Programs' Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the custom fuel schedule recordkeeping indicates an exceedance with the applicable standard pursuant to the regulation.

PERMIT CONDITION EU0020-007

10 CSR 10-6.350

Emission Limitations and Emission Trading of Oxides of Nitrogen

Emission Limitation:

Beginning May 1, 2003, the permittee shall limit the emissions of NO_x to the emission limits set forth by Permit No. 0799-012 (Permit Condition EU0020-003).

Additionally, the emission limitation stated, above, in no way precludes the permittee from participating in acquiring banked NO_x allowance and early reduction credits as proposed under subsection (3)(B)5A.-C.

Note: The permitted (Permit No. 0799-012) NO_x emission level is more stringent than the 0.25 pounds per million BTU of heat input during the control period limitation proposed by this rule. Compliance with the state permit condition is said to meet compliance with the provision of this regulation.

Monitoring:

- 1) A certified CEMS shall be installed pursuant to 40 CFR Part 75.
- 2) The CEMS shall be capable of monitoring measured parameters at least once every 15 minutes and shall record and monitor the NO_x emissions (i.e., in tons/hour).
- 3) Test methods and monitoring shall be complied with those methods pursuant to 10 CSR 10-6.350(5)(D).

Recordkeeping:

Each owner or operator of an affected unit subject to section (3) of this rule shall maintain records of the following (10 CSR 10-6.350 requirements):

- 1) Total fuel consumed during the control period;
- 2) The total heat input for each emissions unit during the control period;
- 3) Reports of all stack testing conducted to meet the requirements of this rule;
- 4) All other data collected by a CEMS necessary to convert the monitoring data to the units of the applicable emission limitation;
- 5) All performance evaluations conducted in the past year;
- 6) All monitoring device calibration checks;
- 7) All monitoring system, monitoring device and performance testing measurements;
- 8) Records of adjustments and maintenance performed on monitoring systems and devices; and
- 9) A log identifying each period during which the CEMS or alternate procedure was inoperative, except for zero and span checks, and the nature of the repairs and adjustments performed to make the system operative.

Reporting:

A compliance certification report for each affected unit shall be submitted to the department by October 31 following each control period pursuant to 10 CSR 10-6.340(4)(A). Any non compliance with the provisions of this rule, the permittee shall report to The Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after any exceedance of the terms imposed by this regulation, following the applicable annual ozone season.

PERMIT CONDITION EU0020-008

10 CSR 10-6.360

Control of NO_x Emissions From Electric Generating Units and Non-Electric Generating Boilers

Emission Limitation:

The permittee shall obtain a NO_x Budget Permit for the combustion turbine generator EU0020 pursuant to Title V of the Clean Air Act.

A NO_x Budget Permit (Missouri Department of Natural Resources project 2007-07-087, ORIS Code 007604) is being issued to the permittee in conjunction with this Title V permit.

Monitoring/Recordkeeping:

The permittee shall retain the most current NO_x Budget permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

Annual Compliance Certification.

The permittee shall report any deviations of the monitoring/recordkeeping requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION EU0020-009

10 CSR 10-6.270 Acid Rain Source Permits Required

Emission Limitation:

The permittee shall obtain an Acid Rain Source Permit for the combustion turbine generator EU0020 pursuant to Title IV of the Clean Air Act.

An acid rain permit (Missouri Department of Natural Resources project 2004-06-125, ORIS Code 007604) is being issued to the permittee in conjunction with this Title V permit. SO₂ limitations are referenced in this Title IV: Phase II Acid Rain Permit for the installation.

Monitoring/Recordkeeping:

The permittee shall retain the most current acid rain permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

Annual Compliance Certification.

The permittee shall report any deviations of the monitoring/recordkeeping requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

PERMIT CONDITION EU0020– 010

10 CSR 10-6.362 Clean Air Interstate Rule Annual NO_x Trading Program
10 CSR 10-6.364 Clean Air Interstate Rule Seasonal NO_x Trading Program
10 CSR 10-6.366 Clean Air Interstate Rule SO_x Trading Program

Emission Limitation:

The permittee shall obtain a CAIR Source Permit for the combustion turbine generator EU0020.

A CAIR Permit (Missouri Department of Natural Resources project 2007-07-095, ORIS Code 7604) is being issued to the permittee in conjunction with this Title V permit. (See Attachment G)

Monitoring/Recordkeeping:

The permittee shall retain the most current CAIR permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.

Reporting:

Annual Compliance Certification.

The permittee shall report any deviations of the monitoring/recordkeeping requirements of this permit condition in the semi-annual monitoring report and annual compliance certification required by Section V of this permit.

EU0030 – Auxiliary Boiler			
Emission Unit	Description	Manufacturer/Model #	2006 EIQ Reference #
EU0030	33.48 MMBtu/hr (800 hp) Auxiliary Boiler; Natural Gas; Installed December 14, 1998	Clever Brooks/CB- 200300-150	EP-04

PERMIT CONDITION EU0030-001
 10 CSR 10-6.060
 Construction Permits Required
 Construction Permit No. 0998-012, Issued August 19, 1998

Emission Limitation:

The St. Francis Power Plant shall emit into the atmosphere from the entire installation less than 40 tons of SO_x during any 12-month rolling average when burning natural gas. SO₂ emissions from this operation shall be calculated based on fuel sulfur analysis and fuel flow. [Special Condition No. 1] No other fuels other than natural gas shall be combusted in the boiler at any time. [Special Condition No. 3]

Monitoring/Recordkeeping:

The St. Francis Power Plant shall maintain an accurate record of emissions of SO_x emitted into the atmosphere from the entire installation. [Special Condition No. 4]

The St. Francis Power Plant shall calculate the monthly sum of SO_x emissions (in tons) for natural gas from the entire installation. Attachment A, “Monthly SO_x Emission Tracking Record or an equivalent form is suitable from this purpose. Equation 1 (see Attachment A) shall be utilized to calculate monthly emissions and to record annual emissions of SO_x (in tons) from the entire installation. [Special Condition No. 4]

These records shall be kept on-site for five years and shall be made immediately available to the Missouri Department of Natural Resources’ personnel upon request. [Special Condition No. 4]

Reporting:

The St. Francis Power Plant shall report to the Air Pollution Control Programs’ Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the end of the month is records indicate that the installation exceeded the 40-ton SO_x limit. [Special Condition No. 5]

PERMIT CONDITION EU0030-002
 10 CSR 10-6.070
 New Source Performance Regulations
 40 CFR Part 60 Subpart Dc
 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units-
 Standard for SO_x

Emission Limitation:

None.

Monitoring/Recordkeeping:

- 1) The owner or operator of this facility shall record and maintain records of the amount of each fuel combusted during each operating day. [§60.48c(g)(1)]
- 2) As an alternative , the owner or operator of a facility that combusts only natural gas may elect to record and maintain records of the amount of each fuel combusted during each calendar month; [§60.48c(g)(2)]or
- 3) The owner or operator of a facility where the only fuels combusted in any steam generating unit at the property are natural gas, may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month. [§60.48c(g)(3)]

Reporting:

- 1) The owner or operator of this facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by §60.7 of this part. This notification shall include:
- 2) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.
- 3) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under §60.42c, or §60.43c.
- 4) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired. [§60.48c(a)(1), (2), (3)]

EU0040 through EU0060– Diesel Generators			
Emission Unit	Description	Manufacturer/Model #	2006 EIQ Reference #
EU0040	Diesel Generator #1; 18.25 MMBtu/hr (2 MW); No. 2 fuel oil fired; Installed June 2000	Detroit Diesel/T1637K36	EP-09
EU0050	Diesel Generator #2; 18.25 MMBtu/hr (2 MW); No. 2 fuel oil fired; Installed June 2000	Detroit Diesel/T1637K36	EP-10
EU0060	Diesel Generator #3; 18.25 MMBtu/hr (2 MW); No. 2 fuel oil fired; Installed June 2000	Detroit Diesel/T1637K36	EP-11

