



**Missouri Department of Natural Resources**  
Air Pollution Control Program

## **PART 70**

# **PERMIT TO OPERATE**

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

**Operating Permit Number:** OP2010-117  
**Expiration Date:** NOV 01 2015  
**Installation ID:** 095-0050  
**Project Number:** 2005-11-015

### **Installation Name and Address**

Independence Power & Light - Blue Valley Station  
21500 East Truman Road  
Independence, MO 64051  
Jackson County

### **Parent Company's Name and Address**

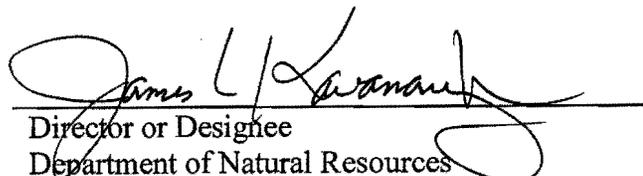
City of Independence  
P.O. Box 1019  
Independence, MO 64051

### **Installation Description:**

The Independence Power & Light – Blue Valley Station is a coal and oil fueled electrical power plant. The installation has coal unloading, conveying, stockpiles and crushing equipment to supply the coal burning boilers. The primary emission sources are boiler units #1, #2 and #3 and a gas turbine. The boilers can burn coal, fuel oil or natural gas. The turbine can burn fuel oil or natural gas. The installation also has a small heating boiler that can burn fuel oil or natural gas. Equipment for fly ash loading and hauling is on-site. A 10,000 gallon underground, gasoline storage tank is used for fueling city vehicles.

NOV 02 2010

Effective Date

  
Director or Designee  
Department of Natural Resources

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## I. Installation Description and Equipment Listing

### INSTALLATION DESCRIPTION

The Independence Power & Light – Blue Valley Station is a coal and oil fueled electrical power plant. The installation has coal unloading, conveying, stockpiles and crushing equipment to supply the coal burning boilers. The primary emission sources are boiler units #1, #2 and #3 and a gas turbine. The boilers can burn coal, fuel oil or natural gas. The turbine can burn fuel oil or natural gas. The installation also has a small heating boiler that can burn fuel oil or natural gas. Equipment for fly ash loading and hauling is on-site. A 10,000 gallon underground, gasoline storage tank is used for fueling city vehicles.

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 <sub>x</sub> )	Nitrogen Oxides (NO <sub>x</sub> )	Volatile Organic Compounds (VOC)	Carbon Monoxide (CO)	Lead (Pb)	Hazardous Air Pollutants (HAPs)
2009	401.98	339.84	6,177.33	720.25	4.02	28.02	0.03	48.19
2008	121.03	28.90	10,658.32	1,231.61	7.00	53.07	0.04	93.84
2007	104.84	2.70	9,185.42	1,179.20	7.23	50.48	0.04	90.15
2006	170.81	39.97	11,817.23	1,231.61	7.79	54.93	0.04	96.63
2005	165.60	39.07	11,549.53	1,150.09	7.79	55.53	0.04	95.00
2004	195.53	44.53	12,584.23	1,343.36	8.03	57.88	0.04	99.00
2003	146.14	64.58	9,811.22	1,064.73	6.43	49.27	0.03	76.39

### 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
EU0030	Unit #1 - Combustion Engineering-Dry Bottom, Tangential Fired Boiler Fueled by coal, fuel oil or natural gas Put in Service in 1958 - 282 Million BTU/hour, 21 MWe EP-03, Electrostatic Precipitator
EU0040	Unit #2 – Combustion Engineering-Dry Bottom, Tangential Fired Boiler Put in Service in 1958 - 282 Million BTU/hour, 21 MWe Fueled by coal, fuel oil or natural gas EP-04, Electrostatic Precipitator
EU0050	Unit #3 – Combustion Engineering-Dry Bottom, Tangential Fired Boiler Put in Service in 1965 - 540 Million BTU/hour, 51 MWe Fueled by coal, fuel oil or natural gas EP-05, Electrostatic Precipitator

- EU0090 Heating Boiler  
Put in Service in 1987 - 8.4 Million BTU/hour  
Fueled by natural gas or fuel oil  
EP-09, No control devices reported
- EU0100 Turbine Put in Service in 1976 - 646 Million Btu/Hr, 50 MWe  
Fueled by natural gas or fuel oil  
EP-10, No control devices reported
- EU0110 Gasoline tank (10,000 gallon underground), EP-13

### **EMISSION UNITS WITHOUT SPECIFIC LIMITATIONS**

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

#### Description of Emission Source

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Unpaved haul roads  
Coal Transfer and Conveying Control Device – enclosure and chemical wet suppression  
EP-01 Coal unloading (truck dump direct to pile)  
EP-01 Coal storage pile  
EP-01 Coal storage pile – bulldozing  
EP-12 Coal Crusher, Control Device – completely enclosed  
EP-11 Fuel oil storage tank (3.3 x 10<sup>6</sup> gallons)  
EP-14 Diesel tank (10,000 gallon underground)  
EP-51, Emergency Generator  
EP-52, Emergency Generator  
EP-102 2-Diesel fuel storage tanks – emergency generators (1500 gallons each)  
EP-103 Transfer of lime for water treatment  
EP-104 2-Aboveground Waste Oil Tanks (300 gallons each)  
EP-105 2-Underground waste oil tanks (550 gallons each)  
EP-106 Fly ash pneumatic transfer  
Mineral oil tank (approximately 300 gallons)  
4-water based parts washers

### **DOCUMENTS INCORPORATED BY REFERENCE**

These documents have been incorporated by reference into this permit:

40 CFR Part 64, Compliance Assurance Monitoring (CAM) Plan for IPL Blue Valley Station approved by Department of Natural Resources via email, dated January 7, 2010.

## II. 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.

<b>EU0030 through EU0050 - TANGENTIALLY FIRED DRY BOTTOM BOILERS FUELED BY COAL, OIL, OR NATURAL GAS</b>			
Emission Unit	Description	Manufacturer	2008 EIQ Ref #
EU0030	Unit 1 282 million BTU/hour boiler, in service 1958	Combustion Engineering	EP-03
EU0040	Unit 2 282 million BTU/hour boiler, in service 1958	Combustion Engineering	EP-04
EU0050	Unit 3 540 million BTU/hour boiler, in service 1965	Combustion Engineering	EP-05

<p><b>PERMIT CONDITION EU0030-01 through EU0050-01</b>                  10 CSR 10-2.040 Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating                  40 CFR Part 64, Compliance Assurance Monitoring (CAM)</p>
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**Emission Limitation:**

The permittee shall not emit particulate matter from either EU0030, EU0040 or EU0050 in excess of 0.18 pounds per million BTU of heat input.

**Monitoring:**

1. Proper maintenance. At all times, the owner or operator shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment. [§64.7(b)]
2. Continued operation. Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall collect data at all required intervals at all times that the pollutant-specific emissions units are operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. [§64.7(c)]
3. Response to excursions or exceedances: [§64.7(d)]
  - a) Upon detecting an excursion or exceedance, the owner or operator shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to

restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable. [§64.7(d)(1)]

- b) Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process. [§64.7(d)(2)]
- 4. Documentation of need for improved monitoring. After approval of monitoring under this part, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the Part 70 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters. [§64.7(e)]
- 5. Independence Power & Light-Blue Valley Station CAM Monitoring Approach for Boilers 1, 2, & 3:

<b>Particulate Matter (PM) Compliance Indicator</b>	
<b>Indicator</b>	Opacity
<b>Measurement Approach</b>	Continuous Opacity Monitoring System (COMS)
<b>Indicator Range</b>	<p>Based on information supplied by the Permittee, typical opacity levels during normal operation are in the range of 2-5% for each boiler.</p> <p>An excursion for each boiler is defined as a 6-minute block average opacity equal to or greater than 15%. Excursions trigger an inspection, corrective action, and a reporting requirement.</p> <p>The applicable opacity limit is 20% for each boiler.</p> <p>Performance testing on Boiler 3 for compliance with the applicable PM emission limit shall be completed within 1 year of the issuance of the Part 70 permit renewal. This testing shall be conducted at baseline, mid-range, and high PM loading such that a correlation between opacity and PM can be established from baseline up to the applicable PM limit and/or the applicable opacity limit. The APCP will then re-evaluate the excursion level for Boiler 3, which will be set no higher than that opacity which corresponds to 90% of the PM limit, with an associated averaging period for that opacity level set at no longer than 1 hour.</p>

<b>Performance Criteria</b>	
<b>Data Representativeness</b>	All boilers discharge to a dedicated control device (i.e., an electrostatic precipitator with 4-fields in a series arrangement) and a dedicated stack. Each stack is equipped with a COMS located downstream of the electrostatic precipitator. These COMS comply with the applicable version of 40 CFR Part 60, Appendix B, Performance Specification 1 (PS-1).
<b>Verification of Operational Status</b>	Not applicable since the selected monitoring approach utilizes existing COMS that were initially installed and evaluated per the applicable version of PS-1.
<b>QA/QC Practices and Criteria</b>	Perform a daily zero and calibration drift check, periodic cleaning of optical surfaces and other periodic QA/QC checks as specified in applicable version of PS-1.
<b>Monitoring Frequency and Data Collection Procedure</b>	Continuous [i.e., the COMS is to complete a minimum of one cycle (i.e., sampling, analyzing, and data recording) for each successive 10-second period].
<b>Averaging Period</b>	The data acquisition system is to reduce the 10-second data points to 6-minute block averages.
<b>Reporting</b>	Summary information on the number, duration, and cause for any excursions and COMS downtime will be reported on a semi-annual basis in the installation's Part 70 semi-annual monitoring report that is submitted in accordance with 10 CSR 10-6.065.

**Reporting:**

1. A report for monitoring under this part shall include, at a minimum, the information required under §70.6(a)(3)(iii) of this chapter and the following information, as applicable: [§64.9(a)(2)]
  - a) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [§64.9(a)(2)(i)]
  - b) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and [§64.9(a)(2)(ii)]
2. The report shall be submitted in the installation's Part 70 semi-annual monitoring report that is submitted in accordance with 10 CSR 10-6.065.

In accordance with 10 CSR 10-6.065(6)(C)1.C.(II)(b)I. *Retention of Records*, all required monitoring data and support information must be kept for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application.

