



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 herein.

Operating Permit Number: OP2010-081
Expiration Date: JUL 18 2015
Installation ID: 097-0104
Project Number: 2002-06-106

Installation Name and Address

The Empire District Electric Company
State Line Power Plant
2299 S. State Line Ave.
Joplin, MO 64804
Jasper County

Parent Company's Name and Address

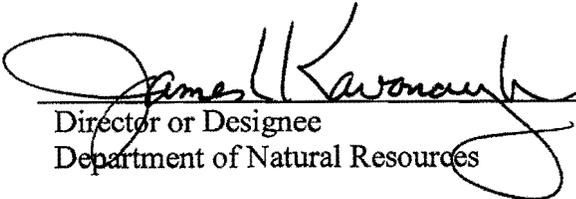
The Empire District Electric Company
P.O. Box 127
Joplin MO, 64802

Installation Description:

The Empire District Electric Company (Empire District) – State Line Power Plant (State Line) is an electric generating facility. The combined cycle portion of the facility is jointly owned by Empire District and Westar Energy, Inc., and is operated by Empire District. The simple cycle portion of the facility is owned and operated by Empire District. Electricity is generated from one simple-cycle stationary combustion turbine and two combined-cycle stationary combustion turbines. The combustion turbines use natural gas as their primary fuel. The simple-cycle combustion turbine may also use distillate fuel oil (Number 1, Number 2, or Jet A). Total plant output is a nominal six hundred (600) megawatts. Other stationary sources of emissions include parts washing, storage tanks, emergency generator and fire pump engine.

JUL 19 2010

Effective Date



Director or Designee
Department of Natural Resources

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I. Installation Description and Equipment Listing

INSTALLATION DESCRIPTION

Empire District's – State Line Power Plant is an electric generating facility. The combined cycle portion of the facility is jointly owned by Empire District and Westar Energy, Inc., and is operated by Empire District. The simple cycle portion of the facility is owned and operated by Empire District. Electricity is generated from one stationary simple-cycle combustion turbine and two stationary combined-cycle combustion turbines. The combustion turbines use natural gas as their primary fuel. The simple-cycle combustion turbines may also use distillate fuel oil. Total plant output is a nominal six hundred (600) megawatts. Other sources of emissions include parts washing, storage tanks, emergency generator and fire pump engine.

Reported Air Pollutant Emissions, tons per year									
Year	Particulate Matter ≤ Ten Microns (PM-10)	Particulate Matter ≤ 2.5 Microns (PM-2.5)	Sulfur Oxides (SO _x)	Nitrogen Oxides (NO _x)	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)	Ammonia (NH ₃)
2008	52.37	52.37	4.8	113.99	63.49	650.53	0.00	0.00	70.51
2007	47.81	47.81	5.06	109.67	59.33	593.3	0.00	7.47	64.16
2006	36.77	36.76	3.59	60.56	47.39	455.71	0.00	5.8	49.17
2005	46.21	46.21	4.3	77.85	58.87	574.18	0.00	7.29	61.91
2004	29.63	29.63	2.7	78.52	36.96	368.14	0.00	4.59	39.47

EMISSION UNITS WITH LIMITATIONS

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

Emission Unit #	Description of Emission Unit
EP03	Turbine 1
EP05	Turbine 2-2
EP06	Turbine 2-1
EP07	Solvents Containing Parts Washer
EP08	Emergency Generator
EP09	Emergency Fire Pump

EMISSION UNITS WITHOUT LIMITATIONS

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

<u>Emission Source Number</u>	<u>Description of Emission Source</u>
EP01	Truck fuel oil Unloading Point
EP02	735,000-gal distillate fuel storage tank 1, installed 1995
EP04	735,000-gal distillate fuel storage tank 2, installed 1997
INS 4	Ammonia Tanks (2) 21,000 gallons each
INS 5	Sulfuric Acid Tank 10,000 gallons
INS 6	Sodium Hypochlorite Tank 6,000 gallons
INS 7	Hydrogen Cylinders

DOCUMENTS INCORPORATED BY REFERENCE

These documents have been incorporated by reference into this permit.

- 1) Construction Permit No. 0594-035, Issued May 17, 1994
- 2) Construction Permit No. 0594-035, Correction Letter dated December 12, 2003
- 3) Construction Permit No. 1099-003, Issued September 24, 1999
- 4) Construction Permit No. 092002-015, Issued August 28, 2002
- 5) Phase II Acid Rain Permit, Issued
- 6) Clean Air Interstate Rule Permit, Issued

II. 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.

There are no plant-wide emission limitations that apply to this facility.

III. 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.

EP03 – SIMPLE CYCLE TURBINE 1		
Emission Unit	Description	Manufacturer/Model #
EP03	Turbine 1 a distillate fuel oil or natural gas powered simple cycle electric generating turbine, installed in 1994.	Westinghouse 501D5

PERMIT CONDITION EP03 - 001
10 CSR 10-6.060 Construction Permit Required
Construction Permit No. 0594-035 – Authority to install two new simple cycle turbines.

Note: This permit condition applies only to Turbine 1.

Emission Limitation:

- 1) Best Available Control Technology (BACT) for the emissions of nitrogen oxides (NOx) from the operation of this turbine at normal operating conditions (between 60% and 100% of base load) conditions is set at 25 ppm (parts per million) by volume, one-hour rolling average, corrected to 15 percent O₂ (oxygen), on a dry basis, when burning natural gas. This shall be achieved by using low-NOx burners. [Special Condition No. 1]
- 2) BACT for the emissions of NOx from the operation of this turbine at normal operating conditions (between 60% and 100% of base load) is set at 42 ppm by volume, one-hour rolling average, corrected to 15 percent O₂, on a dry basis, when burning distillate fuel oil. This shall be achieved by using a water injection system in combination with low-NOx burners.
 Since fuel-bound nitrogen can be a problem when combusting distillate fuel oil, an allowance for fuel-bound nitrogen is allowed. The allowance is taken from the following table, and added to the 42 ppm limit. The equation is taken from Subpart GG, “Standards of Performance for Stationary Gas Turbines” 60.332(a)(3). [Special Condition No. 2] Where N = the nitrogen content of the fuel (percent by weight).

<u>FUEL-BOUND NITROGEN</u>	<u>ALLOWANCE</u>
(percent by weight)	(ppm)
$N \leq 0.015$	0
$0.015 \leq N \leq 0.05$	400(N)

- 3) Empire District Electric Company is exempt from Emission Limitations 1 and 2, [Special Conditions 1 and 2], when ice fog is deemed a traffic hazard by the owner or operator of the turbine. “Ice fog” is defined as an atmospheric suspension of highly reflective ice crystals. [Special condition No. 11]
- 4) Empire District Electric Company shall apply to the Air Pollution Control Program’s Enforcement Section for an exemption from using water injection as stated in Emission Limitation 2, [Special Condition 2], during periods of drought. [Special Condition No. 12]

Operation Limitation:

- 1) BACT for the emissions of sulfur dioxide from the operation of this turbine is to be the control of the sulfur content of distillate fuel oil. Empire District shall not use distillate fuel oil with a sulfur content of greater than 0.05 percent by weight. [Special Condition No. 3]
- 2) No Fuels other than natural gas or distillate fuel oil shall be combusted in the turbine at any time. [Special Condition No. 5]

Record Keeping/Reporting:

- 1) Empire District shall submit reports of excess emissions and monitor downtime, using 60.7(c) as a reference standard. All excess emissions shall be defined and reported in accordance with the applicable emissions limit as stated above [Emission Limitation, 1 and 2]. If cause for excess is known, an exemption may be made such as those listed in 10 CSR 10-6.050 *Start-Up, Shutdown, and Malfunction Conditions*. For the purpose of reports required under 60.7 (c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:
 - a) An hour of excess emissions shall be any unit operating hour in which the one (1) hour rolling average NO_x concentration exceeds the applicable emission limit as stated above [Emission Limitation, 1 and 2]. A one (1) hour rolling average NO_x concentration is the arithmetic average of the NO_x concentration measured by the CEMS for a given minute (corrected to 15 percent O₂) and the fifty-nine (59) NO_x concentration minutes immediately preceding that unit operating minute. The minutes used to determine the rolling average will be unit operating minutes at normal operating conditions (between 60% and 100% of base load) but are not required to be consecutive.
 - i) A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO_x concentration or diluent (or both). [§60.334(j)(1)(iii)(B)]
 - ii) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period. Empire District does not have to report ambient conditions if the worst case ISO correction factor is used as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1). [§60.334(j)(1)(iii)(C)]
 - b) *Ice Fog*. Each period during which an exemption provided in §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. [§60.334(j)(3)]
 - c) All reports required under §60.7(c) shall be postmarked by the 30th day following the end of each 6-month period. [§60.334(j)(5)]

PERMIT CONDITION EP03 - 002

10 CSR 10-6.060 Construction Permit Required

Construction Permit No. 1099-003 New combined cycle turbine and convert existing single cycle turbine to combined cycle.