PERMIT CONDITION (EU0040 through EU0060)-001
10 CSR 10-6.060
Construction Permits Required
Construction Permit No. 042000-014, Issued April 5, 2000

Emission Limitations:

The St. Francis Power Plant shall emit into the atmosphere from the three diesel generators, less than 40.0 tons of NOx in every consecutive 12-month rolling average. [Special Condition No. 1]

Monitoring/Recordkeeping:

- 1) Attachment D or an equivalent form must be used to demonstrate compliance with this condition.
- 2) These records shall be maintained on-site for five years and shall be made available for inspection to the Missouri Department of Natural Resources' personnel upon request. [Special Condition No. 2]

Reporting:

The St. Francis Power Plant shall report to the Air Pollution Control Programs' Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than 15 days after the end of the month during which the source exceeds the NOx limitation. [Special Condition No. 3]

PERMIT CONDITION (EU0040 through EU0060)-002
10 CSR 10-6.260
Restriction of Emission of Sulfur Compounds

Emission Limitation:

- 1) Emissions from any existing or new source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
- 2) Stack gasses shall not contain more than 35 milligrams (mg) per cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.
- 3) No person shall cause or permit the emission of sulfur compounds from any source which causes or contributes to concentrations exceeding those specified in 10 CSR 10-6.010 Ambient Air Quality Standards. [10 CSR 10-6.260(4) of August 30, 1996 version, 10 CSR 10-6.260(3)(B) of May 30, 2004, version & 10 CSR 10-6.010 Ambient Air Quality Standards]

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.03 parts per million (ppm) (80 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$))	Annual arithmetic mean
	0.14 ppm (365 $\mu\text{g}/\text{m}^3$)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 $\mu\text{g}/\text{m}^3$)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 $\mu\text{g}/\text{m}^3$)	1/2-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 $\mu\text{g}/\text{m}^3$)	1/2-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 $\mu\text{g}/\text{m}^3$	24-hour average not to be exceeded more than once in any 90 consecutive days

Operational Limitation/Equipment Specifications:

The emission unit shall be limited to burning number 2 fuel oil.

Monitoring/Recordkeeping:

- 1) The permittee shall maintain an accurate record of the sulfur content of fuel used. Fuel purchase receipts, analyzed samples or certifications that verify the fuel type and sulfur content will be acceptable.
- 2) These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.
- 3) All records shall be maintained for five years.

Reporting:

The permittee shall report any deviations/exceedances of this permit condition using the semi-annual monitoring report and annual compliance certification to the Air Pollution Control Program Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as required by 10 CSR 10-6.065(6)(C)1.C.(III).

Core Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued.

10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions

- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the director within two business days, in writing, the following information:
 - a) Name and location of installation;
 - b) Name and telephone number of person responsible for the installation;
 - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
 - d) Identity of the equipment causing the excess emissions;
 - e) Time and duration of the period of excess emissions;
 - f) Cause of the excess emissions;
 - g) Air pollutants involved;
 - h) Best estimate of the magnitude of the excess emissions expressed in the units of the applicable requirement and the operating data and calculations used in estimating the magnitude;
 - i) Measures taken to mitigate the extent and duration of the excess emissions; and
 - j) Measures taken to remedy the situation that caused the excess emissions and the measures taken or planned to prevent the recurrence of these situations.
- 2) The permittee shall submit the paragraph 1 information list to the director in writing at least ten days prior to any maintenance, start-up or shutdown, which is expected to cause an excessive release of emissions that exceed one hour. If notice of the event cannot be given ten days prior to the planned occurrence, it shall be given as soon as practicable prior to the release. If an unplanned excess release of emissions exceeding one hour occurs during maintenance, start-up or shutdown, the director shall be notified verbally as soon as practical during normal working hours and no later than the close of business of the following working day. A written notice shall follow within ten working days.
- 3) Upon receipt of a notice of excess emissions issued by an agency holding a certificate of authority under section 643.140, RSMo, the permittee may provide information showing that the excess emissions were the consequence of a malfunction, start-up or shutdown. The information, at a minimum, should be the paragraph 1 list and shall be submitted not later than 15 days after receipt of the notice of excess emissions. Based upon information submitted by the permittee or any other pertinent information available, the director or the commission shall make a determination whether the excess emissions constitute a malfunction, start-up or shutdown and whether the nature, extent and duration of the excess emissions warrant enforcement action under section 643.080 or 643.151, RSMo.
- 4) Nothing in this rule shall be construed to limit the authority of the director or commission to take appropriate action, under sections 643.080, 643.090 and 643.151, RSMo to enforce the provisions of the Air Conservation Law and the corresponding rule.
- 5) Compliance with this rule does not automatically absolve the permittee of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

The permittee shall not commence construction, modification, or major modification of any installation subject to this rule, begin operation after that construction, modification, or major modification, or begin operation of any installation which has been shut down longer than five years without first obtaining a permit from the permitting authority.

10 CSR 10-6.065 Operating Permits

The permittee shall file a complete application for renewal of this operating permit at least six months before the date of permit expiration. In no event shall this time be greater than eighteen months. [10 CSR 10-6.065(6)(B)1.A(V)] The permittee shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] The permittee shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request. [10 CSR 10-6.065(6)(C)3.B]

10 CSR 10-6.110 Submission of Emission Data, Emission Fees and Process Information

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079 to satisfy the requirements of the Federal Clean Air Act, Title V.
- 3) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the EIQ form or equivalent approved by the director.

10 CSR 10-6.130 Controlling Emissions During Episodes of High Air Pollution Potential

This rule specifies the conditions that establish an air pollution alert (yellow/orange/red/purple), or emergency (maroon) and the associated procedures and emission reduction objectives for dealing with each. The permittee shall submit an appropriate emergency plan if required by the director.

10 CSR 10-6.150 Circumvention

The permittee shall not cause or permit the installation or use of any device or any other means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission or air contaminant which violates a rule of the Missouri Air Conservation Commission.

10 CSR 10-6.170 Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the director.
- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.

- 3) Should it be determined that noncompliance has occurred, the director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
 - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
 - b) Paving or frequent cleaning of roads, driveways and parking lots;
 - c) Application of dust-free surfaces;
 - d) Application of water; and
 - e) Planting and maintenance of vegetative ground cover.

10 CSR 10-6.180 Measurement of Emissions of Air Contaminants

- 1) The director may require any person responsible for the source of emission of air contaminants to make or have made tests to determine the quantity or nature, or both, of emission of air contaminants from the source. The director may specify testing methods to be used in accordance with good professional practice. The director may observe the testing. All tests shall be performed by qualified personnel.
- 2) The director may conduct tests of emissions of air contaminants from any source. Upon request of the director, the person responsible for the source to be tested shall provide necessary ports in stacks or ducts and other safe and proper sampling and testing facilities, exclusive of instruments and sensing devices as may be necessary for proper determination of the emission of air contaminants.
- 3) The director shall be given a copy of the test results in writing and signed by the person responsible for the tests.