**PERMIT CONDITION EU0030-02 through EU0050-02**

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

**Emission Limitation:**

1. No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any existing source any visible emissions with an opacity greater than 20%. 10 CSR 10-6.220(3)(A)
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%. 10 CSR 10-6.220(3)(B)

**Operational Limitation/Equipment Specifications:**

1. All instruments and control equipment shall be calibrated, maintained and operated according to the manufacturer specifications and recommendations.
2. The permittee shall calibrate, maintain and operate a continuous opacity monitoring system (COMS) and automated data acquisition system for measuring and recording the opacity (in percent opacity) in order to provide reasonable assurance of the performance of the electrostatic precipitators.

**Compliance:**

1. Visible emissions exceeding the above limitations are in violation of this rule unless the Director determines that the excess emissions do not warrant enforcement action based on data submitted under 10 CSR 10-6.050 Start-Up, Shutdown and Malfunction Conditions.
2. Any exceedance of the above emission limitations solely because of the presence of uncombined water shall not be a violation of this rule.
3. An exceedance is defined as a six-minute block average opacity equal to or greater than 20%.

**Monitoring:**

1. The continuous opacity monitoring system (COMS) is to complete a minimum of one cycle (i.e., sampling, analyzing, and data recording) for each successive ten-second period.
2. The data acquisition system is to reduce the ten-second opacity data points to six-minute block averages.
3. Percent opacity is shown continuously on the local readout on the precipitator controller display. Six minute block averages are recorded on a Continuous Opacity Monitor computer.
4. Perform a daily zero and calibration drift check, periodic cleaning of optical surfaces and other periodic QA/QC checks as specified in applicable version of Performance Specification 1.

**Record Keeping:**

1. This includes, but is not restricted to the following reported in a quarterly monitoring report (Attachment D or equivalent):
  - a) The charts or printouts generated by the continuous opacity monitor, where applicable;
  - b) An opacity summary report;
  - c) An excess opacity emission summary;
  - d) An excess opacity emission summary list;
  - e) An opacity monitoring downtime summary list.

2. All six-minute opacity averages and daily Quality Assurance (QA)/Quality Control (QC) records. This includes, but is not restricted to the daily monitoring system calibration check done on the continuous opacity monitoring system. Attachment E or an equivalent record keeping sheet shall be used to certify compliance with the daily monitoring system calibration check.
3. The permittee shall maintain records of any opacity monitoring equipment malfunctions.
4. The permittee shall maintain records of any Method 9 test performed to determine compliance with this permit condition. Attachment C or equivalent record keeping form shall be used to provide Method 9 Opacity Emissions Observations log records.
5. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request. All records must be maintained for five years.

In accordance with 10 CSR 10-6.065(6)(C)1.C.(II)(b)I. *Retention of Records*, all required monitoring data and support information must be kept for a period of at least five (5) years from the date of the monitoring sample, measurement, report or application.

**Reporting:**

1. Notice of any deviation resulting from an emergency (or upset) condition as defined in paragraph (6)(C)7.A of 10 CSR 10-6.065 (Emergency Provisions) shall be submitted to the permitting authority either verbally or in writing within two working days after the date on which the emission limitation is exceeded due to the emergency, if the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.
2. Any deviation that poses an imminent and substantial danger to public health, safety or the environment shall be reported as soon as practicable.
3. The permittee shall submit a quarterly written report to the Director of the Air Pollution Control Program. All quarterly reports shall be postmarked no later than the thirtieth day following the end of each calendar quarter and shall include the following emissions data:
  - a) A summary including total time for each cause of excess emissions and/or monitor downtime;
  - b) Nature and cause of excess emissions, if known;
  - c) The six-minute average opacity values greater than the opacity emission requirements (The average of the values shall be obtained by using the procedures specified in the Reference Method used to determine the opacity of the visible emissions);
  - d) The date and time identifying each period during which the COMS was inoperative (except for zero and span checks), including the nature and frequency of system repairs or adjustments that were made during these times; and
  - e) If no excess emissions have occurred during the reporting period and the COMS has not been inoperative, repaired or adjusted, this information shall be stated in the report.

**PERMIT CONDITION EU0030-03 through EU0050-03**  
10 CSR 10-6.260 Restriction of Emission of Sulfur Compounds

**Emission Limitation:**

1. Independence Power and Light - Blue Valley Station shall limit their average sulfur emissions into the atmosphere to 6.3 pounds of sulfur dioxide per million BTUs of actual heat input averaged on any consecutive three (3)-hour basis.
2. 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.

**Monitoring:**

1. The permittee shall install, maintain, and operate a continuous emission monitoring system for measuring the sulfur dioxide (SO<sub>2</sub>) emission rate (#SO<sub>2</sub>/mmBtu) in accordance with 40 CFR Part 75 and 40 CFR Part 60, Appendix A, Method 19.
2. In addition, the permittee shall comply with the quality assurance requirements in 40 CFR Part 75, Appendix B.
3. The permittee shall conduct, at the frequency required in Part 75, Appendix B, a Relative Accuracy Test Audit on the continuous emission monitoring system, pursuant to 40 CFR Part 75, and 40 CFR Part 60, Appendix A, using Reference Method 6c for SO<sub>2</sub>, or equivalent EPA approved method. For a complete list of all testing and quality assurance measures required review 40 CFR Part 75 and 40 CFR Part 60.

**Record Keeping:**

The permittee shall maintain hourly records of the sulfur dioxide emission rate (#SO<sub>2</sub>/mmBtu) in accordance with 40 CFR Part 75 and 40 CFR Part 60, Appendix A, Method 19.

**Reporting:**

1. The permittee 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 or non-compliance of 10 CSR 10-6.260 demonstrated by the requirements set forth in this condition.
2. The permittee shall report quarterly when the monitoring system showed exceedances of the sulfur dioxide limitations set forth in this rule. If any exceedances were recorded, the quarterly report should give the day, the duration of how long the emission unit was out of the limitations set forth in this rule, and a data summary of the exceedance (the data summary shall consist of the magnitude in actual pounds of sulfur dioxide per million BTUs actual heat input averaged over three consecutive hours. Additionally, the report shall give a detailed explanation of why the plant was in exceedance (nature and cause) and corrective action taken by the permittee to bring the emission unit back into the limitations set forth in this rule.
3. Further, the permittee shall report when the monitoring system is down due to inoperative periods, repairs, malfunctions or monitor adjustments. The report shall give a reason why the monitor was down, the duration of the downtime event, and provide the percent of the total operating period the monitor experienced downtime. The report shall distinguish between those downtime events that were due to Quality Assurance activities and those events that occurred for other reasons. However, if no excess emissions occurred within the quarter and the continuous sulfur dioxide monitoring system has not been inoperative, repaired, or adjusted, that information shall be included in the

report. Attachment E or an equivalent record keeping form shall be used. These records are not required to be stored as hardcopies, but may be stored in the permittee's computerized emissions system as an electronic record.

4. All quarterly reports shall be postmarked by the thirtieth (30) day following the end of each calendar quarter.

**PERMIT CONDITION EU0050-04**

10 CSR 10-6.270 Acid Rain source Permits Required  
40 CFR Parts 72, 73 and 75 through 78

**Emission Limitation:**

Pursuant to Title IV of the Clean Air Act, the facility submitted an Acid Rain Permit application to the Missouri Department of Natural Resources on May 21, 2009 for the Blue Valley #3 boiler. Attachment F contains a copy of the permit and application. The permit has been incorporated into this operating permit and is, therefore, effective as long as this Part 70 operating permit is effective.

**Monitoring/Recordkeeping/Reporting**

1. The permittee shall retain the most current Acid Rain Permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.
2. The permittee shall submit an Acid Rain Permit renewal application at the same time as they submit a Part 70 renewal operating permit application.

**PERMIT CONDITION EU0050-05**

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  
40 CFR Part 96

**Emission Limitation:**

This facility submitted a CAIR application to the Missouri Department of Natural Resources on February 22, 2010, for the Blue Valley #3 boiler and RCT (turbine). Attachment G contains a copy of the permit and application. The permit has been incorporated into this operating permit and is; therefore, effective as long as this Part 70 operating permit is effective.

**Monitoring/Recordkeeping**

1. The permittee shall retain the most current CAIR Permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.
2. The permittee shall submit a renewal CAIR application at the same time as they submit a Part 70 renewal operating permit application.

<b>EU0090 - HEATING BOILER</b>		
Emission Unit	Description	2008 EIQ Ref #
EU0090	Heating boiler fueled by natural gas or oil	EP-09

**PERMIT CONDITION EU0090-01**  
10 CSR 10-2.040  
Maximum Allowable Emissions of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating

**Emission Limitation:**

The permittee shall not emit particulate matter in excess of 0.40 pounds per million BTU of heat input.

**Monitoring:**

The Webfire PM<sub>10</sub> emission factor for SCC 10500105 is 3.76 lb/1000 gallon. This divided by the AP42, Appendix A heating value of fuel oil (140 MMBtu/1000gal), demonstrates a potential emission rate of 0.027 lbs PM<sub>10</sub>/MMBtu. The total PM is assumed to be approximately equal to the PM<sub>10</sub>, so no monitoring is required.

**Reporting:**

None.

**PERMIT CONDITION EU0090-02**  
10 CSR 10-6.220  
Restriction of Emission of Visible Air Contaminants

**Emission Limitation:**

1. No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any existing source any visible emissions with an opacity greater than 20%.
2. Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

**Monitoring/Record Keeping/Reporting:**

As detailed in Core Permit Requirements.

**PERMIT CONDITION EU0090-03**  
10 CSR 10-6.260  
Restriction of Emission of Sulfur Compounds

**Emission Limitation:**

1. Independence Power and Light - Blue Valley Station shall limit their average sulfur emissions into the atmosphere to eight pounds of sulfur dioxide per million BTUs of actual heat input averaged on any consecutive three (3)-hour basis.

- 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.

**Monitoring:**

The installation shall maintain records of the fuel type used verifying a sulfur content less than 0.5% by weight. Purchase receipts, analyzed samples or certifications that verify the fuel type as a grade level with a sulfur content less than 0.5% by weight will be acceptable. The fuel oils known to be less than 0.5% by weight sulfur per Chapter 414 RSMo, Section 414.032, ASTM D396 – Table 1 and ASTM D975 - Table 1, are Fuel Oil No. 1 and no. 2 and diesel fuel oil Grade Low Sulfur No. 1-D, Grade Low Sulfur No. 2-D.

If this can not be accomplished then compliance to the emission limitations shall be determined by source testing and shall be accomplished as specified in 10 CSR 10-6.030(6). Other methods approved by the staff director in advance may be used. Sulfur content of fuel shall be analyzed and recorded. The heating value of the fuel shall be determined as specified in 10 CSR 10-6.040(2) and the actual heat input shall be determined by multiplying the heating value of the fuel by the amount of fuel burned.