Note: This permit condition applies only to Turbine 1.

Operation Limitation:

Empire District shall limit the simple-cycle Turbine 1 to 5,000 hours of operation in any consecutive 12-month period. [Special Condition No. 22]

Monitoring/Recordkeeping:

Empire District shall maintain records that indicate the monthly and cumulative 12-month hours of operation of the simple turbine. The most recent 60 months records shall be maintained on site and shall be made available to Missouri DNR Employees upon request. Attachment A or similar hour tracking sheet is acceptable to use. [Special Condition No. 23]

Reporting:

Empire District shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of each month, if the 12 month cumulative total records show that the source exceeded the limitation of 5,000 hours of operation. [Special Condition No. 24]

PERMIT CONDITION EP03 - 003

10 CSR 10-6.070 New Source Performance Regulations

40 CFR Part 60 Subpart A General Provisions and Subpart GG Standards of Performance for Stationary Gas Turbines - Nitrogen Oxides (NO_x)

Note: The NO_x emission limit of 40 CFR Part 60 Subpart GG §60.332(a)(1) is less stringent than the NO_x emission limit of Construction Permit 0594-035. Therefore, the §60.332(a)(1) emission limit is not listed as a permit condition to this unit. Compliance with the BACT limits of Construction Permit 0594-035, as listed in Permit Condition EP03-001, will assure compliance with §60.332(a)(1).

Standards for Nitrogen Oxides (NO_x)

Monitoring:

- 1) Empire District has elected to install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_x and O₂ monitors. As an alternative, a CO₂ monitor may be used to adjust the measured NO_x concentrations to 15 percent O₂ by either converting the CO₂ hourly averages to equivalent O₂ concentrations using Equation F-14a or F-14b in Appendix F to part 75 of Chapter 40 and making the adjustments to 15 percent O₂, or by using the CO₂ readings directly to make the adjustments, as described in Method 20. The CEMS shall be installed, certified, maintained and operated as follows: [§60.334(b)]
 - a) Each CEMS must be installed and certified according to PS 2 and 3 (for diluent) of 40 CFR Part 60, Appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_x and diluent monitors may be performed individually or on a combined basis, *i.e.*, the relative accuracy tests of the CEMS may be performed either: [§60.334(b)(1)]
 - i) On a ppm basis (for NO_x) and a percent O₂ basis for oxygen; or [§60.334(b)(1)(i)]
 - ii) On a ppm at 15 percent O₂ basis; or [§60.334(b)(1)(ii)]
 - iii) On a ppm basis (for NO_x) and a percent CO₂ basis (for a CO₂ monitor that uses the procedures in Method 20 to correct the NO_x data to 15 percent O₂). [§60.334(b)(1)(iii)]
 - b) As specified in §60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour. [§60.334(b)(2)]

- c) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in §60.13(h). [§60.334(b)(3)]
- i) For each unit operating hour in which a valid hourly average, as described in §60.334(b)(2), is obtained for both NO_x and diluent, the data acquisition and handling system must calculate and record the hourly NO_x emissions in the units of the applicable NO_x emission standard, *i.e.*, percent NO_x by volume, dry basis, corrected to 15 percent O₂ and International Organization for Standardization (ISO) standard conditions (if required as given in §60.335(b)(1)). For any hour in which the hourly average O₂ concentration exceeds 19.0 percent O₂, a diluent cap value of 19.0 percent O₂ may be used in the emission calculations. [§60.334(b)(3)(i)]
 - ii) A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (H_o), minimum ambient temperature (T_a), and minimum combustor inlet absolute pressure (P_o) into the ISO correction equation. [§60.334(b)(3)(ii)]
 - iii) If Empire District has installed a NO_x CEMS to meet the requirements of part 75 of chapter 40, and is continuing to meet the ongoing requirements of part 75 of chapter 40, the CEMS may be used to meet the requirements of this section, except that the missing data substitution methodology provided for at 40 CFR Part 75, subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in §60.7(c). [§60.334(b)(3)(iii)]
- 2) For any turbine for which a custom fuel monitoring schedule has previously been approved, Empire District may, without submitting a special petition to the Administrator, continue monitoring on this schedule. [§60.334(h)(4)]
- 3) In conducting the performance tests required in §60.8, Empire District shall use as reference methods and procedures the test methods in 40 CFR Part 60 Appendix A or other methods and procedures as specified in §60.335, except as provided for in §60.8(b). Acceptable alternative methods and procedures are given in §60.335(c). [§60.335(a)]
- 4) Empire District shall determine compliance with the applicable nitrogen oxides emission limitation as follows: [§60.335(b)]
- a) For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{xo}) corrected to 15 percent O₂ shall be corrected to ISO standard conditions using the following equation:

$$\text{NO}_x = (\text{NO}_{xO}) \left(\frac{P_r}{P_o} \right)^{0.5} e^{19(H_o - 0.00633)} \left(\frac{288 \text{ K}}{T_a} \right)^{1.53} \quad [\text{§60.335(b)(1)}]$$

Where:

NO_x = emission rate of NO_x at fifteen percent (15%) 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

- 5) Empire District may use the following as alternatives to the reference methods and procedures specified in this section: [§60.335(c)]

- a) Instead of using the equation in §60.335(b)(1), manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in §60.8 to ISO standard day conditions.

Reporting:

Empire District shall report to the Air Program Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this condition, or any malfunction which causes an exceedance of this condition.

PERMIT CONDITION EP03 - 004

10 CSR 10-6.070 New Source Performance Regulations

40 CFR Part 60 Subpart A General Provisions and Subpart GG Standards of Performance for Stationary Gas Turbines - Sulfur Dioxide (SO₂)

Note: The SO₂ emission limit of 40 CFR Part 60 Subpart GG §60.333 is less stringent than the SO₂ emission limit of Construction Permit 0594-035. Therefore, the §60.333 SO₂ emission limit is not listed as a permit condition to this unit. Compliance with the BACT limits of Construction Permit 0594-035, as listed in Permit Condition EP03-001, will assure compliance with §60.333.

Standards for Sulfur Dioxide (SO₂)

Monitoring:

- 1) Empire District shall monitor the total sulfur content of the distillate fuel oil being fired in the turbine. The sulfur content of the distillate fuel oil must be determined using total sulfur methods described in §60.335(b)(10). [§60.334(h)(1)]
 - a) To determine the sulfur content of the distillate fuel oil, a minimum of three fuel samples shall be collected. Analyze the samples for the total sulfur content of the distillate fuel oil using ASTM D129-00, D2622-98, D4294-02, D1266-98, D5453-00 or D1552-01 (all of which are incorporated by reference, *see* §60.17). [§60.335(b)(10)(i)]
 - b) The fuel analyses required above may be performed by Empire District, a service contractor retained by Empire District, the fuel vendor, or any other qualified agency. [§60.335(b)(11)]
- 2) Empire District shall monitor the total sulfur content of the gaseous fuel being fired in the turbine. Empire District has elected to demonstrate that the gaseous fuel meets the definition of natural gas in §60.331(U). Empire District shall use one of the following sources of information to make the required demonstration: [§60.334(h)(3)]
 - a) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or [§60.334(h)(3)(i)]
 - b) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75 of Chapter 60 is required. [§60.334(h)(3)(ii)]
- 3) The frequency for determination of sulfur content of the fuel shall be as follows: [§60.334(i)]
 - a) For distillate fuel oil, use one of the total sulfur sampling options and the associated sampling frequency described in Sections 2.2.3, 2.2.4.1, 2.2.4.2, and 2.2.4.3 of Appendix D to Part 75 of Chapter 40 (*i.e.*, flow proportional sampling, daily sampling, sampling from the unit's storage tank after each addition of fuel to the tank, or sampling each delivery prior to combining it with fuel oil already in the intended storage tank). [§60.334(i)(1)]

Record Keeping/Reporting:

- 1) Empire District shall submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows: [§60.334(j)]
 - a) If Empire District is required to monitor sulfur content of the fuel, excess emissions and monitor downtime that shall be reported are defined as follows:
 - i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.05 weight percent (as required by Permit Condition EP03-001) and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. [§60.334(j)(2)(i)]
 - ii) If the option to sample each delivery of distillate fuel oil has been selected, Empire District shall as soon as practicable switch to one of the other oil sampling options (*i.e.*, daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.05 weight percent (as required by Permit Condition EP03-001). Empire District shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to §60.334(j)(2)(i). When all of the fuel from the delivery has been burned, Empire District may resume using the as-delivered sampling option. [§60.334(j)(2)(ii)]
 - iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample. [§60.334(j)(2)(iii)]
 - b) All reports required under §60.7(c) shall be postmarked by the 30th day following the end of each 6-month period. [§60.334(j)(5)]
- 2) Empire District shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this condition, or any malfunction which causes an exceedance of this condition.