10 CSR 10-3.030 Open Burning Restrictions

- 1) The permittee shall not conduct, cause, permit or allow a salvage operation, the disposal of trade wastes or burning of refuse by open burning.
- 2) Exception - Open burning of trade waste or vegetation may be permitted only when it can be shown that open burning is the only feasible method of disposal or an emergency exists which requires open burning.
- 3) Any person intending to engage in open burning shall file a request to do so with the director. The request shall include the following:
 - a) The name, address and telephone number of the person submitting the application; The type of business or activity involved; A description of the proposed equipment and operating practices, the type, quantity and composition of trade wastes and expected composition and amount of air contaminants to be released to the atmosphere where known;
 - b) The schedule of burning operations;
 - c) The exact location where open burning will be used to dispose of the trade wastes;
 - d) Reasons why no method other than open burning is feasible; and
 - e) Evidence that the proposed open burning has been approved by the fire control authority which has jurisdiction.
- 4) Upon approval of the open burning permit application by the director, the person may proceed with the operation under the terms of the open burning permit. Be aware that such approval shall not exempt St. Francis Power Plant from the provisions of any other law, ordinance or regulation.
- 5) The permittee shall maintain files with letters from the director approving the open burning operation and previous Department of Natural Resources inspection reports.

10 CSR 10-3.090 Restriction of Emission of Odors

No person may cause, permit or allow the emission of odorous matter in concentrations and frequencies or for durations that odor can be perceived when one volume of odorous air is diluted with seven volumes of odor-free air for two separate trials not less than 15 minutes apart within the period of one hour.

This requirement is not federally enforceable.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

- 1) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
 - a) All containers in which a class I or class II substance is 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 into 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 statement 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.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
 - 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 the 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.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 4) 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 system used on passenger buses using HCFC-22 refrigerant.

The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

10 CSR 10-6.280 Compliance Monitoring Usage
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- 1) The permittee is not prohibited from using the following in addition to any specified compliance methods for the purpose of submission of compliance certificates:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) Monitoring method(s) approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
 - c) Any other monitoring methods approved by the director.
- 2) Any credible evidence may be used for the purpose of establishing whether a permittee has violated or is in violation of any such plan or other applicable requirement. Information from the use of the following methods is presumptively credible evidence of whether a violation has occurred by a permittee:
 - a) Monitoring methods outlined in 40 CFR Part 64;
 - b) A monitoring method approved for the permittee pursuant to 10 CSR 10-6.065, “Operating Permits”, and incorporated into an operating permit; and
 - c) Compliance test methods specified in the rule cited as the authority for the emission limitations.
- 3) The following testing, monitoring or information gathering methods are presumptively credible testing, monitoring, or information gathering methods:
 - a) Applicable monitoring or testing methods, cited in:
 - i) 10 CSR 10-6.030, “Sampling Methods for Air Pollution Sources”;
 - ii) 10 CSR 10-6.040, “Reference Methods”;
 - iii) 10 CSR 10-6.070, “New Source Performance Standards”;
 - iv) 10 CSR 10-6.080, “Emission Standards for Hazardous Air Pollutants”; or
 - b) Other testing, monitoring, or information gathering methods, if approved by the director, that produce information comparable to that produced by any method listed above.

General Permit Requirements

The installation shall comply with each of the following requirements. Consult the appropriate sections in the Code of Federal Regulations (CFR) and Code of State Regulations (CSR) for the full text of the applicable requirements. All citations, unless otherwise noted, are to the regulations in effect as of the date that this permit is issued,

10 CSR 10-6.065(6)(C)1.B Permit Duration

This permit is issued for a term of five years, commencing on the date of issuance. This permit will expire at the end of this period unless renewed.

10 CSR 10-6.065(6)(C)1.C General Record Keeping and Reporting Requirements

- 1) Recordkeeping
 - a) All required monitoring data and support information shall be retained for a period of at least five years from the date of the monitoring sample, measurement, report or application.
 - b) Copies of all current operating and construction permits issued to this installation shall be kept on-site for as long as the permits are in effect. Copies of these permits shall be made immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
 - a) All reports shall be submitted to the Air Pollution Control Program, Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) The permittee shall submit a report of all required monitoring by:
 - i) October 1st for monitoring which covers the January through June time period, and
 - ii) April 1st for monitoring which covers the July through December time period.
 - iii) Exception. Monitoring requirements which require reporting more frequently than semi annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
 - c) Each report shall identify any deviations from emission limitations, monitoring, recordkeeping, reporting, or any other requirements of the permit, this includes deviations or Part 64 exceedances.
 - d) Submit supplemental reports as required or as needed. Supplemental reports are required no later than ten days after any exceedance of any applicable rule, regulation or other restriction. All reports of deviations shall identify the cause or probable cause of the deviations and any corrective actions or preventative measures taken.
 - i) Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

- ii) Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
- iii) Any other deviations identified in the permit as requiring more frequent reporting than the permittee's semiannual report shall be reported on the schedule specified in this permit, and no later than ten days after any exceedance of any applicable rule, regulation, or other restriction.
- e) Every report submitted shall be certified by the responsible official, except that, if a report of a deviation must be submitted within ten days after the deviation, the report may be submitted without a certification if the report is resubmitted with an appropriate certification within ten days after that, together with any corrected or supplemental information required concerning the deviation.
- f) The permittee may request confidential treatment of information submitted in any report of deviation.

10 CSR 10-6.065(6)(C)1.D Risk Management Plan Under Section 112(r)

The permittee shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If the permittee has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, the permittee shall submit a Risk Management Plan in accordance with 40 CFR Part 68 no later than the latest of the following dates:

- 1) June 21, 1999;
- 2) Three years after the date on which a regulated substance is first listed under 40 CFR Section 68.130; or
- 3) The date on which a regulated substance is first present above a threshold quantity in a process.

10 CSR 10-6.065(6)(C)1.E Title IV Allowances

This permit prohibits emissions which exceed any allowances the installation holds under Title IV of the Clean Air Act.

No permit revisions shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid rain program if the increases do not require a permit revision under any other applicable requirement.

Limits cannot be placed on the number of allowances that may be held by an installation. The installation may not use these allowances, however, as a defense for noncompliance with any other applicable requirement.

Any allowances held by a Title IV installation shall be accounted for according to procedures established in rules promulgated under Title IV of the Clean Air Act.

A Title IV acid rain permit is being issued in conjunction with this Title V Part 70 operating permit.

Units 8, 9 and 10 are eligible for the new unit exemptions because they serve generators with total nameplate capacity not greater than 25 Mwe or less, and the fuel burned has an annual average sulfur content of 0.05% or less.

10 CSR 10-6.065(6)(C)1.F Severability Clause

In the event of a successful challenge to any part of this permit, all uncontested permit conditions shall continue to be in force. All terms and conditions of this permit remain in effect pending any administrative or judicial challenge to any portion of the permit. If any provision of this permit is invalidated, the permittee shall comply with all other provisions of the permit.

10 CSR 10-6.065(6)(C)1.G General Requirements

- 1) The permittee must comply with all of the terms and conditions of this permit. Any noncompliance with a permit condition constitutes a violation and is grounds for enforcement action, permit termination, permit revocation and re-issuance, permit modification or denial of a permit renewal application.
- 2) The permittee may not use as a defense in an enforcement action that it would have been necessary for the permittee to halt or reduce the permitted activity in order to maintain compliance with the conditions of the permit
- 3) The permit may be modified, revoked, reopened, reissued or terminated for cause. Except as provided for minor permit modifications, the filing of an application or request for a permit modification, revocation and reissuance, or termination, or the filing of a notification of planned changes or anticipated noncompliance, does not stay any permit condition.
- 4) This permit does not convey any property rights of any sort, nor grant any exclusive privilege.
- 5) The permittee shall furnish to the Air Pollution Control Program, upon receipt of a written request and within a reasonable time, any information that the Air Pollution Control Program reasonably may require to determine whether cause exists for modifying, reopening, reissuing or revoking the permit or to determine compliance with the permit. Upon request, the permittee also shall furnish to the Air Pollution Control Program copies of records required to be kept by the permittee. The permittee may make a claim of confidentiality for any information or records submitted pursuant to 10 CSR 10-6.065(6)(C)1.