No monitoring is required when burning pipeline quality natural gas.

**Record Keeping:**

The permittee shall maintain an accurate record of the sulfur content of fuel as received. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

**Reporting:**

The permittee 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 10 CSR 10-6.260 demonstrated by the appropriate record keeping forms.

<b>EU0100 - TURBINE</b>		
<b>Emission Unit</b>	<b>Description</b>	<b>2008 EIQ Ref #</b>
EU0100	Turbine fueled by natural gas or fuel oil	EP-10

<p align="center"><b>PERMIT CONDITION EU0100-01</b> 10 CSR 10-6.220 Restriction of Emission of Visible Air Contaminants</p>
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**Emission Limitation:**

- No owner or other person shall cause or permit emissions to be discharged into the atmosphere from any existing source any visible emissions with an opacity greater than 20%.
- Exception: A person may discharge into the atmosphere from any source of emissions for a period(s) aggregating not more than six (6) minutes in any 60 minutes air contaminants with an opacity up to 60%.

**Monitoring/Record Keeping/Reporting:**

As detailed in Core Permit Requirements.

**PERMIT CONDITION EU0100-02**

10 CSR 10-6.260

Restriction of Emission of Sulfur Compounds

**Emission Limitation:**

1. Emissions from any existing source operation shall not contain more than five hundred parts per million by volume (500 ppmv) of sulfur dioxide.
2. Emissions from any existing source operation 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.

**Monitoring:**

The installation shall maintain records of the fuel type used verifying sulfur content less than 0.5% by weight. Purchase receipts, analyzed samples or certifications that verify the fuel type as a grade level with sulfur content less than 0.5% by weight will be acceptable. The fuel oils known to be less than 0.5% by weight sulfur per Chapter 414 RSMo, Section 414.032, ASTM D396 – Table 1 and ASTM D975 - Table 1, are Fuel Oil No. 1 and no. 2 and diesel fuel oil Grade Low Sulfur No. 1-D, Grade Low Sulfur No. 2-D. If this can not be accomplished then compliance to the emission limitations shall be determined by source testing and shall be accomplished as specified in 10 CSR 10-6.030(6). Other methods approved by the staff director in advance may be used. Sulfur content of fuel shall be analyzed and recorded. The heating value of the fuel shall be determined as specified in 10 CSR 10-6.040(2) and the actual heat input shall be determined by multiplying the heating value of the fuel by the amount of fuel burned.

No monitoring is required when burning pipeline quality natural gas.

**Record Keeping:**

The permittee shall maintain an accurate record of the sulfur content of fuel as received. These records shall be made available immediately for inspection to the Department of Natural Resources' personnel upon request.

**Reporting:**

The permittee 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 10 CSR 10-6.260 demonstrated by the appropriate record keeping forms.

**PERMIT CONDITION EU0100-03**

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  
40 CFR Part 96

**Emission Limitation:**

Attachment G contains a copy of the permit and application. The permit has been incorporated into this operating permit and is, therefore, effective as long as this Part 70 operating permit is effective.

**Monitoring/Recordkeeping**

1. The permittee shall retain the most current CAIR Permit issued to this installation on-site and shall immediately make such permit available to any Missouri Department of Natural Resources' personnel upon request.
2. The permittee shall submit a renewal CAIR application at the same time as they submit a Part 70 renewal operating permit application.

**EU0110 – UNDERGROUND STORAGE TANK**

Emission Unit	Description	2008 EIQ Ref #
EU0110	10,000 Gallon Gasoline UST	EP-13

**PERMIT CONDITION EU0110-01**

10 CSR 10-2.260(3)(C) Gasoline Transfer Control of Petroleum Liquid Storage, Loading and Transfer

**Equipment Specifications:**

1. No owner or operator of a gasoline storage tank or delivery vessel shall cause or permit the transfer of gasoline from a delivery vessel into a gasoline storage tank with a capacity greater than two hundred fifty (250) gallons unless—
  - a) The storage tank is equipped with a submerged fill pipe extending unrestricted to within six inches (6") of the bottom of the tank, and not touching the bottom of the tank, or the storage tank is equipped with a system that allows a bottom fill condition;
  - b) All storage tank caps and fittings are vapor-tight when gasoline transfer is not taking place; and
  - c) Each storage tank is vented via a conduit that is:
    - i) At least two inches (2") inside diameter;
    - ii) At least twelve feet (12') in height above grade; and
    - iii) Equipped with a pressure/vacuum valve that is CARB certified and MO/PETP approved at three inches water column pressure/eight inches water column vacuum (3" wcp/8" wcv).  
When the owner or operator provides documentation that the system is CARB certified for a different valve and will not function properly with a 3" wcp/8" wcv valve, the valve shall be MO/PETP approved. All pressure/vacuum valves shall be bench tested prior to installation. Initial fueling facilities shall have MO/PETP approved pressure/vacuum valves.
2. Stationary storage tanks with a capacity greater than two thousand (2,000) gallons shall also be equipped with a Stage I vapor recovery system in addition to the requirements of paragraph 1. of this condition and the delivery vessels to these tanks shall be in compliance with subsection 10 CSR 10-2.260(3)(D).

- a) The vapor recovery system shall collect no less than ninety percent (90%) by volume of the vapors displaced from the stationary storage tank during gasoline transfer and shall return the vapors via a vapor-tight return line to the delivery vessel. After the effective date of this rule, all coaxial systems shall be equipped with poppeted fittings.
- b) This subsection shall not be construed to prohibit safety valves or other devices required by governmental regulations.

**Operational Limitation:**

1. Operate the vapor recovery system and the gasoline loading equipment in a manner that prevents—
  - a) Gauge pressure from exceeding four thousand five hundred (4,500) pascals (eighteen inches (18") of H<sub>2</sub>O) in the delivery vessel;
  - b) A reading equal to or greater than one hundred percent (100%) of the lower explosive limit (LEL, measured as propane) at two and one-half (2.5) centimeters from all points on the perimeter of a potential leak source when measured by the method referenced in 10 CSR 10-6.030(14)(E) during loading or transfer operations; and
  - c) Visible liquid leaks during loading or transfer operation;
2. Repair and retest within fifteen (15) days, a vapor recovery system that exceeds the limits in Subsection (3)(E) of this rule.

**Monitoring:**

1. The staff director, at any time, may monitor a delivery vessel, vapor recovery system or gasoline loading equipment by a method determined by the staff director to confirm continuing compliance with this rule.
2. A static leak decay test of the Stage I vapor recovery system shall be required once every five (5) years to demonstrate system vapor tightness. In addition, a bench test of each pressure/vacuum valve shall be required once every two (2) years to demonstrate component vapor tightness.
3. Additional testing may also be required by the staff director in order to determine proper functioning of vapor recovery equipment.

**Record Keeping:**

1. The owner or operator of stationary storage tanks subject to this subsection shall keep records documenting the vessel owners and number of delivery vessels unloaded by each owner. The owner or operator shall retain on-site copies of the loading ticket, manifest or delivery receipt for each grade of product received, subject to examination by the staff director upon request. If a delivery receipt is retained rather than a manifest or loading ticket, the delivery ticket shall bear the following information: vendor name, date of delivery, quantity of each grade, point of origin, and the manifest or loading ticket number. The required retention on-site of the loading ticket, manifest or delivery receipt shall be limited to the four (4) most recent records for each grade of product.
2. Maintain written records of inspection reports, enforcement documents, gasoline deliveries, routine and unscheduled maintenance and repairs and all results of tests conducted.
3. All records shall be maintained for a minimum of two (2) years, and shall be made immediately available to inspectors upon request.

### III. 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), the Code of State Regulations (CSR), and local ordinances 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.
- (2) Refer to the regulation for a complete list of allowances. The following is a listing of exceptions to the allowances:
  - (A) Burning of household or domestic refuse. Burning of household or domestic refuse is limited to open burning on a residential premises having not more than four dwelling units, provided that the refuse originates on the same premises, with the following exceptions:
    1. Kansas City metropolitan area. The open burning of household refuse must take place in an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of Kansas City and every contiguous municipality;
    2. Springfield-Greene County area. The open burning of household refuse must take place outside the corporate limits of Springfield and only within areas zoned A-1, Agricultural District;
    3. St. Joseph area. The open burning of household refuse must take place within an area zoned for agricultural purposes and outside that portion of the metropolitan area surrounded by the corporate limits of St. Joseph; and
    4. St. Louis metropolitan area. The open burning of household refuse is prohibited;
  - (B) Yard waste, with the following exceptions:
    1. Kansas City metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation shall require an open burning permit;
    2. Springfield-Greene County area. The City of Springfield requires an open burning permit for the open burning of trees, brush or any other type of vegetation. The City of Springfield prohibits the open burning of tree leaves;
    3. St. Joseph area. Within the corporate limits of St. Joseph, the open burning of trees, tree leaves, brush or any other type of vegetation grown on a residential property is allowed during the following calendar periods and time-of-day restrictions:
      - A. A three (3)-week period within the period commencing the first day of March through April 30 and continuing for twenty-one (21) consecutive calendar days;
      - B. A three (3)-week period within the period commencing the first day of October through November 30 and continuing for twenty-one (21) consecutive calendar days;
      - C. The burning shall take place only between the daytime hours of 10:00 a.m. and 3:30 p.m.; and
      - D. In each instance, the twenty-one (21)-day burning period shall be determined by the Director of Public Health and Welfare of the City of St. Joseph for the region in which

the City of St. Joseph is located provided, however, the burning period first shall receive the approval of the Department Director; and

4. St. Louis metropolitan area. The open burning of trees, tree leaves, brush or any other type of vegetation is limited to the period beginning September 16 and ending April 14 of each calendar year and limited to a total base area not to exceed sixteen (16) square feet. Any open burning shall be conducted only between the hours of 10:00 a.m. and 4:00 p.m. and is limited to areas outside of incorporated municipalities;
- (3) 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.
- (4) Independence Power & Light - Blue Valley Station 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 Independence Power & Light - Blue Valley Station 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.
- (5) 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.
- (6) 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.

