

**Commonwealth of Kentucky
Energy and Environment Cabinet
Department for Environmental Protection
Division for Air Quality
300 Sower Boulevard, 2nd Floor
Frankfort, Kentucky 40601
(502) 564-3999**

Draft

**AIR QUALITY PERMIT
Issued under 401 KAR 52:020**

Permittee Name: East Kentucky Power Cooperative, Inc.
Mailing Address: 4775 Lexington Rd, P.O. Box 707
Winchester, KY 40392-0707

Source Name: East Kentucky Power Cooperative, Inc. – John
Sherman Cooper Power Station
Mailing Address: 670 Cooper Power Plant Road
Somerset, KY 42501

Source Location: 670 Cooper Power Plant Road, Somerset KY

Permit ID: V-26-012
Agency Interest #: 3808
Activity ID: APE20250001, APE20250002
Review Type: Title V / PSD, Construction / Operating
Source ID: 21-199-00005

Regional Office: London Regional Office
875 S. Main Street
London, KY 40741
(606) 330-2080

County: Pulaski

**Application
Complete Date:** April 28, 2025
Issuance Date:
Expiration Date:

**For Michael J. Kennedy, P.E.
Director
Division for Air Quality**

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Permit	Permit Type	Activity #	Complete Date	Issuance Date	Summary of Action
V-26-012	Renewal & Significant Revision	APE20250001 APE20250002	3/28/2025 4/28/2025		Renewal; PSD project for the addition of EUs 18 & 19 two dual fuel combustion turbines with associated auxiliary equipment and conversion of EU 02 to co-fire natural gas with associated changes to coal processing equipment.

SECTION A - PERMIT AUTHORIZATION

Pursuant to a duly submitted application the Kentucky Energy and Environment Cabinet (Cabinet) hereby authorizes the operation of the equipment described herein in accordance with the terms and conditions of this permit. This permit was issued under the provisions of Kentucky Revised Statutes (KRS) Chapter 224 and regulations promulgated pursuant thereto.

The permittee shall not construct, reconstruct, or modify any affected facilities without first submitting a complete application and receiving a permit for the planned activity from the permitting authority, except as provided in this permit or in 401 KAR 52:020, Title V Permits.

Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS**Emission Unit 01****Indirect Heat Exchanger (Unit 1)****Description:**

Pulverized Coal-fired, Dry Bottom, Wall-fired Unit

Primary Fuel: Pulverized Coal

Startup Fuel: Number Two Fuel Oil]

Maximum Continuous Rating: 1,080 MMBtu/hr

Control Devices: Electrostatic Precipitator (ESP); Low NO_x Burners; Dry Flue Gas Desulfurization (DFGD); and Pulse Jet Fabric Filter (PJFF) (DFGD and PJFF shared with Unit 2); MerControl 7895 Injection

Construction Commenced: 1965; ESP installed 1971 and rebuilt 1989; Low NO_x burners installed 1993; Duct reroute to DFGD and PJFF completed April 2016

APPLICABLE REGULATIONS:

401 KAR 51:160, *NO_x requirements for large utility and industrial boilers*

401 KAR 51:210, *CAIR NO_x annual trading program* (See **Section K**)

401 KAR 51:220, *CAIR NO_x ozone season trading program* (See **Section K**)

401 KAR 51:230, *CAIR SO₂ trading program* (See **Section K**)

401 KAR 51:240, codifying **40 C.F.R. 97.401 through 97.435**, **Subpart AAAAAA**, *Cross-State Air Pollution Rule (CSAPR) NO_x annual trading program* (See **Section L**)

401 KAR 51:250, codifying **40 C.F.R. 97.801 through 97.835**, **Subpart EEEEE**, *Cross-State Air Pollution Rule (CSAPR) NO_x ozone season group 2 trading program* (See **Section L**)

401 KAR 51:260, codifying **40 C.F.R. 97.601 through 97.635**, **Subpart CCCCC**, *Cross-State Air Pollution Rule (CSAPR) SO₂ group 1 trading program* (See **Section L**)

401 KAR 52:060, *Acid rain permits*, (See **Section J**)

401 KAR 61:015, *Existing indirect heat exchangers*

401 KAR 63:002, **Section 2(4)(yyyy)**, **40 CFR 63.9980 through 63.10042**, **Tables 1 through 9**, and **Appendices A through E (Subpart UUUUU)**, *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units*

40 CFR 52, **Subpart S Kentucky** (BART SIP)

40 CFR Part 75, *Continuous Emissions Monitoring*

APPLICABLE CONSENT DECREE:

Consent Decree entered September 24, 2007, Civil Action No. 04-34-KSF Terminated by Unopposed Certificating in Support of Conditional Termination of Enforcement through Consent Decree filed on June 16, 2017

1. Operating Limitations:

- a. During a startup period or shutdown period, the permittee shall meet the work practice standards established in Table 3 to 40 CFR 63, Subpart UUUUU to comply with the work practice standards established in 401 KAR 61:015, Section 9. [401 KAR 61:015, Section 9(2)(b)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. The permittee must meet each emission limit and work practice standard in Table 1 through 3 to 40 CFR 63, Subpart UUUUU, that is applicable to the EGU, except as provided under 40 CFR 63.10009. [40 CFR 63.9991(a)(1)]
 - i. The permittee must conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months, or each 48 calendar months if neural network combustion optimization software is employed, as specified in 40 CFR 63.10021(e). [Item 1, Table 3, 40 CFR 63, Subpart UUUUU]
 - ii. The permittee must operate all CMS during startup. Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). For startup of a unit, the permittee must use clean fuels as defined in 63.10042 for ignition. Once the permittee converts to firing coal, residual oil, or solid oil-derived fuel, the permittee must engage all of the applicable control technologies except dry scrubber and SCR. The permittee must start the dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation. The permittee must comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in 40 CFR 63, Subpart UUUUU. The permittee must keep records during startup periods. The permittee must provide reports concerning activities and startup periods, as specified in 40 CFR 63.10011(g) and 63.10021(h). [Item 3(a)(1), Table 3 to 40 CFR 63, Subpart UUUUU]
 - iii. If the permittee chooses to use just one set of sorbent traps to demonstrate compliance with the applicable Hg emission limit, the permittee must comply with the limit at all times; otherwise, the permittee must comply with the applicable limit at all times except for startup and shutdown periods. [Item 3(c), Table 3 to 40 CFR 63, Subpart UUUUU]
 - iv. The permittee must collect monitoring data during startup periods, as specified in 40 CFR 63.10020(a) and (e). The permittee must keep records during startup periods as provided in 63.10021(h) and 63.10032. The permittee must provide reports concerning activities and startup periods as specified in 63.10011(g) and 63.10031. [Item 3(d), Table 3 to 40 CFR 63, Subpart UUUUU]
 - v. The permittee must operate all CMS during shutdown. The permittee must also collect appropriate data, and the permittee must calculate the pollutant emission rate for each hour of shutdown for those pollutants for which a CMS is used. [Item 4, Table 3 to 40 CFR 63, Subpart UUUUU]
 - vi. While firing coal, residual oil, or solid oil-derived fuel during shutdown, the permittee must vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal, residual oil, or solid oil-derived fuel being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. In any case, the permittee must operate controls when necessary to comply with other standards made applicable to the EGU

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

by a permit limit or a rule other than 40 CFR 63, Subpart UUUUU and that require operation of the control devices. [Item 4, Table 3 to 40 CFR 63, Subpart UUUUU]

- vii. If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the clean fuels defined in 40 CFR 63.10042 and must be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity. [Item 4, Table 3 to 40 CFR 63, Subpart UUUUU]
- viii. The permittee must comply with all applicable emission limits at all times except during startup periods and shutdown periods at which time the permittee must meet this work practice. The permittee must collect monitoring data during shutdown periods, as specified in 40 CFR 63.10020(a). The permittee must keep records during shutdown periods as provided in 40 CFR 63.10032 and 63.10021(h). Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown. The permittee must provide reports concerning activities and shutdown periods, as specified in 40 CFR 63.10011(g) and 10031. [Item 4, Table 3 to 40 CFR 63, Subpart UUUUU]

Compliance Demonstration Method:

Compliance shall be demonstrated according to 4. **Specific Monitoring Requirements** l. and m. and 5. **Specific Recordkeeping Requirements** f., h., and k., and 6. **Specific Reporting Requirements** m.

- c. The permittee must conduct periodic tune-ups of the EGU as specified in 40 CFR 63.10021(e)(1) through (9). The permittee must perform an inspection of the burner at least once every 36 calendar months unless the EGU employs neural network combustion optimization during normal operations in which case the permittee must perform an inspection of the burner at least once every 48 calendar months. If the EGU is offline when a deadline to perform the tune-up passes, the permittee shall perform the tune-up work practice requirements within 30 days after the re-start of the affected unit. [40 CFR 63.10021(e)]
 - i. As applicable, inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows: [40 CFR 63.10021(e)(1)]
 - 1. Burner or combustion control component parts needing replacement that affect the ability to optimize NO_x and CO must be installed within 3 calendar months after the burner inspection, [40 CFR 63.10021(e)(1)(i)]
 - 2. Burner or combustion control component parts that do not affect the ability to optimize NO_x and CO may be installed on a schedule determined by the operator; [40 CFR 63.10021(e)(1)(ii)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type; [40 CFR 63.10021(e)(2)]
- iii. As applicable, observe the damper operations as a function of mill and/or cyclone loadings, cyclone and pulverizer coal feeder loadings, or other pulverizer and coal mill performance parameters, making adjustments and effecting repair to dampers, controls, mills, pulverizers, cyclones, and sensors; [40 CFR 63.10021(e)(3)]
- iv. As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors; [40 CFR 63.10021(e)(4)]
- v. Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O₂ probes and/or sensors, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up should be corrected or repaired as necessary. [40 CFR 63.10021(e)(5)]
- vi. Optimize combustion to minimize generation of CO and NO_x. This optimization should be consistent with the manufacturer's specifications, if available, or best combustion engineering practice for the applicable burner type. NO_x optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR and SNCR; CO optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations and adjusting combustion zone temperature profiles; [40 CFR 63.10021(e)(6)]
- vii. While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO_x in ppm, by volume, and oxygen, in volume percent, before and after the tune-up adjustments are made (measurements may be either on a dry or wet basis as long as it is the same basis before and after the adjustment are made). The permittee may use portable CO, NO_x and O₂ monitors for this measurement. EGU's employing neural network optimization systems need only provide a single pre- and post-tune-up value rather than continual values before and after each optimization adjustment made by the system; [40 CFR 63.10021(e)(7)]
- viii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in 40 CFR 63.10021(e)(1) through (9) including: [40 CFR 63.10021(e)(8)]

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1. The concentrations of CO and NO_x in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems; [40 CFR 63.10021(e)(8)(i)]
2. A description of any corrective actions taken as part of the combustion adjustment; and [40 CFR 63.10021(e)(8)(ii)]
3. The type(s) and amount(s) of fuel used over the 12 calendar months prior to the adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period; and [40 CFR 63.10021(e)(8)(iii)]
- ix. Report the tune-up date electronically in the quarterly compliance report in accordance with 40 CFR 63.10031(g) and section 10.2 of appendix E to 40 CFR 63, Subpart UUUUU. The tune-up report date is the date when tune-up requirements in paragraphs 40 CFR 63.10021(e)(6) and (7) are completed. [40 CFR 63.10021(e)(9)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** l. and m. and **6. Specific Reporting Requirements** f.

- d. As provided in 40 CFR 63.6(g), the Administrator may approve use of an alternative to the work practice standards in 40 CFR 63.9991. [40 CFR 63.9991(b)]
- e. The permittee must be in compliance with the emission limits and operating limits in 40 CFR 63, Subpart UUUUU. These limits apply at all times except during periods of startup and shutdown; however, the permittee is required to meet the work practice requirements, items 3 and 4, in Table 3 to 40 CFR 63, Subpart UUUUU during periods of startup or shutdown. [40 CFR 63.10000(a)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** l. and m. and **6. Specific Reporting Requirements** f.

- f. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.10000(b)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** l. and m. and **6. Specific Reporting Requirements** f.

- g. The permittee must follow the startup or shutdown requirements as given in Table 3 to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10021(h)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. The permittee may use the diluent cap and default gross output values, as described in 40 CFR 63.10007(f), during startup periods or shutdown periods. [40 CFR 63.10021(h)(1)]
- ii. The permittee must operate all CMS, collect data, calculate pollutant emission rates, and record data during startup periods or shutdown periods. [40 CFR 63.10021(h)(2)]
- iii. The permittee may choose to submit an alternative non-opacity emission standard, in accordance with the requirements contained in 40 CFR 63.1011(g)(4). Until promulgation in the Federal Register of the final alternative non-opacity emission standard, the permittee shall comply with paragraph (1) of the definition of “startup” in 40 CFR 63.10021(h)(4)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** l. and m. and **6. Specific Reporting Requirements** f.

2. Emission Limitations:

- a. The permittee shall not cause emissions of particulate matter in excess of 0.23 lb/MMBtu. [401 KAR 61:015, Section 4(1)(a)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** b. and **5. Specific Recordkeeping Requirements** m.

- b. The permittee shall not cause emissions of particulate matter in excess of greater than forty (40) percent opacity except that, for: [401 KAR 61:015, Section 4(1)(c)]
 - i. A maximum of sixty percent opacity shall be permissible for not more than one six minute period in any sixty consecutive minutes; [401 KAR 61:015, Section 4(1)(c)1.]
 - ii. Emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions if the method used is that recommended by the manufacturer and the time does not exceed the manufacturer’s recommendations. [401 KAR 61:015, Section 4(1)(c)3.]

Compliance Demonstration Method

Compliance shall be demonstrated according to **4. Monitoring Requirements** a. and **5. Specific Recordkeeping Requirements** f., m. and n.

- c. The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 3.3 lb/MMBtu based on a 24-hour average. [401 KAR 61:015, Section 5(1)]

Compliance Demonstration Method:

In determining emission rates for SO₂, the permittee shall use CEMS in accordance with the procedures specified in 40 CFR Part 75. If the percent removal efficiency requirement is used to demonstrate compliance, the outlet SO₂ emission rate shall be determined by using 40 CFR Part 60, Appendix A-7, Method 19, Equation 19-7 to calculate the Unit 1

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

SO₂ inlet and Equation 19-24 to determine the SO₂ percent removal efficiency. The permittee will calculate the Unit 1 SO₂ outlet by dividing the sum of the combined Unit 1 and 2 duct SO₂ emitted (in pounds) over 30 days by the sum of combined Unit 1 and 2 duct heat input over 30 days. Or if the permittee chooses to demonstrate compliance based on the limit of 0.100 lb/MMBtu, the outlet SO₂ CEMS will be used.

- d. Beginning April 15, 2016, filterable particulate matter emissions shall not exceed 0.030 lb/MMBtu. [Consent Decree entered September 24, 2007, paragraph 82]
- e. Beginning April 30, 2017, filterable particulate matter emissions shall not exceed 0.030 lb/MMBtu. [40 CFR 52, Subpart S, referencing the Kentucky Regional Haze BART SIP, Table 7.5.3-2]

Compliance Demonstration Method:

Compliance with the filterable particulate matter emission limits shall be demonstrated according to **3. Testing Requirements** a. and **Section D—Source Emission Limitations and Testing Requirements**

- f. The permittee shall comply with the following emission limits: [40 CFR 63.9991(a)(1) and Item 1. In Table 2 to 40 CFR 63, Subpart UUUUU]
- i. If the permittee elects to comply with these emission limitations using emissions averaging, emissions averaging shall be conducted according to 40 CFR 63.10009 and 40 CFR 63.10022.

Pollutant	Emission Limit	Compliance Demonstration Method
PM (Filterable)	3.0E-2 lb/MMBtu OR 3.0E-1 lb/MWh	Quarterly stack testing OR PM CEMS [Item 1. in Table 5. and Table 7 to 40 CFR 63, Subpart UUUUU]
AND		
Hydrogen Chloride (HCl)	2.0E-3 lb/MMBtu OR 2.0E-2 lb/MWh	Quarterly Stack Testing [Item 3 in Table 5 to 40 CFR 63, Subpart UUUUU]
AND		
Mercury (Hg)	1.2E0 lb/TBtu OR 1.3E-2 lb/GWh	LEE testing for 30 Days with a sampling period consistent with that given in section 5.2.1 of appendix A to 40 CFR 63, Subpart UUUUU, per Method 30B at appendix A-8 to 40 CFR Part 60 run OR Sorbent trap monitoring system

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- g. See **Section D – Source Emission Limitations and Testing Requirements** for additional limitations

3. Testing Requirements:

- a. The permittee shall conduct an annual PM performance test on the unit. This annual stack test requirement may be satisfied by stack tests conducted to satisfy other requirements of this permit. The permittee may perform biennial rather than annual testing provided the following is true: [Consent Decree entered September 24, 2007, Paragraph 86]
- i. Two of the most recently completed test results from test conducted in accordance with 40 CFR Part 60 Appendix A-1, Method 5 demonstrate that the PM emissions are equal to or less than 0.015 lb/MMBtu, or
 - ii. The unit is equipped with a PM CEMS in accordance with paragraphs 88 through 95 of the Consent Decree entered September 24, 2007.
 - iii. The permittee shall perform annual rather than biennial testing the year immediately following any test results demonstrating that the particulate matter emissions are greater than 0.015 lb/MMBtu, unless the unit is equipped with a PM CEMS in accordance with paragraphs 88 through 95 of the Consent Decree entered September 24, 2007.
- b. For affected units meeting the LEE requirements of 40 CFR 63.1005(h), the permittee must repeat the performance test once every 3 years (once every year for Hg) according to Table 5 to 40 CFR 63, Subpart UUUUU and 40 CFR 63.10007. Should subsequent emissions testing results show the unit does not meet the LEE eligibility requirements, LEE status is lost. If this should occur: [40 CFR 63.10006(b)]
- i. For all pollutant emission limits except Hg, the permittee must conduct emissions testing quarterly, except as otherwise provided in 40 CFR 63.10021(d)(1). [40 CFR 63.10006(b)(1)]
 - ii. For Hg, the permittee must install, certify, maintain and operate a Hg CEMS or a sorbent trap monitoring system in accordance with appendix A to 40 CFR 63, Subpart UUUUU, within 6 calendar months of losing LEE eligibility. Until the Hg CEMS or sorbent trap monitoring system is installed, certified, and operating, the permittee must conduct Hg emissions testing quarterly, except as otherwise provided in 40 CFR 63.10021(d)(1). The permittee must have 3 calendar years of testing and CEMS or sorbent trap monitoring system data that satisfy the LEE emissions criteria to reestablish LEE status. [40 CFR 63.10006(b)(2)]
- c. Except for where 40 CFR 63.10006(a) or (b), apply, or where the permittee installs, certifies, and operates a PM CEMS to demonstrate compliance with a filterable PM emission limit, the permittee must conduct all applicable periodic emissions tests for filterable PM individual, or total HAP metals emissions according to Table 5 to 40 CFR 63, Subpart UUUUU, 40 CFR 63.10007, and 63.10000(c), except as otherwise provided in 40 CFR 63.40021(d)(1). [40 CFR 63.10006(c)]