10 CSR 10-6.065(6)(C)1.H Incentive Programs Not Requiring Permit Revisions

No permit revision will be required for any installation changes made under any approved economic incentive, marketable permit, emissions trading, or other similar programs or processes provided for in this permit.

10 CSR 10-6.065(6)(C)1.I Reasonably Anticipated Operating Scenarios

None.

10 CSR 10-6.065(6)(C)1.J Emissions Trading

Emission Units EU0010 and EU0020 are subject to 10 CSR 10-6.350, Emission Limitations and Emissions Trading of Oxides of Nitrogen.

10 CSR 10-6.065(6)(C)3 Compliance Requirements

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
 - a) Enter upon the premises where a permitted installation is located or an 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 that must be kept under the conditions of this permit;
 - c) Inspect, at reasonable times and using reasonable safety practices, 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 Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semiannually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
- a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
 - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, as well as the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102. All deviations and Part 64 exceedances and excursions must be included in the compliance certifications. The compliance certification shall include the following:
- a) The identification of each term or condition of the permit that is the basis of the certification;
 - b) The current compliance status, as shown by monitoring data and other information reasonably available to the installation;
 - c) Whether compliance was continuous or intermittent;
 - d) The method(s) used for determining the compliance status of the installation, both currently and over the reporting period; and
 - e) Such other facts as the Air Pollution Control Program will require in order to determine the compliance status of this installation.

10 CSR 10-6.065(6)(C)6 Permit Shield

- 1) Compliance with the conditions of this permit shall be deemed compliance with all applicable requirements as of the date that this permit is issued, provided that:
- a) The application requirements are included and specifically identified in this permit, or
 - b) The permitting authority, in acting on the permit revision or permit application, determines in writing that other requirements, as specifically identified in the permit, are not applicable to the installation, and this permit expressly includes that determination or a concise summary of it.
- 2) Be aware that there are exceptions to this permit protection. The permit shield does not affect the following:
- a) The provisions of section 303 of the Act or section 643.090, RSMo concerning emergency orders,
 - b) Liability for any violation of an applicable requirement which occurred prior to, or was existing at, the time of permit issuance,

- c) The applicable requirements of the acid rain program,
- d) The authority of the EPA and the Air Pollution Control Program of the Missouri Department of Natural Resources to obtain information, or
- e) Any other permit or extra-permit provisions, terms or conditions expressly excluded from the permit shield provisions.

10 CSR 10-6.065(6)(C)7 Emergency Provisions

- 1) An emergency or upset as defined in 10 CSR 10-6.065(6)(C)7.A shall constitute an affirmative defense to an enforcement action brought for noncompliance with technology-based emissions limitations. To establish an emergency- or upset-based defense, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

10 CSR 10-6.065(6)(C)8 Operational Flexibility

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, at least seven days in advance of these changes, except as allowed for emergency or upset conditions. Emissions allowable under the permit means a federally enforceable permit term or condition determined at issuance to be required by an applicable requirement that establishes an emissions limit (including a work practice standard) or a federally enforceable emissions cap that the source has assumed to avoid an applicable requirement to which the source would otherwise be subject.

- 1) Section 502(b)(10) changes. Changes that, under section 502(b)(10) of the Act, contravene an express permit term may be made without a permit revision, except for changes that would violate applicable requirements of the Act or contravene federally enforceable monitoring (including test methods), record keeping, reporting or compliance requirements of the permit.
 - a) Before making a change under this provision, The permittee shall provide advance written notice to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, describing the changes to be made, the date on which the change will occur, and any changes in emission and any permit terms and conditions that are affected. The permittee

shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.

- b) The permit shield shall not apply to these changes.

10 CSR 10-6.065(6)(C)9 Off-Permit Changes

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
 - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
 - b) The permittee must provide written notice of the change to the Air Pollution Control Program, Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, Kansas 66101, no later than the next annual emissions report. This notice shall not be required for changes that are insignificant activities under 10 CSR 10-6.065(6)(B)3. This written notice shall describe each change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.
 - c) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
 - d) The permit shield shall not apply to these changes.

10 CSR 10-6.020(2)(R)12 Responsible Official

The application utilized in the preparation of this permit was signed by Mr. Duane Highly, Director - Power Production. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of this air contaminant source shall notify the director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

10 CSR 10-6.065(6)(E)6 Reopening-Permit for Cause

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources receives notice from the EPA that a petition for disapproval of a permit pursuant to 40 CFR § 70.8(d) has been granted, provided that the reopening may be stayed pending judicial review of that determination,
- 2) Missouri Department of Natural Resources or EPA determines that the permit contains a material mistake or that inaccurate statements were made which resulted in establishing the emissions limitation standards or other terms of the permit,
- 3) Additional applicable requirements under the Act become applicable to the installation; however, reopening on this ground is not required if—:
 - a) The permit has a remaining term of less than three years;
 - b) The effective date of the requirement is later than the date on which the permit is due to expire; or
 - c) The additional applicable requirements are implemented in a general permit that is applicable to the installation and the installation receives authorization for coverage under that general permit,
- 4) The installation is an affected source under the acid rain program and additional requirements (including excess emissions requirements), become applicable to that source, provided that, upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the permit; or
- 5) Missouri Department of Natural Resources or EPA determines that the permit must be reopened and revised to assure compliance with applicable requirements.

10 CSR 10-6.065(6)(E)1.C Statement of Basis
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This permit is accompanied by a statement setting forth the legal and factual basis for the permit conditions (including references to applicable statutory or regulatory provisions). This Statement of Basis, while referenced by the permit, is not an actual part of the permit.

Attachments

Attachments follow.

Attachment B

NO_x EMISSION SUMMARY REPORT FOR UNIT 2

PART I. INSTALLATION INFORMATION

Name of Company: St Francis Power Plant
 Address:

Report Period:
 Cer./CEA: (date) (Hr)
 Emission Limit:

Manufacturer/Model Number Stack/Process

Emission Point:
 Pollutant Monitored: NO_x PPMC

CDs CNTY & SOURCE #'s:

Total Source Operating Time in Report Period: _____ (hrs)

PART II. CAUSE OF EXCESS EMISSIONS (EE)	Duration of EE (Hrs)	Percent of Operating Time
A. Air Pollution Control Equipment Failure (01)		
B. Fuel Problem (02)		
C. Process Problem (03)		
D. Unknown Cause (Excess Emission) (04)		
E. Startup (05)		
F. Soot Blowing (06)		
G. Other Known Causes (Excess Emission) (07)		
H. Shutdown (08)		
I. Total (A + B + ...E)		
Part III CAUSES OF CEMS DOWNTIME	Downtime (Hrs)	Percent of Operating Time
A. Monitor Equipment Malfunction (01)		
B. Non-monitor Equipment Malfunction (02)		
C. Quality Assurance (03)		
D. Other Known Cause (Monitor Malfunction) (04)		
E. Unknown Cause (Monitor Malfunction) (05)		
F. Total (A + B + ...E)		

Note: Percent Operating Time = [(EE (hrs) or Downtime (hrs)) / Total Operating Time] x 100

Attachment B – Continued

EXCESS NO_x PPMC EMISSION REPORT

Source: St Francis Power Plant

Quarter: _____ Year: _____

Source of Emissions: _____

The following information is reported in total time for the entire quarter identified above.

Excess Emission Duration _____
(hours)

If duration is other than zero, submit NO_x PPMC emission form.

Monitoring System Downtime Due to Quality Assurance _____ (hours)

If downtime, not including zero and span calibrations, is other than zero, submit downtime system Downtime form.