<b>10 CSR 10-6.050 Start-up, Shutdown and Malfunction Conditions</b>
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- 1) In the event of a malfunction, which results in excess emissions that exceed one hour, the permittee shall submit to the Director within two business days, in writing, the following information:
  - a) Name and location of installation;
  - b) Name and telephone number of person responsible for the installation;
  - c) Name of the person who first discovered the malfunction and precise time and date that the malfunction was discovered.
  - d) Identity of the equipment causing the excess emissions;
  - e) Time and duration of the period of excess emissions;

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

#### **10 CSR 10-6.060 Construction Permits Required**

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

#### **10 CSR 10-6.065 Operating Permits**

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

**10 CSR 10-6.080 Emission Standards for Hazardous Air Pollutants and 40 CFR Part 61  
Subpart M National Emission Standard for Asbestos**

- 1) The permittee shall follow the procedures and requirements of 40 CFR Part 61, Subpart M for any activities occurring at this installation which would be subject to provisions for 40 CFR Part 61, Subpart M, National Emission Standard for Asbestos.
- 2) The permittee shall conduct monitoring to demonstrate compliance with registration, certification, notification, and Abatement Procedures and Practices standards as specified in 40 CFR Part 61, Subpart M.

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

- 1) The permittee shall complete and submit an Emission Inventory Questionnaire (EIQ) in accordance with the requirements outlined in this rule.
- 2) The permittee 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) The permittee shall pay an annual emission fee per ton of regulated air pollutant emitted according to the schedule in the rule. This fee is an emission fee assessed under authority of RSMo. 643.079.
- 5) The fees shall be payable to the Department of Natural Resources and shall be accompanied by the Emissions Inventory Questionnaire (EIQ) form or equivalent approved by the Director.
- 6) The permittee 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.
- 7) 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.
- 8) The permittee 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. The permittee shall submit an appropriate emergency plan if required by the Director.

**10 CSR 10-6.150 Circumvention**

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

**10 CSR 10-6.170**

**Restriction of Particulate Matter to the Ambient Air Beyond the Premises of Origin**

**Emission Limitation:**

- 1) The permittee shall not cause or allow to occur any handling, transporting or storing of any material; construction, repair, cleaning or demolition of a building or its appurtenances; construction or use of a road, driveway or open area; or operation of a commercial or industrial installation without

applying reasonable measures as may be required to prevent, or in a manner which allows or may allow, fugitive particulate matter emissions to go beyond the premises of origin in quantities that the particulate matter may be found on surfaces beyond the property line of origin. The nature or origin of the particulate matter shall be determined to a reasonable degree of certainty by a technique proven to be accurate and approved by the Director.

- 2) The permittee shall not cause nor allow to occur any fugitive particulate matter emissions to remain visible in the ambient air beyond the property line of origin.
- 3) Should it be determined that noncompliance has occurred, the Director may require reasonable control measures as may be necessary. These measures may include, but are not limited to, the following:
  - a) Revision of procedures involving construction, repair, cleaning and demolition of buildings and their appurtenances that produce particulate matter emissions;
  - b) Paving or frequent cleaning of roads, driveways and parking lots;
  - c) Application of dust-free surfaces;
  - d) Application of water; and
  - e) Planting and maintenance of vegetative ground cover.

**Monitoring:**

- 1) The permittee shall conduct inspections of its facilities sufficient to determine compliance with this regulation. If the permittee discovers a violation, the permittee shall undertake corrective action to eliminate the violation.
- 2) The permittee shall conduct monthly observations unless a violation is noted, which will require the following monitoring schedule:
  - a) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after the violation.
  - b) Should no violation of this regulation be observed during this period then-
    - i) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
    - ii) If a violation is noted, monitoring reverts to weekly.
    - iii) Should no violation of this regulation be observed during this period then-
      - (1) The permittee may observe once per month.
      - (2) If a violation is noted, monitoring reverts to weekly.
  - c) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency in item 2a.

**Recordkeeping:**

The permittee shall document all readings on Attachment A, or its equivalent, noting the following:

- 1) Whether air emissions (except water vapor) remain visible in the ambient air beyond the property line of origin.
- 2) Whether the visible emissions were normal for the installation.
- 3) Whether equipment malfunctions contributed to an exceedance.
- 4) Any violations and any corrective actions undertaken to correct the violation.

**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 10-2.070 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 10-6.220 Restriction of Emission of Visible Air Contaminants**

**Emission Limitation:**

No owner or other person shall cause or permit to be discharged into the atmosphere from any source any visible emissions in excess of the limits specified by this rule. This permit will contain the opacity limits identified (10, 20 or 40 percent) for the specific emission units.

**Monitoring:**

- 1) The permittee shall conduct opacity readings on each emission unit using the procedures contained in U.S. EPA Test Method 22. The permittee is only required to take readings when the emission unit is operating and when the weather conditions allow. If the permittee observes no visible or other significant emissions using these procedures, then no further observations are required. For emission units with visible emissions perceived or believed to exceed the applicable opacity standard, the source representative would then conduct a Method 9 observation.
- 2) The permittee shall conduct monthly observations unless a violation is noted, which will require the following monitoring schedule:
  - a) The permittee shall conduct weekly observations for a minimum of eight (8) consecutive weeks after the violation.
  - b) Should no violation of this regulation be observed during this period then-
    - i) The permittee may observe once every two (2) weeks for a period of eight (8) weeks.
    - ii) If a violation is noted, monitoring reverts to weekly.
    - iii) Should no violation of this regulation be observed during this period then-
      - (1) The permittee may observe once per month.
      - (2) If a violation is noted, monitoring reverts to weekly.
  - c) If the permittee reverts to weekly monitoring at any time, monitoring frequency will progress in an identical manner to the initial monitoring frequency in item 2a.

**Recordkeeping:**

The permittee shall maintain records of all observation results using Attachment B (or its equivalent), noting:

- 1) Whether any air emissions (except for water vapor) were visible from the emission units;
- 2) All emission units from which visible emissions occurred;
- 3) Whether the visible emissions were normal for the process;
- 4) The permittee shall maintain records of any equipment malfunctions, which may contribute to visible emissions; and,
- 5) The permittee shall maintain records of all U.S. EPA Method 9 opacity tests performed.

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

The permittee 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) The permittee shall comply with the standards for labeling of products using ozone-depleting substances pursuant to 40 CFR Part 82, Subpart E:
  - a) All containers in which a class I or class II substance is stored or transported, all products containing a class I substance, and all products directly manufactured with a class I substance must bear the required warning statement if it is being introduced into interstate commerce pursuant to §82.106.
  - b) The placement of the required warning statement must comply with the requirements pursuant to §82.108.
  - c) The form of the label bearing the required warning statement must comply with the requirements pursuant to §82.110.
  - d) No person may modify, remove, or interfere with the required warning statement except as described in §82.112.
- 2) The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners (MVACs) in Subpart B:
  - a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to §82.156.
  - b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to §82.158.

- c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to §82.161.
  - d) Persons disposing of small appliances, MVACs, and MVAC-like appliances must comply with record keeping requirements pursuant to §82.166. ("MVAC-like" appliance as defined at §82.152).
  - e) Persons owning commercial or industrial process refrigeration equipment must comply with the leak repair requirements pursuant to §82.156.
  - f) Owners/operators of appliances normally containing 50 or more pounds of refrigerant must keep records of refrigerant purchased and added to such appliances pursuant to §82.166.
- 3) If the permittee manufactures, transforms, imports, or exports a class I or class II substance, the permittee is subject to all the requirements as specified in 40 CFR Part 82, Subpart A, Production and Consumption Controls.
  - 4) If the permittee performs a service on motor (fleet) vehicles when this service involves ozone-depleting substance refrigerant (or regulated substitute substance) in the motor vehicle air conditioner (MVAC), the permittee is subject to all the applicable requirements as specified in 40 CFR Part 82, Subpart B, Servicing of Motor Vehicle Air conditioners. The term "motor vehicle" as used in Subpart B does not include a vehicle in which final assembly of the vehicle has not been completed. The term "MVAC" as used in Subpart B does not include the air-tight sealed refrigeration system used as refrigerated cargo, or system used on passenger buses using HCFC-22 refrigerant.
  - 5) The permittee shall be allowed to switch from any ozone-depleting substance to any alternative that is listed in the Significant New Alternatives Program (SNAP) promulgated pursuant to 40 CFR Part 82, Subpart G, Significant New Alternatives Policy Program. *Federal Only - 40 CFR Part 82*

#### **10 CSR 10-6.280 Compliance Monitoring Usage**

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

- b) Other testing, monitoring, or information gathering methods, if approved by the Director, that produce information comparable to that produced by any method listed above.

## IV. 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 immediately available to any Missouri Department of Natural Resources' personnel upon request.
- 2) Reporting
  - a) All reports shall be submitted to the Air Pollution Control Program's Enforcement Section, P. O. Box 176, Jefferson City, MO 65102.
  - b) The permittee shall submit a report of all required monitoring by:
    - i) October 1st for monitoring which covers the January through June time period, and
    - ii) April 1st for monitoring which covers the July through December time period.
    - iii) Exception. Monitoring requirements which require reporting more frequently than semi-annually shall report no later than 30 days after the end of the calendar quarter in which the measurements were taken.
  - c) Each report shall identify any deviations from emission limitations, monitoring, 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 the permittee wishes to assert an affirmative defense. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that indicate an emergency occurred and the permittee can identify the cause(s) of the emergency. The permitted installation must show that it was operated properly at the time and that during the period of the emergency the permittee took all reasonable steps to minimize levels of

emissions that exceeded the emission standards or requirements in the permit. The notice must contain a description of the emergency, the steps taken to mitigate emissions, and the corrective actions taken.

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

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

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

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

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

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

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

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

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

This facility will be issued an Acid Rain Permit concurrently with this 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, the permittee shall comply with all other provisions of the permit.

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

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

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

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

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

None.

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

An Acid Rain Permit was issued concurrently with this permit in Attachment F. This acid rain permit is effective for the same five-year period as this operating permit. The designated representative must submit an application for renewal of this permit no later than six months prior to the expiration of this operating permit, per 40 CFR 72.30, *Requirement to apply*, and in conjunction with the operating permit renewal application.

The CAIR Permit has been incorporated into this Part 70 Operating Permit (see Attachment G). The CAIR Permit is effective as long as this Part 70 Operating Permit is effective. The permittee shall submit a renewal application for CAIR at the same time as they submit a renewal application for this Part 70 Operating Permit (6 months prior to the expiration date).