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- d. Except for where 40 CFR 63.10006(b) applies, if the permittee does not use either an HCl CEMS to monitor compliance with the HCl limit or an SO₂ CEMS to monitor compliance with the alternative SO₂ emission limit, the permittee must conduct all applicable periodic HCl emissions tests according to Table 5 to 40 CFR 63, Subpart UUUUU and 40 CFR 63.10007 at least quarterly, except as otherwise provided for in 40 CFR 63.10021(d)(1). [40 CFR 63.10006(d)]
- e. The permittee must complete performance tests for the EGU for 40 CFR 63, Subpart UUUUU as follows: [40 CFR 63.10006(f)(1)]
 - i. At least 45 calendar days measured from the test's end date, must separate performance tests conducted every quarter; [40 CFR 63.10006(f)(1)(i)]
 - ii. For annual testing, at least 320 calendar days, measured from the test's end date, must separate performance tests; [40 CFR 63.10006(f)(1)(ii) and (f)(1)(ii)(A)]
 - iii. At least 1,050 calendar days, measured from the test's end date, must separate performance tests conducted every 3 years. [40 CFR 63.10006(f)(1)(iii)]
- f. For units demonstrating compliance with 40 CFR 63, Subpart UUUUU limits through quarterly emissions testing, the permittee must conduct a performance test in the 4th quarter of the calendar year if the EGU has skipped performance tests in the first 3 quarters of the calendar year. [40 CFR 63.10006(f)(2)]
- g. If the EGU misses a performance test deadline for 40 CFR 63, Subpart UUUUU due to being inoperative and if 168 or more boiler operating hours occur in the next test period, the permittee must complete an additional performance test in that period as follows: [40 CFR 63.10006(f)(3)]
 - i. At least 15 calendar days must separate two performance tests conducted in the same quarter. [40 CFR 63.10006(f)(3)(i)]
 - ii. At least 107 calendar days must separate two performance tests conducted in the same calendar year. [40 CFR 63.10006(f)(3)(ii)]
 - iii. At least 350 calendar days must separate two performance tests conducted in the same 3 year period. [40 CFR 63.10006(f)(3)(iii)]
- h. If the permittee elects to demonstrate compliance using emissions averaging under 40 CFR 63.10009, the permittee must continue to conduct performance stack tests at the appropriate frequency given 40 CFR 63.10006(c) through (f). [40 CFR 63.10006(g)]
- i. If a performance test on a non-mercury LEE shows emissions in excess of 50 percent of the emission limit and the permittee chooses to reapply for LEE status, the permittee must conduct performance tests at the appropriate frequency given in 40 CFR 63.10006(c) through (e) for that pollutant until all performance tests over a consecutive 3-year period show compliance with LEE criteria. [40 CFR 63.10006(h)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- j. The permittee must conduct all required performance tests according to 40 CFR 63.7(d), (e), (f), and (h). The permittee must also develop a site-specific test plan according to the requirements in 40 CFR 63.7(c). [40 CFR 63.10007(a)]
 - i. If the permittee uses CEMS (Hg, HCl, SO₂ or other) to determine compliance with a 30- (or, if applicable, 90-) boiler operating day rolling average emission limit, the permittee must collect quality-assured CEMS data for all unit operating conditions, including startup and shutdown (see 40 CFR 63.10011(g) and Table 3 to 40 CFR 63, Subpart UUUUU) except as otherwise provided by 40 CFR 63.40020(b). Emission rates determined during startup periods and shutdown periods (as defined in 40 CFR 63.10042) are not to be included in the compliance determinations, except as otherwise provided in 40 CFR 63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). [40 CFR 63.10007(a)(1)]
 - ii. If the permittee conducts performance testing with test methods in lieu of continuous monitoring, operate the unit at maximum normal operating load conditions during each periodic (e.g., quarterly) performance test. Maximum normal operating load will generally be between 90 and 110 percent of design capacity but should be representative of site specific normal operations during each test run. [40 CFR 63.10007(a)(2)]
- k. The permittee must conduct each performance test (including traditional 3-run stack tests, 30-boiler operating day tests based on CEMS data (or sorbent trap systems data)) according to the requirements of Table 5 to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10007(b)]
- l. Except for a 30-boiler operating day performance test based on CEMS (or sorbent trap monitoring system) data, where the concept of test runs does not apply, the permittee must conduct a minimum of three separate test runs for each performance test, as specified in 40 CFR 63.7(e)(3). Each test run must comply with the minimum applicable sampling time or volume specified in Table 2 to 40 CFR 63, Subpart UUUUU. Sections 63.1005(d) and (h), respectively, provide special instructions for conducting performance tests based on CEMS or sorbent trap monitoring systems, and for conducting emissions tests for LEE qualification. [40 CFR 63.10007(d)]
- m. To use the results of performance testing to determine compliance with the applicable emissions limits in Table 2 40 CFR 63, Subpart UUUUU, proceed as follows: [40 CFR 63.10007(e)]
 - i. Except for a 30-boiler operating day performance test based on CEMS (or sorbent trap monitoring system) data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), the permittee must use the method detection level as the measured emissions level for that pollutant in calculating compliance. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 29 fractions both for individual HAP metals and for total HAP metals) may include a combination of

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- method detection level data and analytical data reported above the method detection level. [40 CFR 63.10007(e)(1)]
- ii. If the limits are expressed in lb/MMBtu or lb/TBtu, the permittee must use the F-factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 in appendix A-7 to 40 CFR Part 63. In cases where an appropriate F-factor is not listed in Table 19-2 of Method 19, the permittee may use F-factors from Table 1 in section 3.3.5 of appendix F to 40 CFR Part 63. Use the following factors to convert the pollutant concentrations measured during the initial performance tests to units of lb/scf, for use in the applicable Method 19 equations: [40 CFR 63.10007(e)(2)]
 - 1. Multiply HCl ppm by 9.43×10^{-8} ; [40 CFR 63.10007(e)(2)(ii)]
 - 2. Multiply Hg concentrations (ug/scm) by 6.24×10^{-11} [40 CFR 63.10007(e)(2)(v)]
 - iii. To determine compliance with emission limits expressed in lb/MWh or lb/GWh, the permittee must first calculate the pollutant mass emission rate during the performance test, in units of lb/h. For Hg, if a CEMS or sorbent trap monitoring system is used, use Equation A-2 or A-3 in Appendix A to 40 CFR 63, Subpart UUUUU (as applicable). In all other cases, use an equation that has the general form of Equation A-2 or A-3 replacing the value of K with 1.66×10^{-7} lb/scf-ppm for SO₂, 9.43×10^{-8} lb/scf-ppm for HCl (if an HCl CEMS is used), 5.18×10^{-8} lb/scf-ppm for HF (if an HF CEMS is used), or 6.24×10^{-8} lb-scm/mg-scf for HAP metals and for HCl and HF (when performance stack testing is used) and defining C_h, as the average SO₂, HCl, or HF concentration in ppm, or the average HAP metals concentration in mg/dscm. This calculation requires stack gas volumetric flow rate (scfh) and (in some cases) moisture content data (see 40 CFR 63.10005(h)(3) and 63.10010). Then, if applicable emission limit is in units of lb/GWh, use Equation A-4 to 40 CFR 63, Subpart UUUUU to calculate the pollutant emission rate in lb/GWh. In this calculation, define (M)_h as the calculated pollutant mass emission rate for the performance test (lb/h), and define (MW)_h as the average electrical load during the performance test (megawatts). If the applicable emission limit is in lb/MWh rather than lb/GWh, omit the 10³ term from Equation A-4 to determine the pollutant emission rate in lb/MWh. [40 CFR 63.10007(e)(3)]
 - n. If the permittee elects to (or is required to) use CEMS to continuously monitor Hg, HCl, HF, SO₂, or PM emissions (or, if applicable sorbent trap monitoring systems to continuously collect Hg emissions data), the following default values are available for use in the emission rate calculations during startup periods or shutdown periods as defined by 40 CFR 63.10042.) For the purposes of 40 CFR 63, Subpart UUUUU, these default values are not considered to be substitute data. [40 CFR 63.10007(f)]
 - i. *Diluent cap values.* IF the permittee uses CEMS (or, if applicable, sorbent trap monitoring systems) to comply with a heat input-based emission rate limit, the permittee may use the following diluent cap values for a startup or shutdown hour in which the measured CO₂ concentration is below the cap value or the measured O₂

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- concentration is above the cap value: The permittee may use 5% for CO₂ or 14% for O₂. [40 CFR 63.10007(f)(1) and (f)(1)(ii)]
- ii. *Default gross output.* If you use CEMS to continuously monitor Hg, HCl, HF, SO₂, or PM emissions (or, if applicable, sorbent trap monitoring systems to continuously collect Hg emissions data), the following default value is available for use in the emission rate calculations during startup periods or shutdown periods (as defined in 40 CFR 63.10042). For the purposes of 40 CFR 63, Subpart UUUUU, this default value is not considered to be substitute data. For a startup or shutdown hour in which there is heat input to an affected EGU but zero gross output, the permittee must calculate the pollutant emission rate using a value equivalent to 5% of the maximum sustainable gross output, expressed in megawatts, as defined in section 6.5.2.1(a)(1) of Appendix A to 40 CFR Part 75. This default gross output is either the nameplate capacity of the EGU or the highest gross output observed in at least four representative quarters of EGU operation. For a monitored common stack, the gross output is used only when all EGUs are operating (*i.e.*, combusting fuel) are in startup or shutdown mode, and have zero electrical generation. Under those conditions, a default gross output equal to 5% of the combined maximum sustainable gross output of the EGUs that are operating but have a total of zero gross output must be used to calculate the hourly gross output-based pollutant emissions rate. [40 CFR 63.10007(f)(2)]
 - o. Upon request, the permittee shall make available to the EPA Administrator such records as may be necessary to determine whether the performance tests have been done according to the requirements of this section. [40 CFR 63.10007(g)]

4. Specific Monitoring Requirements:

- a. The permittee shall install, calibrate, operate, and maintain monitoring equipment necessary for continuously monitoring and recording opacity, continuous opacity monitoring system (COM), compliant with 40 CFR Part 60, Performance Specification 1. Excluding exempted time periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall: [401 KAR 61:005 Section 3(5)(a)1.a. and 401 KAR 52:020, Section 10]
 - i. Accept the concurrent readout from the COM and perform an inspection of the control equipment and make any necessary repairs; or [401 KAR 52:020, Section 10]
 - ii. Within 30 minutes after the COM indicates exceedance of the opacity standard, determine opacity using US EPA Reference Method 9. If emissions are visible, inspect the COM and/or the control equipment and make any necessary repairs. If US EPA Reference Method 9 cannot be performed, the reason for not performing shall be documented. [401 KAR 52:020, Section 10]
- b. The permittee shall install, calibrate, maintain and operate CEMS for measuring emissions of particulate matter. [401 KAR 52:020, Section 10]
- c. During periods of monitoring system malfunction, a temporary exemption from the monitoring and reporting requirements of 40 CFR 61:005, Section 3, may be provided

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pursuant to 401 KAR 50:055, if the source demonstrates that the malfunction was unavoidable and is being repaired as expeditiously as practicable. [401 KAR 61:005, Section 3(4)]

- d. The permittee shall install, calibrate, maintain and operate CEMS for measuring NO_x, SO₂, and either oxygen or carbon dioxide emissions. Excluding exempted time periods, if any 24-hour average sulfur dioxide value exceeds the standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable. [401 KAR 61:005, Section 3(5)(a) and 401 KAR 52:020, Section 10]
- e. The sulfur content of solid fuels, as burned, shall be determined at least once per week in accordance with methods specified by the Division. [401 KAR 61:015, Section 6(1)]
- f. The permittee shall meet the monitoring requirements of 401 KAR 63:015, according to the following:
 - i. The rate of fuel burned for each fuel shall be measured daily and recorded. [401 KAR 61:015, Section 6(3)(a)]
 - ii. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. [401 KAR 61:015, Section 6(3)(b)]
 - iii. The average electrical output and the minimum and maximum hourly generation rate shall be measured and recorded daily. [401 KAR 61:015, Section 6(3)(c)]
- g. The permittee shall monitor the duration of startups. [401 KAR 52:020, Section 10]
- h. If the permittee demonstrates compliance with any applicable emissions limit through use a continuous monitoring system (CMS), where a CMS includes a continuous parameter monitoring system (CPMS) as well as a continuous emissions monitoring system (CEMS), the permittee must develop a site-specific monitoring plan and submit this site-specific monitoring plan, if requested, at least 60 days before the initial performance evaluation (where applicable) of the CMS. This requirement also applies if the permittee petitions the Administrator for alternative monitoring parameters under 40 CFR 63.8(f). This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing monitoring plans that apply to CEMS and CPMS prepared under appendix B to 40 CFR part 60 or 75, and that meet the requirements of 40 CFR 63.10010. Using the process described in 40 CFR 63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in 40 CFR 63.10000(d), and, if approved, include those in the site-specific monitoring plan. The monitoring plan must address the provisions in 40 CFR 63.10000(d)(2) through (5). [40 CFR 63.10000(d)(1)]
- i. The site-specific monitoring plan shall include the information specified in 40 CFR 63.10000(d)(5)(i) through (d)(5)(vii). Alternatively, the requirements of 40 CFR

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63.10000(d)(5)(i) through (d)(5)(vii) are considered to be met for a particular CMS or sorbent trap monitoring system if: [40 CFR 63.10000(d)(2)]

- i. The CMS or sorbent trap monitoring system is installed, certified, maintained, operated, and quality assured either according to 40 CFR part 75 or appendix A or B to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10000(d)(2)(i)]
- ii. The recordkeeping and reporting requirements of 40 CFR part 75, or appendix A or B of 40 CFR 63, Subpart UUUUU that pertain to the CMS are met. [40 CFR 63.10000(d)(2)(ii)]
- j. The permittee must operate and maintain the CMS according to the site-specific monitoring plan. [40 CFR 63.10000(d)(4)]
- k. The provisions of the site-specific monitoring plan must address the following items: [40 CFR 63.10000(d)(5)]
 - i. Installation of the CMS or sorbent trap monitoring system sampling probe or other interface at a measurement location relative to each affected process unit such that the measurement is representative of control of the exhaust emissions (*e.g.*, on or downstream of the last control device). See 40 CFR 63.10010(a) for further details. [40 CFR 63.10000(d)(5)(i)]
 - ii. Performance and equipment specifications for the sample interface, the pollutant concentration or parametric signal analyzer, and the data collection and reduction systems. [40 CFR 63.10000(d)(5)(ii)]
 - iii. Schedule for conducting initial and periodic performance evaluations. [40 CFR 63.10000(d)(5)(iii)]
 - iv. Performance evaluation procedures and acceptance criteria (*e.g.*, calibrations), including the quality control program in accordance with the general requirements of 40 CFR 63.8(d). [40 CFR 63.10000(d)(5)(iv)]
 - v. On-going operation and maintenance procedures, in accordance with the general requirements of 40 CFR 63.8(c)(1)(ii), (c)(3), and (c)(4)(ii). [40 CFR 63.10000(d)(5)(v)]
 - vi. Conditions that define a CMS that is out of control consistent with 40 CFR 63.8(c)(7)(i), where appropriate, and for responding to out of control periods consistent with 40 CFR 63.8(c)(7)(ii) and (c)(8). [40 CFR 63.10000(d)(5)(vi)]
 - vii. On-going recordkeeping and reporting procedures, in accordance with the general requirements of 40 CFR 63.10(c), (e)(1), and (e)(2)(i), or as specifically required under 40 CFR 63, Subpart UUUUU. [40 CFR 63.10000(d)(5)(vii)]
- l. The permittee shall comply with the applicable monitoring requirements of 40 CFR 63.10010, 63.10011, 63.10020, and 63.10021.

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- m. The permittee must operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments, and any scheduled maintenance as defined in the site-specific monitoring plan. The permittee is required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. [40 CFR 63.10020(b)]
- n. Periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities excluding zero and span checks must be reported as time the monitor was inoperative (downtime) under 40 CFR 63.10(c). Failure to collect required quality-assured data during monitoring system malfunctions, monitoring system out-of-control periods, or repairs associated with monitoring system malfunctions or monitoring system out-of-control periods is a deviation from the monitoring requirements. [40 CFR 63.10020(d)]

5. Specific Recordkeeping Requirements:

- a. The source shall maintain a file for a minimum of two (2) years from the date of collection of the data or submission to the cabinet of all information reported in the quarterly summaries; and all other data collected by the CEMS or as necessary to convert monitoring data to the units of the applicable standard. [401 KAR 61:005, Section 3(15)(g)]
- b. The permittee must maintain a file of all measurements required by 401 KAR 61:015 and summarized monthly. The record of all measurements and summary shall be retained for at least two years following the date of measurements and summaries. [401 KAR 61:015, Section 6(4)]
- c. The permittee shall maintain records of the following:
 - i. The rate of fuel burned for each fuel shall be measured daily and recorded. [401 KAR 61:015, Section 6(3)(a)]
 - ii. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. [401 KAR 61:015, Section 6(3)(b)]
 - iii. The average electrical output and minimum and maximum hourly generation rate shall be measured and recorded daily. [401 KAR 61:015, Section 6(3)(c)]
- d. The permittee must keep records according to 40 CFR 63.10032(a)(1) and (2). If it is required to (or elected to) continuously monitor Hg and/or HCl and/or HF and/or PM emissions, the permittee must keep the records required under appendix A and/or appendix B and/or appendix C to 40 CFR 63, Subpart UUUUU. If the permittee elects to conduct periodic (e.g. quarterly or annual) performance stack tests, then, for each test completed on or after January 1, 2024, the permittee must keep records of the applicable data elements under 40 CFR 63.7(g). The permittee must also keep records of all data elements and other

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information in appendix E to 40 CFR 63, Subpart UUUUU that apply to the compliance strategy. [40 CFR 63.10032(a)]

- i. In accordance with 40 CFR 63.10(b)(2)(xiv), a copy of each notification or report that the permittee submits to comply with 40 CFR 63, Subpart UUUUU. The permittee must also keep records of all supporting documentation for the Initial Notifications of Compliance Status, semiannual compliance reports, or quarterly compliance reports that are submitted. [40 CFR 63.10032(a)(1)]
- ii. Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.10032(a)(2)]
- e. For each CEMS the permittee must keep the following records: [40 CFR 63.10032(b)]
 - i. Records described in 40 CFR 63.10(b)(2)(vi) through (xi). [40 CFR 63.10032(b)(1)]
 - ii. Previous (*i.e.*, superseded) versions of the performance evaluation plan as required in 40 CFR 63.8(d)(3). [40 CFR 63.10032(b)(2)]
 - iii. Request for alternative to accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i). [40 CFR 63.10032(b)(3)]
 - iv. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. [40 CFR 63.10032(b)(4)]
- f. The permittee must keep the records required in Table 7 to 40 CFR 63, Subpart UUUUU including records of all monitoring data to show continuous compliance with each emission limit and operating limit that applies. [40 CFR 63.10032(c)]
- g. The permittee must keep the following records: [40 CFR 63.10032(d)]
 - i. The permittee must keep records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used. [40 CFR 63.10032(d)(1)]
 - ii. If the permittee elects to average emissions consistent with 40 CFR 63.10009, the permittee must additionally keep a copy of the emissions averaging implementation plan required in 40 CFR 63.10009(g), all calculations required under 40 CFR 63.10009, including daily records of heat input or steam generation, as applicable, and monitoring records consistent with 40 CFR 63.10022. [40 CFR 63.10032(e)]
- h. The permittee must keep records of the occurrence and duration of each startup or shutdown. [40 CFR 63.10032(f)(1)]
- i. The permittee must keep records of the occurrence and duration of each malfunction of an operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.10032(g)]

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- j. The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.10032(h)]
- k. The permittee must keep records of the type(s) and amount(s) of fuel used during each startup or shutdown. [40 CFR 63.10032(i)]
- l. Records kept in compliance with 40 CFR 63, Subpart UUUUU shall be kept: [40 CFR 63.10033]
 - i. In a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.10033(a)]
 - ii. As specified in 40 CFR 63.10(b)(1), records must be kept for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.10033(b)]
 - iii. On site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records off site for the remaining 3 years. [40 CFR 63.10033(c)]
- m. The permittee shall maintain record of:
 - i. The sulfur content from each fuel analysis [401 KAR 52:020, Section 10]
 - ii. When no excess emissions have occurred and the continuous monitoring systems have not been inoperative, repaired, or adjusted; [401 KAR 52:020, Section 10]
 - iii. Data collected either by the continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard; [401 KAR 52:020, Section 10]
 - iv. Results of all compliance tests; [401 KAR 52:020, Section 10]
 - v. Percentage of the CEM data (excluding exempted time periods) showing excursions above the PM standard. [401 KAR 52:020, Section 10]
- n. The permittee shall maintain record in of US EPA Reference Method 9 readings in a designated logbook and/or electronic format. Records shall be maintained for 5 years. [401 KAR 52:020, Section 10]
- o. In event of startup, the permittee shall maintain records of: [401 KAR 52:020, Section 10 and 401 KAR 61:015]
 - i. The duration of startup;
 - ii. The type of startup (cold, warm, or hot); and

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- iii. Whether or not the duration of the startup exceeded the manufacturer's recommendation or typical, historical, durations, and if so an explanation of why the startup exceeded recommended or typical duration.

p. See **Section F – Monitoring, Recordkeeping, and Reporting Requirements.**

6. Specific Reporting Requirements:

- a. For each continuous monitoring system, the permittee shall submit, in writing to the cabinet, or every calendar quarter, a written report of excess emissions including the nature and cause of the excess emissions, if known, as follows: [401 KAR 61:005, Section 3(15)]
 - i. The averaging period used for data reporting shall correspond to the averaging period specified in the emission test method used to determine compliance with an emission standard for the applicable pollutant and source category, and quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter; [401 KAR 61:005, Section 3(15)(a)]
 - ii. For opacity measurements, the summary shall consist of the magnitude in actual percent opacity of six minute averages of opacity greater than the opacity standard in the applicable standard for each hour of operation of the facility as follows: [401 KAR 61:005, Section 3(15)(b)]
 - 1. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four (4) equally spaced, instantaneous opacity measurements per minute; [401 KAR 61:005, Section 3(15)(b)1.]
 - 2. All exempted time periods shall be considered before determining the excess average of opacity (for example, if an administrative regulation allows two minutes of opacity measurements in excess of the standards, the source shall report all opacity averages, in any one hour, in excess of the standard, minus the two minute exemption); and [401 KAR 61:005, Section 3(15)(b)2.]
 - 3. If more than one opacity standard applies, excess emissions data shall be submitted in relation to all applicable standards. [401 KAR 61:005, Section 3(15)(b)3.]
 - iii. For particulate matter measurements, the summary shall be based on twenty-four hour block averaging times; [401 KAR 61:005, Section 3(15)(c)]
 - iv. For gaseous measurements, the summary shall consist of hourly averages expressed in the units of the applicable standard. [401 KAR 61:005, Section 3(15)(d)]
 - v. Except for zero span checks, the date and time of each period during which the CEMS was not operating, including proof of CEMS performance during system repairs and the nature of the repairs or adjustments; [401 KAR 61:005, Section 3(15)(e)]
 - vi. If excess emissions have not occurred and the CEMS have not been inoperative, repaired, or adjusted this information shall be included in the report; and [401 KAR 61:005, Section 3(15)(f)]

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- b. The permittee shall submit monitoring reports to the permitting authority in accordance with 40 CFR 70.6(a)(3)(iii). [40 CFR 64.9(a)(1)]
- c. In the event of startup, the permittee shall report: [401 KAR 52:020, Section 10]
 - i. The duration of the startup;
 - ii. The type of startup (cold, warm, or hot); and
 - iii. Whether or not the duration of the startup exceeded the manufacturer's recommendation or typical, historical durations, and if so, an explanation of why the start-up exceeded recommended or typical durations.
- d. The permittee may not use data recorded during EGU startup or shutdown in calculations used to report emissions, except as otherwise provided in 40 CFR 63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. The permittee must use all of the quality-assured data collected during all other periods in assessing the operation of the control device and associated control stream. [40 CFR 63.10020(c)]
- e. The permittee must submit the following records: [40 CFR 63.10031(a)]
 - i. If the permittee is required to (or elects to) monitor Hg emissions continuous, the permittee must meet the electronic reporting requirements of appendix A to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10031(a)(1)]
 - ii. If the permittee elects to monitor filterable PM emissions continuously, the permittee must meet the electronic reporting requirements of appendix C to 40 CFR 63, Subpart UUUUU. Electronic reporting of hourly PM emissions data shall begin with the later of the first operating hour on or after January 1, 2024; or the first operating hour after completion of the initial PM CEMS correlation test. [40 CFR 63.10031(a)(3)]
- f. The semiannual compliance report must contain the following information: [40 CFR 63.10031(c)]
 - i. The information required by the summary report located in 40 CFR 63.10(e)(3)(vi). [40 CFR 63.10031(c)(1)]
 - ii. The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or the basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure. [40 CFR 63.10031(c)(2)]

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- iii. Indicate whether the permittee burned new types of fuel during the reporting period. If the permittee did burn new types of fuel, the permittee must include the date of the performance test where that fuel was in use. [40 CFR 63.10031(c)(3)]
- iv. Include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in 40 CFR 63.10021(e)(6) and (7) were completed. [40 CFR 63.10031(c)(4)]
- v. A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during the test, if applicable. If the permittee is conducting stack tests once every 3 years to maintain LEE status, consistent with 40 CFR 63.10006(b), the date of each stack test conducted during the previous 3 years, a comparison to emission level achieved in each stack test conducted during the previous 3 years to the 50 percent emission limit threshold required in 40 CFR 63.10005(h)(1)(i), and a statement as to whether there have been any operation changes since the last stack test that could increase emissions. [40 CFR 63.10031(c)(7)]
- vi. A certification. [40 CFR 63.10031(c)(8)]
- vii. If the permittee has a deviation from any emission limit, work practice standard, or operating limit, the permittee must also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation. [40 CFR 63.10031(c)(9)]
- viii. If the permittee had any process or control equipment malfunction(s) during the reporting period, the permittee must include the number, duration, and a brief description for each type of malfunction which occurred during the semiannual reporting period which caused or may have caused any applicable emission limitation to be exceeded. [40 CFR 63.10031(c)(10)]
- g. The permittee must include in the quarterly compliance reports as described in 40 CFR 63.10031(g), the applicable data elements in section 13 of appendix E to 40 CFR 63, Subpart UUUUU for any “deviation” (as defined in 40 CFR 63.10042 and elsewhere in 40 CFR 63, Subpart UUUUU) that occurred during the calendar quarter. If there were no deviations, the permittee must include a statement to that effect in the quarterly compliance report. [40 CFR 63.10031(d)]
- h. The permittee must report all deviations as defined in 40 CFR 63, Subpart UUUUU in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(a) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to 40 CFR 63.10031(c) and (d) or two quarterly compliance reports covering the appropriate calendar half pursuant to 40 CFR 63.10031(g), along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report(s) includes all the required information concerning deviations from any emission limit, operating limit, or work practice requirement in 40 CFR 63, Subpart UUUUU, submission of the compliance report satisfies any obligation to report the same deviations in the semiannual monitoring report.