Monitoring System Downtime Excluding Downtime Due to Quality Assurance _____
(hours)

Source Operating Time _____ (hours)

Reported by _____

Position Title _____

Attachment B – Continued

EXCESS EMISSION SUMMARY – NO_x PPMC

Source: St. Francis Power Plant Report Period: ____/____/____ to ____/____/____

Source of Emissions: _____

<u>Date</u>	<u>Time</u>	<u>Magnitude</u>	<u>Reason Message</u>
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Attachment B – Continued

EXCESS EMISSION SUMMARY – NO_x PPMC MONITORING SYSTEM DOWNTIME

Source: St. Francis Power Plant Report Period: ____/____/____ to ____/____/____

Source of Emissions: _____

<u>Date</u>	<u>Time</u>	<u>Duration (hr)</u>	<u>Reason Message</u>
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Attachment C-2
 10 CSR 10-6.220 Compliance Demonstration
 Opacity Emission Observations (Method 9)

Company _____
 Location _____
 Date _____
 Time _____

Observer _____
 Observer Certification Date _____
 Type Facility _____
 Pt. Of Emiss. _____
 Control Device _____

Hour	Min	Seconds				Steam Plume		Comments
		0	15	30	45	Attached	Detached	
	0							
	1							
	2							
	3							
	4							
	5							
	6							
	7							
	8							
	9							
	10							
	11							
	12							
	13							
	14							
	15							
	16							
	17							
	18							

SUMMARY OF AVERAGE OPACITY

Set Number	Time	Opacity	
	Start - End	Sum	Average

Readings ranged from ___ to ___ % opacity.

The Source was/was not in compliance with ___ at the time evaluation was made.

 (Signature of Observer)

Attachment E

TITLE IV: ACID RAIN PERMIT

In accordance with Titles IV and V of the Clean Air Act and Missouri State Rule 10 CSR 10-6.270, *Acid Rain Source Permits Required*, the State of Missouri issues this Acid Rain Permit.

Installation Name: St. Francis Power Plant, **ORIS Code:** 7604
Project Number: 2006-09-053, **Permit Number:**
Unit IDs: 1 and 2
Effective Dates: January 1, 2007 through December 31, 2011

The permit application submitted for this source, as corrected by the State of Missouri Department of Natural Resources, Air Pollution Control Program, Operating Permit Section, is attached. The owners and operators of this source must comply with the standard requirements and special provisions set forth in this application.

The number of allowances actually held by an affected source in a unit account may differ from the number allocated by the United States Environmental Protection Agency. Pursuant to 40 CFR 72.84, *Automatic permit amendment*, this does not necessitate a revision to any unit SO₂ allowance allocations identified in this permit.

These units are not coal fired and therefore are not subject to the requirements of 40 CFR Part 76, Nitrogen Oxides Emission Reduction Program.

This acid rain permit is effective for the five-year period shown above, per 40 CFR 72.69, *Issuance and effective date of acid rain permits*. The designated representative must submit an application for renewal of this permit no later than June 30, 2011, per 40 CFR 72.30, *Requirement to apply*, and in conjunction with the operating permit renewal application.

Date

Director or Designee,
Department of Natural Resources

Plant Name (from Step 1)	St. Francis Power Plant
--------------------------	-------------------------

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 unit 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 unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another affected unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; 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).
- (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.

STEP 3,
Cont'd.

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 unit 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 unit 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;
 - (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.

Plant Name (from Step 1)	St. Francis Power Plant
--------------------------	-------------------------

Step 3,
Cont'd.

Liability. Cont'd.

- (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. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_x averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one affected unit shall not be liable for any violation by any other affected unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (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:

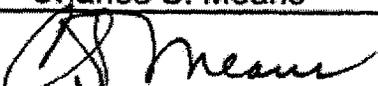
- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an affected source or affected unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
- (2) Limiting the number of allowances a unit can hold; *provided*, that the number of allowances held by the unit 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.

STEP 4

Certification

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	Charles S. Means	
Signature		Date
		3/19/04



Attachment F

TITLE V: NOX BUDGET TRADING PERMIT

In accordance with Title V of the Clean Air Act and Missouri State Rule 10 CSR 10-6.360, *Control of NO_x Emissions from Electric Generating Units and Non-electric Generating Boilers*, the State of Missouri issues this NO_x Budget Permit.

Installation Name: AECI – St. Francis Plant, **ORIS Code:** 7604
Project Number: 2007-07-088, **Permit Number:**
Unit IDs: Unit 1 and Unit 2
Effective Dates: May 1, 2007 through April 30, 2012

The permit application submitted for this source, as corrected by the State of Missouri Department of Natural Resources' Air Pollution Control Program, Operating Permit Section, is attached. The owners and operators of this source must comply with the standard requirements and special provisions set forth in this application.

This NO_x Budget Permit applies only to unit 1 at AECI's St. Francis Power Plant, plant number 069-0066.

This NO_x Budget permit is effective for the five-year period shown above, per 10 CSR 10-6.360(3)(C), *NO_x Budget Permits*. The designated representative must submit an application for renewal of this permit no later than November 30, 2011, per 10 CSR 10-6.360(3)(C), *NO_x Budget Permits*, and in conjunction with the operating permit renewal application.

Date

Director or Designee,
Department of Natural Resources

St. Francis Power Plant
Plant Name (from Step 1)

2. Monitoring requirements.

- A. The owners and operators and, to the extent applicable, the NOx authorized account representative of each NOx budget source and each NOx budget unit at the source shall comply with the monitoring requirements of section (4) of this rule.
- B. The emissions measurements recorded and reported in accordance with section (4) of this rule shall be used to determine compliance by the unit with the NOx budget emissions limitation under paragraph (3)(A)3. of this rule.

3. Nitrogen oxides requirements.

- A. The owners and operators of each NOx budget source and each NOx budget unit at the source shall hold NOx allowances available for compliance deductions under paragraph (3)(F)5. of this rule, as of the NOx allowance transfer deadline, in the unit's compliance account and the source's overdraft account in an amount not less than the total emissions for the control period from the unit, as determined in accordance with section (4) of this rule.
- B. Each ton of nitrogen oxides emitted in excess of the NOx budget emissions limitation shall constitute a separate violation of this rule, the CAA, and applicable state law.
- C. A NOx budget unit shall be subject to the requirements under subparagraph (3)(A)3.A. of this rule starting on the later of May 1, 2007 or the date on which the unit commences operation.
- D. NOx allowances shall be held in, deducted from, or transferred among NOx allowance tracking system accounts in accordance with subsections (3)(E), (F), (G), and (H) of this rule.
- E. A NOx allowance shall not be deducted, in order to comply with the requirements under subparagraph (3)(A)3.A. of this rule, for a control period in a year prior to the year for which the NOx allowance was allocated.
- F. A NOx allowance allocated by the director or the administrator under the NOx budget trading program is a limited authorization to emit one (1) ton of nitrogen oxides in accordance with the NOx budget trading program. No provision of the NOx budget trading program, the NOx budget permit application, the NOx budget permit, or an exemption under subsection (1)(E) of this rule and no provision of law shall be construed to limit the authority of the United States or the state to terminate or limit such authorization.
- G. A NOx allowance allocated by the director or the administrator under the NOx budget trading program does not constitute a property right.
- H. Upon recordation by the administrator under subsections (3)(F), (G), or (H) of this rule, every allocation, transfer, or deduction of a NOx allowance to or from a NOx budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, any NOx budget permit of the NOx budget unit by operation of law without any further review.

4. Excess emissions requirements. The owners and operators of a NOx budget unit that has excess emissions in any control period shall:

- A. Surrender the NOx allowances required for deduction under part (3)(F)5.D.(I) of this rule; and
- B. Pay any fine, penalty, or assessment or comply with any other remedy imposed under part (3)(F)5.D.(III) of this rule.