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

- 1) Any document (including reports) required to be submitted under this permit shall contain a certification signed by the responsible official.
- 2) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow authorized officials of the Missouri Department of Natural Resources, or their authorized agents, to perform the following (subject to the installation's right to seek confidential treatment of information submitted to, or obtained by, the Air Pollution Control Program):
  - a) Enter upon the premises where a permitted installation is located or an emissions-related activity is conducted, or where records must be kept under the conditions of this permit;
  - b) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
  - c) Inspect, at reasonable times and using reasonable safety practices, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit; and
  - d) As authorized by the Missouri Air Conservation Law, Chapter 643, RSMo or the Act, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with the terms of this permit, and all applicable requirements as outlined in this permit.
- 3) All progress reports required under an applicable schedule of compliance shall be submitted semi-annually (or more frequently if specified in the applicable requirement). These progress reports shall contain the following:
  - a) Dates for achieving the activities, milestones or compliance required in the schedule of compliance, and dates when these activities, milestones or compliance were achieved, and
  - b) An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measures adopted.
- 4) The permittee shall submit an annual certification that it is in compliance with all of the federally enforceable terms and conditions contained in this permit, including emissions limitations, standards, or work practices. These certifications shall be submitted annually by April 1st, unless the applicable requirement specifies more frequent submission. These certifications shall be submitted to EPA Region VII, 901 North 5th Street, Kansas City, 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, the permittee must demonstrate, through properly signed, contemporaneous operating logs or other relevant evidence, the following:
- a) That an emergency or upset occurred and that the permittee can identify the source of the emergency or upset,
  - b) That the installation was being operated properly,
  - c) That the permittee took all reasonable steps to minimize emissions that exceeded technology-based emissions limitations or requirements in this permit, and
  - d) That the permittee submitted notice of the emergency to the Air Pollution Control Program within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a description of the emergency, any steps taken to mitigate emissions, and any corrective actions taken.
- 2) Be aware that an emergency or upset shall not include noncompliance caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.

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

An installation that has been issued a Part 70 operating permit is not required to apply for or obtain a permit revision in order to make any of the changes to the permitted installation described below if the changes are not Title I modifications, the changes do not cause emissions to exceed emissions allowable under the permit, and the changes do not result in the emission of any air contaminant not previously emitted. The permittee shall notify the Air Pollution Control Program'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, The permittee 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. The permittee shall maintain a copy of the notice with the permit, and the Air Pollution Control Program shall place a copy with the permit in the public file. Written notice shall be provided to the EPA and the Air Pollution Control Program as above at least seven days before the change is to be made. If less than seven days notice is provided because of a need to respond more quickly to these unanticipated conditions, the permittee shall provide notice to the EPA and the Air Pollution Control Program as soon as possible after learning of the need to make the change.
  - b) The permit shield shall not apply to these changes.

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

- 1) Except as noted below, the permittee may make any change in its permitted operations, activities or emissions that is not addressed in, constrained by or prohibited by this permit without obtaining a permit revision. Insignificant activities listed in the application, but not otherwise addressed in or prohibited by this permit, shall not be considered to be constrained by this permit for purposes of the off-permit provisions of this section. Off-permit changes shall be subject to the following requirements and restrictions:
  - a) The change must meet all applicable requirements of the Act and may not violate any existing permit term or condition; the permittee may not change a permitted installation without a permit revision if this change is subject to any requirements under Title IV of the Act or is a Title I modification;
  - b) The permittee must provide written notice of the change to the Air Pollution Control Program'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) The permittee shall keep a record describing all changes made at the installation that result in emissions of a regulated air pollutant subject to an applicable requirement and the emissions resulting from these changes; and
  - d) The permit shield shall not apply to these changes.

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

The application utilized in the preparation of this permit was signed by George F. Morrow, Power and Light Director. On September 15, 2008, the Air Pollution Control Program was informed that E. Leon Daggett, Power & Light Director is now the responsible official. If this person terminates employment, or is reassigned different duties such that a different person becomes the responsible person to represent and bind the installation in environmental permitting affairs, the owner or operator of

this air contaminant source shall notify the Director of the Air Pollution Control Program of the change. Said notification shall be in writing and shall be submitted within 30 days of the change. The notification shall include the name and title of the new person assigned by the source owner or operator to represent and bind the installation in environmental permitting affairs. All representations, agreement to terms and conditions and covenants made by the former responsible person that were used in the establishment of limiting permit conditions on this permit will continue to be binding on the installation until such time that a revision to this permit is obtained that would change said representations, agreements and covenants.

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

This permit may be reopened for cause if:

- 1) The Missouri Department of Natural Resources (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**

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.

## **V. Attachments**

Attachments follow.





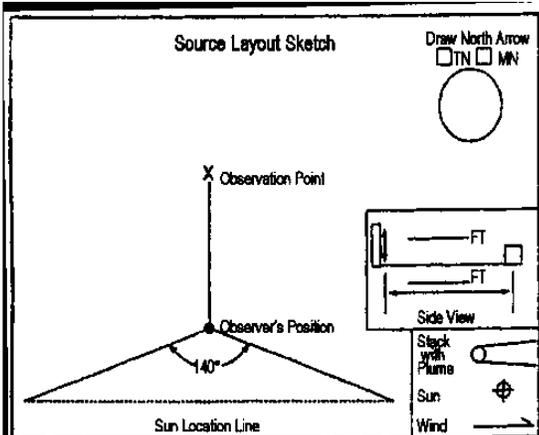
**Attachment C**  
**Method 9 Form**

**EPA METHOD 9 (40 CFR 60 - Appendix A)**  
**VISIBLE EMISSION OBSERVATION FORM**

COMPANY NAME	
LOCATION	
LOCATION	
CITY	STATE ZIP
PROCESS EQUIPMENT	OPERATING MODE
CONTROL EQUIPMENT	OPERATING MODE
DESCRIBE EMISSION POINT	
HEIGHT OF EMISSION POINT	HEIGHT OF EMISSION POINT RELATIVE TO OBSERVER START      END
DISTANCE TO EMISSION POINT	DIRECTION TO EMISSION PT. (DEGREES (0-360)) START      END
VERTICAL ANGLE TO OBSERVATION POINT	DIRECTION TO OBSERVATION POINT (DEGREES (0-360)) START      END
DISTANCE & DIRECTION TO OBSERVATION POINT FROM EMISSION POINT START      END	
DESCRIBE EMISSIONS	
START      END	EMISSION COLOR      WATER DROPLET PLUME
START      END	ATTACHED <input type="checkbox"/> DETACHED <input type="checkbox"/> NONE <input type="checkbox"/>
DESCRIBE PLUME BACKGROUND	
START      END	BACKGROUND COLOR      SKY CONDITIONS
START      END	START      END
WIND SPEED	WIND DIRECTION
START      END	START      END
AMBIENT TEMP	WET BULB TEMP      RH percent
START      END	

OBSERVATION DATE	START TIME	END TIME
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MIN	SEC				COMMENTS
	0	15	30	45	
1					
2					
3					
4					
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ADDITIONAL INFORMATION

OBSERVER'S NAME (PRINT)	
OBSERVER'S SIGNATURE	DATE
ORGANIZATION	
CERTIFIED BY	DATE

**Attachment D**  
**Opacity Summary Report**

<b>PART I.</b>		<b>INSTALLATION INFORMATION</b>	
Name of Company: Address:		Independence Power and Light Blue Valley Station	Report Period: Cer./CEA: (date) (Hr) Emission Limit:
Manufacturer/Model Number CDs CNTY & SOURCE #'s:		Stack/Process	Emission Point: Pollutant Monitored:
Total Source Operating Time in Report Period: (Min)			
<b>PART II.</b>		<b>CAUSE OF EXCESS EMISSIONS (EE)</b>	<b>Duration of EE (Min )</b>
<b>Percent of Operating Time</b>			
A.	Air Pollution Control Equipment Failure (01)		
B.	Fuel Problem (02)		
C.	Process Problem (03)		
D.	Unknown Cause (Excess Emission) (04)		
E.	Startup (05)		
F.	Soot Blowing (06)		
G.	Other Known Causes (Excess Emission) (07)		
H.	Shutdown (08)		
I.	Total (A + B + ...E)		
<b>Part III</b>		<b>CAUSES OF COMS DOWNTIME</b>	<b>Downtime (Min )</b>
<b>Percent of Operating Time</b>			
A.	Monitor Equipment Malfunction (01)		
B.	Non-monitor Equipment Malfunction (02)		
C.	Quality Assurance (03)		
D.	Other Known Cause (Monitor Malfunction) (04)		
E.	Unknown Cause (Monitor Malfunction) (05)		
F.	Total (A + B + ...E)		
Note: Percent Operating Time = [{EE (min ) or Downtime (min )} / Total Operating Time] x 100			

EXCESS OPACITY EMISSION SUMMARY

Source: Independence Power and Light Blue Valley Station

Quarter: \_\_\_\_\_ Year: \_\_\_\_\_

Source of Emissions: \_\_\_\_\_

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

Excess Emission Duration \_\_\_\_\_ (hours)

If duration is other than zero, submit Visible Emission form.

Monitoring System Downtime Due to Quality Assurance \_\_\_\_\_ (hours)

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

Monitoring System Downtime Excluding Downtime Due to Quality Assurance \_\_\_\_\_ (hours)

Source Operating Time \_\_\_\_\_ (hours)

Reported by \_\_\_\_\_

Position Title \_\_\_\_\_

EXCESS EMISSION SUMMARY – VISIBLE EMISSIONS

Source: Independence Power and Light Blue Valley Station

Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

<u>Date</u>	<u>Time</u>	<u>Magnitude</u>	<u>Reason Message</u>
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EXCESS EMISSION SUMMARY – OPACITY MONITORING SYSTEM DOWNTIME

Source: Independence Power and Light Blue Valley Station

Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

Date	Time	Duration (D-H-M)	Reason Message
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**Attachment E**  
**SO<sub>2</sub> Summary Report**

<b>PART I.</b>		<b>INSTALLATION INFORMATION</b>	
Name of Company: Address:		Independence Power and Light Blue Valley Station	Report Period: Cer./CEA: (date) (Hr) Emission Limit:
Manufacturer/Model Number Stack/Process CDs CNTY & SOURCE #'s:		Emission Point: Pollutant Monitored:	
Total Source Operating Time in Report Period: (Min)			
<b>PART II.</b>	<b>CAUSE OF EXCESS EMISSIONS (EE)</b>	<b>Duration of EE (Min )</b>	<b>Percent of Operating Time</b>
A.	Air Pollution Control Equipment Failure (01)		
B.	Fuel Problem (02)		
C.	Process Problem (03)		
D.	Unknown Cause (Excess Emission) (04)		
E.	Startup (05)		
F.	Soot Blowing (06)		
G.	Other Known Causes (Excess Emission) (07)		
H.	Shutdown (08)		
I.	Total (A + B + ...E)		
<b>Part III</b>	<b>CAUSES OF COMS DOWNTIME</b>	<b>Downtime (Min )</b>	<b>Percent of Operating Time</b>
A.	Monitor Equipment Malfunction (01)		
B.	Non-monitor Equipment Malfunction (02)		
C.	Quality Assurance (03)		
D.	Other Known Cause (Monitor Malfunction) (04)		
E.	Unknown Cause (Monitor Malfunction) (05)		
F.	Total (A + B + ...E)		
Note: Percent Operating Time = [{EE (min ) or Downtime (min )} / Total Operating Time] x 100			

EXCESS SO<sub>2</sub> EMISSION SUMMARY

Source: Independence Power and Light Blue Valley Station

Quarter: \_\_\_\_\_ Year: \_\_\_\_\_

Source of Emissions: \_\_\_\_\_

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

Excess Emission Duration \_\_\_\_\_ (hours)

If duration is other than zero, submit Visible Emission form.