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Submission of the compliance report(s) does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [40 CFR 63.10031(e)]

- i. For each performance stack test completed after January 1, 2024, in accordance with 40 CFR 63.10031(g), submit the applicable reference method information in section 17 through 31 of appendix E to 40 CFR 63, Subpart UUUUU along with the quarterly compliance report for the calendar quarter in which the test was completed. [40 CFR 63.10031(f)]
- i. For correlation tests, RRAs, and RCAs of PM CEMS that are completed on or after January 1, 2024, submit the appendix E reference method information together with the summarized electronic test results, in accordance with section 11.4 of appendix B to 40 CFR 63, Subpart UUUUU or 7.2.4 of appendix C to 40 CFR Part 63, as applicable. [40 CFR 63.10031(f)(1)]
- ii. If the permittee has elected to demonstrate compliance using a PM CEMS, the permittee must submit quarterly PDF reports in accordance with 40 CFR 63.10031(f)(6), which include all of the 30-boiler operating day rolling average emissions rates derived from the CEMS data. The quarterly reports are due within 60 days after the reporting periods ending on March 31st, June 30th, September 30th, and December 31st. Beginning of the first calendar quarter of 2024, the compliance averages shall no longer be reported separately, but shall be incorporated into the quarterly compliance reports described in 40 CFR 63.10031(g). In addition to the compliance averages for PM CEMS and/or HAP metals CMS, the quarterly compliance reports described in 40 CFR 63.10031(g) must also include the 30- (or, if applicable 90-) boiler day operating rolling average emission rates for Hg, HCl, HF, and/or SO₂ if the permittee has elected to (or is required to) continuously monitor these pollutants. Further, if the EGU or common stack is in an averaging plan, the quarterly compliance reports must identify all of the EGUs or common stacks in the plan and must include all of 30- (or 90-) group boiler operating day rolling weighted average emission rates (WAERs) for the averaging group. [40 CFR 63.10031(f)(2)]
- iii. The permittee must submit semiannual compliance reports as required under 40 CFR 63.10031(b) through (d), ending with the semiannual period from July 1 through December 31, 2023, and Notifications of Compliance Status as required under 40 CFR 63.10030(e), as PDF files. Quarterly compliance reports shall be submitted in a format specified by the Administrator, thereafter, in accordance with 40 CFR 63.10031(g), starting with a report covering the first calendar quarter of 2024. [40 CFR 63.10031(f)(4)]
- iv. All reports required by 40 CFR 63, Subpart UUUUU not subject to 40 CFR 63.10031(f), and (f)(1) through (4) must be sent to the Administrator at the appropriate address listed in 40 CFR 63.13. If acceptable to both the Administrator and the permittee, these reports may be submitted on electronic media. The Administrator retains the right to require submittal of reports subject to 40 CFR 63.10031(f), and (f)(1) through (4) in paper format. [40 CFR 63.10031(f)(5)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- v. All reports and notifications described in 40 CFR 63.10031(f) and (f)(1), (2), and (4) shall be submitted to the EPA in the specified format and at the specified frequency, using the ECMPS reporting tool. Each PDF version of a stack test report, CEMS RATA report, PM CEMS correlation test report, RRA report, and RCA report must include sufficient test information to assess that the reference method testing was done correctly. Note that the EPA will continue to accept, as necessary, PDF reports that are being phased out at the end of 2023, if the submission deadlines for those reports extend beyond December 31, 2023. The following data elements must be entered into the ECMPS reporting tool at the time of submission of each PDF file: [40 CFR 63.10031(f)(6)]
1. The facility name, physical address, mailing address (if different from the physical address), and county; [40 CFR 63.10031(f)(6)(i)]
 2. The ORIS code (or equivalent ID number assigned by EPA's Clean Air Markets Division (CAMD)) and the Facility Registry System (FRS) ID; [40 CFR 63.10031(f)(6)(ii)]
 3. The EGU (or EGUS) to which the report applies. Report the EGU IDs as they appear in the CAMD Business System; [40 CFR 63.10031(f)(6)(iii)]
 4. If any of the EGUs in 40 CFR 63.10031(f)(6)(iii) share a common stack, indicate which EGUs share the stack. If emissions data are monitored and reported at the common stack according to 40 CFR Part 75, report the ID number of the common stack as it is represented in the electronic monitoring plan required under 40 CFR 75.53. [40 CFR 63.10031(f)(6)(iv)]
 5. If any of the EGUs described in 40 CFR 63.10031(f)(6)(iii) are in an averaging plan under 40 CFR 63.10009, indicate which EGUs are in the plan and whether it is a 30- or 90- day averaging plan; [40 CFR 63.10031(f)(6)(v)]
 6. The identification of each emission point to which the report applies. An "emission point" is a point at which source effluent is released to the atmosphere, and is either a dedicated stack that serves one of the EGUs identified in 40 CFR 63.10031(f)(6)(iii) or a common stack that serves two or more of those EGUs. To identify an emission point, associate it with the EGU or stack ID in the CAMD Business system or the electronic monitoring plan (*e.g.*, "Unit 2 stack," "common stack CS001," or "multiple stack MS001"); [40 CFR 63.10031(f)(6)(vi)]
 7. An indication of the type of PDF report or notification being submitted; [40 CFR 63.10031(f)(6)(vii)]
 8. The pollutant(s) being addressed in the report; [40 CFR 63.10031(f)(6)(viii)]
 9. The reporting period being covered by the report (if applicable); [40 CFR 63.10031(f)(6)(ix)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

10. The relevant test method that was performed for a performance test (if applicable); [40 CFR 63.10031(f)(6)(x)]
 11. The date the performance test was completed (if applicable) and the test number (if applicable; and [40 CFR 63.10031(f)(6)(xi)]
 12. The responsible official's name, title, and phone number. [40 CFR 63.10031(f)(6)(xii)]
- j. Starting with the first calendar quarter of 2024, the permittee must use the ECMPS reporting tool to submit quarterly electronic compliance reports. Each quarterly compliance report shall include the applicable data elements in sections 2 through 13 of Appendix E to 40 CFR 63, Subpart UUUUU. For each stack test summarized in the compliance report the permittee must also submit the appropriate reference method information in sections 17 through 31 of appendix E to 40 CFR 63, Subpart UUUUU. The compliance reports and associated appendix E information must be submitted no later than 60 calendar days after the end of each calendar quarter. [40 CFR 63.10031(g)]
- k. Initial Notifications of Compliance Status (if any) shall be submitted in accordance with 40 CFR 63.9(h)(2)(ii), as PDF files, using the ECMPS reporting tool. The applicable data elements in 40 CFR 63.10031(f)(6)(i) through (xii) must be entered into ECMPS with each Notification. [40 CFR 63.10031(h)]
- l. If the permittee elected to use a certified PM CEMS to monitor PM emissions continuously to demonstrate compliance with this subpart and have begun recording valid data from the PM CEMS prior to November 9, 2020, the permittee must use the ECMPS reporting tool to submit a detailed report of the PS 11 correlation test (see appendix B to 40 CFR part 60) in a PDF file no later than 60 days after that date. For a correlation test completed on or after November 9, 2020, but prior to January 1, 2024, the permittee must submit the PDF report according to section 7.2.4 of appendix C to 40 CFR 63, Subpart UUUUU. The applicable data elements in 40 CFR 63.10031(f)(6)(i) through (f)(6)(xii) must be entered into the ECMPS reporting tool with the PDF report. [40 CFR 63.10031(j)]
- m. The permittee shall submit all applicable reports as described in 40 CFR 63 10011, 10021, and 10031.
- 7. Specific Control Equipment Operating Conditions:**
- a. The permittee shall install and operate a dry FGD and fabric filtration at EKPC Cooper Units 1 and 2 that will address condensable particulate emissions and other visibility impairing pollutants. [Kentucky Regional Haze SIP, Table 7.5.3-1]
 - b. The permittee shall continuously operate each PM control device to maximize PM emission reductions consistent with manufacturers' specifications, the operations design and maintenance limitations of the units, and good engineering practice. Specifically, the permittee shall, at a minimum: [Consent Decree entered Sept 24, 2007, paragraph 81]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. Energize each section of the ESP for each unit, regardless of whether that action is needed to comply with opacity limits; [Consent Decree entered Sept 24, 2007, paragraph 81(a)]
- ii. Maintain the energy or power levels delivered to the ESPs for each unit to achieve the greatest possible removal of PM; [Consent Decree entered Sept 24, 2007, paragraph 81(b)]
- iii. Make best efforts to expeditiously repair and return to service transformer-rectifier sets when they fail; and [Consent Decree entered Sept 24, 2007, paragraph 81(c)]
- iv. Inspect for, and schedule for repair, any openings in ESP casings and ductwork to minimize air leakage. [Consent Decree entered Sept 24, 2007, paragraph 81(d)]
- v. The permittee shall also optimize the plate-cleaning and discharge-electrode cleaning systems for the ESPs at each unit by varying the cycle time, cycle frequency, rapper-vibrator intensity, and number of strikes per cleaning event, of these systems to minimize PM emissions. [Consent Decree entered Sept 24, 2007, paragraph 81]
- c. The permittee shall continuously operate each ESP at all times that the unit it serves is combusting Fossil Fuel, in compliance with the manufacturer's specifications, the operation design and maintenance limitations of the unit, and good engineering practices. [Consent Decree entered Sept 24, 2007, paragraph 85]
- d. The pulse jet fabric filter baghouse shall be continuously operated to maximize PM emission reductions, consistent with manufacturer's specifications, the operation design and maintenance limitations of the unit, and good engineering practices. [Consent Decree entered Sept 24, 2007, paragraph 81]
- e. The permittee shall continuously operate each FGD (or equivalent SO₂ control technology approved pursuant to Consent Decree entered September 24, 2007, paragraph 66) at all times that the unit it serves is in operation, consistent with the technological limitations, manufacturer's specifications, and good engineering and maintenance practices for the FGD or equivalent technology, for minimizing emissions to the extent practicable. [Consent Decree entered September 24, 2007, paragraph 67]
- f. The permittee shall maintain records regarding the maintenance of control equipment. [401 KAR 52:020, Section 10]
- g. The permittee shall operate low NO_x burners (LNB) on all of the units within the EKPC System. [Consent Decree entered on September 24, 2007, paragraph 56]
- h. See **Section E – Source Equipment Requirements.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 02****Indirect Heat Exchanger (Unit 2n)****Description:**

Pulverized Coal-fired, Dry Bottom, Wall-fired Unit

Primary Fuel: Pulverized Coal, Natural Gas, or Co-fired Natural Gas with Coal

Startup Fuel: Number Two Fuel Oil and/or Natural Gas

Maximum Continuous Rating: 2,433 MMBtu/hr

Control Devices: Low NO_x burners; Dry Flue Gas Desulfurization (DFGD); Selective Catalytic Reduction (SCR); Pulse Jet Fabric Filter (PJFF); (DFGD and PJFF shared with Unit 1); and FuelSolv TreatmentConstruction Commenced: 1969; Low NO_x burners installed 1994; DFGD, SCR and PJFF installed in 2012; DFGD and PJFF in operation since June 30, 2012; Duct reroute to DFGD and PJFF completed April 2016; PM CEMS installed on or before December 31, 2012 as required by the Notice of Non-Material Change to Consent Decree filed October 7, 2011 and Consent Decree filed September 24, 2007, Civil Action No. 04-34-KSF**APPLICABLE REGULATIONS:****401 KAR 51:017**, *Prevention of significant deterioration of air quality* (NO_x, CO, VOC, PM/PM₁₀/PM_{2.5} (filterable + condensable), H₂SO₄, and GHG)**401 KAR 51:160**, *NO_x requirements for large utility and industrial boilers***401 KAR 51:210**, *CAIR NO_x annual trading program* (See **Section K**)**401 KAR 51:220**, *CAIR NO_x ozone season trading program* (See **Section K**)**401 KAR 51:230**, *CAIR SO₂ trading program* (See **Section K**)**401 KAR 51:240**, *Cross-State Air Pollution Rule (CSAPR) NO_x annual trading program* (See **Section L**)**401 KAR 51:250**, *Cross-State Air Pollution Rule (CSAPR) NO_x ozone season group 2 trading program* (See **Section L**)**401 KAR 51:260**, *Cross-State Air Pollution Rule (CSAPR) SO₂ group 1 trading program* (See **Section L**)**401 KAR 52:060**, *Acid rain permits* (See **Section J**)**401 KAR 61:015**, *Existing indirect heat exchangers***401 KAR 63:002**, **Section 2(4)(yyyy)**, 40 CFR 63.9980 through 63.10042, Tables 1 through 9, and Appendices A through E (**Subpart UUUUU**), *National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units***40 CFR 52**, **Subpart S**, *Kentucky* (BART SIP)**40 CFR Part 75**, *Continuous Emissions Monitoring***NON-APPLICABLE REGULATION:****401 KAR 60:005**, **Section 2(2)(b)**, 40 CFR 60.40Da through 60.52Da (**Subpart Da**), *Standards of Performance for Electric Utility Steam Generating Units* is not applicable because C2 is considered an existing unit under 40 CFR 60.40Da(a)(1) and the change to co-fire natural gas is not considered a *modification* under 40 CFR 60.14(a).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**APPLICABLE CONSENT DECREE:**

Consent Decree entered September 24, 2007, Civil Action No. 04-34-KSF

Non-Material Change to Consent Decree filed October 7, 2011, Civil Action No. 04-34-KSF

Terminated by Unopposed Certificate in Support of Condition Termination of Enforcement through Consent Decree Filed on June 16, 2017

ALTERNATE OPERATING SCENARIO:

The conditions for the alternate operating scenario described in **Section H** apply prior to the Commercial Operation Date of the Co-Fire Project (see **Section D – Source Emission Limitations and Testing Requirements**).

1. Operating Limitations:

- a. The permittee shall operate and maintain the SCR according to the manufacturer's specifications. Flue gas emissions shall be routed through the SCR at all times the unit is in firing natural gas. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements**

- b.

- b. The permittee shall combust pipeline quality natural gas with a maximum sulfur content of 0.5 grains per 100 dry standard cubic feet (gr/100 dscf). [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **Section D – Source Emission Limitations And Testing Requirements**

- c. The permittee shall prepare and maintain for EU 02 a good combustion and operation practices plan (GCOP), for co-firing or natural gas-firing, within 90 days of the Commercial Operation Date of the Co-Fire Project (refer to **Section D – Source Emission Limitations and Testing Requirements**), that defines, measures, and verifies the use of operational and design practices determined as BACT for minimizing NO_x, CO, VOC, PM/PM₁₀/PM_{2.5} (filterable + condensable), H₂SO₄, and GHG emissions. The permittee shall operate according to the provisions of this plan at all times, including periods of startup, shutdown, and malfunction. The plan shall be incorporated into the plant standard operating procedures (SOP) and shall be made available for the Division's inspection. The plan shall include, but not be limited to: [401 KAR 51:017]
 - i. A list of combustion optimization practices and a means of verifying the practices have occurred;
 - ii. A list of combustion and operation practices to be used to lower energy consumption and a means of verifying the practices have occurred; and
 - iii. A list of the design choices determined to be BACT and verification that designs were implemented in the final construction.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. A list of parameters to be continuously monitored by a continuous parameter monitoring system (CPMS), such as temperature, pressure drop, and aqueous ammonia flow rate, as applicable for each control device.
- v. Procedures for limiting ammonia slip from the SCR.

Compliance Demonstration Method:

Compliance with the GCOP BACT shall be demonstrated according to **5 Specific Recordkeeping Requirements** a.

- d. When co-firing or natural gas-firing, during startup and shutdown, the permittee shall minimize the CO, VOC, PM, PM10, PM2.5, and H2SO4 emissions by complying with the work practice standards 401 KAR 61:015, Section 9. During a startup period or shutdown period, the permittee shall: [401 KAR 61:015, Section 9 and 401 KAR 51:017]
 - i. The permittee shall comply with 401 KAR 50:055, Section (2)(5); [401 KAR 61:015, Section 9(1)(a)]
 - ii. The frequency and duration of startup periods or shutdown periods shall be minimized by the affected facility; [401 KAR 61:015, Section 9(1)(b)]
 - iii. All reasonable steps shall be taken by the permittee to minimize the impact of emissions on ambient air quality from the affected facility during startup periods and shutdown periods; [401 KAR 61:015, Section 9(1)(c)]
 - iv. The actions, including duration of the startup period, of the permittee of each affected facility during startup periods and shutdown periods, shall be documented by signed, contemporaneous logs or other relevant evidence; and [401 KAR 61:015, Section 9(1)(d)]
 - v. Startups and shutdowns shall be conducted according to either: [401 KAR 61:015, Section 9(1)(e)]
 - 1. The manufacturer's recommended procedures; or [401 KAR 61:015, Section 9(1)(e)1.]
 - 2. Recommended procedures for a unit of similar design, for which manufacturer's recommended procedures are available, as approved by the cabinet based on documentation provided by the permittee. [401 KAR 61:015, Section 9(1)(e)2.]

Compliance Demonstration Method:

The permittee shall demonstrate compliance with the relevant 401 KAR 61:015 operating standards according to **5. Specific Recordkeeping Requirements** f. and **6. Specific Reporting Requirements** b.