5. Record keeping and reporting requirements.

- A. Unless otherwise provided, the owners and operators of the NOx budget source and each NOx budget unit at the source shall keep on-site at the source each of the following documents for a period of five (5) years from the date the document is created. This period may be extended for cause, at any time prior to the end of five (5) years, in writing by the director or the administrator.
- (I) The account certificate of representation for the NOx authorized account representative for the source and each NOx budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with paragraph (3)(B)4.; provided that the certificate and documents shall be retained on-site at the source beyond such five (5)-year period until such documents are superseded because of the submission of a new account certificate of representation changing the NOx authorized account representative.
- (II) All emissions monitoring information, in accordance with section (4) of this rule; provided that to the extent that section (4) of this rule provides for a three (3)-year period for record keeping, the three (3)-year period shall apply.
- (III) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NOx budget trading program.
- (IV) Copies of all documents used to complete a NOx budget permit application and any other submission under the NOx budget trading program or to demonstrate compliance with the requirements of the NOx budget trading program.
- B. The NOx authorized account representative of a NOx budget source and each NOx budget unit at the source shall submit the reports and compliance certifications required under the NOx budget trading program, including those under subsections (3)(D), (3)(H), or section (4) of this rule.

6. Liability.

- A. Any person who knowingly violates any requirement or prohibition of the NOx budget trading program, a NOx budget permit, or an exemption under subsection (1)(E) of this rule shall be subject to enforcement pursuant to applicable state or federal law.
- B. Any person who knowingly makes a false material statement in any record, submission, or report under the NOx budget trading program shall be subject to criminal enforcement pursuant to the applicable state or federal law.
- C. No permit revision shall excuse any violation of the requirements of the NOx budget trading program that occurs prior to the date that the revision takes effect.
- D. Each NOx budget source and each NOx budget unit shall meet the requirements of the NOx budget trading program.
- E. Any provision of the NOx budget trading program that applies to a NOx budget source (including a provision applicable to the NOx authorized account representative of a NOx budget source) shall also apply to the owners and operators of such source and of the NOx budget units at the source.
- F. Any provision of the NOx budget trading program that applies to a NOx budget unit (including a provision applicable to the NOx authorized account representative of a NOx budget unit) shall also apply to the owners and operators of such unit. Except with regard to the requirements applicable to units with a common stack under section (4) of this rule, the owners and operators and the NOx authorized account representative of one NOx budget unit shall not be liable for any violation by any other NOx budget unit of which they are not owners or operators or the NOx authorized account representative and that is located at a source of which they are not owners or operators or the NOx authorized account representative.

7. Effect on other authorities. No provision of the NOx budget trading program, a NOx budget permit application, a NOx budget permit, or an exemption under subsection (1)(E) of this rule shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NOx authorized account representative of a NOx budget source or NOx budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the CAA.

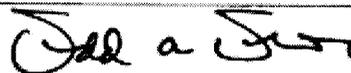
Certification

I am authorized to make this submission on behalf of the owners and operators of the NOx Budget sources or NOx Budget 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.

Todd A. Tolbert (AAAR)

Name

Signature



July 3, 2007

Date

Attachment G

TITLE V: CLEAN AIR INTERSTATE RULE (CAIR) PERMIT

In accordance with Title V of the Clean Air Act and Missouri State Rules 10 CSR 10-6.362, *Clean Air Interstate Rule Annual Nox Trading Program*, 10 CSR 10-6.364, *Clean Air Interstate Rule Seasonal NO_x Trading Program*, and 10 CSR 10-6.366, *Clean Air Interstate Rule SO_x Trading Program*, the State of Missouri issues this CAIR Permit.

Installation Name: AECI – St. Francis Power Plant, **ORIS Code:** 7604
Project Number: 2007-07-095, **Permit Number:**
Unit IDs: Units 1 and 2
Effective Dates: January 1, 2009 through November 28, 2011

The permit application submitted for this source, as corrected by the State of Missouri Department of Natural Resources' Air Pollution Control Program, Operating Permit Section, is attached. The owners and operators of this source must comply with the standard requirements and special provisions set forth in this application.

This CAIR Permit applies only to units 1 and 2 and AECI – St. Francis Power Plant, plant 069-0066.

This CAIR permit is effective for the dates shown above. The designated representative must submit an application for renewal of this permit no later than May 28, 2011, and in conjunction with the operating permit renewal application.

Date

Director or Designee,
Department of Natural Resources

CAIR Permit Application RECEIVED

Page 1

(for sources covered under a CAIR SIP)

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For more information, refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321, and 96.322

AIR POLLUTION
 CONTROL PGM

This submission is: New Revised

STEP 1
 Identify the source by plant name, State, and ORIS or facility code

St. Francis Power Plant Plant Name	MO State	007604 ORIS/Facility Code
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STEP 2
 Enter the unit ID# for each CAIR unit and indicate to which CAIR programs each unit is subject (by placing an "X" in the column)

Unit ID#	NO _x Annual	SO ₂	NO _x Ozone Season
1	X	X	X
2	X	X	X

STEP 3
 Read the standard requirements and the certification, enter the name of the CAIR designated representative, and sign and date

Standard Requirements

(a) Permit Requirements.

(1) The CAIR designated representative of each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) required to have a title V operating permit at the source shall:

(i) Submit to the permitting authority a complete CAIR permit application under §96.122, §96.222, and §96.322 (as applicable) in accordance with the deadlines specified in §96.121, §96.221, and §96.321 (as applicable); 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 source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) required to have a title V operating permit at the source shall have a CAIR permit issued by the permitting authority under subpart CC, CCC, and CCCC (as applicable) 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 II, III, and IIII (as applicable) of 40 CFR part 96, the owners and operators of a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) that is not otherwise required to have a title V operating permit and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) 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 CC, CCC, and CCCC (as applicable) of 40 CFR part 96 for such CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) and such CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable).

St. Francis Power Plant
Plant Name (from Step 1)

STEP 3,
continued

(b) Monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) at the source shall comply with the monitoring, reporting, and recordkeeping requirements of subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

(2) The emissions measurements recorded and reported in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96 shall be used to determine compliance by each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) with the CAIR NO_x emissions limitation, CAIR SO₂ emissions limitation, and CAIR NO_x Ozone Season emissions limitation (as applicable) under paragraph (c) of §96.106, §96.206, and §96.306 (as applicable).

(c) Nitrogen oxides emissions requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_x source and each CAIR NO_x unit at the source shall hold, in the source's compliance account, CAIR NO_x allowances available for compliance deductions for the control period under §96.154(a) in an amount not less than the tons of total nitrogen oxides emissions for the control period from all CAIR NO_x units at the source, as determined in accordance with subpart HH of 40 CFR part 96.

(2) A CAIR NO_x unit shall be subject to the requirements under paragraph (c)(1) of §96.106 for the control period starting on the later of January 1, 2009 or the deadline for meeting the unit's monitor certification requirements under §96.170(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR NO_x allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.106, for a control period in a calendar year before the year for which the CAIR NO_x allowance was allocated.

(4) CAIR NO_x allowances shall be held in, deducted from, or transferred into or among CAIR NO_x Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

(5) A CAIR NO_x allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Annual Trading Program. No provision of the CAIR NO_x Annual Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.105 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 allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EE, FF, GG, or II of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR NO_x allowance to or from a CAIR NO_x source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO_x unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO₂ allowances available for compliance deductions for the control period under §96.254(a) and (b) not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO₂ units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

(2) A CAIR SO₂ unit shall be subject to the requirements under paragraph (c)(1) of §96.206 for the control period starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under §96.270(b)(1), (2), or (5) and for each control period thereafter.

(3) A CAIR SO₂ allowance shall not be deducted, for compliance with the requirements under paragraph (c)(1) of §96.206, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.