<p>PERMIT CONDITION EP03 - 005 10 CSR 10-6.270 Acid Rain Source Permits Required</p>
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Emission Limitation:

Empire District shall obtain an Acid Rain Source Permit for EP03 pursuant to Title IV of the Clean Air Act. An acid rain permit (Missouri Department of Natural Resources project 2006-03-066, ORIS Code 7296, OP2010-081) is issued to Empire District in conjunction with this Title V permit. SO₂ limitations are referenced in this Title IV: Phase II Acid Rain Permit for the installation. (See Attachment E)

Monitoring/Record Keeping:

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

Reporting:

Annual Compliance Certification

PERMIT CONDITION EP03 – 006
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:

Empire District shall obtain a Clean Air Interstate Rule (CAIR) Source Permit for the combustion turbine generator EP03.

A CAIR Permit (Missouri Department of Natural Resources project 2007-06-072, ORIS Code 7296) is being issued to Empire District in conjunction with this Title V permit. (See Attachment F)

Monitoring/Recordkeeping:

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

Reporting:

Empire District 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.

EP05 and EP06– COMBINED CYCLE TURBINES 2-2 and 2-1		
Emission Unit	Description	Manufacturer/Model #
EP05	Turbine 2-2 a natural gas powered combined cycle electric generating turbine. Installed 1996.	Westinghouse 501FD
EP06	Turbine 2-1 a natural gas powered combined cycle electric generating turbine. Installed 2000.	Westinghouse 501FD

PERMIT CONDITION (EP05 and EP06) - 001
10 CSR 10-6.060 Construction Permit Required
Construction Permit No. 1099-003 New combined cycle turbine and convert existing simple cycle turbine to combined cycle.

Note: The special conditions in this section refer to construction permit No. 1099-003

Emission Limitation:

- 1) Except during periods of start-up, shutdown and malfunction, Empire District shall limit nitrogen oxide (NOx) emissions from the turbine generators and from duct burners to four (4) ppm corrected to 15 percent oxygen on a dry basis and expressed as a 30 day rolling average. This limit shall be achieved through the installation of a selective catalytic reduction (SCR) system on each exhaust system. [Special Condition No. 1]

- 2) Empire District shall limit carbon monoxide emissions from the turbine generators to the following levels.
 - a) 10 ppm corrected to 15% oxygen on a dry basis during normal operation from 75 to 100% load.
 - b) 50 ppm corrected to 15% oxygen on a dry basis during periods of operation less than 75% load. [Special Condition No. 2]
- 3) Empire District shall limit volatile organic compound (VOC) emissions from the turbines to three (3) ppm corrected to 15% oxygen on a dry basis. [Special Condition No. 3]
- 4) Empire District shall limit emissions of particulate matter less than ten (10) microns in aerodynamic diameter (PM₁₀) from the turbines to 0.1 pounds per million BTU (lb/MMBTU) of heat input. [Special Condition No. 4]
- 5) Empire District shall achieve the following from the combustion turbines and duct burners operating in the combined cycle:
 - a) CO: 12.5 ppm corrected to 15% oxygen on a dry basis
 - b) VOC: 5.1 ppm corrected to 15% oxygen on a dry basis
 - c) PM₁₀: 0.012 lb/MMBTU [Special Condition No. 5]
- 6) Empire District shall emit less than 100 tons of VOC from the turbines, from the duct burners, and from the parts washing in any consecutive 12-month period. [Special Condition No. 6]

Operation Limitation:

Natural gas shall be the only fuel fired in the combined cycle turbines and duct burners.
[Special Condition No. 20]

Monitoring/Recordkeeping:

- 1) Empire District shall use Attachment B, "Monthly VOC Emission Tracking Record" or an equivalent form to verify compliance with the emission limitation of emission limitation no. 6. The most recent 60 months records shall be maintained on site and shall be made available to Missouri Department of Natural Resources' Employees upon request. [Special Condition No. 7]
- 2) Empire District shall install, calibrate, maintain, and operate a continuous monitoring systems, and record the output of the system, for measuring NO_x emissions discharged to the atmosphere. These shall be located after the heat recovery steam generators (HRSG) in a position to monitor the combined flue gas of the turbines and duct burners. [Special Condition No. 16]
- 3) Empire District shall install, calibrate, maintain, and operate a continuous monitoring systems, and record the output of the system, for measuring the oxygen content of the flue gasses at each location where NO_x emissions are monitored. [Special Condition No. 17]
- 4) The continuous emission monitoring systems required by monitoring requirement number two shall be installed and operated according to the guidelines in 40 CFR §60.13, *Monitoring requirements*; in 40 CFR Appendix B, Performance Specification 2 – *Specifications and test procedures for SO₂ and NO_x continuous emission monitoring systems in stationary sources*; and in 40 CFR Appendix F, *Quality Assurance Procedures*. [Special Condition No. 18]
- 5) The continuous emission monitoring systems required by monitoring requirement number three shall be installed and operated according to the guidelines in 40 CFR §60.13, *Monitoring requirements*; in 40 CFR Appendix B, Performance Specification 3 - *Specifications and test procedures of O₂ and CO₂ continuous emission monitoring systems in stationary sources*; and in 40 CFR Appendix F, *Quality Assurance Programs*. [Special Condition No. 19]

- 6) Empire District shall maintain records during periods of startup and shut down that include the amount of time required for each cycle and time that the turbines are operated at less than 60% load. [Special Condition No. 21.]

Reporting:

- 1) Empire District shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of each month, if the 12-month cumulative total records show that the source exceeded the limitation of 100 tons of VOC. [Special Condition No. 8]
- a) Empire District shall submit reports of excess emissions and monitor downtime, using 60.7(c) as a reference standard. All excess emissions shall be defined and reported in accordance with the applicable emissions limit as stated above [Emission Limitation, 1]. If cause for excess is known, an exemption may be made such as those listed in 10 CSR 10-6.050 *Start-Up, Shutdown, and Malfunction Conditions*. For the purpose of reports required under 60.7 (c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:
- i) An hour of excess emissions shall be any unit operating hour in which the thirty (30) day rolling average NO_x concentration exceeds the applicable emission limit as stated above [Emission Limitation, 1]]. A thirty (30) day rolling average NO_x concentration is the arithmetic average of the NO_x concentration measured by the CEMS for a given hour (corrected to 15 percent O₂) and the seven hundred nineteen (719) average NO_x concentration hours immediately preceding that unit operating hour. The hours used to determine the rolling average will be unit operating hours, excluding start-up and shutdown, and are not required to be consecutive. A period of monitor downtime shall be any unit operating hour in which sufficient data are not obtained to validate the hour, for either NO_x concentration or diluent (or both). [§60.334(j)(1)(iii)(B)]
- ii) Each report shall include the ambient conditions (temperature, pressure, and humidity) at the time of the excess emission period. Ambient conditions do not have to be reported if the worst case ISO correction factor is used as specified in §60.334(b)(3)(ii), or if the ISO correction equation is not being used under the provisions of §60.335(b)(1). [§60.334(j)(1)(iii)(C)]
- b) *Ice Fog*. Each period during which an exemption provided in §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. [§60.334(j)(3)]
- c) All reports required under §60.7(c) shall be postmarked by the 30th day following the end of each 6-month period. [§60.334(j)(5)]

PERMIT CONDITION (EP05 and EP06) - 002

10 CSR 10-6.070 New Source Performance Regulations

40 CFR Part 60 Subpart A General Provisions and Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units

Note: Subpart Db applies to the duct burners

Emission Limitations:

- 1) Empire District shall not discharge into the atmosphere any gases from the duct burners that contain nitrogen oxides (NO_x) in excess of 0.20 lb/million Btu heat input. [§60.44b(a)(4)]

- a) This nitrogen oxides standard for the duct burners applies at all times including periods of startup, shutdown or malfunction. [§60.44b(h)]
- b) Compliance with this nitrogen oxides standard is determined on a 30-day rolling average basis. [§60.44b(i)]
- c) The nitrogen oxides emission standard under §60.44b apply at all times. [§60.46b(a)]

Monitoring:

- 1) Compliance with the nitrogen oxides emission standards required by §60.44b(a)(4) for duct burners used in combined cycle systems, shall be determined with the following procedures described in either §60.46(f)(1) or (2): [§60.46(f)]
 - a) The emissions rate (E) of NO_x shall be computed using the following equation:
$$E = E_{sg} + \left(\frac{H_g}{H_b} \right) (E_{sg} - E_g) \quad [\text{§60.46(f)(1)(i)}]$$

Where:
E = emissions rate of NO_x from the duct burner, ng/J (lb/million Btu) heat input
E_{sg} = combined effluent emissions rate, in ng/J (lb/million Btu) heat input using appropriate F-Factor as described in Method 19
H_g = heat input rate to the combustion turbine, in Joules/hour (million Btu/hour)
H_b = heat input rate to the duct burner, in Joules/hour (million Btu/hour)
E_g = emissions rate from the combustion turbine, in ng/J (lb/million Btu) heat input calculated using appropriate F-Factor as described in Method 19
 - b) Method 7E of Appendix A of Part 60 shall be used to determine the NO_x concentrations. Method 3A or 3B of Appendix A of Part 60 shall be used to determine oxygen concentration. [§60.46(f)(1)(ii)]
 - c) Empire District shall identify and demonstrate to the Administrator's satisfaction suitable methods to determine the average hourly heat input rate to the combustion turbine and the average hourly heat input rate to the affected duct burner. [§60.46(f)(1)(iii)]
 - d) Compliance with the emissions limits under §60.44b(a)(4) is determined by the three-run average (nominal 1-hour runs) for the initial and subsequent performance tests; or [§60.46(f)(1)(iv)]
- 2) Empire District may elect to determine compliance on a 30-day rolling average basis by using the continuous emission monitoring system specified under §60.48b for measuring NO_x and oxygen and meet the requirements of §60.48b. The sampling site shall be located at the outlet from the steam generating unit. The NO_x emissions rate at the outlet from the steam generating unit shall constitute the NO_x emissions rate from the duct burner of the combined cycle system. [§60.46(f)(2)]

Record Keeping:

- 1) Empire District shall maintain records of the following information for each steam generating unit operating day: [§60.49b(g)]
 - a) Calendar date. [§60.49b(g)(1)]
 - b) The average hourly nitrogen oxides emission rates (expressed as NO₂) (ng/J or lb/million Btu heat input) measured or predicted. [§60.49b(g)(2)]
 - c) The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days. [§60.49b(g)(3)]
 - d) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under

§60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken. [§60.49b(g)(4)]

- e) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken. [§60.49b(g)(5)]
- f) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data. [§60.49b(g)(6)]
- g) Identification of the “F” factor used for calculations, method of determination, and type of fuel combusted. [§60.49b(g)(7)]

Reporting:

Empire District shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this condition, or any malfunction which causes an exceedance of this condition.

PERMIT CONDITION (EP05 and EP06) - 003
10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60 Subpart A General Provisions and Subpart GG Standards of Performance for
Stationary Gas Turbines - Nitrogen Oxides (NO_x)

Note: The NO_x emission limit of 40 CFR Part 60 Subpart GG §60.332(a)(1) is less stringent than the NO_x emission limit of Construction Permit 1099-003 . Therefore, the §60.332(a)(1) emission limit is not listed as a permit condition to this unit. Compliance with the BACT limits of Construction Permit 1099-033, as listed in Permit Condition EP05 and EP06-001, will assure compliance with §60.332(a)(1).

Standards for Nitrogen Oxides (NO_x)

Monitoring:

- 1) Empire District has elected to install, certify, maintain, operate, and quality-assure a continuous emission monitoring system (CEMS) consisting of NO_x and O₂ monitors. As an alternative, a CO₂ monitor may be used to adjust the measured NO_x concentrations to 15 percent O₂ by either converting the CO₂ hourly averages to equivalent O₂ concentrations using Equation F–14a or F–14b in Appendix F to part 75 of chapter 40 and making the adjustments to 15 percent O₂, or by using the CO₂ readings directly to make the adjustments, as described in Method 20. The CEMS shall be installed, certified, maintained and operated as follows: [§60.334(b)]
 - a) Each CEMS must be installed and certified according to Performance Specification 2 and 3 (for diluent) of 40 CFR Part 60, Appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. Appendix F, Procedure 1 is not required. The relative accuracy test audit (RATA) of the NO_x and diluent monitors may be performed individually or on a combined basis, *i.e.*, the relative accuracy tests of the CEMS may be performed either: [§60.334(b)(1)]
 - i) On a ppm basis (for NO_x) and a percent O₂ basis for oxygen; or [§60.334(b)(1)(i)]
 - ii) On a ppm at 15 percent O₂ basis; or [§60.334(b)(1)(ii)]
 - iii) On a ppm basis (for NO_x) and a percent CO₂ basis (for a CO₂ monitor that uses the procedures in Method 20 to correct the NO_x data to 15 percent O₂). [§60.334(b)(1)(iii)]
 - b) As specified in §60.13(e)(2), during each full unit operating hour, each monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained for each quadrant of the hour in which the unit operates. For unit operating

hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two valid data points (one in each of two quadrants) are required to validate the hour. [§60.334(b)(2)]

- c) For purposes of identifying excess emissions, CEMS data must be reduced to hourly averages as specified in §60.13(h). [§60.334(b)(3)]
- i) For each unit operating hour in which a valid hourly average, as described in §60.334(b)(2), is obtained for both NO_x and diluent, the data acquisition and handling system must calculate and record the hourly NO_x emissions in the units of the applicable NO_x emission standard, *i.e.*, percent NO_x by volume, dry basis, corrected to 15 percent O₂ and International Organization for Standardization (ISO) standard conditions (if required as given in §60.335(b)(1)). For any hour in which the hourly average O₂ concentration exceeds 19.0 percent O₂, a diluent cap value of 19.0 percent O₂ may be used in the emission calculations. [§60.334(b)(3)(i)]
- ii) A worst case ISO correction factor may be calculated and applied using historical ambient data. For the purpose of this calculation, substitute the maximum humidity of ambient air (H_o), minimum ambient temperature (T_a), and minimum combustor inlet absolute pressure (P_o) into the ISO correction equation. [§60.334(b)(3)(ii)]
- iii) If Empire District has installed a NO_x CEMS to meet the requirements of Part 75 of Chapter 40, and is continuing to meet the ongoing requirements of Part 75 of Chapter 40, the CEMS may be used to meet the requirements of this section, except that the missing data substitution methodology provided for at 40 CFR Part 75, Subpart D, is not required for purposes of identifying excess emissions. Instead, periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance report required in §60.7(c). [§60.334(b)(3)(iii)]
- 2) For any turbine for which a custom fuel monitoring schedule has previously been approved, Empire District may, without submitting a special petition to the Administrator, continue monitoring on this schedule. [§60.334(h)(4)]
- 3) In conducting the performance tests required in §60.8, Empire District shall use as reference methods and procedures the test methods in 40 CFR Part 60 Appendix A or other methods and procedures as specified in §60.335, except as provided for in §60.8(b). Acceptable alternative methods and procedures are given in §60.335(c). [§60.335(a)]
- 4) Empire District shall determine compliance with the applicable nitrogen oxides emission limitation as follows: [§60.335(b)]
- a) For each run of the performance test, the mean nitrogen oxides emission concentration (NO_{xo}) corrected to 15 percent O₂ shall be corrected to ISO standard conditions using the following equation:

$$NO_x = (NO_{xO}) \left(\frac{P_r}{P_o} \right)^{0.5} e^{19(H_o - 0.00633)} \left(\frac{288 \text{ K}}{T_a} \right)^{1.53} \quad [\text{§60.335(b)(1)}]$$

Where:

NO_x = emission rate of NO_x at fifteen percent (15%) 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

- 5) Empire District may use the following as alternatives to the reference methods and procedures specified in this section: [§60.335(c)]
- a) Instead of using the equation in §60.335(b)(1), manufacturers may develop ambient condition correction factors to adjust the nitrogen oxides emission level measured by the performance test as provided in §60.8 to ISO standard day conditions.