- e. The permittee must meet each emission limit and work practice standard in Table 1 through 3 to 40 CFR 63, Subpart UUUUU, that is applicable to the EGU, except as provided under 40 CFR 63.10009. [40 CFR 63.9991(a)(1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. The permittee must conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months, or each 48 calendar months if neural network combustion optimization software is employed, as specified in 40 CFR 63.10021(e). [Item 1, Table 3, 40 CFR 63, Subpart UUUUU]
- ii. The permittee must operate all CMS during startup. Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). For startup of a unit, the permittee must use clean fuels as defined in 63.10042 for ignition. Once the permittee converts to firing coal, residual oil, or solid oil-derived fuel, the permittee must engage all of the applicable control technologies except dry scrubber and SCR. The permittee must start the dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation. The permittee must comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in 40 CFR 63, Subpart UUUUU. The permittee must keep records during startup periods. The permittee must provide reports concerning activities and startup periods, as specified in 40 CFR 63.10011(g) and 63.10021(h). [Item 3(a)(1), Table 3 to 40 CFR 63, Subpart UUUUU]
- iii. If the permittee chooses to use just one set of sorbent traps to demonstrate compliance with the applicable Hg emission limit, the permittee must comply with the limit at all times; otherwise, the permittee must comply with the applicable limit at all times except for startup and shutdown periods. [Item 3(c), Table 3 to 40 CFR 63, Subpart UUUUU]
- iv. The permittee must collect monitoring data during startup periods, as specified in 40 CFR 63.10020(a). The permittee must keep records during startup periods as provided in 63.10021(h) and 63.10032. The permittee must provide reports concerning activities and startup periods as specified in 63.10011(g) and 63.10031. [Item 3(d), Table 3 to 40 CFR 63, Subpart UUUUU]
- v. The permittee must operate all CMS during shutdown. The permittee must also collect appropriate data, and the permittee must calculate the pollutant emission rate for each hour of shutdown for those pollutants for which a CMS is used. [Item 4, Table 3 to 40 CFR 63, Subpart UUUUU]
- vi. While firing coal, residual oil, or solid oil-derived fuel during shutdown, the permittee must vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal, residual oil, or solid oil-derived fuel being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. In any case, the permittee must operate controls when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other than 40 CFR 63, Subpart UUUUU and that require operation of the control devices. [Item 4, Table 3 to 40 CFR 63, Subpart UUUUU]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- vii. If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the clean fuels defines in 40 CFR 63.10042 and must be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity. [Item 4, Table 3 to 40 CFR 63, Subpart UUUUU]
- viii. The permittee must comply with all applicable emission limits at all times except during startup periods and shutdown periods at which time the permittee must meet this work practice. The permittee must collect monitoring data during shutdown periods, as specified in 40 CFR 63.10020(a). The permittee must keep records during shutdown periods as provided in 40 CFR 63.10032 and 63.10021(h). Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown. The permittee must provide reports concerning activities and shutdown periods, as specified in 40 CFR 63.10011(g) and 10031. [Item 4, Table 3 to 40 CFR 63, Subpart UUUUU]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** g., h. and i. and **5. Specific Recordkeeping Requirements** h., i., l. and m., and **6. Specific Reporting Requirements** m.

- f. The permittee must meet each operating limit in Table 4 to 40 CFR 63, Subpart UUUUU, that is applicable: [40 CFR 63.9991(a)(2)]
- g. As provided in 40 CFR 63.6(g), the Administrator may approve use of an alternative to the work practice standards in 40 CFR 63, Subpart UUUUU. [40 CFR 63.9991(b)]
- h. The permittee must perform periodic tune-ups of the EGU as specified in 40 CFR 63.10021(e)(1) through (9). The permittee must perform an inspection of the burner at least once every 36 calendar months unless the EGU employs neural network combustion optimization during normal operations in which case the permittee must perform an inspection of the burner at least once every 48 calendar months. If the EGU is offline when a deadline to perform the tune-up passes, the permittee shall perform the tune-up work practice requirements within 30 days after the re-start of the affected unit. [40 CFR 63.10000(e)]
- i. As applicable, inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows: [40 CFR 63.10021(e)(1)]
 - 1. Burner or combustion control component parts needing replacement that affect the ability to optimize NO_x and CO must be installed within 3 calendar months after the burner inspection, [40 CFR 63.10021(e)(1)(i)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. Burner or combustion control component parts that do not affect the ability to optimize NO_x and CO may be installed on a schedule determined by the operator; [40 CFR 63.10021(e)(1)(ii)]
- ii. As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available, or in accordance with best combustion engineering practice for that burner type; [40 CFR 63.10021(e)(2)]
- iii. As applicable, observe the damper operations as a function of mill and/or cyclone loadings, cyclone and pulverizer coal feeder loadings, or other pulverizer and coal mill performance parameters, making adjustments and effecting repair to dampers, controls, mills, pulverizers, cyclones, and sensors; [40 CFR 63.10021(e)(3)]
- iv. As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors; [40 CFR 63.10021(e)(4)]
- v. Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O₂ probes and/or sensors, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up should be corrected or repaired as necessary. [40 CFR 63.10021(e)(5)]
- vi. Optimize combustion to minimize generation of CO and NO_x. This optimization should be consistent with the manufacturer's specifications, if available, or best combustion engineering practice for the applicable burner type. NO_x optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR and SNCR; CO optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations and adjusting combustion zone temperature profiles; [40 CFR 63.10021(e)(6)]
- vii. While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO_x in ppm, by volume, and oxygen, in volume percent, before and after the tune-up adjustments are made (measurements may be either on a dry or wet basis as long as it is the same basis before and after the adjustment are made). The permittee may use portable CO, NO_x and O₂ monitors for this measurement. EGU's employing neural network optimization systems need only provide a single pre- and post-tune-up value rather than continual values before and after each optimization adjustment made by the system; [40 CFR 63.10021(e)(7)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- viii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in 40 CFR 63.10021(e)(1) through (9) including: [40 CFR 63.10021(e)(8)]
1. The concentrations of CO and NO_x in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems; [40 CFR 63.10021(e)(8)(i)]
 2. A description of any corrective actions taken as part of the combustion adjustment; and [40 CFR 63.10021(e)(8)(ii)]
 3. The type(s) and amount(s) of fuel used over the 12 calendar months prior to the adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period; and [40 CFR 63.10021(e)(8)(iii)]
- ix. Report the tune-up date electronically in the quarterly compliance report in accordance with 40 CFR 63.10031(g) and section 10.2 of appendix E to 40 CFR 63, Subpart UUUUU. The tune-up report date is the date when tune-up requirements in paragraphs 40 CFR 63.10021(e)(6) and (7) are completed. [40 CFR 63.10021(e)(9)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** l. and m. and **6. Specific Reporting Requirements** f.iv.

- i. The permittee must be in compliance with the emission limits and operating limits in 40 CFR 63, Subpart UUUUU. These limits apply at all times except during periods of startup and shutdown; however, for coal-fired EGUs, the permittee is required to meet the work practice requirements in items 3 and 4 in Table 3 to 40 CFR 63, Subpart UUUUU during periods of startup or shutdown. [40 CFR 63.10000(a)]
- j. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.10000(b)]
- k. The permittee must meet each operating limit in Table 4 to 40 CFR 63, Subpart UUUUU that is applicable to the EGU. [40 CFR 63.9991(a)(2) and Table 4 to 40 CFR 63, Subpart UUUUU]
- l. The permittee must follow the startup or shutdown requirements as given in Table 3 to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10021(h)]
 - i. The permittee may use the diluent cap and default gross output values, as described in 40 CFR 63.10007(f), during startup periods or shutdown periods. [40 CFR 63.10021(h)(1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- ii. The permittee must operate all CMS, collect data, calculate pollutant emission rates, and record data during startup periods or shutdown periods. [40 CFR 63.10021(h)(2)]
- iii. The permittee may choose to submit an alternative non-opacity emission standard, in accordance with the requirements contained in 40 CFR 63.1011(g)(4). Until promulgation in the Federal Register of the final alternative non-opacity emission standard, the permittee shall comply with paragraph (1) of the definition of “startup” in 40 CFR 63.10042. [40 CFR 63.10021(h)(4)]
- m. The permittee shall meet the work practice standards established in Table 3 to 40 CFR 63, Subpart UUUUU. [401 KAR 61:015, Section 9(2)(b)]

2. Emission Limitations:

- a. For BACT, when co-firing or natural gas-firing, the permittee shall not allow emissions to exceed the following: [401 KAR 51:017]

Pollutant	Emission Limit	Averaging Period	Annual Emission Limit (tpy)	Compliance Demonstration Method
NO _x	0.080 lb/MMBtu	30-day rolling ^b	878	NO _x CEMS (See 4. <u>Specific Monitoring Requirements</u> a.) and Recordkeeping (See 5. <u>Specific Recordkeeping Requirements</u> r.)
CO	0.12 lb/MMBtu	3-hour average ^a	1,278	Performance Testing (See 3. <u>Testing Requirements</u> a.i.) and Recordkeeping (See 5. <u>Specific Recordkeeping Requirements</u> r.)
VOC	0.0055 lb/MMBtu	3-hour average ^a	58	Performance Testing (See 3. <u>Testing Requirements</u> a.ii.) and Recordkeeping (See 5. <u>Specific Recordkeeping Requirements</u> r.)
PM/PM ₁₀ /PM _{2.5} (filterable + condensable)	0.030 lb/MMBtu	3-hour average ^a	310	Performance Testing (See 3. <u>Testing Requirements</u> a.iii.) and Recordkeeping (See 5. <u>Specific</u>

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				<u>Recordkeeping Requirements r.)</u>
H ₂ SO ₄	0.005 lb/MMBtu	3-hour average ^a	57	Performance Testing (See 3. <u>Testing Requirements a.iv.)</u> and Recordkeeping (See 5. <u>Specific Recordkeeping Requirements r.)</u>)
GHG	2,074 lb/MWh-g	12-month rolling ^b	2,146,866	Part 75 procedures and Recordkeeping (See 5. <u>Specific Recordkeeping Requirements r.)</u>)

^a Excluding startups and shutdowns

^b Including startups and shutdowns

- b. Beginning on December 31, 2012 the permittee shall install and commence continuous operation of year-round SCR technology on Unit 2 so as to achieve, and thereafter maintain, a NO_x 30-day rolling average emission rate not greater than 0.080 lb/MMBtu. [Consent Decree entered September 24, 2007, Paragraph 53]

Compliance Demonstration Method:

In determining Emission Rates for NO_x, the permittee shall use CEMS in accordance with the procedures specified in the Cooper Station Monitoring Plan approved by U.S. EPA on December 20, 2013 and revised on June 17, 2016, unless otherwise approved by the Permitting Authority and/or U.S. EPA. See also **4. Specific Monitoring Requirements a.** and **Section D – Source Emission Limitations and Testing Requirements.**

- c. The permittee shall install and commence continuous operation of FGD technology (or equivalent SO₂ control technology approved pursuant to paragraph 66 of the Consent Decree) so as to achieve a 30-day Rolling Average SO₂ Removal Efficiency of at least ninety-five percent or a 30-day Rolling Average SO₂ Emission Rate of no greater than 0.100 lb/MMBtu. [Consent Decree entered September 24, 2007, Paragraph 65]

Compliance Demonstration Method:

In determining Emission Rates for SO₂, the permittee shall use CEMS in accordance with the procedures specified in the Cooper Station Monitoring Plan approved by the U.S. EPA on December 20, 2013 and revised on June 17, 2016, unless otherwise approved by the Permitting Authority and/or U.S. EPA. See also **4. Specific Monitoring Requirements a.** and **Section D – Source Emission Limitations and Testing Requirements.**

- d. Beginning April 15, 2016, filterable particulate matter emissions shall not exceed 0.030 lb/MMBtu. [Consent Decree entered on September 24, 2007, paragraph 82]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- e. By April 30, 2017, filterable particulate matter emissions shall not exceed 0.030 lb/MMBtu. [40 CFR 52, Subpart S, referencing the Kentucky Regional Haze BART SIP, Table 7.5.3-2]

Compliance Demonstration Method:

Compliance with the filterable particulate matter emission limits d. and e. shall be demonstrated according to **3. Testing Requirements** a. and **Section D – Source Emission Limitations and Testing Requirements**.

- f. The permittee shall not cause emissions of particulate matter in excess of 0.23 lb/MMBtu. [401 KAR 61:015, Section 4(1)(a)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** g. and **5. Specific Recordkeeping Requirements** h.

- g. The permittee shall not cause emissions of particulate matter in excess of forty (40) percent opacity, except that, for: [401 KAR 61:015, Section 4(1)(c)]
- i. A maximum of sixty (60) percent opacity shall be permissible for not more than one (1) six (6) minute period in any sixty (60) consecutive minutes, [401 KAR 61:015, Section 4(1)(c)1.]
 - ii. Emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions if the method used is that recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 61:015, Section 4(1)(c)3.]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** b. and **5. Specific Recordkeeping Requirements** f. and h.

- h. When combusting 100% coal, the permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 3.3 lb/MMBtu. [401 KAR 61:015, Section 5(1)]
- i. When combusting 100% natural gas, the permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 2.2 lb/MMBtu. [401 KAR 61:015, Section 5(1)]
- j. If different fuels are burned simultaneously in any combination, the applicable standard shall be determined by proration using the following formula: Allowable Sulfur Dioxide Emission, [401 KAR 61:015, Section 5(2)]

$$\frac{lb}{MMBtu} = \frac{[x(a) + y(b) + z(c)]}{x + y + z}$$

Where:

x = percent of total heat input derived from liquid fuel

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y = percent of total heat input derived from gaseous fuel

z = percent of total heat input derived from solid fuel

a = allowable SO₂ emission in lb/MMBtu heat input derived from liquid fuel

b = allowable SO₂ emission in lb/MMBtu heat input derived from gaseous fuel

c = allowable SO₂ emission in lb/MMBtu heat input derived from solid fuel

Compliance Demonstration Method:

Compliance shall be demonstrated according to 4. **Specific Monitoring Requirements** a. and 5. **Specific Recordkeeping Requirements** f.

- k. The permittee must meet the following emission limitations. [40 CFR 63.9991(a)(1)]

Pollutant	Emission Limit	Compliance Demonstration Method
PM (filterable)	0.030 lb/MMBtu OR 0.30 lb/MWh (Gross)	Quarterly stack testing OR PM CEMS [Item 1. in Table 5. and Table 7 to 40 CFR 63, Subpart UUUUU]
AND		
Hydrogen Chloride (HCl)	2.0E-3 lb/MMBtu OR 2.0E-2 lb/MWh	Quarterly Stack Testing [Item 3 in Table 5 to 40 CFR 63, Subpart UUUUU]
AND		
Mercury (Hg)	1.2E0 lb/TBtu OR 1.3E-2 lb/GWh	LEE testing for 30 Days with a sampling period consistent with that given in section 5.2.1 of appendix A to 40 CFR 63, Subpart UUUUU, per Method 30B at appendix A-8 to 40 CFR Part 60 run OR Sorbent Trap Monitoring System [Item 4 in Table 5 to 40 CFR 63, Subpart UUUUU]

3. **Testing Requirements:**

- a. Within 60 days after achieving the maximum production rate at which EU02 will be operated after the Co-Fire Project but no later than 180 days after the Commercial Operation Date of the Co-fire Project, as described in **Section D – Source Emission Limitations and Testing Requirements**, the permittee shall conduct the following initial

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

performance tests to determine initial compliance with the appropriate BACT limits: [401 KAR 51:017]

- i. U.S. EPA Reference Method 10 for CO;
 - ii. U.S. EPA Reference Method 18, 25, or 25a for VOC;
 - iii. U.S. EPA Reference Method 5 (filterable) or MATS-modified EPA Method 5 (filterable) or US EPA Reference Method 201 (filterable) and US EPA Method 202 (condensable) for PM/PM₁₀/PM_{2.5};
 - iv. U.S. EPA Reference Method 8, CTM-013 and CTM-013A for H₂SO₄;
 - v. Alternate test methods may be used, as approved by the Division.
 - vi. The performance tests shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. [401 KAR 50:045, Section 5(1)]
 - vii. Each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with the 401 KAR 51:017 BACT limitations, the arithmetic mean of the results of three runs shall apply. [401 KAR 50:045, Section 9(1)]
 - viii. Subsequent testing shall be performed within 61 months of the previous stack test.
- b. The permittee shall conduct an annual PM performance test on the unit. This annual stack test requirement may be satisfied by stack tests conducted as otherwise required under the air permit for any year that such stack tests are required under the permit. The permittee may perform biennial rather than annual testing provided that: [Consent Decree entered on September 24, 2007, paragraph 86]
- i. Two of the most recently completed test results from tests conducted in accordance with 40 CFR Part 60, Appendix A-1, Method 5 demonstrate that the PM emissions are equal to or less than 0.015 lb/MMBtu, or [Consent Decree entered on September 24, 2007, paragraph 86(a)]
 - ii. The unit is equipped with a PM CEMS. [Consent Decree entered on September 24, 2007, paragraph 86(b)]
 - iii. The permittee shall perform annual rather than biennial testing the year immediately following any test result demonstrating that the particulate matter emissions are greater than 0.015 lb/MMBtu, unless the unit is equipped with a PM CEMS. [Consent Decree entered on September 24, 2007, paragraph 86]
- c. Tests completed to demonstrate compliance with 401 KAR 61:015 shall be conducted according to the methods described in 401 KAR 61:015, Section 7. [401 KAR 61:015, Section 7]

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- d. Except where 40 CFR 63.10006(a) or (b) apply, or where the permittee installs, certifies, and operates a PM CEMS to demonstrate compliance with a filterable PM emissions limit, the permittee must conduct all applicable periodic emissions tests for filterable PM, individual, or total HAP metals emissions according to Table 5 to 40 CFR 63, Subpart UUUUU, 40 CFR 63.10007. and 40 CFR 63.10000(c), except as otherwise provided in 40 CFR 63.10021(d)(1). [40 CFR 63.10006(c)]
- e. Except where 40 CFR 63.10006(b) applies, if the permittee does not use either an HCl CEMS to monitor compliance with the HCl limit or an SO₂ CEMS to monitor compliance with the alternate equivalent SO₂ emission limit, the permittee must conduct all applicable periodic HCl emissions tests according to Table 5 to 40 CFR 63, Subpart UUUUU and 40 CFR 63.10007 at least quarterly, except as otherwise provided in 40 CFR 63.10021(d)(1). [40 CFR 63.10006(d)]
- f. Notwithstanding the provisions of 40 CFR 63.10021(d)(1), the requirements listed in 40 CFR 63.10006(g) and (h), and the requirements of 40 CFR 63.10006(f)(3), the permittee must complete performance tests as follows: [40 CFR 63.10006(f)(1)]
 - i. At least 45 calendar days, measured from the test's end date, must separate performance tests conducted every quarter; [40 CFR 63.10006(f)(1)(i)]
 - ii. For annual testing: [40 CFR 63.10006(f)(1)(ii)]
 - 1. At least 320 calendar days, measured from the test's end date, must separate performance tests; [40 CFR 63.10006(f)(1)(ii)(A)]
 - 2. At least 320 calendar days, measured from the test's end date, must separate annual sorbent trap mercury testing for 30-boiler operating day LEE tests; [40 CFR 63.10006(f)(1)(ii)(B)]
 - 3. At least 230 calendar days, measured from the test's end date, must separate annual sorbent trap mercury testing for 90-boiler operating day LEE tests; and [40 CFR 63.10006(f)(1)(ii)(C)]
 - iii. At least 1,050 calendar days, measured from the test's end date, must separate performance tests conducted every 3 years. [40 CFR 63.10006(f)(1)(iii)]
- g. For units demonstrating compliance through quarterly emission testing, the permittee must conduct a performance test in the 4th quarter of a calendar year if the EGU has skipped performance tests in the first 3 quarters of the calendar year. [40 CFR 63.10006(f)(2)]
- h. If the EGU misses a performance test deadline due to being inoperative and if 168 or more boiler operating hours occur in the next test period, the permittee must complete an additional performance test in that period as follows: [40 CFR 63.10006(f)(3)]
 - i. At least 15 calendar days must separate two performance tests conducted in the same quarter. [40 CFR 63.10006(f)(3)(i)]

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- ii. At least 107 calendar days must separate two performance tests conducted in the same calendar year. [40 CFR 63.10006(f)(3)(ii)]
- iii. At least 350 calendar days must separate two performance tests conducted in the same 3 year period. [40 CFR 63.10006(f)(3)(iii)]
- i. If a performance test on a non-mercury LEE shows emissions in excess of 50 percent of the emission limit and if the permittee chooses to reapply for LEE status, the permittee must conduct performance tests at the appropriate frequency given in 40 CFR 63.10006(c) through (e) for that pollutant until all performance tests over a consecutive 3-year period show compliance with LEE criteria. [40 CFR 63.10006(h)]
- j. Except as otherwise provided in 40 CFR 63.10007, the permittee must conduct all required performance tests according to 40 CFR 63.7(d), (e), (f), and (h). The permittee must develop a site-specific test plan according to the requirements in 40 CFR 63.7(c). [40 CFR 63.10007(a)]
 - i. If the permittee uses CEMS (Hg, HCl, SO₂, or other) to determine compliance with a 30- (or, if applicable 90-) boiler operating day rolling average emission limit, the permittee must collect quality assured CEMS data for all unit operating conditions, including startup and shutdown (see 40 CFR 63.10011(g) and Table 3 to 40 CFR 63, Subpart UUUUU), except as otherwise provided in 40 CFR 63.10020(b). Emission rates determined during startup periods and shutdown periods (as defined in 40 CFR 63.10042) are not to be included in the compliance determinations except as otherwise provided in 40 CFR 63.1000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). [40 CFR 63.10007(a)(1)]
 - ii. If the permittee conducts performance testing with test methods in lieu of continuous monitoring, operate the unit at maximum normal operating load condition during each periodic (e.g. quarterly) performance test. Maximum normal operating load will be generally between 90 and 110 percent of design capacity but should be representative of site specific normal operations during each test run. [40 CFR 63.10007(a)(2)]
- k. The permittee must conduct each performance test (including traditional 3-run stack tests, 30-boiler operating day tests based on CEMS data (or sorbent trap monitoring system data), and 20-boiler day Hg emission tests for LEE qualification) according to the requirements in Table 5 to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10007(b)]
- l. Except for a 30-boiler operating day performance test based on CEMS (or sorbent trap monitoring system) data, where the concept of test runs does not apply, the permittee must conduct a minimum of three separate test runs for each performance test, as specified in 40 CFR 63.7(e)(3). Each test run must comply with the minimum applicable sampling time or volume specified in Table 1 or 2 to 40 CFR 63, Subpart UUUUU. Sections 63.10005(d) and (h), respectively, provide special instructions for conducting performance tests based on CEMS or sorbent trap monitoring systems, and for conducting emission tests for LEE qualification. [40 CFR 63.10007(d)]