(4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.205 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 SO₂ allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart FFF, GGG, or III of 40 CFR part 96, every allocation, transfer, or deduction of a CAIR SO₂ allowance to or from a CAIR SO₂ source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO₂ unit.

Nitrogen oxides ozone season emissions 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 40 CFR part 96.

(2) A CAIR NO_x Ozone Season unit shall be subject to the requirements under paragraph (c)(1) of §96.306 for the control period 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, and IIII of 40 CFR part 96.

(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

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Plant Name (from Step 1)

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**STEP 3,
continued**

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 allowance does not constitute a property right.

(7) Upon recordation by the Administrator under subpart EEEE, FFFF, GGGG, or IIII of 40 CFR part 96, 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.

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

(1) The owners and operators of the source and each CAIR NO_x unit at the source shall surrender the CAIR NO_x allowances required for deduction under §96.154(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

(2) 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.

If a CAIR SO₂ source emits sulfur dioxide during any control period in excess of the CAIR SO₂ emissions limitation, then:

(1) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ allowances required for deduction under §96.254(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

(2) 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.

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:

(1) 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

(2) 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 source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) 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 §96.113, §96.213, and §96.313 (as applicable) for the CAIR designated representative for the source and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) 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 §96.113, §96.213, and §96.313 (as applicable) changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96, provided that to the extent that subparts HH, HHH, and HHHH (as applicable) 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 Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable).

(iv) Copies of all documents used to complete a CAIR permit application and any other submission under the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) and each CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) including those under subparts HH, HHH, and HHHH (as applicable) of 40 CFR part 96.

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continued

(f) Liability.

(1) Each CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) and each NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable).

(2) Any provision of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) that applies to a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO_x units, CAIR SO₂ units, and CAIR NO_x Ozone Season units (as applicable) at the source.

(3) Any provision of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable) that applies to a CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

(g) Effect on Other Authorities.

No provision of the CAIR NO_x Annual Trading Program, CAIR SO₂ Trading Program, and CAIR NO_x Ozone Season Trading Program (as applicable), a CAIR permit application, a CAIR permit, or an exemption under § 96.105, §96.205, and §96.305 (as applicable) shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_x source, CAIR SO₂ source, and CAIR NO_x Ozone Season source (as applicable) or CAIR NO_x unit, CAIR SO₂ unit, and CAIR NO_x Ozone Season unit (as applicable) from compliance with any other provision of the applicable, approved State implementation plan, a federally enforceable permit, or the Clean Air Act.

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.

Name Duane D. Highley	
Signature 	Date June 27, 2007

STATEMENT OF BASIS

Permit Reference Documents

These documents were relied upon in the preparation of the operating permit. Because they are not incorporated by reference, they are not an official part of the operating permit.

- 1) Part 70 Operating Permit Application, received Sept 23, 2006;
- 2) 2006 Emissions Inventory Questionnaire, received May 2, 2007; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.
- 4) Construction Permit No. 0997-017A, Issued March 30, 1999
- 5) Construction Permit No. 0998-012, Issued August 19, 1998
- 6) Construction Permit No. 0799-012, Issued July 14, 1999
- 7) Amendment to Permit No. 0997-017A and 0799-012 (Dated October 29, 1999)
- 8) Construction Permit No. 042000-014, Issued April 5, 2000
- 9) EPA Region VII Letter of Approval of Custom Fuel Sampling Schedules, Dated January 7, 1998
- 10) Phase II Acid Rain Permit Application, received March 31, 2004
- 11) NOx Budget Permit, received July 9, 2007
- 12) Clean Air Interstate Rule (CAIR) Permit, received July 5, 2007

Applicable Requirements Included in the Operating Permit but Not in the Application or Previous Operating Permits

In the operating permit application, the installation indicated they were not subject to the following regulation(s). However, in the review of the application, the agency has determined that the installation is subject to the following regulation(s) for the reasons stated.

10 CSR 10-6.360, *Control of NOx Emissions From Electric Generating Units and Non-Electric Generating Boilers*. It was determined that this rule applies to Combustion Turbine 1 (EU0010) and Combustion Turbine 2 (EU0020). Further explanation is included below under “Other Regulatory Determinations.”

10 CSR 10-6.362, *Clean Air Interstate Rule Annual NOx Trading Program*, 10 CSR 10-6.364, *Clean Air Interstate Rule Seasonal NOx Trading Program*, and 10 CSR 10-6.366, *Clean Air Interstate Rule Sox Trading Program*. It was determined that this rule applies to Combustion Turbine 1 (EU0010) and Combustion Turbine 2 (EU0020). The CAIR Permit for this facility is being issued with this Part 70 Operating Permit Renewal and is included as Attachment G.

Other Air Regulations Determined Not to Apply to the Operating Permit

The Air Pollution Control Program has determined the following requirements to not be applicable to this installation at this time for the reasons stated.

10 CSR 10-6.100, *Alternate Emission Limits*

This rule is not applicable because the installation is in an ozone attainment area.

10 CSR 10-3.060, *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*

10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*

These rules do not apply to EU0030 – Auxiliary Boiler because it is subject to 10 CFR Part 60 Subpart Dc.

Construction Permit Revisions

The following revisions were made to construction permits for this installation:

The following revisions were made to construction permits for this installation:

Construction Permit #0997-017A

- 1) Special Condition #9 is not included in the operating permit because it does not meet the requirements of 40 CFR 60.334 (c). §60.334(c) is reporting requirement under 60.7(c) and defines periods of excess emissions that shall be reported. Fuel analysis for sulfur content requirement of this condition is covered by Subpart GG and is incorporated in the permit.
- 2) The initial compliance testing requirements were not included in the operating permit because they have already been completed.
- 3) The references to fuel oil operations for Unit 1 were removed. AECI has not constructed the necessary equipment (i.e. tanks, piping, other ancillaries) to operate this Unit on fuel oil. Since the equipment to operate the Unit with fuel oil was not constructed within 18 months of issuance of this construction permit, the permittee must first apply for and receive a new construction permit before the Unit may be modified to burn fuel oil.

Construction Permit No. 0799-012

- 1) Special Conditions No. 6 and No. 10 were not included in Permit Conditions EU0020-001 through EU0020-004 (where the other special conditions of this construction permit were listed) because they are included under Permit Condition EU0020-006 which lists the requirements of 40 CFR Part 60 Subpart GG.
- 2) The initial compliance testing requirements were not included in the operating permit because they have already been completed.

Construction Permit No. 0998-012

All requirements associated with the use of #2 fuel oil were removed from the special conditions of this construction permit as they were incorporated into the operating permit. Although this construction permit authorized the use of #2 fuel oil as a back up fuel, AECI has not constructed the necessary equipment to operating this unit on fuel oil. Since the necessary equipment was not constructed within 18 months of issuance of this construction permit, the permittee must first apply for and receive a new construction permit before the unit may be modified to burn fuel oil.

Construction Permit No. 042000-014

The initial compliance testing requirements were not included in the operating permit because they have already been completed.

New Source Performance Standards (NSPS) Applicability

10 CSR 10-6.070, *New Source Performance Standards*

40 CFR Part 60, Subpart GG – *Standards of Performance for Stationary Gas Turbines.*

This Subpart applies to the combustion Turbines EU0010 and EU0020. However 60.332(a)(1) and (a)(2) Standard for nitrogen oxide is not included in this permit since the construction permits (Permit 0997-017A and 0799-012) BACT NO_x limits are more stringent than the NSPS standard.

40 CFR Part 60, Subpart Dc – *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units.*

The Auxiliary Boiler (EU0040) is subject to the requirements of this standard. The emission unit has the ability to use natural gas.