Record Keeping/Reporting:

Empire District shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this condition, or any malfunction which causes an exceedance of this condition.

PERMIT CONDITION (EP05 and EP06) - 004
10 CSR 10-6.070 New Source Performance Regulations
40 CFR Part 60 Subpart A General Provisions and Subpart GG Standards of Performance for Stationary Gas Turbines - Sulfur Dioxide (SO₂)

Note: The SO₂ emission limit of 40 CFR Part 60 Subpart GG §60.333 is less stringent than the SO₂ emission limit of Construction Permit 1099-003. Therefore, the §60.333 SO₂ emission limit is not listed as a permit condition to this unit. Compliance with the BACT limits of Construction Permit 1099-003, as listed in Permit Condition EP05 & EP06-001, will assure compliance with §60.333.

Standards for Sulfur Dioxide (SO₂)

Monitoring:

- 1) Empire District Electric Company shall monitor the total sulfur content of the gaseous fuel being fired in the turbine. Empire District has elected to demonstrate that the gaseous fuel meets the definition of natural gas in §60.331(U). Empire District shall use one of the following sources of information to make the required demonstration: [§60.334(h)(3)]
 - a) The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or [§60.334(h)(3)(i)]
 - b) Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of Appendix D to Part 75 of Chapter 60 is required. [§60.334(h)(3)(ii)]

Record Keeping/Reporting:

- 1) Empire District shall submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows: [§60.334(j)]
 - a) If Empire District is required to monitor sulfur content of the fuel, excess emissions and monitor downtime that shall be reported are defined as follows:
 - i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.05 weight percent and ending on the

date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit. [§60.334(j)(2)(i)]

- ii) If the option to sample each delivery of fuel oil has been selected, Empire District switch to one of the other oil sampling options (*i.e.*, daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.05 weight percent . Empire District shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to §60.334(j)(2)(i). When all of the fuel from the delivery has been burned, Empire District may resume using the as-delivered sampling option. [§60.334(j)(2)(ii)]
 - b) All reports required under §60.7(c) shall be postmarked by the 30th day following the end of each 6-month period. [§60.334(j)(5)]
- 2) Empire District shall report to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after any exceedance of any of the terms imposed by this condition, or any malfunction which causes an exceedance of this condition.

PERMIT CONDITION (EP05 and EP06) - 005 10 CSR 10-6.270 Acid Rain Source Permits Required

Emission Limitation:

Empire District shall obtain an Acid Rain Source Permit for EP05 and EP06 pursuant to Title IV of the Clean Air Act.

An acid rain permit (Missouri Department of Natural Resources project 2009-11-043, ORIS Code 7296) was issued to Empire District on _____, with an expiration date of _____.

Monitoring/Record Keeping:

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

Reporting:

Annual Compliance Certification

PERMIT CONDITION (EP05 and EP06) - 006 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:

Empire District shall obtain a Clean Air Interstate Rule (CAIR) Source Permit for the combustion turbine generators EP05 and EP06.

A CAIR Permit (Missouri Department of Natural Resources project 2007-06-072, ORIS Code 7296) is being issued to Empire District in conjunction with this Title V permit. (See Attachment F)

Monitoring/Recordkeeping:

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

Reporting:

Empire District 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.

EP07– SOLVENTS CONTAINING PARTS WASHER	
Emission Unit	Description
EP07	Solvents containing parts washer. Installed 2001.

PERMIT CONDITION EP07 - 001
10 CSR 10-6.060 Construction Permit Required
Construction Permit No. 1099-003 New combined cycle turbine and convert existing single cycle turbine to combined cycle.

Emission Limitation:

Empire District shall emit less than 100 tons of VOC from the turbines, from the duct burners, and from the parts washing in any consecutive 12-month period. [Special Condition No. 6]

Monitoring/Recordkeeping:

Empire District shall use Attachment B, “Monthly VOC Emission Tracking Record” or an equivalent form to verify compliance with this emission limitation. The most recent 60 months records shall be maintained on site and shall be made available to Missouri DNR Employees upon request. [Special Condition No. 7]

Reporting:

Empire District shall report to the Air Pollution Control Program’s Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, no later than ten (10) days after the end of each month, if the 12-month cumulative total records show that the source exceeded the limitation of 100 tons of VOC. [Special Condition No. 8]

EU0050 and EU0060– EMERGENCY SERVICE EQUIPMENT		
Emission Unit	Description	Manufacturer/Model #
EP08	Emergency diesel powered generator. Installed 2002.	Caterpillar 3412C
EP09	Emergency diesel powered fire pump. Installed 2002.10	Clarke Power Tech 8.1L

PERMIT CONDITION (EP08 and EP09)-001
10 CSR 10-6.060 Construction Permit Required
Construction Permit No. 092002-015 Installation of a 550 Kilowatt emergency generator and a 2,500 gallon per minute emergency fire pump, both driven by diesel engines.

Operation Limitation:

The operating hours of the emergency generator shall not exceed 500 hours in any consecutive 12-month period. The operating hours of the emergency fire pump shall not exceed 500 hours in any consecutive 12-month period. To facilitate the record keeping for this condition, the emergency equipment shall be equipped with non-resettable hour meters. [Special Condition No. 1]

Monitoring/Recordkeeping:

Empire District shall maintain a record of the number of hours the emergency equipment is operated. Attachment C or an equivalent form shall be used for this purpose. Empire District shall maintain all records required by this permit for not less than five years and shall make them available to any Missouri Department of Natural Resources' employee upon request. These records shall include the operating hours for that month and the total hours of operation for the previous 12-month period. [Special Condition No. 2]

Reporting:

Empire District shall report to the Air Pollution Control Program's Enforcement Section no later than ten days after the end of the month during which the records from the monitoring condition indicate that the hours of operation during the previous 12-month period has exceeded 500 hours. [Special Condition No. 3]

PERMIT CONDITION (EP08 and EP09) - 002
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

Emission Limitations:

- 1) Emissions from any new source operation shall not contain more than five hundred parts per million by volume (500 ppm_v) of sulfur dioxide.
- 2) Stack gasses shall not contain more than thirty-five milligrams (35 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.

Pollutant	Concentration by Volume	Remarks
Sulfur Dioxide (SO ₂)	0.03 parts per million (ppm) (80 micrograms per cubic meter (µg/m ³))	Annual arithmetic mean
	0.14 ppm (365 µg/m ³)	24-hour average not to be exceeded more than once per year
	0.5 ppm (1300 µg/m ³)	3-hour average not to be exceeded more than once per year
Hydrogen Sulfide (H ₂ S)	0.05 ppm (70 µg/m ³)	½-hour average not to be exceeded over 2 times per year
	0.03 ppm (42 µg/m ³)	½-hour average not to be exceeded over 2 times in any 5 consecutive days
Sulfuric Acid (H ₂ SO ₄)	10 µg/m ³	24-hour average not to be exceeded more than once in any 90 consecutive days
	30 µg/m ³	1-hour average not to be exceeded more than once in any 2 consecutive days

Monitoring/Record Keeping/Reporting:

The emergency equipment (EP08 and EP09) will always be in compliance with this regulation. Calculations demonstrating compliance are in Attachment D. Empire District shall keep this attachment with this permit. No monitoring or reporting is required for this permit condition.

IV. Core Permit Requirements

The installation shall comply with each of the following regulations or codes. 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. The following is only an excerpt from the regulation or code, and is provided for summary purposes only.