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- m. To use the results of performance testing to determine compliance with the applicable emission limits in Table 1 or 2 to 40 CFR 63, Subpart UUUUU, proceed as follows: [40 CFR 63.10007(e)]
- i. Except for a 30-boiler operating day performance test based on CEMS (or sorbent trap monitoring system) data, if measurement results for any pollutant are reported as below the method detection level (e.g., laboratory analytical results for one or more sample components are below the method defined analytical detection level), the permittee must use the method detection level as the measured emissions level for that pollutant in calculating compliance. The measured result for a multiple component analysis (e.g., analytical values for multiple Method 29 fractions both for individual HAP metals and for total HAP metals) may include a combination of method detection level data and analytical data reported above the method detection level. [40 CFR 63.10007(e)(1)]
- ii. If the limits are expressed in lb/MMBtu or lb/TBtu, the permittee must use the F-factor methodology and equations in sections 12.2 and 12.3 of EPA Method 19 in appendix - 7 to 40 CFR part 60. In cases where an appropriate F-factor is not listed in Table 19-2 of Method 19, the permittee may use F-factors from Table 1 in section 3.3.5 of appendix F to 40 CFR part 75, or F-factors derived using the procedures in section 3.3.6 of appendix F to 40 CFR part 75. Use the following factors to convert the pollutant concentrations measured during the initial performance tests to units of lb/scf, for use in the applicable Method 19 equations: [40 CFR 63.10007(e)(2)]
1. Multiple HCl ppm by 9.43×10^{-8} ;
 2. Multiply Hg concentrations ($\mu\text{g}/\text{scm}$) by 6.24×10^{-11}
- iii. To determine compliance with emission limits expressed in lb/MWh or lb/GWh, the permittee must first calculate the pollutant mass emission rate during the performance test in units of lb/h. For Hg, if a CEMS or sorbent trap monitoring system is used, use equation A-2 or A-3 in appendix A to 40 CFR 63, Subpart UUUUU (as applicable). In all other cases, use an equation that has the general form of Equation A-2 or A-3, replacing value of K with 1.66×10^{-7} lb/scf-ppm for SO₂, 9.43×10^{-8} lb/scf-ppm for HCl (if an HCl CEMS is used), 5.18×10^{-8} lb/scf-ppm for HF (if an HF CEMS is used), or 6.24×10^{-8} lb-scm/mg-scf for HAP metals and for HCl and HF (when performance stack testing is used), and defining C_h as the average SO₂, HCl, or HF concentration in ppm, or the average HAP metals concentration in mg/dscm. This calculation requires stack gas volumetric flow rate (scfh) and (in some cases) moisture content data (see 40 CFR 63.10005(h)(3) and 63.10010). Then, if the applicable emission limit is in units of lb/GWh, use Equation A-4 in appendix A to 40 CFR 63, Subpart UUUUU to calculate the pollutant emission rate in lb/Gwh. In this calculation, define (M)_h as the calculated pollutant mass emission rate for the performance test (lb/h), and define (MW)_h as the average electrical load during the performance test (megawatts). If the applicable emission limit is in lb/MWh rather than lb/GWh, omit the 10³ term from equation A-4 to determine the pollutant emission rate in lb/MWh. [40 CFR 63.10007(e)(3)]

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- n. If the permittee elects to (or is required to) use CEMS to continuously monitor Hg, HCl, HF, SO₂, or PM emissions (or, if applicable, sorbent trap monitoring system to continuously collect Hg emissions data), the following default values are available for use in the emission rate calculations during startup periods or shutdown periods (as defined by 40 CFR 63.10042). For the purposes of 40 CFR 63, Subpart UUUUU, these default values are not considered to be substitute data. [40 CFR 63.10007(f)]
 - i. *Diluent cap values.* If the permittee uses CEMS (or, if applicable, sorbent trap monitoring systems) to comply with a heat input-based emission rate limit, the permittee may use the following diluent cap values for a startup or shutdown hour in which the measured CO₂ concentration is below the cap value or the measured O₂ concentration is above the cap value. The permittee may use 5% for CO₂ or 14% for O₂. [40 CFR 63.10007(f)(1)(ii)]
 - ii. *Default gross output.* If the permittee uses CEMS to monitor Hg, HCl, HF, SO₂, or PM emissions (or, if applicable, sorbent trap monitoring systems to continuously collect Hg emissions data), the following default value is available for use in the emission rate calculations during startup periods or shutdown periods (as defined in 40 CFR 63.10042). For the purposes of 40 CFR 63, Subpart UUUUU, the default value is not considered to be substitute data. For a startup or shutdown hour in which there is heat input to an affected EGU but zero gross output, the permittee must calculate the pollutant emission rate using a value equivalent to 5% of the maximum sustainable gross output, expressed in megawatts, as defined in section 6.5.2.1(a)(1) of appendix A to 40 CFR part 75. This default gross output is either the nameplate capacity of the EGU or the highest gross output observed in at least four representative quarters of EGU operation. For a monitored common stack, the default gross output is used only when all EGUs are operating (*i.e.*, combusting fuel) are in startup or shutdown mode, and have zero electrical generation. Under those conditions, a default gross output equal to 5% of the combined maximum sustainable gross output of the EGUs that are operating but have a total of zero gross output must be used to calculate the hourly gross output-based pollutant emissions rate. [40 CFR 63.10007(f)(2)]
- o. If the permittee uses quarterly performance testing to demonstrate compliance with one or more applicable emission limits in Tables 1 or 2 to 40 CFR 63, Subpart UUUUU, the permittee: [40 CFR 63.10021(d)]
 - i. May skip performance testing in those quarters during which less than 168 boiler operating hours occur, except that a performance test must be conducted at least once every calendar year. [40 CFR 63.10021(d)(1)]
 - ii. Must conduct the performance test as defined in Table 5 to 40 CFR 63, Subpart UUUUU and calculate the results of the testing in units of the applicable emissions standard; and [40 CFR 63.10021(d)(2)]

4. Specific Monitoring Requirements:

- a. The permittee shall install, calibrate, maintain and operate CEMS for measuring NO_x, SO₂ and either oxygen or carbon dioxide emissions. Excluding exempted time periods, if any

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appropriately averaged emission rate exceeds the applicable standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable. [401 KAR 61:005, Section 3; 40 CFR 60, Appendix B, Performance Specification 2; 40 CFR 75, Appendix A; and 401 KAR 52:020, Section 10]

- b. The permittee shall install, calibrate, operate, and maintain a continuously monitoring and recording opacity, continuous opacity monitoring system (COM), compliance with 40 CFR 60, Performance Specification 1. Excluding exempted time periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall: [401 KAR 61:005, Section 3(5)(a)1.a. and 401 KAR 52:020, Section 10]
 - i. Accept the concurrent readout from the COM and perform an inspection of the control equipment and make any necessary repairs; or [401 KAR 52:020, Section 10]
 - ii. Within 30 minutes after the COM indicates exceedance of the opacity standard, determine opacity using US EPA Reference Method 9. If emissions are visible, inspect the COM and/or the control equipment and make any necessary repairs. If US EPA Reference Method 9 cannot be performed, the reason for not performing shall be documents. [401 KAR 52:020, Section 10]
- c. The sulfur content of solid fuels, as burned, shall be determined at least once per week in accordance with the methods specified by the cabinet. [401 KAR 61:015, Section 6(1)]
- d. The rate of fuel burned for each fuel shall be measured daily. [401 KAR 61:015, Section 6(3)(a)]
- e. The heating value and ash content of fuels shall be ascertained at least once per week. [401 KAR 61:015, Section 6(3)(b)]
- f. The average electrical output and the minimum and maximum hourly generation rate shall be measured daily. [401 KAR 61:015, Section 6(3)(c)]
- g. The permittee shall install, calibrate, maintain and operate CEMS for measuring emissions of particulate matter. [401 KAR 52:020, Section 10]
- h. The permittee must install, certify, operate, maintain, and quality assure each monitoring system necessary for demonstrating compliance with the work practice standards for PM during startup periods and shutdown periods. The permittee must collect, record, report, and maintain data obtained from these monitoring systems during startup periods and shutdown periods. [40 CFR 63.10000(l)]
- i. For affected units meeting the LEE requirements of 40 CFR 63.10005(h), the permittee must repeat the performance test once every 3 years (once every year for Hg) according to Table 5 to 40 CFR 63, Subpart UUUUU and 40 CFR 63.10007. Should subsequent emissions testing results show the unit does not meet the LEE eligibility requirements, LEE status is lost. If this should occur: [40 CFR 63.10006(b)]

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- i. For all pollutant emission limits except for Hg, the permittee must conduct emissions testing quarterly, except as otherwise provided in 40 CFR 63.10021(d)(1). [40 CFR 63.10006(b)(1)]
- ii. For Hg, the permittee must install, certify, maintain, and operate a sorbent trap monitoring system in accordance with appendix A to 40 CFR 63, Subpart UUUUU, within 6 calendar months of losing LEE eligibility. The permittee must have 3 calendar years of testing or sorbent trap monitoring system data that satisfy the LEE emissions criteria to reestablish LEE status. [40 CFR 63.10006(b)(2)]
- j. Flue gases from the affected units under 40 CFR 63, Subpart UUUUU exhaust to the atmosphere through a variety of different configurations, including but not limited to individual stacks, a common stack configuration or a main stack plus a bypass stack. For the CEMS and sorbent trap monitoring systems used to provide data under 40 CFR 63, Subpart UUUUU, the continuous monitoring system installation requirements for these exhaust configurations are described in 40 CFR 63.10010(a)(1) through (6). [40 CFR 63.10010(a)]
- k. If the permittee uses an oxygen (O₂) or carbon dioxide (CO₂) CEMS to convert measured pollutant concentrations to the units of the applicable emissions limit, the O₂ or CO₂ concentrations shall be monitored at a location that represents emissions to the atmosphere, *i.e.*, at the outlet of the EGU, downstream of all emission control devices. The permittee must install, certify, maintain, and operate the CEMS according to 40 CFR part 75. Use only quality assured O₂ or CO₂ data in the emissions calculations; do not use 40 CFR part 75 substitute data values. [40 CFR 63.10010(b)]
- l. If the permittee is required to use a stack gas flow rate monitor, either for routine operation of a sorbent trap monitoring system or to convert pollutant concentrations to units of an electrical output-based emission standard in Table 2 to 40 CFR 63, Subpart UUUUU, the permittee must install, certify, operate, and maintain the monitoring system and conduct on-going quality-assured flow rate data in the emissions calculations. Do not apply bias adjustment factors to the flow rate data and do not use substitute flow rate data in the calculations. [40 CFR 63.10010(c)]
- m. If the permittee is required to make corrections for stack gas moisture content when converting pollutant concentrations to the units of an emission standard in Table 2 to 40 CFR 63, Subpart UUUUU the permittee must install, certify, operate, and maintain a moisture monitoring system in accordance with 40 CFR Part 75. Alternatively, the permittee may use appropriate fuel-specific default moisture values from 40 CFR 75.11(b) to estimate moisture content of the stack gas. If the permittee installs and operates a moisture monitoring system, do not use substitute moisture data in the emissions calculations. [40 CFR 63.10010(d)]
- n. If the permittee uses a sorbent trap monitoring system, the permittee must install, certify, operate, maintain and quality-assure the data from the monitoring system in accordance with appendix A to 40 CFR 63, Subpart UUUUU. The permittee must calculate and record a 30- (or if alternate emission averaging is used, 90-) boiler operating day rolling average

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Hg emission rate, in units of the standard, updated after each new boiler operating day. Each 30- (or, if alternate emission averaging is used, 90-) boiler operating day rolling average emission rate, calculated according to section 6.2 of appendix A to 40 CFR 63, Subpart UUUUU, is the average of all the valid hourly Hg emission rates in the preceding 30- (or, if alternate emissions averaging is used, a 90-) boiler operating days. Section 7.1.4.3 of appendix A to 40 CFR 63, Subpart UUUUU explains how to reduce sorbent trap monitoring system data to an hourly basis. [40 CFR 63.10010(g)]

- o. If the permittee chooses to comply with the PM filterable emissions limit in lieu of metal HAP limits, the permittee may choose to install, certify, operate, and maintain a PM CEMS and record and report the output of the PM CEMS as specified in 40 CFR 63.10010(i)(1) through (8). Compliance with the applicable PM emissions limit in Table 2 to 40 CFR 63, Subpart UUUUU is determined on a 30-boiler operating day rolling average basis. [40 CFR 63.10010(i)]
- p. The permittee must monitor and collect data according to the site-specific monitoring plan required by 40 CFR 63.10000(d). [40 CFR 63.10020(a)]
- q. The permittee must operate the monitoring system and collect data at all required intervals at all times that the affected EGU is operating, except for required monitoring system quality assurance or quality control activities, including, as applicable, calibration checks and required zero and span adjustments, and any scheduled maintenance as defined in the site-specific monitoring plan. The permittee is required to affect monitoring system repairs in response to monitoring system malfunctions and to return the monitoring system to operation as expeditiously as practicable. [40 CFR 63.10020(b)]
- r. The permittee may not use data recorded during EGU startup or shutdown in calculations used to report emissions, except as otherwise provided in 40 CFR 63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. The permittee must use all of the quality-assured data collected during all other periods in assessing the operation of the control device and associated control system. [40 CFR 63.10020(c)]
- s. Periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities excluding zero and span checks must be reported as time the monitor was inoperative (downtime) under 40 CFR 63.10(c). Failure to collect required quality-assured data during monitoring system malfunctions, monitoring system out-of-control periods, or repairs associated with monitoring system malfunctions or monitoring system out-of-control periods is a deviation from the monitoring requirements. [40 CFR 63.10020(d)]
- t. The permittee must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 4 to 40 CFR 63, Subpart

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

UUUUU that is applicable, according to the monitoring specified in Tables 6 and 7 to 40 CFR 63, Subpart UUUUU and 40 CFR 63.10021(b) through (g). [40 CFR 63.10021(a)]

- u. Except as otherwise provided in 40 CFR 63.10020(c), if the permittee uses a CEMs to measure SO₂, PM, HCl, HF, or Hg emissions, or using a sorbent trap monitoring system to measure Hg emissions, the permittee must demonstrate continuous compliance by using all quality-assured hourly data recorded by the CEMS (or sorbent trap monitoring system) and the other required monitoring systems (e.g. flow rate, CO₂, O₂, or moisture systems) to calculate the arithmetic average emissions rate in units of the standard on a continuous 30-boiler operating day (or, if alternate emissions averaging is used for Hg, 90-boiler operating day) rolling average basis, updated at the end of each new boiler operating day. Use equation 8 in 40 CFR 63.10021 to determine the 30- (or if applicable, 90-) boiler operating day rolling average. [40 CFR 63.10021(b)]
- v. During periods of monitoring system malfunction, a temporary exemption from the monitoring and reporting requirements of 401 KAR 61:005, Section 3, may be provided pursuant to 401 KAR 50:055 if the source demonstrates that the malfunction was unavoidable and is being repaired as expeditiously as practicable. [401 KAR 61:005, Section 3(4)]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the following: [401 KAR 51:017 and 401 KAR 52:020, Section 10]
 - i. 15-minute averages of all NO_x emissions (in lb/MMBtu);
 - ii. NO_x emissions (in lb/MMBtu) on a rolling 1-hour basis, including startups and shutdowns.
 - iii. All CEMS calibration checks for a period of five years;
 - iv. The GCOP plan and any revisions.
- b. The permittee shall maintain records of the design features, installation, recommended procedures, and maintenance for the SCR and low NO_x burners, any instance in which the recommended procedures were not followed, and any corrective actions taken. [401 KAR 52:020, Section 10]
- c. The rate of fuel burned for each fuel shall be measured daily or at shorter intervals and recorded. [401 KAR 61:015, Section 6(3)(a)]
- d. The heating value and ash content of liquid fuels shall be ascertained at least once per week and recorded. [401 KAR 61:015, Section 6(3)(b)]
- e. The average electrical output and the minimum and maximum hourly generation rate shall be measured and recorded daily. [401 KAR 61:015, Section 6(3)(c)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- f. The permittee shall maintain a file of all measurements required by 401 KAR 61:015, and summarized monthly. The record of all measurements and summary shall be retained for at least two years following the date of measurements and summaries. [401 KAR 61:015, Section 6(4)]
- g. The permittee must keep records according to 40 CFR 63.10032(a)(1) and (2). If the permittee is required to (or elects to) continuously monitor Hg and/or HCl and/or HF and/or PM emissions,, the permittee must keep records required under appendix A and/or appendix B and/or appendix C to 40 CFR 63, Subpart UUUUU. If the permittee elects to conduct periodic (*e.g.* quarterly or annual) performance stack tests, then, for each test completed on or after January 1, 2024, the permittee must keep records of the applicable data elements under 40 CFR 63.7(g). The permittee must also keep records of all data elements and other information in appendix E to 40 CFR 63, Subpart UUUUU that apply to the compliance strategy. [40 CFR 63.10032(a)]
 - i. In accordance with 40 CFR 63.10(b)(2)(xiv), a copy of each notification or report that is submitted to comply with 40 CFR 63, Subpart UUUUU. The permittee must also keep records of all supporting documentation for the initial Notifications of Compliance Status, semiannual compliance reports, or quarterly compliance reports that are submitted. [40 CFR 63.10032(a)(1)]
 - ii. Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.10032(a)(2)]
- h. For each CEMS, the permittee must keep records according to 40 CFR 63.10032(b)(1) through (4): [40 CFR 63.10032(b)]
 - i. Records described in 40 CFR 63.10(b)(2)(vi) through (xi). [40 CFR 63.10032(b)(1)]
 - ii. Previous (*i.e.*, superseded) versions of performance evaluation plan as required in 40 CFR 63.8(d)(3). [40 CFR 63.10032(b)(2)]
 - iii. Requests for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i). [40 CFR 63.10032(b)(3)]
 - iv. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. [40 CFR 63.10032(b)(4)]
- i. The permittee must keep the records required in Table 7 to 40 CFR 63, Subpart UUUUU to show continuous compliance with each emission limit that is applicable. [40 CFR 63.10032(c)]
- j. The permittee must also keep the records in 40 CFR 63.10032(d)(1) through (3): [40 CFR 63.10032(d)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. The permittee must keep records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used. [40 CFR 63.10032(d)(1)]
- ii. For an EGU that qualifies as an LEE under 40 CFR 63.10005(h), the permittee must keep annual records that document that the emissions in the previous stack test(s) continue to qualify the unit for LEE status for an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year. [40 CFR 63.10032(d)(3)]
- k. If the permittee elects to average emissions consistent with 40 CFR 63.1009, the permittee must additionally keep a copy of the emissions averaging implementation plan required in 40 CFR 63.10009(g), all calculations required under 40 CFR 63.10009, including daily records of heat input or steam generation, as applicable, and monitoring records consistent with 40 CFR 63.10022. [40 CFR 63.10032(e)]
- l. The permittee must keep records of the occurrence and duration of each startup or shutdown. [40 CFR 63.10032(f)(1)]
- m. The permittee must keep records of the occurrence and duration of each malfunction of an operation (*i.e.* process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.10032(g)]
- n. The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.10032(h)]
- o. The permittee must keep records of the type(s) and amount(s) of fuel used during each startup or shutdown. [40 CFR 63.10032(i)]
- p. The permittee must keep records:
 - i. In a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.10033(a)]
 - ii. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.10033(b)]
 - iii. On site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. [40 CFR 63.10033(c)]
- q. The permittee shall maintain a log of the date, time, and duration if the emission units were not operated in a manner consistent with good air pollution control practices for minimizing emissions and actions taken to remedy the situation [401 KAR 51:017]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- r. The permittee shall maintain records of the 12-month rolling total emissions of NO_x, CO, VOC, PM, PM₁₀, PM_{2.5}, H₂SO₄, and GHG to demonstrate compliance with the annual BACT emission limitations. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

- a. The permittee must provide 30 days prior notice of the date the EGU will cease complying with 40 CFR 63, Subpart UUUUU. The notification must identify: [40 CFR 63.10000(i)(2)]
 - i. The name of the owner or operation of the EGU, the location of the facility, the EGU that will cease complying with 40 CFR 63, Subpart UUUUU, and the date of the notice; [40 CFR 63.10000(i)(2)(i)]
 - ii. The currently applicable subcategory under 40 CFR 63, Subpart UUUUU. And any 40 CFR part 60, part 62, or part 63 subpart and subcategory that will be applicable after the permittee ceases complying with 40 CFR 63, Subpart UUUUU. [40 CFR 63.10000(i)(2)(ii)]
 - iii. The date on which the permittee became subject to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10000(i)(2)(iii)]
 - iv. The date upon which the permittee will cease complying with 40 CFR 63, Subpart UUUUU, consistent with 40 CFR 63.10000. [40 CFR 63.10000(i)(2)(iv)]
- b. Periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunction or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities excluding zero and span checks must be reported as time the monitor was inoperative (downtime) under 40 CFR 63.10(c). Failure to collect required quality-assured data during monitoring system malfunctions, monitoring system out-of-control periods, or repairs associated with monitoring system malfunctions of monitoring system out-of-control periods is a deviation from the monitoring requirements. [40 CFR 63.10020(d)]
- c. Report the tune-up date electronically in the quarterly compliance report, in accordance with 40 CFR 63.10031(g) and section 10.2 of appendix E to 40 CFR 63, Subpart UUUUU. The tune-up report date is the date when tune-up requirements in 40 CFR 63.10021(e)(6) and (7) are completed. [40 CFR 63.10021(e)(9)]
- d. The permittee must submit the applicable reports and notifications required under 40 CFR 63.10031(a) through (k) to the Administrator electronically, using EPA's Emission Collection and Monitoring Plan System (ECMPS) reporting tool. If the final date of any time period (or any deadline) for any of these submissions falls on a weekend or a Federal holiday, the time period shall be extended to the next business day. Moreover, if the EPA Host System supporting the ECMPS reporting tool is offline and unavailable for submission of reports for any part of a day when a report would otherwise be due, the deadline is automatically extended until the first business day on which the system becomes available following the outage. Use of the ECMPS reporting tool to submit a report or