Maximum Available Control Technology (MACT) Applicability

10 CSR 10-6.075, *Maximum Achievable Control Technology Regulations*

40 CFR Part 63, Subpart Q - *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers*

The provisions of this subpart apply to all new and existing industrial process cooling towers that are operated with chromium-based water treatment chemicals and are either major sources or are integral parts of facilities that are major sources as defined in §63.401. Since the cooling tower at this facility does not use chromium compounds, this Subpart is not applicable.

40 CFR Part 63, Subpart ZZZZ - *National Emission Standard for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

Although this Subpart establishes national emission limitations and operating limitations for hazardous air pollutants (HAP) emitted from stationary reciprocating internal combustion engines (RICE), there are no requirements for the Diesel Generators (Emission Units EU0050-EU0070) because they are existing (commenced construction or reconstruction before December 19, 2002) Compression Ignition (CI) Units.

40 CFR Part 63, Subpart DDDDD - *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters*

On July 30, 2007, the United States Court of Appeals, District of Columbia Circuit officially ordered a full vacature of the Boiler MACT rule. The vacature has the same effect as if a federal Boiler MACT rule was never promulgated. This means there is no longer a September 13, 2007 compliance date for sources affected by this HAP source category. We are awaiting written guidance from EPA on how to handle sources formerly subject to the Boiler MACT, including the Auxiliary Boiler (EU0030). The Auxiliary Boiler would have been subject to this MACT, however, there would have been no requirements other than initial notification because this unit is an existing gas/oil-fired unit according to § 63.7506 (b)(1) and (2). If there is a new MACT promulgated and this unit is subject with requirements a major modification will be required to update this operating permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

In the permit application and according to APCP records, there was no indication that any Missouri Air Conservation Law, Asbestos Abatement, 643.225 through 643.250; 10 CSR 10-6.080, Emission Standards for Hazardous Air Pollutants, Subpart M, National Standards for Asbestos; and 10 CSR 10-6.250, Asbestos Abatement Projects - Certification, Accreditation, and Business Exemption Requirements apply to this installation. The installation is subject to these regulations if they undertake any projects that deal with or involve any asbestos containing materials. None of the installation's operating projects underway at the time of this review deal with or involve asbestos containing material. Therefore, the above regulations were not cited in the operating permit. If the installation should undertake any construction or demolition projects in the future that deal with or involve any asbestos

containing materials, the installation must follow all of the applicable requirements of the above rules related to that specific project.

Compliance Assurance Monitoring (CAM) Applicability

40 CFR Part 64, *Compliance Assurance Monitoring (CAM)*

The CAM rule applies to each pollutant specific emission unit that:

- Is subject to an emission limitation or standard, and
- Uses a control device to achieve compliance, and
- Has pre-control emissions that exceed or are equivalent to the major source threshold.

40 CFR Part 64 is not applicable because none of the pollutant-specific emission units uses a control device to achieve compliance with a relevant standard.

Other Regulatory Determinations

Opacity Monitoring

10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*

EU0010 and EU0020

Opacity Monitoring: Based on the definition of gas fired units, as defined in 40 CFR 72.2, the gas turbines (EU0010 and EU0020) are exempt from the opacity monitoring requirements of CFR 75.14. And also are exempt from the requirements of 10 CSR 10-6.220. Therefore, the applicant is not required to conduct any regular monitoring of opacity from these combustion turbines.

Combustion Turbine #1

The required performance tests (Construction Permit 0997-017 and 0997-017A) were conducted at base load levels above 60%. The test results (see table below) show that the carbon monoxide (CO) limit was not exceeded. In addition, the turbine is expected to operate only at loads above 60%. Therefore, the periodic monitoring to show compliance with the CO limit is to document that the turbine operates above 60% full load. During these performance tests, the turbine also showed compliance with the particulate matter less than ten microns (PM10), volatile organic compounds (VOC) and nitrogen oxides (NOx) BACT limits. Therefore, no further monitoring is required for PM10 and VOC since the turbine is restricted to operating ranges of turbine loads of above 60%. NOx emissions will be continuously monitored using CEMS as required by Subpart GG of 40 CFR Part 60.

Pollutant	Unit	Natural Gas	
		Limit	Test Result (average)
PM10	lb/MMBtu	0.01	0.0025
VOC	lb/MMBtu	0.01	0.002
NOx	ppmv @ 15% O ₂	4.0	3.1
CO	ppmv @ 15% O ₂	10.0	0.5

Combustion Turbine #2

Testing was conducted on June 26-28, 2001 to determine emission rates of PM₁₀, NO_x, CO and VOC as required by the construction permit 0799-012. The test results (see table below) show that the CO limit was not exceeded. In addition, the turbine is expected to operate only at loads above 60%. Therefore, the periodic monitoring to show compliance with the CO limit is to document that the turbine operates above 60% full load. During these performance tests, the turbine also showed compliance with the

PM₁₀, VOC and NO_x BACT limits. Therefore, no further monitoring is required for PM₁₀ and VOC since the turbine is restricted to operating ranges of turbine loads of above 60%. NO_x emissions will be continuously monitored using CEMS as required by Subpart GG of 40 CFR Part 60.

Pollutant	Unit	Natural Gas	
		Limit	Test Result (average)
PM10	lb/MMBtu	0.003	0.00297
VOC	lb/MMBtu	0.01	0.006
NOx	ppmv @15% O ₂	4.5	2.8
CO	ppmv @15% O ₂	10.0	07.6

Combustion Turbines #1 and #2

10 CSR 10-6.360, *Control of NOx Emissions From Electric Generating Units and Non-Electric Generating Boilers.*

The Combustion Turbines qualify for the exemption under 10 CSR 10-6.360(C) as long as the units are limited to burning only natural gas or fuel oil, and are limited to operating 42.7 hours. This hourly operating limit was calculated based on the restriction of paragraph (C)(2) which restricts the unit’s operating hours to the number calculated by dividing twenty-five (25) tons of potential mass emissions by the unit’s maximum potential hourly NO_x mass emissions. According to paragraph (C)(3), the unit’s maximum potential hourly NO_x mass emissions is to be calculated by multiplying the unit’s maximum rated hourly heat input by the highest default NO_x emission rate applicable to the unit under 40 CFR 75.19(c), Table LM-2. For these units:

$$\text{Potential hourly NOx Emissions} = (1673 \text{ MMBtu/hr}) \times (0.7 \text{ lb MMBtu})^* \times (1 \text{ ton}/2000 \text{ lb}) = 0.586 \text{ ton/hr.}$$

* From Table LM-2 for gas fired turbine

$$\text{Allowable Hours of Operation} = (25 \text{ tons}) / (0.586 \text{ ton/hr}) = 42.7 \text{ hours.}$$

The facility has opted to obtain a NO_x Budget Permit for the turbines rather than accept this operational (hours-of-operation) limitation. The permit is being issued in conjunction with this operating permit.

Other Regulations Not Cited in the Operating Permit or the Above Statement of Basis

Any regulation which is not specifically listed in either the Operating Permit or in the above Statement of Basis does not appear, based on this review, to be an applicable requirement for this installation for one or more of the following reasons:

- 1) The specific pollutant regulated by that rule is not emitted by the installation;
- 2) The installation is not in the source category regulated by that rule;
- 3) The installation is not in the county or specific area that is regulated under the authority of that rule;
- 4) The installation does not contain the type of emission unit which is regulated by that rule;
- 5) The rule is only for administrative purposes.

Should a later determination conclude that the installation is subject to one or more of the regulations cited in this Statement of Basis or other regulations which were not cited, the installation shall determine and demonstrate, to the Air Pollution Control Program’s satisfaction, the installation’s compliance with

that regulation(s). If the installation is not in compliance with a regulation which was not previously cited, the installation shall submit to the Air Pollution Control Program a schedule for achieving compliance for that regulation(s).

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