10 CSR 10-6.045 Open Burning Requirements

- (1) General Provisions. The open burning of tires, petroleum-based products, asbestos containing materials, and trade waste is prohibited, except as allowed below. Nothing in this rule may be construed as to allow open burning which causes or constitutes a public health hazard, nuisance, a hazard to vehicular or air traffic, nor which violates any other rule or statute.
 - (A) Refer to the regulation for a complete list of allowances.
- (2) Certain types of materials may be open burned provided an open burning permit is obtained from the Director. The permit will specify the conditions and provisions of all open burning. The permit may be revoked if the owner or operator fails to comply with the conditions or any provisions of the permit.
- (3) Empire District, State Line Power Plant may be issued an annually renewable open burning permit for open burning provided that an air curtain destructor or incinerator is utilized and only tree trunks, tree limbs, vegetation or untreated wood waste are burned. Open burning shall occur at least two hundred (200) yards from the nearest occupied structure unless the owner or operator of the occupied structure provides a written waiver of this requirement. Any waiver shall accompany the open burning permit application. The permit may be revoked if Empire District, State Line Power Plant fails to comply with the provisions or any condition of the open burning permit.
 - (A) In a nonattainment area, as defined in 10 CSR 10-6.020, paragraph (2)(N)5., the Director shall not issue a permit under this section unless the owner or operator can demonstrate to the satisfaction of the Director that the emissions from the open burning of the specified material would be less than the emissions from any other waste management or disposal method.
- (4) Reporting and Record Keeping. New Source Performance Standard (NSPS) 40 CFR Part 60 Subpart CCCC establishes certain requirements for air curtain destructors or incinerators that burn wood trade waste. These requirements are established in 40 CFR 60.2245-60.2260. The provisions of 40 CFR Part 60 Subpart CCCC promulgated as of September 22, 2005, shall apply and are hereby incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401. To comply with NSPS 40 CFR 60.2245-60.2260, sources must conduct an annual Method 9 test. A copy of the annual Method 9 test results shall be submitted to the Director. Attachment G or an equivalent form can be used to conduct a Method 9 test.
- (5) Test Methods. The visible emissions from air pollution sources shall be evaluated as specified by 40 CFR Part 60, Appendix A–Test Methods, Method 9–Visual Determination of the Opacity of Emissions from Stationary Sources. The provisions of 40 CFR Part 60, Appendix A, Method 9 promulgated as of December 23, 1971, is incorporated by reference in this rule, as published by the U.S. Government Printing Office, 732 N Capitol Street NW, Washington, DC 20401.

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, Empire District 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) Empire District 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, Empire District 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 Empire District 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 Empire District of liability for the excess emissions reported.

10 CSR 10-6.060 Construction Permits Required

Empire District 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

Empire District 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)] Empire District shall retain the most current operating permit issued to this installation on-site. [10 CSR 10-6.065(6)(C)1.C(II)] Empire District shall as soon as practicable 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) Empire District shall complete and submit an Emission Inventory Questionnaire (EIQ) annually.
- 2) Empire District may be required by the Director to file additional reports.
- 3) Public Availability of Emission Data and Process Information. Any information obtained pursuant to the rule(s) of the Missouri Air Conservation Commission that would not be entitled to confidential treatment under 10 CSR 10-6.210 shall be made available to any member of the public upon request.
- 4) Empire District 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.
- 5) Empire District shall complete required reports on state supplied EIQ forms or in a form satisfactory to the Director and the reports shall be submitted to the Director by June 1 after the end of each reporting period.
- 6) The reporting period shall end on December 31 of each calendar year. Each report shall contain the required information for each emission unit for the twelve (12)-month period immediately preceding the end of the reporting period.
- 7) Empire District shall collect, record, and maintain the information necessary to complete the required forms during each year of operation of the installation.

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. Empire District shall submit an appropriate emergency plan if required by the Director.

10 CSR 10-6.150 Circumvention

Empire District 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

Emission Limitation:

- 1) Empire District 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) Empire District 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 10-3.090 Restriction of Emission of Odors **This requirement is not federally enforceable.**

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.

10 CSR 10-6.250 Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements

Empire District shall conduct all asbestos abatement projects within the procedures established for certification and accreditation by 10 CSR 10-6.250. This rule requires individuals who work in asbestos abatement projects to be certified by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires training providers who offer training for asbestos abatement occupations to be accredited by the Missouri Department of Natural Resources Air Pollution Control Program. This rule requires persons who hold exemption status from certain requirements of this rule to allow the Department to monitor training provided to employees. Each individual who works in asbestos abatement projects must first obtain certification for the appropriate occupation from the Department. Each person who offers training for asbestos abatement occupations must first obtain accreditation from the Department. Certain business entities that meet the requirements for state-approved exemption status must allow the Department to monitor training classes provided to employees who perform asbestos abatement.

Title VI – 40 CFR Part 82 Protection of Stratospheric Ozone

- 1) Empire District 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) Empire District 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 Empire District manufactures, transforms, imports, or exports a class I or class II substance, Empire District is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
- 4) If Empire District 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), Empire District 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.
- 5) Empire District 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

- 1) Empire District 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 Empire District 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 Empire District 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.

V. 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) Record Keeping
 - 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 as soon as practicable 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's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
 - b) Empire District 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, record keeping, 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 Empire District 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 Empire District 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 Empire District 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 Empire District '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) Empire District 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)

Empire District shall comply with the requirements of 40 CFR Part 68, Accidental Release Prevention Requirements. If Empire District has more than a threshold quantity of a regulated substance in process, as determined by 40 CFR Section 68.115, Empire District 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.

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, Empire District shall comply with all other provisions of the permit.

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

- 1) Empire District 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) Empire District may not use as a defense in an enforcement action that it would have been necessary for Empire District 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) Empire District 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, Empire District also shall furnish to the Air Pollution Control Program copies of records required to be kept by Empire District. Empire District 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

The State Line Power Plant is subject to the Clean Air Interstate Rule (CAIR), which was issued by the EPA to provide states with a cap and trading system to reduce nitrogen oxides and sulfur dioxide. CAIR provides an interstate solution to emissions that drift from across state boundaries. The CAIR permit is Attachment F.

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, Empire District 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) Empire District 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, KS 66101, as well as the Air Pollution Control Program's 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 Environmental Protection Agency 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, Empire District must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
 - a) That an emergency or upset occurred and that Empire District can identify the source of the emergency or upset,
 - b) That the installation was being operated properly,
 - c) That Empire District took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
 - d) That Empire District 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. Empire District shall notify the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 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, Empire District shall provide advance written notice to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 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. Empire District 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, Empire District 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, Empire District 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; Empire District 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) Empire District must provide written notice of the change to the Air Pollution Control Program's Enforcement Section, P.O. Box 176, Jefferson City, MO 65102, as well as EPA Region VII, 901 North 5th Street, Kansas City, KS 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) Empire District 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 William Howell, Plant Manager and Joe Simmons, Plant Manager. If either or both of these persons terminate 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 (MDNR) receives notice from the Environmental Protection Agency (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) The 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) The 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.

VI. Attachments

Attachments follow.

Attachment B Monthly VOC Tracking Record

Empire District - State Line Power Plant
 Jasper County, S14, T27N, R34W
 Installation ID: 097-0104

This sheet covers the period from _____ to _____.
 (month, year) (month, year)

Column A Date Month/Year	Column B Emission Unit	Column C Month's Natural Gas Consumption or Solvent Usage	Column D VOC Emission Factor ¹	Column E Month's VOC Emissions (tons)	Column F 12 Month VOC Emissions ² (tons)
	Turbine 2-2				
	Turbine 2-1				
	Duct Burner 2-2				
	Duct Burner 2-1				
	Parts Washer				
	Turbine 2-2				
	Turbine 2-1				
	Duct Burner 2-2				
	Duct Burner 2-1				
	Parts Washer				
	Turbine 2-2				
	Turbine 2-1				
	Duct Burner 2-2				
	Duct Burner 2-1				
	Parts Washer				
	Turbine 2-2				
	Turbine 2-1				
	Duct Burner 2-2				
	Duct Burner 2-1				
	Parts Washer				
	Turbine 2-2				
	Turbine 2-1				
	Duct Burner 2-2				
	Duct Burner 2-1				
	Parts Washer				
	Turbine 2-2				
	Turbine 2-1				
	Duct Burner 2-2				
	Duct Burner 2-1				
	Parts Washer				

¹ Emission factors for turbines and duct burners were determined by stack tests.