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

notification required under 40 CFR 63, Subpart UUUUU satisfies any requirement under 40 CFR 63 Subpart A to submit that same report or notification (or the information contained in it) to the appropriate EPA Regional office or state agency whose delegation request has been approved. [40 CFR 63.10021(f)]

- e. The permittee must report each instance in which the permittee did not meet an applicable emissions limit or operating limit in Tables 1 through 4 of 40 CFR 63, Subpart UUUUU or failed to conduct a required tune-up. These instances are deviations from the requirements of 40 CFR 63, Subpart UUUUU. These deviations must be reported according to 40 CFR 63.10031. [40 CFR 63.10021(g)]
- f. The permittee must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6) and 63.9(b) through (h) that are applicable by the dates specified. [40 CFR 63.10030(a)]
- g. When the permittee is required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [40 CFR 63.10030(d)]
- h. The permittee must submit the notifications in 40 CFR 63.1000(h)(2) and (i)(2) that are applicable by the dates specified. [40 CFR 63.10030(f)]
- i. The permittee must submit each report in 40 CFR 63.10031 that is applicable. [40 CFR 63.10031(a)]
 - i. If the permittee is required to (or elects to) monitor Hg emissions continuously, the permittee must meet the electronic reporting requirements of appendix A to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10031(a)(1)]
 - ii. If the permittee elects to monitor filterable PM emissions continuously, the permittee must meet the electronic reporting requirements of appendix C to 40 CFR 63, Subpart UUUUU. Electronic reporting of hourly PM emissions data shall begin with the later of the first operating hour on or after January 1, 2024; or the first operating hour after completion of the initial PM CEMS correlation test. [40 CFR 63.10031(a)(3)]
- j. The permittee must submit semiannual compliance reports according to the requirements in 40 CFR 63.10031(b)(1) through (5). [40 CFR 63.10031(b)]
- k. The semiannual compliance report must contain the information required in 40 CFR 63.10031(c)(1) through (10): [40 CFR 63.10031(c)]
 - i. The information required by the summary report located in 40 CFR 63.10(e)(3)(vi). [40 CFR 63.10031(c)(1)]
 - ii. The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure. [40 CFR 63.10031(c)(2)]
- iii. Indicate whether the permittee burned new types of fuel during the reporting period. If the permittee did burn new types of fuel, the permittee must include the date of the performance test where that fuel was in use. [40 CFR 63.10031(c)(3)]
 - iv. Include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in 40 CFR 63.10021(e)(6) and (7) were completed. [40 CFR 63.10031(c)(4)]
 - v. A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during the test, if applicable. If the permittee is conducting stack tests once every 3 years to maintain LEE status, consistent with 40 CFR 63.10006(b), the date of each stack test conducted during the previous 3 years, a comparison of emission level the permittee achieves in each stack test conducted during the previous 3 years the 50 percent emission limit threshold required in 40 CFR 63.10005(h)(1)(i), and a statement as to whether there have been any operational changes since the last stack test that could increase emissions. [40 CFR 63.10031(c)(7)]
 - vi. A certification. [40 CFR 63.10031(c)(8)]
 - vii. If the permittee has a deviation from any emission limit, work practice standard, or operating limit, the permittee must also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation. [40 CFR 63.10031(c)(9)]
 - viii. If the permittee had any process or control equipment malfunction(s) during the reporting period, the permittee must include the number, duration, and a brief description for each type of malfunction which occurred during the semiannual reporting period which caused or may have caused any applicable emission limitation to be exceeded. [40 CFR 63.10031(c)(10)]
- l. For EGUS where the permittee relies on a CMS to comply with an emissions or operating limit, the permittee must include in the quarterly compliance reports described in 40 CFR 63.10031(g) the applicable data elements in section 13 of appendix E to 40 CFR 63, Subpart UUUUU for any “deviation” (as defined in 40 CFR 63.10042 and elsewhere in 40 CFR 63, Subpart UUUUU) that occurred during the calendar quarter. If there were no deviations, the permittee must include a statement to that effect in the quarterly compliance report. [40 CFR 63.10031(d)]
 - m. The permittee must report all deviations as defined in 40 CFR 63, Subpart UUUUU in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If the source submits a semiannual compliance report pursuant to 40 CFR 63.10031(c) and (d), or two quarterly compliance reports covering the appropriate calendar half pursuant to 40 CFR 63.10031(g) along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

the compliance report(s) includes all required information concerning deviations from any emission limit, operating limit, or work practice requirement in 40 CFR 63, Subpart UUUUU, submission of the compliance report(s) satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of the compliance report(s) does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [40 CFR 63.10031(e)]

- n. For each performance stack test, in accordance with 40 CFR 63.10031(g), the permittee must submit the applicable reference method information in sections 17 through 31 of 40 CFR 63, Subpart UUUUU along with the quarterly compliance report for the calendar quarter in which the test was completed. [40 CFR 63.10031(f)]
 - i. For each Hg RATA completed, the permittee must submit the applicable reference method information in section 17 through 31 of appendix E to 40 CFR 63, Subpart UUUUU prior to or concurrent with the relevant quarterly emissions report. For correlation tests, RRAs, and RCAs of PM CEMS that are completed, submit the appendix E reference method information together with the summarized electronic test results, in accordance with section 11.4 of appendix B to 40 CFR 63, Subpart UUUUU or section 7.2.4 of appendix C to 40 CFR Part 63, as applicable. [40 CFR 63.10031(f)(1)]
 - ii. If, for a particular EGU or a group of EGUs serving a common stack, the permittee has elected to demonstrate compliance using a PM CEMS, the permittee must submit quarterly PDF reports in accordance with 40 CFR 63.10030(f)(6), which include all of the 30-boiler operating day rolling average emission rates derived from the CEMS data. The quarterly reports are due within 60 days after the reporting periods ending on March 31st, June 30th, September 30th, and December 31st. Beginning with the first calendar quarter of 2024, compliance averages shall no longer be reported separately, but shall be incorporated into the quarterly compliance reports described in 40 CFR 63.10031(g). In addition to the compliance averages for PM CEMS, the quarterly compliance reports in 40 CFR 63.10031(g) must also include the 30- (or if applicable 90-) boiler operating day rolling average emission rates for Hg. [40 CFR 63.10031(f)(2)]
 - iii. The permittee must submit semiannual compliance reports as required under 40 CFR 63.10031(b) through (d), ending with a report covering the semiannual period from July 1 through December 31, 2023, and Notifications of Compliance Status as required under 40 CFR 63.10030(e), as PDF files. Quarterly compliance reports shall be submitted in a format specified by the Administrator, thereafter, in accordance with 40 CFR 63.10031(g), starting with the first report covering the first calendar quarter of 2024. [40 CFR 63.10031(f)(4)]
 - iv. All reports and notifications described in 40 CFR 63.10031(f), (f)(1), (f)(2), and (f)(4) shall be submitted to the EPA in the specified format and at the specified frequency, using the ECMPS reporting tool. Each PDF version of a stack test report, CEMS RATA report, PM CEMS correlation test report RRA report and RCA report must include sufficient information to assess compliance and to demonstrate that the reference

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

method testing was done properly. PDF reports that are being phased out at the end of 2023, if the submission deadlines for those reports extend beyond December 31, 2023. The following data elements must be entered into the ECMPS reporting tool at the time of submission of each PDF file: [40 CFR 63.10031(f)(6)]

1. The facility name, physical address, mailing address (if different from the physical address), and county; [40 CFR 63.10031(f)(6)(i)]
2. The ORIS code (or equivalent ID number assigned by EPA's Clean Air Markets Division (CAMD)) and the Facility Registry System (FRS) ID; [40 CFR 63.10031(f)(6)(ii)]
3. The EGU (or EGUs) to which the report applies. Report the EGU IDs as they appear in the CAMD Business System; [40 CFR 63.10031(f)(6)(iii)]
4. If any of the EGUs in 40 CFR 63.10031(f)(6)(iii) share a common stack, indicate which EGUs share the stack. If emissions data are monitored and reported at the common stack according to 40 CFR Part 75, report the ID number of the common stack as it is represented in the electronic monitoring plan required under 40 CFR 75.53. [40 CFR 63.10031(f)(6)(iv)]
5. If any of the EGUs described in 40 CFR 63.10031(f)(6)(iii) are in an averaging plan under 40 CFR 63.10009, indicate which EGUs are in the plan and whether it is a 30- or 90- day averaging plan; [40 CFR 63.10031(f)(6)(v)]
6. The identification of each emission point to which report applies. An "emission point" is a point at which source effluent is released to the atmosphere, and is either a dedicated stack that serves one of the EGUs identified in 40 CFR 63.10031(f)(6)(iii) or a common stack that serves two or more of those EGUs. To identify an emission point, associate it with the EGU or stack ID in the CAMD Business system or the electronic monitoring plan (*e.g.*, "Unit 2 stack," "common stack CS001," or "multiple stack MS001"); [40 CFR 63.10031(f)(6)(vi)]
7. An indication of the type of PDF report or notification being submitted; [40 CFR 63.10031(f)(6)(vii)]
8. The pollutant(s) being addressed in the report; [40 CFR 63.10031(f)(6)(viii)]
9. The reporting period being covered by the report (if applicable); [40 CFR 63.10031(f)(6)(ix)]
10. The relevant test method that was performed for a performance test (if applicable); [40 CFR 63.10031(f)(6)(x)]
11. The data the performance test was completed (if applicable) and the test number (if applicable); and [40 CFR 63.10031(f)(6)(xi)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

12. The responsible official's name, title, and phone number; [40 CFR 63.10031(f)(6)(xii)]
- o. Starting with a report for the first calendar quarter of 2024, the permittee must use the ECMPS reporting tool to submit quarterly electronic compliance reports. Each quarterly compliance report shall include the applicable data elements in section 2 through 13 of appendix E to 40 CFR 63, Subpart UUUUU. For each stack test summarized in the compliance report, the permittee must also submit the applicable reference method information in sections 17 through 31 of appendix E to 40 CFR 63, Subpart UUUUU. The compliance reports and associated appendix E information must be submitted no later than 60 calendar days after the end of each calendar quarter. [40 CFR 63.10031(g)]
 - p. On and after January 1, 2024. Initial Notifications of Compliance Status (if any) shall be submitted in accordance with 40 CFR 63.9(h)(2)(ii) as PDF files, using the ECMPS reporting tool. The applicable data elements in 40 CFR 63.10031(f)(6)(i) through (xii) must be entered into the ECMPS reporting tool with each Notification. [40 CFR 63.10031(h)]
 - q. If the permittee elects to use a certified PM CEMS to monitor PM emissions continuously to demonstrate compliance with 40 CFR 63, Subpart UUUUU and have begun recording valid data from the PM CEMS prior to November 9, 2020, the permittee must use the ECMPS reporting tool to submit a detailed report of the PS 11 correlation test (see appendix B to 40 CFR part 60) in a PDF file no later than 60 days after that date. For a correlation test completed on or after November 9, 2020, but prior to January 1, 2024, the permittee must submit the PDF report no later than 60 days after the date on which the test is completed. For a correlation test completed on or after January 1, 2024, the permittee must submit the PDF report according to section 7.2.4 of appendix C to 40 CFR 63, Subpart UUUUU. The applicable data elements in 40 CFR 63.10031(f)(6)(i) through (xii) must be entered into the ECMPS reporting tool with the pdf report. [40 CFR 63.10031(j)]

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall install and operate a dry FGD and fabric filtration at EKPC Cooper Units 1 and 2 that will address condensable particulate emissions and other visibility impairing pollutants. [Kentucky Regional Haze SIP, Table 7.5.3-1]
- b. All air pollution control equipment necessary for compliance with any newly applicable emission limits which apply as a result of the cessation or commencement or recommencement of operations that cause the EGU to meet the definition of an EGU subject to 40 CFR 63, Subpart UUUUU must be installed and operational as of the date the source ceases to be or becomes subject to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10000(j)]
- c. The permittee shall install and commence continuous operation of year-round SCR technology on Cooper 2 (or equivalent NO_x control technology approved pursuant to Paragraph 54), so as to achieve and thereafter maintain, a NO_x 30-Day Rolling Average Emission Rate not greater than 0.080 lb/MMBtu. [Consent Decree entered on September 24, 2007, paragraph 53]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- d. The permittee shall operate low NO_x burners (LNB) on all of the units within the EKPC System. [Consent Decree entered on September 24, 2007, paragraph 56]
- e. The permittee shall continuously operate each FGD (or equivalent SO₂ control technology approved pursuant to paragraph 66) covered by this Consent Decree at all times that the unit it serves is in operation, consistent with the technological limitations, manufacturers' specifications, and good engineering and maintenance practices for the FGD, or equivalent technology, for minimizing emissions to the extent practicable. [Consent Decree entered on September 24, 2007, paragraph 67]
- f. The permittee shall continuously operate each PM control device to maximize PM emission reductions, consistent with manufacturers' specifications, the operational design and maintenance limitations of the unit and good engineering practices. Specifically, the permittee, shall, at a minimum: [Consent Decree entered on September 24, 2007, paragraph 81]
 - i. Energize each section of the ESP for each unit regardless of whether that action is needed to comply with opacity limits; [Consent Decree entered on September 24, 2007, paragraph 81(a)]
 - ii. Maintain the energy or power levels delivered to the ESPs for each unit to achieve the greatest possible removal of PM; [Consent Decree entered on September 24, 2007, paragraph 81(b)]
 - iii. Make best efforts to expeditiously repair and return to service transformer-rectifier sets when they fail; and [Consent Decree entered on September 24, 2007, paragraph 81(c)]
 - iv. Inspect for, and schedule for repair, any openings in ESP casings and ductwork to minimize air leakage. [Consent Decree entered on September 24, 2007, paragraph 81(d)]
 - v. The permittee shall also optimize the plate-cleaning and discharge-electrode-cleaning systems for the ESPs at each unit by varying the cycle time, cycle frequency, rapper-vibrator intensity, and number of strikes per cleaning event, of these systems to minimize PM emissions. [Consent Decree entered on September 24, 2007, paragraph 81]
- g. The permittee shall operate each ESP at all times that the unit it serves is combusting Fossil Fuel in compliance with manufacturer's specifications, the operational design and maintenance limitations of the unit, and good engineering practices. [Consent Decree entered on September 24, 2007, paragraph 85]
- h. During 100% natural gas firing, the DFGD and PJFF are not required to be operated. [401 KAR 52:020, Section 10]

8. Alternate Operating Scenarios:

See **Section H – ALTERNATE OPERATING SCENARIOS.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 03****Coal Handling Operations****Description:**

Truck unloading, coal conveyor/transfer points (one), reclaim hoppers, coal stockpile, and yard area

Maximum Continuous Rating: 600 tons/hr
Maximum Annual Capacity: 463,566 tpy upon the Commercial Operation Date of the Co-fire Project (See **Section D – Source Emission Limitations And Testing Requirements**)
Control Devices: DusTreat CF9156 and DusTreat DC6109; additives to reduce fugitive emissions
Construction Commenced: Prior to 1970

APPLICABLE REGULATIONS:

401 KAR 63:010, *Fugitive emissions*

1. Operating Limitations:

- a. The permittee shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1)]
 - i. Use, if possible, of water or suitable chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land; [401 KAR 63:010, Section 3(1)(a)]
 - ii. Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces which can create airborne dusts; [401 KAR 63:010, Section 3(1)(b)]
 - iii. Installation and use of hoods, fans, and fabric filters to enclose and vent the handling of dusty materials, or the use of water sprays or other measures to suppress the dust emissions during handling. Adequate containment methods shall be employed during sandblasting or other similar operations. [401 KAR 63:010, Section 3(1)(c)]
 - iv. Covering, at all times, when in motion, open bodied trucks transporting materials likely to become airborne; [401 KAR 63:010, Section 3(1)(d)]
 - v. The maintenance of paved roadways in a clean condition; or [401 KAR 63:010, Section 3(1)(e)]
 - vi. The prompt removal of earth or other material from a paved street to which earth or other material has been transported by trucking or earth moving equipment or erosion by water. [401 KAR 63:010, Section 3(1)(f)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]
- c. At all times while in motion, open bodied trucks, operating outside company property transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]
- d. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]

Compliance Demonstration Method:

Compliance with the 401 KAR 63:010 operating limitations shall be demonstrated according to **4. Specific Monitoring Requirements** b. and **5. Specific Recordkeeping Requirements** b.

- e. See **Section D – Source Emission Limitations And Testing Requirements** for additional operating limitations.

2. Emission Limitations:

A person shall not cause, suffer, or allow visible fugitive emissions beyond the lot line of the property on which the emissions originate as determined by Reference Method 22 of Appendix A in 40 CFR Part 60, for: [401 KAR 63:010, Section 3(2)]

- a. More than five (5) minutes of emission time during any sixty (60) minute observation period; or [401 KAR 63:010, Section (3)(2)(a)]
- b. More than twenty (20) minutes of emission time during any twenty-four (24) hour period. [401 KAR 63:010, Section 3(2)(b)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** c. and **5. Specific Recordkeeping Requirements** c.

3. Testing Requirements:

Performance testing shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the amount of coal (in tons) received and processed through each piece of conveying or handling equipment, including stockpiles, on a weekly basis. [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. [401 KAR 52:020, Section 10]
- c. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct U.S. EPA Reference Method 22 (visual determination of fugitive emissions) observations per Appendix A of 40 CFR Part 60. In lieu of conducting U.S. EPA Reference Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the amount of coal (in tons) received and processed through each piece of conveying or handling equipment, including stockpiles, on a weekly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain a log of the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the log. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain a log of the following onsite with hard or electronic copies available to the Division upon request: [401 KAR 52:020, Section 10]
 - i. Qualitative fugitive emissions observations conducted including the date, time, initials of observer, whether any fugitive dust emissions were observed,
 - ii. Any U.S. EPA Reference Method 22 performed and field records identified in U.S. EPA Reference Method 22,
 - iii. Any corrective action taken and the result.

6. Specific Reporting Requirements:

See Section F – Monitoring, Recordkeeping and Reporting Requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 04****Unit 2 Cooling Tower****Description:**

Maximum Continuous Rating: 150,000 gal/min (circulating water)
Control Devices: Drift Eliminators
Drift Rate: 0.0005%
Construction Commenced: 2007

APPLICABLE REGULATIONS:

401 KAR 59:010, *New Process Operations*

PRECLUDED REGULATION:

401 KAR 63:002, Section 2(4)(j), 40 CFR 63.400 through 63.407, Table 1 (**Subpart Q**), *National Emission Standards for Hazardous Air Pollutants for Industrial Process Colling Towers*

1. Operating Limitations:

The use of chromium-based water treatment chemicals in the cooling tower is prohibited. [To preclude 40 CFR 63, Subpart Q]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** c.

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]
- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow, or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates ≤ 0.50 tons/hour: $E=2.34$
 - ii. For process weight rates >0.50 and ≤ 30 tons/hr: $E=3.59P^{0.62}$
 - iii. For process weight rates > 30 tons/hr: $E=17.31P^{0.16}$

Where: E = rate of emissions in lb/hr, and
P = process weight rate in tons/hr.

Compliance Demonstration Method:

Compliance with the opacity and mass emission standard is assumed based on the potential to emit for the emission unit.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**3. Testing Requirements:**

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1 and 401 KAR 59:005, Section 2(2)]

4. Specific Monitoring Requirements:

The permittee shall monitor hours of operation and the total dissolved solids content of the circulating water (in ppm) on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the hours of operation and the total dissolved solids content (in ppm) on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the manufacturer's design of the drift eliminators. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records, such as safety data sheets, documenting that chromium-based water treatment chemicals are not purchased or utilized. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See Section F – Monitoring, Recordkeeping, and Reporting Requirements.

7. Specific Control Equipment Operating Conditions:

See Section E – Source Control Equipment Requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 05 Two Fly Ash and Lime Waste Silos A and B (Pneumatic Loading)****Description:**

Maximum Continuous Rating: 31 tons/hr (each)
Control Devices: Fabric Filter Baghouse
Construction Commenced: 1993

APPLICABLE REGULATIONS:

401 KAR 59:010, *New process operations*

1. Operating Limitations:

N/A

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

Compliance Demonstration Method

See 4. **Specific Monitoring Requirements** c. and 5. **Specific Recordkeeping Requirements** c.

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]

- i. For process weight rates ≤ 0.50 tons/hour: $E=2.34$
- ii. For process weight rates >0.50 and ≤ 30 tons/hr: $E=3.59P^{0.62}$
- iii. For process weight rates > 30 tons/hr: $E=17.31P^{0.16}$

Where: E = rate of emissions in lb/hr
P = Process weight rate in tons/hr

Compliance Demonstration Method

Compliance with the mass emission standard is assumed based on the potential to emit for the unit.