Monitoring System Downtime Due to Quality Assurance \_\_\_\_\_ (hours)

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

Monitoring System Downtime Excluding Downtime Due to Quality Assurance \_\_\_\_\_ (hours)

Source Operating Time \_\_\_\_\_ (hours)

Reported by \_\_\_\_\_

Position Title \_\_\_\_\_

EXCESS EMISSION SUMMARY – SO<sub>2</sub> EMISSIONS

Source: Independence Power and Light Blue Valley Station

Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

<u>Date</u>	<u>Time</u>	<u>Magnitude</u>	<u>Reason Message</u>
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EXCESS EMISSION SUMMARY – SO<sub>2</sub> MONITORING SYSTEM DOWNTIME

Source: Independence Power and Light Blue Valley Station

Report Period: \_\_\_\_/\_\_\_\_/\_\_\_\_ to \_\_\_\_/\_\_\_\_/\_\_\_\_

Source of Emissions: \_\_\_\_\_

Date	Time	Duration (D-H-M)	Reason Message
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**Attachment F**  
**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:** Independence Power & Light-Blue Valley, **ORIS Code:** 2132  
**Project Number:** 2005-11-015, **Permit Number:** OP2010-107  
**Unit ID:** 3  
**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 SO<sub>2</sub> allowance allocations identified in this permit.

Pursuant to 40 CFR Part 76, the Missouri Department of Natural Resources Air Pollution Control Program approves the Phase II NO<sub>x</sub> Compliance Plan submitted for Blue Valley #3 Boiler, effective from through . In addition to complying with these NO<sub>x</sub> limits, Blue Valley #3 Boiler shall comply with all other applicable requirements of 40 CFR Part 76, including the requirement to reapply for a NO<sub>x</sub> compliance plan and requirements covering excess emissions.

Blue Valley #1 Boiler and Blue Valley #2 Boiler are each 21 MWe, and do not have NO<sub>x</sub> limits because they are below the threshold of 25 MWe required for an Acid Rain, CAIR, or 10 CSR 10-6.350 Emission Limitations and Emission Trading of Oxides of Nitrogen. The heating boiler is not an electric generating unit, so a NO<sub>x</sub> limit does not apply. The Recuperative Turbine is covered by the CAIR permit.

This acid rain permit is effective for the five-year period shown above, per 40 CFR 72.69, through . The designated representative must submit an application for renewal of this permit no later than six months prior to the expiration of this operating permit, 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



Blue Valley  
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).

Blue Valley

Facility (Source) Name (from STEP 1)

Acid Rain - Page 3

### **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;

Blue Valley  
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

Blue Valley Facility (Source) Name (from STEP 1)
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Acid Rain - Page 5

**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;

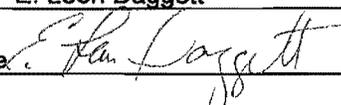
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,

(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 E. Leon Daggett	
Signature 	Date 5-13-09

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United States Environmental Protection Agency  
 Acid Rain Program

2009 MAY 21 PM 12:32

OMB No. 2060-0258

**Phase II NO<sub>x</sub> Compliance Plan**

AIR POLLUTION

Page 7 of 22

For more information, see instructions and refer to 40 CFR 76.9

This submission is:  New  Revised **RENEWAL**

**STEP 1**  
 Indicate plant name, State, and ORIS code from NADB, if applicable

Plant Name <b>BLUE VALLEY</b>	State <b>MO</b>	ORIS Code <b>2132</b>
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**STEP 2**

Identify each affected Group 1 and Group 2 boiler using the boiler ID# from NADB, if applicable. Indicate boiler type: "CB" for cell burner, "CY" for cyclone, "DBW" for dry bottom wall-fired, "T" for tangentially fired, "V" for vertically fired, and "WB" for wet bottom. Indicate the compliance option selected for each unit.

ID# <b>3</b>	ID#	ID#	ID#	ID#	ID#
Type <b>T</b>	Type	Type	Type	Type	Type

(a) Standard annual average emission limitation of 0.50 lb/mmBtu (for Phase I dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase I tangentially fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) EPA-approved early election plan under 40 CFR 76.9 through 12/31/07 (also indicate above emission limit specified in plan)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Standard annual average emission limitation of 0.45 lb/mmBtu (for Phase II dry bottom wall-fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Standard annual average emission limitation of 0.40 lb/mmBtu (for Phase II tangentially fired boilers)	<input checked="" type="checkbox"/>	<input type="checkbox"/>				
(f) Standard annual average emission limitation of 0.63 lb/mmBtu (for cell burner boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) Standard annual average emission limitation of 0.85 lb/mmBtu (for cyclone boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Standard annual average emission limitation of 0.80 lb/mmBtu (for vertically fired boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Standard annual average emission limitation of 0.84 lb/mmBtu (for wet bottom boilers)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(j) NO <sub>x</sub> Averaging Plan (Include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(k) Common stack pursuant to 40 CFR 76.17(a)(2)(i)(A) (check the standard emission limitation box above for most stringent limitation applicable to any unit utilizing stack)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(l) Common stack pursuant to 40 CFR 76.17(a)(2)(i)(B) with NO <sub>x</sub> Averaging (check the NO <sub>x</sub> Averaging Plan box and include NO <sub>x</sub> Averaging form)	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**BLUE VALLEY**

Plant Name (from Step 1)

NO<sub>x</sub> Compliance - Page 2  
 Page 2 of 2

**STEP 2, cont'd.**

ID#	ID#	ID#	ID#	ID#	ID#
Type	Type	Type	Type	Type	Type

(m) EPA-approved common stack apportionment method pursuant to 40 CFR 76.17 (e)(2)(i)(C), (a)(2)(iii)(B), or (b)(2)	<input type="checkbox"/>					
(n) AEL (Include Phase II AEL Demonstration Period, Final AEL Petition, or AEL Renewal form as appropriate)	<input type="checkbox"/>					
(o) Petition for AEL demonstration period or final AEL under review by U.S. EPA or demonstration period ongoing	<input type="checkbox"/>					
(p) Repowering extension plan approved or under review	<input type="checkbox"/>					

**STEP 3**  
 Read the standard requirements and certification, enter the name of the designated representative, sign &

**Standard Requirements**

**General.** This source is subject to the standard requirements in 40 CFR 72.9 (consistent with 40 CFR 76.8(e)(1)(i)). These requirements are listed in this source's Acid Rain Permit.

**Special Provisions for Early Election Units**

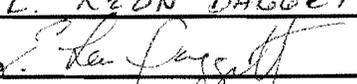
**Nitrogen Oxides.** A unit that is governed by an approved early election plan shall be subject to an emissions limitation for NO<sub>x</sub> as provided under 40 CFR 76.8(a)(2) except as provided under 40 CFR 76.8(e)(3)(iii).

**Liability.** The owners and operators of a unit governed by an approved early election plan shall be liable for any violation of the plan or 40 CFR 76.8 at that unit. The owners and operators shall be liable, beginning January 1, 2000, for fulfilling the obligations specified in 40 CFR Part 77.

**Termination.** An approved early election plan shall be in effect only until the earlier of January 1, 2008 or January 1 of the calendar year for which a termination of the plan takes effect. If the designated representative of the unit under an approved early election plan fails to demonstrate compliance with the applicable emissions limitation under 40 CFR 76.5 for any year during the period beginning January 1 of the first year the early election takes effect and ending December 31, 2007, the permitting authority will terminate the plan. The termination will take effect beginning January 1 of the year after the year for which there is a failure to demonstrate compliance, and the designated representative may not submit a new early election plan. The designated representative of the unit under an approved early election plan may terminate the plan any year prior to 2008 but may not submit a new early election plan. In order to terminate the plan, the designated representative must submit a notice under 40 CFR 72.40(d) by January 1 of the year for which the termination is to take effect. If an early election plan is terminated any year prior to 2000, the unit shall meet, beginning January 1, 2000, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7. If an early election plan is terminated on or after 2000, the unit shall meet, beginning on the effective date of the termination, the applicable emissions limitation for NO<sub>x</sub> for Phase II units with Group 1 boilers under 40 CFR 76.7.

**Certification**

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	E. LEON DAGGETT	
Signature		Date
		5-18-09

**Attachment G**

**TITLE V: CLEAN AIR INTERSTATE RULE (CAIR) PERMIT**

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

**Installation Name:** Independence Power & Light - Blue Valley Station, **ORIS Code:** 2132  
**Project Number:** 2005-11-015, **Permit Number:** OP2010-107  
**Unit IDs:** 3 and RCT (turbine)  
**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 unit 3 and RCT (turbine) at Independence Power & Light - Blue Valley Station, plant 095-0050.

This CAIR permit is effective for the five-year period shown above. The designated representative must submit an application for renewal of this permit no later than six months prior to the expiration of this operating permit, and in conjunction with the operating permit renewal application.

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Date

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Director or Designee,  
Department of Natural Resources

# CAIR Permit Application

(for sources covered under a CAIR SIP)

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

This submission is:  New  Revised

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

Blue Valley Power Station	MO	2132
Plant Name	State	ORIS/Facility Code

**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 <sub>x</sub> Annual	SO <sub>2</sub>	NO <sub>x</sub> Ozone Season
3	X	X	X
RCT (Turbine)	X	X	X

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 2011 FEB 23 PM 2:58  
 AIR POLLUTION  
 CONTROL DIVISION

**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<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> 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<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) required to have a title V operating permit and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> 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<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) that is not otherwise required to have a title V operating permit and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> 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<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and such CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable).