² Current months emissions + last 12-months emissions - emissions from the same month last year
 Total of less than 100 tons indicates compliance

Attachment D
10 CSR 10-6.260 Compliance Worksheet

This attachment may be used to demonstrate that the Emergency Equipment (EP08 and EP09) is always in compliance with 10 CSR 10-6.260, *Restriction of Emission of Sulfur Compounds*

Emergency Generator (EP08) Diesel-fired

General Equation

$\text{ppm}_v \text{ SO}_2 = \text{SO}_2 \text{ Emission Factor (lb/MMBtu)} \div \text{F factor (wscf/MMBtu)} \div \text{Conversion Factor (lb/scf)}$

- 1) The SO₂ emission factor diesel engines > 600 HP = 1.01S lb/MMBtu Assume S = 0.8 (EPA AP-42 Table 3.4-1)
- 2) The F factor is the ratio of gas volume of products of combustion to the heat content of the fuel. For fuel oil the F factor is 10,320 wscf/MMBtu (Part 60 Appendix A Method 19 Table 19-2)
- 3) Conversion factor for lb/scf to ppm_v is 1.660E-7 lb/scf per ppm (Part 60 Appendix A Method 19 Table 19-1)

Compliance Demonstration

$$\text{ppmv SO}_2 = \left(0.808 \text{ lb} / \text{MMBtu} \right) \left(\text{MMBtu} / 10,320 \text{ ft}^3 \right) \left(\text{ppmv} / 1.660E^{-7} \text{ lb} / \text{scf} \right) = 472 \text{ ppmv} < 500 \text{ ppmv}$$

Emergency Fire Pump (EP09) Diesel-fired

General Equation

$\text{ppm}_v \text{ SO}_2 = \text{SO}_2 \text{ Emission Factor (lb/MMBtu)} \div \text{F factor (wscf/MMBtu)} \div \text{Conversion Factor (lb/scf)}$

- 1) The SO₂ emission factor diesel engines < 600 HP = 0.29 lb/MMBtu (EPA AP-42 Table 3.3-1)
- 2) The F factor is the ratio of gas volume of products of combustion to the heat content of the fuel. For fuel oil the F factor is 10,320 wscf/MMBtu (Part 60 Appendix A Method 19 Table 19-2)
- 3) Conversion factor for lb/scf to ppm_v is 1.660E-7 lb/scf per ppm (Part 60 Appendix A Method 19 Table 19-1)

Compliance Demonstration

$$\text{ppmv SO}_2 = \left(0.29 \text{ lb} / \text{MMBtu} \right) \left(\text{MMBtu} / 10,320 \text{ ft}^3 \right) \left(\text{ppmv} / 1.660E^{-7} \text{ lb} / \text{scf} \right) = 169 \text{ ppmv} \ll 500 \text{ ppmv}$$

Attachment E
TITLE IV: ACID RAIN PERMIT

**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: Empire District, State Line Power Plant
ORIS Code: 7296
Project Number: 2006-03-066, **Permit Number:** OP2010-081
Unit IDs: 1, 2-1, and 2-2
Effective Dates: through

The permit application submitted for this source, as corrected by the State of Missouri Department of Natural Resources (MDNR), Air Pollution Control Program (APCP), 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 have never burned coal, and are therefore not subject to the Nitrogen Oxides Emissions Reduction Program of the Acid Rain 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 _____, 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

State Line
Facility (Source) Name (from STEP 1)

Acid Rain - Page 2

Permit Requirements

STEP 3

Read the standard requirements.

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

Monitoring Requirements

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

Sulfur Dioxide Requirements

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

State Line Facility (Source) Name (from STEP 1)
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Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

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

Nitrogen Oxides Requirements

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

Excess Emissions Requirements

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

Recordkeeping and Reporting Requirements

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

State Line

Facility (Source) Name (from STEP 1)

Acid Rain - Page 4

Recordkeeping and Reporting Requirements, Cont'd.

STEP 3, Cont'd.

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

Liability

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

Effect on Other Authorities

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

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

State Line Facility (Source) Name (from STEP 1)
--

Effect on Other Authorities, Cont'd.

STEP 3, Cont'd.

to applicable National Ambient Air Quality Standards or State Implementation Plans;

(2) Limiting the number of allowances a source can hold; *provided*, that the number of allowances held by the source shall not affect the source's obligation to comply with any other provisions of the Act;

(3) Requiring a change of any kind in any State law regulating electric utility rates and charges, affecting any State law regarding such State regulation, or limiting such State regulation, including any prudence review requirements under such State law;

(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(5) Interfering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

Certification

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

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

Name	GEORGE G. THULLESEN		
Signature		Date	11/6/09

Attachment F
Title V: Clean Air Interstate Rule Permit

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: Empire District, State Line Power Plant
ORIS Code: 7296
Project Number: 2006-03-06672, **Permit Number:** OP2010-081
Unit IDs: 1, 2-1, and 2-2
Effective Dates: through

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, 2-1, and 2-2 of Empire District State Line Power Plant.

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 _____, and in conjunction with the operating permit renewal application.

Date

Director or Designee,
Department of Natural Resources

CAIR Permit Application

(for sources covered under a CAIR SIP)

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Page 1

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

STATE POLLUTION CONTROL PGM

This submission is: New Revised

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

Plant Name	State Line	State	MO	ORIS/Facility Code	7296
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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
2-1	X	X	X
2-2	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).

Plant Name (from Step 1) State Line

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 allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO_x Ozone Season Trading Program. No provision of the CAIR NO_x Ozone Season Trading Program, the CAIR permit application, the CAIR permit, or an exemption under §96.305 and no provision of law shall be construed to limit the authority of the State or the United States to terminate or limit such authorization.

(6) A CAIR NO_x 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.

Plant Name (from Step 1) State Line

**STEP 3,
continued**

(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.

(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.

Plant Name (from Step 1)	State Line
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STEP 3,
continued

(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 Harold R. Colgin, II	
Signature <i>Harold R. Colgin II</i>	Date 6-4-07

**Attachment G
 Opacity Emissions Observations**

Method 9 Opacity Emissions Observations								
Company				Observer				
Location				Observer Certification Date				
Date				Emission Unit				
Time				Control Device				
Hour	Minute	Seconds				Steam Plume (check if applicable)		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		Sum	Average
	Start	End						

Readings ranged from _____ to _____ % opacity.

Was the emission unit in compliance at the time of evaluation? _____
 YES NO Signature of Observer _____

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 June 21, 2002; revised June 2, 2003;
- 2) 2007 Emissions Inventory Questionnaire, internet submittal May 30, 2008;
- 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. 0594-035, Correction Letter dated December 12, 2003;
- 5) Construction Permit No. 0594-035A, Amendment Letter dated October 17, 1996;

Facility Operational Notes

Empire District has elected not to claim an allowance for fuel bound nitrogen at this time. Therefore, Empire District is exempt from fuel nitrogen testing and monitoring requirements of subpart GG. Sections of subpart GG referring to fuel nitrogen testing and monitoring have not been included in this permit condition.

Empire District has elected to use only pipeline grade natural gas which meets the definition of "natural gas" in 40 CFR Part 60 Subpart GG §60.331(u) at this time. Therefore, Empire District is exempt from monitoring the total sulfur content of the gaseous fuel. Sections of subpart GG referring to sulfur monitoring of gaseous fuels have not been included in this permit condition.

In 1994 Empire District received permit number 0595-035 that permitted the construction two turbines (EP03 and EP05). Using either natural gas or No. 2 fuel oil the turbines had a combined operational limit.

In 1999, permit number 1099-003 allowed Empire District to add a combined-cycle natural gas fired combustion turbine (EP06) and convert an existing simple-cycle turbine (EP05) to a natural gas fired combined cycle turbine. The allowable hours of operation for the existing simple-cycle (EP03) were reduced. The combined cycle turbines were permitted to operate with out a limit on the hours of operation.

The State Line Power Plant facility uses water injection only as a control device.

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.

- 1) 10 CSR 10-6.180, *Measurement of Emissions of Air Contaminants*, is included as a core permit requirement for all installations in Missouri.
- 2) 10 CSR 10-6.280, *Compliance Monitoring Usage*, is included as a core permit requirement for all installations in Missouri.

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.

- 1) 10 CSR 10-3.080, *Restriction of Emission of Visible Air Contaminants*, was checked as applicable on the permit application. However, this regulation was rescinded on May 30, 2000.
- 2) 10 CSR 10-3.100, *Restriction of Emission of Sulfur Compounds*, was checked as applicable on the permit application. However, this regulation was rescinded on July 30, 1997.
- 3) 10 CSR 10-6.100, *Alternate Emission Limits*, is not applicable because the installation is in an ozone attainment area.
- 4) 10 CSR 10-6.220, *Restriction on Visible Air Contaminants*, was listed as applicable to the Combustion Turbines (EP03, EP05, & EP 06) on Form OP-D04 of the permit application. However, this regulation is not applicable to the turbines because per §(1)(A), all internal combustion engines operated outside the Kansas City or St. Louis metropolitan areas are exempt. In addition, the duct burners are exempt because per §(1)(H), emission sources regulated by 40 CFR Part 60 and 10 CSR 10-6.070 are exempt.