3. Testing Requirements:

Performance testing shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the amount (tons) of material processed on a monthly basis, [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. The permittee shall perform a qualitative visual observation of the opacity of emissions at each stack no less than once per week while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9. The permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the process weight rate (tons) on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the qualitative visual observations made as specified in **4. Specific Monitoring Requirements** c., including the date, time, initials of observer, whether any emissions were observed (yes/no), any corrective action take, and any U.S. EPA Reference Method 9 readings conducted. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of the manufacturer's specifications for the baghouse and filters. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain records regarding the maintenance of the baghouses. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F – Monitoring, Recordkeeping, and Reporting Requirements.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Units 08 & 13****Emergency Diesel Generator & Fire Pump Engines****EU 08 Emergency Generator Engine:**

Model: CAT 3516
Construction Date: 1998
Primary Fuel: No. 2 Diesel Fuel
Maximum Continuous Rating: 12.18 MMBtu/hr (2,145 HP)

EU 13 Emergency Fire Pump Engine:

Model: Scania F674DSJF
Construction Date: 1978
Primary Fuel: No. 2 Diesel Fuel
Maximum Continuous Rating: 2.02 MMBtu/hr (>500 HP)

APPLICABLE REGULATIONS:

401 KAR 63:002, Section 2(4)(eeee), 40 CFR 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (**Subpart ZZZZ**), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

1. Operating Limitations:

- a. The stationary RICE do not have to meet the requirements of 40 CFR 63, Subpart ZZZZ and of 40 CFR 63, Subpart A, including initial notification requirements. [40 CFR 63.6590(b)(3)(iii)]
- b. The permittee must operate the emergency stationary RICE according to the requirements in 40 CFR 63.6640(f)(1) through (4). In order for the engine to be considered an emergency stationary RICE under 40 CFR 63, Subpart ZZZZ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 63.6640(f)(1) through (4), is prohibited. If the permittee does not operate the engine according to the requirements of 40 CFR 63.6640(f)(1) through (4), the engine will not be considered an emergency engine under 40 CFR 63, Subpart ZZZZ and must meet all requirements for non-emergency engines: [40 CFR 63.6640(f)]
 - i. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]
 - ii. The permittee may operate the emergency stationary RICE for the purpose specified in 40 CFR 63.6640(f)(2)(i) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 63.6640(f)(3) and (4) counts as part of the 100 hours per calendar year allowed by 40 CFR 63.6640(f)(2). [40 CFR 63.6640(f)(2)]
 1. Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The permittee may petition the Administrator

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and readiness testing of emergency stationary RICE beyond 100 hours per calendar year. [40 CFR 63.6640(f)(2)(i)]

- iii. Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operations in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 63.6640(f)(2). The 50 hours per year for non-emergency situations can not be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [40 CFR 63.6640(f)(3)]

2. Emission Limitations:

N/A

3. Testing Requirements:

Performance testing shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the hours of operation on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall monitor the fuel usage (in gallons) on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the hours of operation on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain record of the fuel usage (in gallons) on a monthly basis. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F – Monitoring, Recordkeeping, and Reporting Requirements.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 09

Pebble Lime, Fly Ash, and Waste Product Handling System

Description:

Emission Point	Description	Maximum Continuous Rating (Tons/hr)	Control Device	Construction Commenced
09-01	Fly Ash and Waste Product Silo	80	Fabric Filter	2010
09-03	Vacuum Systems 1 & 2	40 (each)		
09-04	Pebble Lime Silo	19		
09-05	Hydrator Feed Bins 1 & 2	25 (each)		
09-06	Lime Hydrator 1 & 2	19 (each)		
09-07	Hydrated Lime Silo	50		

APPLICABLE REGULATIONS:

40 CFR Part 64 Compliance Assurance Monitoring (Applicable to 09-03, 09-04, and 09-07 for PM)

401 KAR 59:010, New process operations

1. Operating Limitations:

The permittee shall operate fabric filters with bags having a minimum design specification of 0.005 gr/dscf at all times the handling system is in operation. [401 KAR 52:020, Section 10]

2. Emission Limitations:

- a. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

Compliance Demonstration Method

Refer to **4. Specific Monitoring Requirements** a. and **5. Specific Recordkeeping Requirements** a.

- b. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]

- i. For process weight rates ≤ 0.50 tons/hour: $E=2.34$
- ii. For process weight rates >0.50 and ≤ 30 tons/hr: $E=3.59P^{0.62}$
- iii. For process weight rates > 30 tons/hr: $E=17.31P^{0.16}$

Where: E = rate of emissions in lb/hr
P = Process weight rate in tons/hr

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method

Compliance with the mass emission standard can be assumed based on the potential to emit for Emission Points 09-01, 09-05, and 09-06. Compliance for Emission Points 09-03, 09-04, and 09-07 shall be demonstrated according to 4. **Specific Monitoring Requirements**

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1, and 401 KAR 59:005, Section 2(2)]

4. Specific Monitoring Requirements:

- a. The permittee shall perform a qualitative visual observation of the opacity of emissions at each stack no less than once per week, while the affected facility is operating. If visible emissions from the stack are observed (not including condensed water in the plume), the permittee shall determine the opacity using U.S. EPA Reference Method 9. In lieu of determining the opacity using U.S. EPA Reference Method 9, the permittee shall immediately perform a corrective action which results in no visible emissions (not including condensed water in the plume). [401 KAR 52:020, Section 10]
- b. The permittee shall monitor the following for each emission point: [401 KAR 52:020, Section 10]
 - i. The monthly total process weight (in tons); and
 - ii. The monthly hours of operation.
- c. The permittee shall install, calibrate, maintain, and operate a pressure drop monitoring device to monitor the differential pressure across the baghouse for emission points 09-03 and 09-07. The permittee shall ensure that the monitored value is maintained within the range specified by the manufacturer. The permittee shall monitor the differential pressure across the baghouse at least once per week during all times of operation. [401 KAR 52:020, Section 10]
- d. For Emission Points 09-03 and 09-07 only: The permittee shall comply with the requirements specified in the table below, to monitor emissions of particulate matter: [40 CFR Part 64]

CAM Monitoring Approach		Indicator #1
I.	Indicator	Pressure Drop
A.	Measurement Approach	Differential pressure at the control device shall be monitored
II.	Indicator Range	An excursion is defined as a control device operation parameter 15-minute average outside the indicator range during operation of the dust collector (excluding startup and shutdown periods). An

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

		excursion triggers an inspection of the control equipment and a QVO as soon as practical. If five percent or greater of the CEM data recorded in a calendar quarter show excursions above the pressure drop indicator level, the permittee triggers the threshold for a QIP
	Manufacturer's Specified Ranges	
	09-03 Vacuum System #1: Exhauster A Vent 5 to 7 inches of water	
	09-03 Vacuum System #2: Exhauster B Vent 5 to 7 inches of water	
	09-04 Pebble Lime Silo: Vent 0 to 8 inches of water	
	09-07 Hydrated Lime Silo: Vent 0 to 8 inches of water	
III.	Performance Criteria	
A.	Data Representativeness	The one-minute averages recorded by the Data Acquisition Handling System (DAHS) are reduced to 15-minute averages.
B.	Verification of Operational Status	The system is recalibrated to zero when the dust collection system is shut down for maintenance.
C.	QA/QC Practices and Criteria	Control device monitored parameters will be maintained and operated consistent with manufacturer recommendations.
D.	Monitoring Frequency	Control device differential pressure shall be monitored continuously.
IV.	Data Collection Procedures	Differential pressure readings shall be kept in a form readily available for inspection. Excursions of the operating range will be specifically identified.
V.	Averaging Period	Control device differential pressure shall be reported as 15-minute averages, excluding startup and shutdown periods.
VI.	Recordkeeping	Control device operating parameters shall be maintained for a period of 5 years
VII	Reporting	Any excursions of the control device differential pressure readings will be included in the semiannual report. The number, duration, cause of, and corrective action taken as a result of any excursion.

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the qualitative visual observations made as specified in 4. Specific Monitoring Requirements a., including the date, time, initials of observer, whether any emissions were observed (yes/no), any corrective action taken, and any U.S. EPA Reference Method 9 readings conducted. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the following for each emission point: [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. The monthly total process weight rate (in tons); and
- ii. The monthly hours of operation.
- c. The permittee shall maintain records of the monitored differential pressure across the baghouse for emission points 09-03 and 09-07. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain records of the manufacturer's specifications for the baghouse and filters. [401 KAR 52:020, Section 10]
- e. For Emission Points 09-03 and 09-07, the permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 CFR 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 CFR 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). [40 CFR 64.9(b)(1)]
- f. For Emission Points 09-03 and 09-07, instead of paper records, the permittee may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements. [40 CFR 64.9(b)(2)]

6. Specific Reporting Requirements:

- a. For Emission Points 09-03 and 09-07, on and after the date specified in 40 CFR 64.7(a) by which the permittee must use monitoring that meets the requirements of 40 CFR 64, the permittee shall submit monitoring reports to the Division in accordance with **Section F – Monitoring, Recordkeeping, and Reporting Requirements**. [40 CFR 64.9(a)(1)]
- b. For Emission Points 09-03 and 09-07, a report for monitoring under 40 CFR 64 shall include, at a minimum, the information required under 40 CFR 70.6(a)(3)(iii) and the following information, as applicable: [40 CFR 64.9(a)(2)]
 - i. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; [40 CFR 64.9(a)(2)(i)]
 - ii. 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 [40 CFR 64.9(a)(2)(ii)]
 - iii. A description of the actions taken to implement a QIP during the reporting period as specified in 40 CFR 64.8. Upon completion of a QIP, the permittee shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring. [40 CFR 64.9(a)(2)(iii)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. The threshold for requiring the implementation of a QIP is an accumulation of exceedances or excursions exceeding 5 percent duration of a pollutant-specific emissions unit's operating time for a semiannual reporting period. [40 CFR 64.8(a)]

7. Specific Control Equipment Operating Conditions:

- a. The permittee shall maintain records regarding the maintenance of the control devices. [401 KAR 52:020, Section 10]
- b. See **Section E – Source Control Equipment Requirements.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 10****Paved Roadways****Description:**

Control Device:

Wet suppression as needed

Construction Date:

Prior to 1970, Additional road and traffic added 2010; Updated road and traffic throughput with CCGT and Co-fire Projects (See **Section D – Source Emission Limitations And Testing Requirements**)

APPLICABLE REGULATIONS:**401 KAR 63:010, *Fugitive emissions*****1. Operating Limitations:**

- a. The permittee shall not cause, suffer, or allow any material to be handled, processed, transported or stored, a building or its appurtenances to be constructed, altered repaired or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1)]
 - i. Use, if possible, of water or suitable chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing land; [401 KAR 63:010, Section 3(1)(a)]
 - ii. Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials, stockpiles, and other surfaces which can create airborne dusts; [401 KAR 63:010, Section 3(1)(b)]
 - iii. Covering, at all times when in motion, open bodied tracks transporting materials likely to become airborne; [401 KAR 63:010, Section 3(1)(d)]
 - iv. The maintenance of paved roadways in a clean condition; or [401 KAR 63:010, Section 3(1)(e)]
 - v. The prompt removal of earth or other material from a paved street to which earth or other material has been transported by trucking or earth moving equipment or erosion by water. [401 KAR 63:010, Section 3(1)(f)]
- b. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. At all times while in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]
- d. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]

Compliance Demonstration Method:

Refer to **4. Specific Monitoring Requirements** a.) and **5. Specific Recordkeeping Requirements** a.

2. Emission Limitations:

The permittee shall not cause, suffer, or allow visible fugitive dust emissions beyond the lot line of the property on which the emissions originate, as determined by Reference Method 22 of Appendix A in 40 CFR Part 60, for: [401 KAR 63:010, Section 3(2)]

- a. More than five (5) minutes of emission time during any sixty (60) minute observation period; or [401 KAR 63:010, Section 3(2)(a)]
- b. More than twenty (20) minutes of emission time during any twenty-four (24) hour period. [401 KAR 63:010, Section 3(2)(b)]

Compliance Demonstration Method

Refer to **4. Specific Monitoring Requirements** b. and **5. Specific Recordkeeping Requirements** b.

3. Testing Requirements:

Performance testing shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis. [401 KAR 52:020, Section 10]
- b. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct a U.S. EPA Reference Method 22 (visual determination of fugitive emissions) observation per Appendix A of 40 CFR Part 60. In lieu of conducting U.S. EPA Reference Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain a log of the reasonable precautions taken to prevent particulate matter from becoming airborne, on a daily basis. Notation of the operating status, downtime, or relevant weather conditions are acceptable for entry to the log. [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- b. The permittee shall maintain a log of the following: [401 KAR 52:020, Section 10]
 - i. Qualitative fugitive emissions observations conducted, including the date, time, initials of observer, and whether any fugitive dust emissions were observed;
 - ii. Any U.S. EPA Reference Method 22 performed and field records identified in U.S. EPA Reference Method 22;
 - iii. Any corrective action taken and the results.

6. Specific Reporting Requirements:

See Section F – Monitoring, Recordkeeping, and Reporting Requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 12****Communication Tower Emergency Generator Engine****Description:**

Model: Olympian G35LG (4-Stroke Rich Burn)
Manufacture Date: 2010
Primary Fuel: Propane (LPG)
Maximum Fuel Input: 5.7 gal/hr
Maximum Continuous Rating: 0.52 MMBtu/hr (71 HP)

APPLICABLE REGULATIONS:

401 KAR 60:005, Section 2(2)(eeee) 40 CFR 60.4230 through 60.4248, Tables 1 through 4 (**Subpart JJJJ**), *Standards of Performance for Stationary Spark Ignition Internal Combustion Engines*

401 KAR 63:002, Section 2(4)(eeee) 40 CFR 63.6580 through 63.6675, Tables 1a through 8 (**Subpart ZZZZ**), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

1. Operating Limitations:

- a. The permittee must operate the emergency stationary ICE according to the requirements of 40 CFR 60.4243(d)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart JJJJ, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in 40 CFR 60.4243(d)(1) through (3), is prohibited. If the permittee does not operate the engine according to the requirements in 40 CFR 60.4243(d)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart JJJJ and must meet all requirements for non-emergency engines. [40 CFR 60.4243(d)]
- i. There is no limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4243(d)(1)]
- ii. The permittee may operate the emergency stationary ICE for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4243(d)(3) counts as part of the 100 hours per calendar year allowed by 40 CFR 60.4243(d)(2). The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the permittee maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4243(d)(2) and (d)(2)(i)]
- iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for the maintenance and testing provided in 40 CFR 60.4243(d)(2). Except as provided in 40 CFR 60.4243(d)(3)(i), the

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR 60.4243(d)(3) and (d)(3)(i)]

1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [40 CFR 60.4243(d)(3)(i)(A)]
 2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [40 CFR 60.4243(d)(3)(i)(B)]
 3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [40 CFR 60.4243(d)(3)(i)(C)]
 4. The power is provided only to the facility itself or to support the local transmission and distribution system. [40 CFR 60.4243(d)(3)(i)(D)]
 5. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the permittee. [40 CFR 60.4243(d)(3)(i)(E)]
- b. Owners and operators of stationary SI ICE must operate and maintain stationary SI ICE that achieve the emission standards as required in 40 CFR 60.4233 over the entire life of the engine. [40 CFR 60.4234]
- c. Table 3 to 40 CFR 60, Subpart JJJJ shows which parts of the General Provision in 40 CFR 60.1 through 60.19 are applicable. [40 CFR 60.4246(a)]
- d. The permittee meets the requirements of 40 CFR Part 63 by meeting the requirements of 40 CFR 60, Subpart JJJJ. No further requirements apply under 40 CFR Part 63. [40 CFR 63.6590(c)]

2. Emission Limitations:

The permittee must comply with the emission standards in 40 CFR 60.4231(c). [40 CFR 60.4233(c)]

Compliance Demonstration Method

The permittee must comply by purchasing an engine certified to the emission standards in 60.4231(c) for the same engine class and maximum engine power. In addition, the permittee must meet one of the requirements specified in 40 CFR 60.4243(a)(1) and (2). [40 CFR 60.4243(a)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- A. If the permittee operates and maintains the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the permittee must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required of the permittee. The permittee must also meet the requirements as specified in 40 CFR Part 1068, Subparts A through D. If the permittee adjusts engine settings according to and consistent with the manufacturer's instructions, the stationary SI internal combustion engine will not be considered out of compliance. [40 CFR 60.4243(a)(1)]
- B. If the permittee does not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine, and the permittee must demonstrate compliance by keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required if you are an owner or operator. [40 CFR 60.4243(a)(2) and (a)(2)(i)]

3. Testing Requirements:

Performance testing shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. If the engine does not meet the standards applicable to non-emergency engines, the permittee must install a non-resettable hour meter upon startup of the emergency engine. [40 CFR 63.4237(c)]
- b. The permittee shall monitor the amount of fuel used (in gallons) on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. If the engine does not meet the standards applicable to non-emergency engines, the permittee must keep records of the hours of operation of the engines that is recorded through the non-resettable hour meter. The permittee must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation. [40 CFR 60.4245(b)]
- b. The permittee shall maintain records of the amount of fuel used (in gallons) on a monthly basis. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of: [40 CFR 60.4245(a)]
 - i. All notifications submitted to comply with 40 CFR 60, Subpart JJJJ and all documentation supporting any notification. [40 CFR 60.4245(a)(1)]
 - ii. Maintenance conducted on the engine. [40 CFR 60.4245(a)(2)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. If the stationary SI internal combustion engine is a certified engine, documentation from the manufacturer that the engine is certified to meet the emissions standards and information as required in 40 CFR Parts 1048, 1054, and 1060. [40 CFR 60.4245(a)(3)]
- iv. If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to 40 CFR 60.4243(a)(2), documentation that the engine meets the emission standards. [40 CFR 60.4245(a)(4)]
- d. Any records required to be maintained by 40 CFR 60, Subpart JJJJ that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [40 CFR 60.4245(j)]

6. Specific Reporting Requirements:

- a. If the permittee is required to submit notifications or reports following the procedure specified in 40 CFR 60.4245(g), the permittee must submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. [40 CFR 60.4245(g)]
- b. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in 40 CFR 60.4245(h)(1) through (7). [40 CFR 60.4245(h)]
- c. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, the permittee must meet the requirements outlined in 40 CFR 60.4245(i)(1) through (5). [40 CFR 60.4245(i)]
- d. See **Section F – Monitoring, Recordkeeping, and Reporting Requirements.**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 17	NG-Fired Dewpoint Heater No. 1
Emission Unit 20	CCGT NG-Fired Auxiliary Boiler
Emission Unit 23	NG-Fired Dewpoint Heater No. 2
Emission Unit 24	NG-Fired Dewpoint Heater No. 3

Description:

Dewpoint Heaters used to heat natural gas above the dew point; and
Auxiliary Boiler used for HRSG freeze protection, warm startups, and cold startups.

Emission Unit	Primary Fuel	Maximum Rated Capacity (MMBtu/hr)	Control Device	Proposed Construction Date
17	Natural Gas	11.65	Low NO _x Burners (LNBs)	September 2026
20	Natural Gas	99	Oxidation Catalyst, LNBs	
23	Natural Gas	9.13	LNBs	
24	Natural Gas	9.13	LNBs	

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (NO_x, CO, VOC, PM/PM₁₀/PM_{2.5} (filterable + condensable), H₂SO₄, and GHG)

401 KAR 59:015, *New indirect heat exchangers*

401 KAR 60:005, Section 2(2)(d), 40 C.F.R. 60.40c through 60.48c (**Subpart Dc**), *Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units* (EUs 17 and 20 only)

401 KAR 63:002, Section 2(4)(iii), 40 CFR 63.7480 through 63.7575, Tables 1 through 13 (**Subpart DDDDD**), *National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters*

1. Operating Limitations:

- a. The permittee shall operate and maintain low-NO_x burners for each unit according to the manufacturer's recommendations. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements**
a.

- b. The permittee shall only combust pipeline quality natural gas with a maximum sulfur content of 0.5 grains per 100 dry standard cubic feet (gr/100 dscf). [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **Section D – Source Emission Limitations And Testing Requirements**.

- c. The permittee shall prepare and maintain for EUs 17, 20, 23, and 24 a good combustion and operations practices plan (GCOP) within 90 days of startup that defines, measures, and verifies the use of operational and design practices determined as BACT for minimizing

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

CO, NO_x, PM/PM₁₀/PM_{2.5}, VOC, H₂SO₄, and GHG emissions. The permittee shall operate according to the provisions of this plan at all times, including periods of startup, shutdown, and malfunction. The plan shall be incorporated into the plant standard operating procedures (SOP) and shall be made available for the Division's inspection. The plan shall include but not be limited to: [401 KAR 51:017]

- i. A list of combustion optimization practices and a means of verifying the practices have occurred;
- ii. A list of combustion and operation practices to be used to lower energy consumption and a means of verifying the practices have occurred; and
- iii. A list of the design choices determined to be BACT and verification that designs were implemented in the final construction.

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** b.

- d. During a startup period or a shutdown period, the permittee shall comply with the work practice standards established in Table 3 to 40 CFR 63, Subpart DDDDD. [401 KAR 59:015, Section 7(2)(a)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **1. Operating Limitations** e.