Blue Valley Power Station  
Plant Name (from Step 1)

CAIR Permit Application  
Page 2

STEP 3,  
continued

(b) Monitoring, reporting, and recordkeeping requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> 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<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) with the CAIR NO<sub>x</sub> emissions limitation, CAIR SO<sub>2</sub> emissions limitation, and CAIR NO<sub>x</sub> 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<sub>x</sub> source and each CAIR NO<sub>x</sub> unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> 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<sub>x</sub> units at the source, as determined in accordance with subpart HH of 40 CFR part 96.

(2) A CAIR NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> allowance was allocated.

(4) CAIR NO<sub>x</sub> allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Allowance Tracking System accounts in accordance with subparts FF, GG, and II of 40 CFR part 96.

(5) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Annual Trading Program. No provision of the CAIR NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> allowance to or from a CAIR NO<sub>x</sub> source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR NO<sub>x</sub> unit.

Sulfur dioxide emission requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO<sub>2</sub> source and each CAIR SO<sub>2</sub> unit at the source shall hold, in the source's compliance account, a tonnage equivalent of CAIR SO<sub>2</sub> 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 SO<sub>2</sub> units at the source, as determined in accordance with subpart HHH of 40 CFR part 96.

(2) A CAIR SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> allowance was allocated.

(4) CAIR SO<sub>2</sub> allowances shall be held in, deducted from, or transferred into or among CAIR SO<sub>2</sub> Allowance Tracking System accounts in accordance with subparts FFF, GGG, and III of 40 CFR part 96.

(5) A CAIR SO<sub>2</sub> allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO<sub>2</sub> Trading Program. No provision of the CAIR SO<sub>2</sub> 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 SO<sub>2</sub> 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 SO<sub>2</sub> allowance to or from a CAIR SO<sub>2</sub> source's compliance account is incorporated automatically in any CAIR permit of the source that includes the CAIR SO<sub>2</sub> 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<sub>x</sub> Ozone Season source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO<sub>x</sub> 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<sub>x</sub> Ozone Season units at the source, as determined in accordance with subpart HHHH of 40 CFR part 96.

(2) A CAIR NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> Ozone Season allowance was allocated.

(4) CAIR NO<sub>x</sub> Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO<sub>x</sub> Ozone Season Allowance Tracking System accounts in accordance with subparts FFFF, GGGG, and IIII of 40 CFR part 96.

(5) A CAIR NO<sub>x</sub> allowance is a limited authorization to emit one ton of nitrogen oxides in accordance with the CAIR NO<sub>x</sub> Ozone Season Trading Program. No provision of the CAIR NO<sub>x</sub> 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<sub>x</sub> 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<sub>x</sub> Ozone Season allowance to or from a CAIR NO<sub>x</sub> Ozone Season source's compliance account is incorporated automatically in any CAIR permit of the source.

Blue Valley Power Station  
Plant Name (from Step 1)

CAIR Permit Application  
Page 3

STEP 3,  
continued

**(d) Excess emissions requirements.**

If a CAIR NO<sub>x</sub> source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO<sub>x</sub> unit at the source shall surrender the CAIR NO<sub>x</sub> 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 SO<sub>2</sub> source emits sulfur dioxide during any control period in excess of the CAIR SO<sub>2</sub> emissions limitation, then:

(1) The owners and operators of the source and each CAIR SO<sub>2</sub> unit at the source shall surrender the CAIR SO<sub>2</sub> 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<sub>x</sub> Ozone Season source emits nitrogen oxides during any control period in excess of the CAIR NO<sub>x</sub> Ozone Season emissions limitation, then:

(1) The owners and operators of the source and each CAIR NO<sub>x</sub> Ozone Season unit at the source shall surrender the CAIR NO<sub>x</sub> 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<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> 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<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> 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<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> 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<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) or to demonstrate compliance with the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable).

(2) The CAIR designated representative of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) at the source shall submit the reports required under the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> 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<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) and each NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) shall meet the requirements of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable).

(2) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) shall also apply to the owners and operators of such source and of the CAIR NO<sub>x</sub> units, CAIR SO<sub>2</sub> units, and CAIR NO<sub>x</sub> Ozone Season units (as applicable) at the source.

(3) Any provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> Ozone Season Trading Program (as applicable) that applies to a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) or the CAIR designated representative of a CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> Ozone Season unit (as applicable) shall also apply to the owners and operators of such unit.

Blue Valley Power Station

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STEP 3,  
continued

(g) Effect on Other Authorities.

No provision of the CAIR NO<sub>x</sub> Annual Trading Program, CAIR SO<sub>2</sub> Trading Program, and CAIR NO<sub>x</sub> 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<sub>x</sub> source, CAIR SO<sub>2</sub> source, and CAIR NO<sub>x</sub> Ozone Season source (as applicable) or CAIR NO<sub>x</sub> unit, CAIR SO<sub>2</sub> unit, and CAIR NO<sub>x</sub> 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.

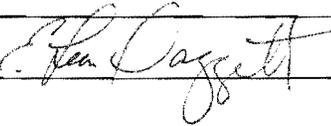
**Certification**

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.

E. Leon Daggett

Name

Signature



Date

2-18-10

## 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 11/2/2005;
- 2) 2008 Emissions Inventory Questionnaire, received 3/9/2009; and
- 3) U.S. EPA document AP-42, *Compilation of Air Pollutant Emission Factors*; Volume I, Stationary Point and Area Sources, Fifth Edition.

### 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.

None.

### Other Air Regulations Determined Not to Apply to the Operating Permit

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

10 CSR 10-2.030 Restriction of Emission of Particulate Matter from Industrial Processes was applied to the Coal Transfer and Conveying (EU0020) and Coal Crusher (EU0120) in the last operating permit (OP2001050). This regulation was rescinded March 30, 2001.

10 CSR 10-2.210 Control of Emissions from Solvent Metal Cleaning not longer applies because Independence Power & Light has switched to a water based detergent parts washer (Safety Kleen's Aqueous AQ-1 Partswasher) except for a submersion parts washer with a liquid surface area less than one square foot. 10 CSR 10-2.210(1)(D)1.A. exempts "Cold cleaners with liquid surface areas of one square foot or less or maximum capacities of one gallon or less;"

10 CSR 10-2.260 *Control of Petroleum Liquid Storage, Loading and Transfer*

(1) Applicability. This rule shall apply throughout Clay, Jackson and Platte Counties.

... (3) General Provisions

(A) Petroleum Storage Tanks.

1. No owner or operator of petroleum storage tanks shall cause or permit the storage in any stationary storage tank of more than 40,000 gallons capacity of any petroleum liquid having a true vapor pressure of 1.5 pounds per square inch absolute (psia) or greater at 90 degrees Fahrenheit ...

10 CSR 10-2.260 is not applicable to the 3,300,000 gallon Fuel Oil No. 2 tank (EP-11), the diesel fuel storage tank (EP-101), two-1500 gallon diesel fuel storage tanks (EP-102), the 300 gallon mineral oil tank, the 300 gallon aboveground waste oil tank (EP-104), two-550 gallon underground waste oil tanks (EP-105) and the 10,000 gallon underground diesel storage tank (EP-14) because they do not meet the definition of petroleum liquid.

“Petroleum liquid—Petroleum, condensate and any finished or intermediate products manufactured in a petroleum refinery with the exception of Numbers 2–6 fuel oils as specified in ASTM D(396-69), gas turbine fuel oils Number 2-GT—4-GT, as specified in ASTM D(2880-71), and diesel fuel oils Number 2-D and 4-D, as specified” in ASTM D(975-68). (10 CSR 10-6.020(P)8.)

Section (3)(A) is not applicable to the 10,000 gallon underground gasoline tank (EP-13) because it is less than the 40,000 gallon level.

Section (3)(B): “Gasoline Loading 1. No owner or operator of a gasoline loading installation or delivery vessel shall cause or permit the loading of gasoline into any delivery vessel from a loading installation unless the loading installation is equipped with a vapor recovery system or equivalent...” is not applicable either. The fuel is not loaded into a delivery vessel defined as “A tank truck, trailer or railroad tank car.” 10 CSR 10-6.020(D)2.

Section (3)(D) Gasoline Delivery Vessels does not apply because the facility does not deliver gasoline.

#### 10 CSR 10-6.100, *Alternate Emission Limits*

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

#### 10 CSR 10-6.220 *Restriction of Emissions of Visible Air Contaminants*

The rule is not applicable to the truck dumping into the coal transfer and conveying control device because of 10 CSR 10-6.220(1):

Applicability. This rule applies to all sources of visible emissions throughout the state of Missouri with the exception of the following:... (G) Truck dumping of nonmetallic minerals into any screening operation, feed hopper or crusher;...”

The rule also does not apply to the EP-12 crusher (46 tons/hour) and closed conveyors because they are completely enclosed and any resulting emissions would be fugitive.

#### 10 CSR 10-6.350 Emission Limitations and Emissions Trading of Oxides of Nitrogen

This rule is not applicable to Blue Valley Boiler #3 (EU0050) and the RCT turbine (EU0100) according to 10 CSR 10-6.350(1)(F): “The requirements of Sections (3), (4), and (5) of this rule will not apply to any entity or source subject to and implementing the requirements of 10 CSR 10-6.364.” The facility is subject to and implementing 10 CSR 10-6.364 Clean Air Interstate Rule Seasonal NOx Trading Program for EU0050 and EU0100.

The rule is also not applicable to Blue Valley Boiler #1 (EU0030) and #2 (EU0040) because they do not serve generators with a nameplate capacity greater than 25 megawatts.

10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes was applied to the Coal Transfer and Conveying (EU0020) and Coal Crusher (EU0120) in the last operating permit (OP2001050). 10 CSR 10-6.400(1)(B) states “The provisions of this rule shall not apply to the following:... 12. The grinding, crushing and conveying operations at a power plant.”

10 CSR 10-6.400 Restriction of Emission of Particulate Matter from Industrial Processes does not apply to the boilers because 10 CSR 10-2.040 Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating applies instead. The rule also does not apply to the turbine EU0100 because the definition of process weight excludes “...liquids and gases used solely as fuels and air introduced for the purposes of combustion”.

### **Construction Permit Revisions**

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

None.