Construction Permit Revisions

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

Construction Permit #0594-035

- 1) Special Condition No. 4 is not included in the operating permit because the construction permit #1099-003 imposed an operating limit that superseded the limit of hours per year of operation for the simple-cycle turbine.
- 2) Special Condition No. 13 referred to the recording and reporting of the operating time of the simple-cycle turbine specified in Special Condition No. 4. Construction permit #1099-003 includes recording and reporting the operation time for the simple-cycle turbine.
- 3) Special Condition No. 6, 7, 8, and 9 were removed from the construction permit because it was determined that the conditions were duplications of requirements in NSPS Subpart GG – *Standards of Performance of Stationary Gas Turbines*. Because the conditions are unnecessary they have been removed from the permit. Condition removal per correction letter dated December 12, 2003.

Construction Permit No. 0594-035A

The modification dated October 17, 1996 modified the limitation of hours of operation per year for the two single-cycle turbines due to the installation of a continuous monitoring devices which was later superseded by construction permit #1099-003.

Construction Permit #1099-003

- 1) Construction Permit 1099-003 authorized the installation of a new combined-cycle natural gas fired combustion turbine (EP06) and the conversion of the existing simple-cycle combustion turbine (EP 05) to a combined-cycle combustion turbine. The permit listed 10 CSR 10-3.080, *Restriction of Emission of Visible Air Contaminants*, as an applicable requirement. However, this regulation was rescinded on May 30, 2000.
- 2) The construction permit required stack testing to be conducted at the facility. The stack testing has been completed and is not listed as a special condition in this permit.

Construction Permit #092002-015

Construction Permit 092002-015 authorized the installation of an emergency generator and an emergency fire pump driven by diesel engines. The permit listed 10 CSR 10-6.220, *Restriction of Emission of Visible Air Contaminants*, as an applicable requirement. However, per §(1)(A) all internal combustion engines operated outside the Kansas City or St. Louis metropolitan areas are exempt. Therefore 10 CSR 10-6.220 was not applied to the Emergency Equipment (EP08 and EP09) in this operating permit.

Operating Permit Application Revisions

The following revisions were made to operating permit application for this installation:

On June 2, 2003, the Air Pollution Control Program received a letter requesting an update to the operating permit application to include 10 CSR 10-6.350 *Emission Limitations and Emissions Trading of Oxides of Nitrogen*. This rule was established to reduce nitrogen oxides thereby reducing ozone and its precursors. This rule also served as a NO_x emissions trading program for the state of Missouri. The Clean Air Interstate Rule (CAIR) was issued by the EPA to provide states with a cap and trading system to reduce nitrogen oxides and sulfur dioxide. CAIR provides an interstate solution to emissions that drift from across state boundaries. CAIR takes precedence over 10 CSR 10-6.350.

New Source Performance Standards (NSPS) Applicability

- 1) 40 CFR Part 60 Subpart K, *Standards of Performance For Storage Vessels For Petroleum Liquids For Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior To May 19, 1978*, and 40 CFR Part 60 Subpart Ka, *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984* are not applicable to the two distillate fuel storage tanks (EP-02 and EP-04) because they were constructed after the applicability dates.
- 2) 40 CFR Part 60 Subpart Kb, *Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984* is not applicable to the two distillate fuel storage tanks (EP-02 and EP-04) because storage tanks with a capacity greater than or equal to 40,000 gallons (151 m³) which store a liquid with a maximum true vapor pressure less than 3.5 kilopascals (kPa) are exempt.
- 3) 40 CFR Part 60, Subpart Db, *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units* is applicable to the emissions resulting from combustion of fuels in the steam generating units (duct burners) of the combined cycle operation of Turbines 2-1 and 2-2 (EP05 and EP06).
- 4) 40 CFR Part 60, Subpart GG, *Standards of Performance for Stationary Gas Turbines* is applicable to Combustion Turbines (EP03, EP05, & EP06). However, as shown in the calculations below, the most restrictive NO_x emission limits required by subpart GG is 75 ppm_v NO_x at 15 % oxygen. This limit is less stringent than the NO_x emission limits established by Construction Permit 0594-035 (42 ppm_v, and 25 ppm_v) and Construction Permit 1099-003 (4 ppm_v) as set forth in Permit Condition EP03-001 and Permit Condition (EP05 and EP06)-001.

Allowable Emission Rate per 40 CFR 60.332(a)(1)

$$\text{STD} = (0.0075)(14.4/Y) + F$$

Where:

STD = allowable NO_x emissions (% by volume at 15 percent oxygen and on a dry basis)

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility.

Given that the value of Y shall not exceed 14.4 kilojoules per watt-hour and the installation assumes no fuel bound nitrogen allowance, i.e. $F = 0$

$$\begin{aligned}\text{STD} &= (0.0075)(14.4/Y) + F \\ &= (0.0075)(14.4/14.4) + 0 \\ &= 0.0075 \% \text{ or } 75 \text{ ppm}_v \text{ NO}_X \text{ at } 15 \% \text{ oxygen}\end{aligned}$$

This limit (75 ppm_v) is less stringent than the NO_X emission limits established by Construction Permit 0594-035 and Construction Permit 1099-003 as set forth in Permit Condition EP03-001 and Permit Condition (EP05 and EP06)-001. The emission limits and rolling average time periods used in the construction permits will be used to ensure compliance with 40 CFR Part 60 Subpart GG.

- 5) 40 CFR Part 60, Subpart KKKK, *Standards of Performance for Stationary Gas Turbines for Which Construction is Commenced After February 18, 2005* is not applicable to this installation because it only applies to a stationary combustion turbine with a power output at peak load equal to or greater than 1 megawatt (MW), which commences construction, modification, or reconstruction after February 18, 2005. There are no turbines at this installation that commenced construction after February 18, 2005.

Maximum Available Control Technology (MACT) Applicability

None.

National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability

10 CSR 10-6.080, *Emission Standards for Hazardous Air Pollutant*, 40 CFR Part 61 Subpart M, *National Emission Standard for Asbestos*, 10 CSR 10-6.250, *Asbestos Abatement Projects – Certification, Accreditation, and Business Exemption Requirements*, and Missouri Air Conservation Law, 643.225 through 643.250, *Asbestos Abatement*

In the permit application and according to Air Pollution Control Program records, there was no indication that any of these regulations 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.

In the permit application and according to Air Pollution Control Program 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

The Combustion Turbines (EP03, EP05, & EP06) have the uncontrolled potential to emit NO_x above the major source threshold levels (as defined by Part 70), and use control devices (as defined by 40 CFR §64.1) to comply with applicable emission standards (10 CSR 10-6.060, 10 CSR 10- 6.350, 10 CSR 10-6.070). However, the emission units are not required to submit a CAM plan because per §64.2(b)(1)(vi) emission limitations or standards for which a part 70 or 71 permit specifies a continuous compliance determination method, as defined in §64.1 are exempt. The combustion turbines each have a NO_x CEMS installed to monitor NO_x emissions. CEMS are required by Construction Permit No. 1099-003 and Construction Permit No. 0594-035 correction letter dated December 12, 2003. 40 CFR 60 Performance Specification 2 and 3 must be followed when installing and certifying the CEMS.

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

- 1) 10 CSR 10-3.060, *Maximum Allowable Emissions of Particulate Matter From Fuel Burning Equipment Used for Indirect Heating*, is not applicable to the duct burners because per §(3)(E), this regulation shall not be applied to indirect heating sources subject to the provisions of 10 CSR 10-6.070.
- 2) 10 CSR 10-6.220, *Restriction on Visible Air Contaminants*, is not applicable to the Combustion Turbines (EP03, EP05, & EP 06) or Emergency Equipment (EP08 and EP09) because per §(1)(A), all internal combustion engines operated outside the Kansas City or St. Louis metropolitan areas are exempt. In addition, the duct burners are exempt because per §(1)(H), emission sources regulated by 40 CFR Part 60 and 10 CSR 10-6.070 are exempt.
- 3) 10 CSR 10-6.260, *Restriction on Emission of Sulfur Compounds*, is not applicable to the Combustion Turbines (EP03, EP05, & EP06) because per §(1)(A)1, emission sources subject to an applicable sulfur compound emission limit under 10 CSR 10-6.070 are exempt. This regulation is applicable to the Emergency Equipment (EP08 and EP09).
- 4) 10 CSR 10-6.350, *Emission Limitations and Emissions Trading of Oxides of Nitrogen Compounds*, is not applicable to the Combustion Turbines (EP03, EP05, & EP06). See Operating Permit Revisions above.

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).

Prepared by:

Tandi Edelman
Environmental Engineer