### **New Source Performance Standards (NSPS) Applicability**

40 CFR Part 60 Subparts D, *Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971*; Da, *Standards of Performance for Electric Utility Steam Generating Units for Which Construction Is Commenced After September 18, 1978*; Db, *Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units*; and Dc, *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* are not applicable to the EU0030-EU0050 boilers because they were installed before the earliest compliance date in rules of August 17, 1971. The rules are also not applicable to the EU0090 heating boiler because it has a maximum heat input of 8.4 MMBtu/hour which is below the applicability level of greater than 100 MMBtu/hr.

40 CFR Part 60 Subparts 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*; 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*; and 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* are not applicable. The only storage vessel at this facility greater than the applicability level of 19,800 gallons is the 3,300,000 gallon tank used to store fuel oil, EP-11. This tank was constructed prior to June 11, 1973.

40 CFR Part 60 Subpart KKKK, *Standards of Performance for Stationary Combustion Turbines* is not applicable because the turbine was put on line June 1976, prior to the February 18, 2005 compliance date listed within the regulation.

40 CFR Part 60 Subpart GG, *Standards of Performance for Stationary Gas Turbines* is not applicable because the turbine began operation in 1976, before the applicability date of October 3, 1977.

40 CFR Part 60 Subpart Y, *Standards of Performance for Coal Preparation and Processing Plants* This subpart is not applicable because the coal handling facilities have not been modified since the applicability date of October 24, 1974.

40 CFR Part 60 Subpart IIII, *Stationary Compression Ignition Internal Combustion Engines*  
The EP-51 or EP-52 Emergency Diesel Generators (each 6.2 MMBtu/hr), installed April 1, 1992, do not have to meet the requirements of this subpart because they were not constructed, modified or reconstructed after July 11, 2005.

### **Maximum Available Control Technology (MACT) Applicability**

40 CFR Part 63 Subpart ZZZZ, *National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

§ 63.6585 Am I subject to this subpart?

You are subject to this subpart if you own or operate a stationary RICE at a major or area source of HAP emissions, except if the stationary RICE is being tested at a stationary RICE test cell/stand. §63.6585

(a) Affected source. An affected source is any existing, new, or reconstructed stationary RICE located at a major or area source of HAP emissions, excluding stationary RICE being tested at a stationary RICE test cell/stand.

§ 63.6590 What parts of my plant does this subpart cover?...

(1) Existing stationary RICE.

(i) For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions, a stationary RICE is existing if you commenced construction or reconstruction of the stationary RICE before December 19, 2002....

3) ... an existing compression ignition emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions...does not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

§63.6590

The EP-51 or EP-52 Emergency Diesel Generators (each 6.2 MMBtu/hr=2435 HP), installed April 1, 1992, are subject to this subpart because they are stationary RICE at a major source of HAP emissions. However, existing compression ignition emergency stationary RICE with a site rating more than 500 brake HP at a major source of HAP emissions do not have to meet the requirements of this subpart and of subpart A of this part. No initial notification is necessary.

40 CFR Part 63 Subpart YYYY, *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines*

The subpart is not applicable because existing turbines are not required to meet the requirements §63.6090(b)(4). Existing is defined as “A stationary combustion turbine is existing if you commenced construction or reconstruction of the stationary combustion turbine on or before January 14, 2003...” §63.6090(a)(1).

40 CFR Part 63 Subpart DDDDD, *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters* was vacated by court action.

### **National Emission Standards for Hazardous Air Pollutants (NESHAP) Applicability**

None.

### **Compliance Assurance Monitoring (CAM) Applicability**

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

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

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

EU0030 through EU0050 boilers are subject to CAM. The heating boiler EU0090 and turbine EU0100 are not subject to CAM because they do not have control devices.

**Other Regulatory Determinations**

**10 CSR 10-2.040 Maximum Allowable Emission of Particulate Matter from Fuel Burning Equipment Used for Indirect Heating**

Indirect Heating Source	EIQ	Date Installed	Heat Input (MMBtu/hr)	Limit (lbs/MMBtu)
Unit #1	EP03	1958	282	0.18 <sup>1</sup>
Unit #2	EP04	1958	282	
Unit #3	EP05	1965	540	
Heating Boiler	EP09	1987	8.4	0.4 <sup>2</sup>
<b>TOTAL Q</b>			<b>1112.4</b>	
1. Existing before 2/16/1979			$E = 1.09 \times Q^{-0.259} = 0.18 \text{ lbs/MMBtu}$	
2. New 2/16/1979 and later			0.4 lbs/MMBtu	

10 CSR 10-6.061(3)(A) Exempt Emission Units, 2.BB “Internal combustion engines and gas turbine driven compressors, electric generator sets, and water pumps, used only for portable or emergency services, provided that the maximum annual operating hours shall not exceed five hundred hours...” The emergency generators EP-51 and EP-52 are exempt emission units and listed as emission units without specific limitations.

10 CSR 10-6.020(I)4. “Insignificant activity—An activity or emission unit in which the only applicable requirement would be to list the requirement in an operating permit application under 10 CSR 10-6.065 and is either of the following:

- A. Emission units whose aggregate emission levels for the installation do not exceed that of the minimis levels; and
- B. Emission units or activities listed in 10 CSR 10-6.061 as exempt or excluded from construction permit review under 10 CSR 10-6.060.”

Emission points that were reported in the application as insignificant:

Unit ID		PTE
EP-102	2-Diesel fuel storage tanks – emergency generators (1500 gallons each)	<0.2 VOC
EP-103	Transfer of lime for water treatment	<0.1 PM10
EP-104	Aboveground Waste Oil Tank (300 gallons)	<0.01 VOC
EP-105	2-Underground waste oil tanks (550 gallons each)	<0.02 VOC
EP-106	Fly ash pneumatic transfer	<0.1 PM10

EU0040 Combustion Turbine will be in compliance with the requirements of 10 CSR 10-6.260(3)(A)2. as demonstrated by the following calculations.

10 CSR 10-6.260 *Restriction of Emission of Sulfur Compounds*, (3) General Provisions, (A) Restriction of Concentration of Sulfur Compounds in Emissions, 2. New sources (installed after February 24, 1971). No person shall cause or permit the emission into the atmosphere gases containing more than 500 ppmv of sulfur dioxide, 35 mg/cubic meter of sulfuric acid or sulfur trioxide or any combination of those gases averaged on any consecutive three hour time period.

If the highest fuel sulfur allowed in the permit of 0.5% is used, then the emission factor is (1.01 x 0.5 = 0.505 lb SO<sub>x</sub>/MMBtu).

$$ppmv\ SO_x = \left( \frac{0.505\ lb\ SO_x}{MMBtu} \right)_1 \times \left( \frac{MMBtu}{10,320\ scf} \right)_2 \times \left( \frac{ppmw}{1.660 \times 10^{-7} \frac{lbs\ SO_2}{scf}} \right)_3 \times \left( \frac{28.8\ ppmv}{64.1\ ppmw} \right)_4 = 132\ ppmv\ SO_2$$

<sup>1</sup>AP42 SOx emission factor, Table 3.4-1, is 1.01 x %sulfur = lb SOx/MMBtu for SCC 2-01-001-01

<sup>2</sup>40 CFR Part 60, Appendix A, Table 19-2, 10,320 standard cubic feet of combustion products/MMBtu for distillate fuel

<sup>3</sup>40 CFR Part 60, Appendix A, Table 19-1, 1.660 x 10<sup>-7</sup> lbs SO<sub>2</sub>/scf per ppm

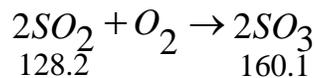
<sup>4</sup>AP 42, Appendix A ppm by weight multiplied by 28.8÷MW (molecular weight of SO<sub>2</sub>=64.1) = ppmv @ 20 degrees Celsius

$$132\ ppmv \times \left( \frac{64.1}{24.04} \right)_5 = 353 \frac{mg}{m^3} SO_2$$

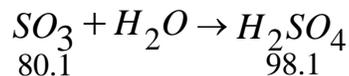
<sup>5</sup>AP 42, Appendix A - parts per million by volume multiplied by MW (molecular weight of SO<sub>2</sub>=64.1) ÷ 24.04 = milligrams/cubic meter

Sulfur dioxide is less than the 500 ppmv limit and is oxidized to sulfur trioxide. According to AP42 1.3.3.2 Sulfur Oxides Emissions, "...On average, more than 95 percent of the fuel sulfur is converted to SO<sub>2</sub>, about 1 to 5 percent is further oxidized to sulfur trioxide (SO<sub>3</sub>)..."

Five percent of the SO<sub>2</sub> concentration is 17.7 mg/cubic meter. Using the molecular weights of SO<sub>3</sub> = 80.1 and SO<sub>2</sub>=64.1 in the equation below, the SO<sub>3</sub> concentration is 17.7 ÷ 128.2 x 160.1 = 22.1 mg/cubic meter which is less than the 35 mg/cubic meter limit.



Sulfur trioxide reacts with water vapor to form sulfuric acid. Using the equation below the concentration of 22.1 mg/cubic meter SO<sub>3</sub>÷80.1 x 98.1 = 27.0, which is also below the 35 mg/cubic meter limit.



10 CSR 10-6.260(3)(C)2. *Restriction of Emissions of Sulfur Compounds from Indirect Heating*

EU0090 no monitoring requirement for natural gas usage.

The emission factor for sulfur dioxide (assuming 100% conversion of fuel sulfur to SO<sub>2</sub>) while burning gas is 0.6 pounds/million scf (SCC 10500106). Using the maximum hourly rate of 0.0084 million cubic feet (2008 EIQ), the emission of sulfur dioxide is 0.005 pounds per hour divided by 8.4 MMBtu/hour is 0.0006 pounds/MMBtu. This is well below the 8 lbs per MMBtu.

EP-101 Diesel fuel storage tank – coal handling area (approximately 150 gallons) has been removed.

The potential to emit using the 2008 EIQ is:

DESCRIPTION	CO	HAP's	Lead	NOx	PM10	SOx	VOC
COAL CRUSHER FUGITIVE					0.69		
HEATING BOILER STACK	1.31			6.31	0.65	37.74	0.05
TURBINE	135.81			1974.45	172.59	2829.30	48.10
UNIT 1 STACK	28.12	50.66	0.02	843.69	59.32	2137.34	3.37
UNIT 2 STACK	27.85	50.18	0.02	835.62	58.47	2116.91	3.34
UNIT 3 STACK	51.52	92.81	0.04	711.08	84.14	3915.55	6.18
Grand Total	244.62	193.66	0.09	4371.15	375.85	11036.85	61.05

**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:

Paul Kochan  
 Environmental Engineer