- e. The permittee must conduct an annual performance tune-up for EUs 17 and 20 and a biennial performance tune-up for EUs 23 and 24 according to 40 CFR 63.7540(a)(10). [40 CFR 63.7500(a)(1) referencing Items 2. and 3. in Table 3 to 40 CFR 63, Subpart DDDDD; 40 CFR 63.7540(a)(10), 40 CFR 63.7540(a)(11), and 63.7540(a)(13)]
 - i. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment; [40 CFR 63.7540(a)(10)(i)]
 - ii. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available; [40 CFR 63.7540(a)(10)(ii)]
 - iii. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection; [40 CFR 63.7540(a)(10)(iii)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NO_x requirement to which the unit is subject; [40 CFR 63.7540(a)(10)(iv)]
- v. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and [40 CFR 63.7540(a)(10)(v)]
- vi. Maintain on-site and submit, if requested by the Administrator, a report containing the information in 40 CFR 63.7540(a)(10)(vi)(A) through (C), [40 CFR 63.7540(a)(10)(vi)]
 - 1. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater; [40 CFR 63.7540(a)(10)(vi)(A)]
 - 2. A description of any corrective actions taken as a part of the tune-up; and [40 CFR 63.7540(a)(10)(i)(B)]
 - 3. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit. [40 CFR 63.7540(a)(10)(i)(C)]

Compliance Demonstration Method:

The permittee must demonstrate initial compliance with the applicable work practice standard upon startup of the heater. [40 CFR 63.7510(g)] Each annual tune-up must be no more than 13 months after the previous tune-up. Each biennial tune-up must be conducted no more than 25 months after previous tune-up. The first annual or biennial tune-up must be no later than 13 months or 25 months, respectively, after the initial startup of the units. [40 CFR 63.7515(d)] If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup. [40 CFR 63.7540(a)(13)]

- f. At all times, the permittee must operate and maintain any affected source (as defined in 40 CFR 63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.7500(a)(3)]
- g. If the boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, the permittee shall conduct a tune-up of the boiler or process

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

heater every 5 years as specified in 40 CFR 63.7540(a)(10)(i) through (vi) to demonstrate continuous compliance. The permittee may delay the burner inspection specified in 40 CFR 63.7540(a)(10)(i) until the next scheduled or unscheduled unit shutdown, but the permittee shall inspect each burner at least once every 72 months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up. [40 CFR 63.7540(a)(12)]

2. Emission Limitations:

- a. The permittee shall not allow emissions of NO_x, CO, VOC, PM/PM₁₀/PM_{2.5} (filterable + condensable), and CO_{2e} to exceed the limits in the following table: [401 KAR 51:017]

Pollutant	Emission Unit	Emission Limit (lb/MMBtu) on a 3-hour block average	Emission Limit (tpy)	Compliance Demonstration Method
NO _x	17	0.05	2.5	Operate and maintain LNBs and GCOP. See 1. <u>Operating Limitations</u> a. and c. For EU 20, see 3. <u>Testing Requirements</u> a.
	23	0.05	2.0	
	24	0.05	2.0	
	20	0.011	5.0	
CO	17	0.082	4.2	GCOP. See 1. <u>Operating Limitations</u> c. For EU 20, see 3. <u>Testing Requirements</u> b.
	23	0.082	3.3	
	24	0.082	3.3	
	20	0.003	1.4	
VOC	17	0.0054	0.3	GCOP. See 1. <u>Operating Limitations</u> c.
	23	0.0054	0.2	
	24	0.0054	0.2	
	20	0.0054	2.3	
PM (filterable)	17	0.0019	0.2	GCOP and combust pipeline quality natural gas. See 1. <u>Operating Limitations</u> b. and c.
	23	0.0019	0.1	
	24	0.0019	0.1	
	20	0.0019	1.4	
PM ₁₀ (filterable + condensable)	17	0.0034	0.2	
	23	0.0034	0.1	
	24	0.0034	0.1	
	20	0.0034	1.4	
PM _{2.5} (filterable +	17	0.0034	0.2	
	23	0.0034	0.1	

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

condensable)	24	0.0034	0.1	
	20	0.0034	1.4	
CO ₂ e	17	117.1	5,783	GCOP and combust pipeline quality natural gas. See 1. Operating Limitations b. and c.
	23	117.1	4,532	
	24	117.1	4,532	
	20	117.1	49,147	

- b. The permittee shall not cause emissions of particulate matter in excess of 0.10 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(b)]
- c. The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]
 - i. A maximum of 27 percent opacity shall be allowed for one 6-minute period in any 60 consecutive minutes; and [401 KAR 59:015, Section 4(2)(a)]
 - ii. For emissions from an affected facility caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)]
- d. The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 0.8 lb/MMBtu actual heat input [401 KAR 59:015, Section 5(1)(b)1.]

Compliance Demonstration Method:

Compliance with the applicable 401 KAR 59:015 PM, opacity, and SO₂ emission standards is assumed while combusting natural gas. [401 KAR 50:045, Section 4(3)(c)1.]

3. Testing Requirements:

- a. For EU 20, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable 401 KAR 51:017 BACT NO_x emission limit using U.S. EPA Method 7E or an alternate method approved by the Division in accordance with an approved test protocol. Subsequent performance tests shall be conducted once every five years. [401 KAR 51:017]
- b. For EU 20, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable 401 KAR 51:017 BACT CO emission limit using U.S. EPA Method 10 or an alternate method approved by the Division in accordance with an approved test protocol. Subsequent performance tests shall be conducted once every five years. [401 KAR 51:017]
- c. Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1 and 401 KAR 59:005, Section 2(2)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**4. Specific Monitoring Requirements:**

The permittee shall monitor the amount of natural gas combusted (in MMscf) on a monthly basis. [401 KAR 52:020, Section 10; 40 CFR 60.48c(g)(2) (For EUs 17 and 20)]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the design features, installation, recommended procedures, and maintenance for the low NO_x burners, any instance in which the recommended procedures were not followed, and any corrective actions taken. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the GCOP plan and any revisions to it. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of the amount of natural gas combusted (in MMscf) on a monthly basis. [401 KAR 52:020, Section 10; 40 CFR 60.48c(g)(2) (For EUs 17 and 20)]
- d. For EUs 17 and 20, all records required under 40 CFR 60.48c shall be maintained by the permittee for a period of two years following the date of such record. [40 CFR 60.48c(i)]
- e. The permittee shall keep a copy of each notification and report submitted to comply with 40 CFR 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.7555(a) and (a)(1)]
- f. Records of notifications and reports submitted to comply with 40 CFR 63, Subpart DDDDD and records of other compliance demonstrations and performance evaluations required in 40 CFR 63.10(b)(2)(viii) shall be kept according to the following procedures: [40 CFR 63.7560]
 - i. Records shall be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.7560(a)]
 - ii. As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.7560(b)]
 - iii. The permittee shall keep each record on site, or they shall be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. [40 CFR 63.7560(c)]

6. Specific Reporting Requirements:

- a. For EUs 17 and 20, the permittee shall submit notification of the date of construction or reconstruction and actual startup, as provided by 40 CFR 60.7. This notification shall include: [40 CFR 60.48c(a)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility. [40 CFR 60.48c(a)(1)]
 - ii. If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under 40 CFR 60.42c or 60.43c. [40 CFR 60.48c(a)(2)]
 - iii. The annual capacity factor at which the permittee anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired. [40 CFR 60.48c(a)(3)]
 - iv. Notification if an emerging technology will be used for controlling SO₂ emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the permittee to submit additional information concerning the control device. The affected facility is subject to the provisions of 40 CFR 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator. [40 CFR 60.48c(a)(4)]
- b. The reporting period for the reports required under 40 CFR 60, Subpart Dc for EUs 17 and 20 is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period. [40 CFR 60.48c(j)]
 - c. The permittee must meet the notification requirements in 40 CFR 63.7545 according to the schedule in 40 CFR 63.7545 and in 40 CFR 63, Subpart A. Some of the notifications must be submitted before the permittee is required to comply with the emission limits and work practice standards in 40 CFR 63, Subpart DDDDD. [40 CFR 63.7495(d)]
 - d. The permittee shall report each instance in which each emission limit and operating limit in 40 CFR 63 Subpart DDDDD, Table 3 was not met. These instances are deviations from the emission limits or operating limits, respectively, in 40 CFR 63 Subpart DDDDD. These deviations must be reported according to the requirements in 40 CFR 63.7550 [40 CFR 63.7540(b)].
 - e. The permittee shall submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified [40 CFR 63.7545(a)].
 - f. As specified in 40 CFR 63.9(b)(4) and (5), for startup of a new or reconstructed affected source on or after January 31, 2013, the permittee shall submit an Initial Notification not later than 15 days after the actual date of startup of the affected source [40 CFR 63.7545(c)].
 - g. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.7545(e). The permittee must submit the Notification of Compliance Status according to 40 CFR

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, the permittee must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to 40 CFR 63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in 40 CFR 63.7545(e)(1) through (8), as applicable. The Notification of Compliance Status must only contain the information specified in 40 CFR 63.7545(e)(1) through (8), and must be submitted within 60 days of the compliance date specified at 40 CFR 63.7495(b). [40 CFR 63.7530(f) and 40 CFR 63.7545(e)]

- i. A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with 40 CFR 63 Subpart DDDDD, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by the permittee or the EPA through a petition process to be a non-waste under 40 CFR 241.3, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of 40 CFR 241.3, and justification for the selection of fuel(s) burned during the compliance demonstration. [40 CFR 63.7545(e)(1)]
- ii. A signed certification that the permittee has met all applicable emission limits and work practice standards. [40 CFR 63.7545(e)(6)]
- iii. If the permittee had a deviation from any emission limit, work practice standard, or operating limit, the permittee must also submit a description of the deviation, the duration of the deviation, and the corrective action taken in the Notification of Compliance Status report. [40 CFR 63.7545(e)(7)]

In addition to the information required in 40 CFR 63.9(h)(2), the notification of compliance status must include the following certification of compliance and signed by a responsible official: "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in 40 CFR 63.7540(a)(10)(i) through (vi)." [40 CFR 63.7545(e)(8) and (e)(8)(i)]

- h. The permittee must report each instance in which the operating limit in Table 3 to 40 CFR 63, Subpart DDDDD was not met. These instances are deviations from the operating limits must be reported according to the requirements in 40 CFR 63.7550. [40 CFR 63.7540(b)]
- i. The permittee must submit to the Administrator all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply by the dates specified. [40 CFR 63.7545(a)]
- j. As specified in 40 CFR 63.9(b)(4) and (5), the permittee must submit an Initial Notification not later than 15 days after the actual date of startup of the affected source. [40 CFR 63.7545(c)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- k. The permittee shall submit each report in 40 CFR 63 Subpart DDDDD, Table 9, that applies to the permittee. [40 CFR 63.7550(a)]
- l. The permittee may submit only an annual or biennial compliance report, as applicable, as specified in 40 CFR 63.7550(b)(1) through (4), instead of a semi-annual compliance report, as follows: [40 CFR 63.7550(b)]
 - i. If submitting an annual or biennial compliance report, the first compliance report must cover the period beginning on the compliance date that is specified for each boiler or process heater in 40 CFR 63.7495 and ending on December 31 within 1 or 2 years, as applicable, after the compliance date that is specified for the source in 40 CFR 63.7495. [40 CFR 63.7550(b)(1)]
 - ii. The first annual or biennial compliance report must be postmarked or submitted no later than January 31. [40 CFR 63.7550(b)(2)]
 - iii. Annual and biennial compliance reports must cover the applicable 1- or 2-year periods from January 1 to December 31. [40 CFR 63.7550(b)(3)]
 - iv. Annual and biennial compliance reports must be postmarked or submitted no later than January 31. [40 CFR 63.7550(b)(4)]
 - v. For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in 40 CFR 63.7550(b)(1) through (4). [40 CFR 63.7550(b)(5)]
- m. The permittee must submit a compliance report with the information in 40 CFR 63.7550(c)(5)(i) through (iii), (xiv), and (xvii): [40 CFR 63.7550(c)(1)]
 - i. Company and Facility name and address. [40 CFR 63.7550(c)(5)(i)]
 - ii. Process unit information, emissions limitations, and operating parameter limitations. [40 CFR 63.7550(c)(5)(ii)]
 - iii. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.7550(c)(5)(iii)]
 - iv. Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual or biennial tune-up according to 40 CFR 63.7540(a)(10) or (11), respectively. Include the date of the most recent burner inspection if it was not done annually or biennially and was delayed until the next scheduled or unscheduled unit shutdown. [40 CFR 63.7550(c)(5)(xiv)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- v. Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report. [40 CFR 63.7550(c)(5)(xvii)]
- n. The permittee shall submit the reports according to the procedures specified in 40 CFR 63.7550(h)(1) through (3), as applicable. [40 CFR 63.7550(h)]
 - i. Within 60 days after the date of completing each performance test (as defined in 40 CFR 63.2) required by 40 CFR 63 Subpart DDDDD, the permittee shall submit the results of the performance tests, including any fuel analyses, following the procedure specified in either 40 CFR 63.7550(h)(1)(i) or (ii). [40 CFR 63.7550(h)(1)]
 - ii. The permittee shall submit all reports required by Table 9 of 40 CFR 63 Subpart DDDDD electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee shall use the appropriate electronic report in CEDRI for 40 CFR 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for 40 CFR 63, Subpart DDDDD, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (<http://www.epa.gov/ttn/chief/cedri/index.html>), once the XML schema is available. If the reporting form specific to 40 CFR 63 Subpart DDDDD is not available in CEDRI at the time that the report is due, the permittee shall submit the report to the Administrator at the appropriate address listed in 40 CFR 63.13. The permittee shall begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI. [40 CFR 63.7550(h)(3)]
- o. See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 18
Emission Unit 19

Combined Cycle Gas Turbine (CCGT) Unit 3
Combined Cycle Gas Turbine (CCGT) Unit 4

Description:

Combined cycle operation consisting of two natural gas-fired lean premix combustion turbines (CT) and one steam turbine (ST) generator. The heat from the combustion gases created by each CT is used in a heat recovery steam generator (HRSG) to produce steam from water in a closed loop system. Each CT is connected to its own HRSG. Electricity is generated from both the CTs and the steam turbine.

The CTs are capable of firing ultra low sulfur fuel oil (ULSFO) instead of natural gas to maintain operational flexibility. Natural gas and ULSFO require different control devices to reduce emissions. The appropriate control devices are used when firing the corresponding fuel, as listed below.

Model:	Siemens 5000F
Primary Fuel:	Natural Gas
Secondary Fuel:	Ultra Low Sulfur Fuel Oil (ULSFO)
Maximum Rated Capacity:	Natural Gas: 2,734 MMBtu/hr, each ULSFO: 2,597 MMBtu/hr, each
Maximum Power Output:	745 MWh-net; 785 MWh-nominal-gross
Control Devices:	Natural Gas: Selective Catalytic Reduction (SCR), Dry Low NO _x Burners (DLN), and Oxidation Catalyst (OxCat), Inlet Air Filters (inherent control). ULSFO: Selective Catalytic Reduction (SCR), Water Injection, Oxidation Catalyst (OxCat), Inlet Air Filters (inherent control).
Construction Date:	Proposed September 2026

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (NO_x, CO, VOC, PM/PM₁₀/PM_{2.5} (filterable + condensable), H₂SO₄, and GHG)

401 KAR 51:160, *NO_x requirements for large utility and industrial boilers*

401 KAR 51:210, CAIR, *NO_x annual trading program* (See **Section K**)

401 KAR 51:220, CAIR, *NO_x ozone season trading program* (See **Section K**)

401 KAR 51:230, CAIR, *SO₂ trading program* (See **Section K**)

401 KAR 51:240, codifying **40 C.F.R. 97.401 through 97.435**, **Subpart AAAAAA**, *Cross-State Air Pollution Rule (CSAPR) NO_x annual trading program* (See **Section L**)

401 KAR 51:250, codifying **40 C.F.R. 97.801 through 97.835**, **Subpart EEEEE**, *Cross-State Air Pollution Rule (CSAPR) NO_x ozone season group 2 trading program* (See **Section L**)

401 KAR 51:260, codifying **40 C.F.R. 97.601 through 97.635**, **Subpart CCCCC**, *Cross-State Air Pollution Rule (CSAPR) SO₂ group 1 trading program* (See **Section L**)

401 KAR 52:060, *Acid rain permits*, incorporating 40 CFR Parts 72 to 78 (See **Section J**)

401 KAR 60:005, **Section 2(2)(www)**, 40 CFR 60.5508a through 60.5580a, Tables 1 through 3 (**Subpart TTTTa**), *Standards of Performance for Greenhouse Gas Emissions for Modified Coal-Fired Steam Electric Generating Units and New Construction and Reconstruction Stationary Combustion Turbine Electric Generating Units*

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

401 KAR 63:002, Section 2(4)(dddd), 40 CFR 63.6080 through 63.6175, Tables 1 through 7 (**Subpart YYYY**), *National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines*

40 CFR 60, Subpart KKKKa, *Standards of Performance for Stationary Combustion Turbines*

40 CFR Part 64, Compliance Assurance Monitoring (VOC)

1. Operating Limitations:

- a. The permittee shall install, operate, and maintain an OxCat according to the manufacturer's specifications. Flue gas emissions shall be routed through the OxCat at all times. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** g., **5. Specific Recordkeeping Requirements** e. and f., and **7. Specific Control Equipment Operating Conditions** c.

- b. The permittee shall install, operate, and maintain an SCR according to the manufacturer's specifications. Flue gas emissions shall be routed through the SCR at all times. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** g., **5. Specific Recordkeeping Requirements** e. and f., and **7. Specific Control Equipment Operating Conditions** a. and b.

- c. The permittee shall limit fuel oil combustion to 2,160 hours (for both CTs combined) on a 12-month rolling total basis. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** b. and **5. Specific Recordkeeping Requirements** b.

- d. When firing natural gas, the permittee shall utilize natural gas with a maximum sulfur content of 0.5 grains of sulfur per 100 dry standard cubic feet of natural gas (gr/100 scf). [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **Section D – Source Emission Limitations And Testing Requirements**

- e. When firing fuel oil, the permittee shall utilize fuel oil with a maximum sulfur content of 15 ppm. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** c. and **5. Specific Recordkeeping Requirements** c.

- f. The permittee shall prepare and maintain for the CCGT a good combustion and operations

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

practices plan (GCOP) within 90 days of startup that defines, measures, and verifies the use of operational and design practices determined as BACT for minimizing CO, NO_x, PM/PM₁₀/PM_{2.5}, VOC, H₂SO₄, and GHG emissions. The permittee shall operate according to the provisions of this plan at all times, including periods of startup, shutdown, and malfunction. The plan shall be incorporated into the plant standard operating procedures (SOP) and shall be made available for the Division's inspection. The plan shall include, but not be limited to: [401 KAR 51:017]

- i. A list of combustion optimization practices and a means of verifying the practices have occurred;
- ii. A list of combustion and operation practices to be used to lower energy consumption and a means of verifying the practices have occurred; and
- iii. A list of the design choices determined to be BACT, including inlet air filters and dry low NO_x burners, and verification that designs were implemented in the final construction.
- iv. A list of the parameters to be continuously monitored by a continuous parameter monitoring system (CPMS) as follows:
 1. A list of parameters for the OxCat including, but not limited to, temperature, pressure drop, and flue gas flow rate.
 2. A list of parameters for the SCR including, but not limited to, temperature, aqueous ammonia flow rate, and flue gas flow rate.
- v. Procedures for limiting ammonia slip from the SCR.

Compliance Demonstration Method:

Compliance with the GCOP BACT shall be demonstrated according to **5 Specific Recordkeeping Requirements** e.

- f. At all times, the permittee must operate and maintain each stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Administrator which may include, but is not limited to, fuel use records, monitoring results, review of operation and maintenance procedures and records, review of reports, and inspection of the source. [40 CFR 60.4333a(a); 40 CFR 60.5525a(b); and 40 CFR 63.6105(c)]
- g. The permittee shall comply with the emissions limitations and operating limitations in 40 CFR 63 Subpart YYYY upon startup of the affected source. [40 CFR 63.6095(a)(4)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- h. The permittee must maintain the 4-hour rolling average of the catalyst inlet temperature within the range suggested by the catalyst manufacturer. The permittee is not required to use the catalyst inlet temperature data that is recorded during engine startup in the calculations of the 4-hour rolling average catalyst inlet temperature. [40 CFR 63.6100 and 63.6140 referencing Table 2, Item 1 of 40 CFR 63, Subpart YYYY]

Compliance Demonstration Method:

The permittee must demonstrate continuous compliance according to **4. Specific Monitoring Requirements** q. and v., **5. Specific Recordkeeping Requirements** x. and **6. Specific Reporting Requirements** k.

- i. The period of time for turbine startup is subject to the limits specified in the definition of startup in 40 CFR 63.6175, where startup begins at the first firing of fuel in the stationary combustion turbine. For combined cycle turbines, startup ends when the stationary combustion turbine has reached stable operation or after 3 hours, whichever is less. [40 CFR 63.6175]

2. Emission Limitations:

- a. The permittee shall not allow emissions from each combustion turbine to exceed the limits in the following table: [401 KAR 51:017 BACT]

Pollutant	Natural Gas Emission Limit	Fuel Oil Emission Limit	Averaging Period	Compliance Demonstration Method
NO _x	2 ppmvd at 15% O ₂	4.5 ppmvd at 15% O ₂	24-hour rolling†	NO _x CEMS
CO	2 ppmvd at 15% O ₂	2 ppmvd at 15% O ₂	24-hour rolling†	CO CEMS
VOC	1 ppmvd at 15% O ₂	2 ppmvd at 15% O ₂	3-hour average†	Performance Testing; See 3. <u>Testing Requirements</u> a.
PM/PM ₁₀ /PM _{2.5}	0.006 lb/MMBtu	0.014 lb/MMBtu	3-hour average*	Performance Testing; See 3. <u>Testing Requirements</u> b.
CO ₂	800 lb/MWh-gross	1,250 lb/MWh-gross	Annual*	O ₂ or CO ₂ CEMS

† Excluding periods of startup and shutdown

* Including periods of startup and shutdown

- b. Annual emissions, including startups and shutdowns, from each combustion turbine shall not exceed the following: [401 KAR 51:017 BACT]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Pollutant	Emission Limit	Averaging Period	Compliance Demonstration Method
NO _x	169 tpy	12-month rolling	NO _x CEMS; See 5. <u>Specific Recordkeeping Requirements</u> e.ii.
CO	2,805 tpy	12-month rolling	CO CEMS; See 5. <u>Specific Recordkeeping Requirements</u> e.iii.
VOC	250 tpy	12-month rolling	Emission Calculation; See 5. <u>Specific Recordkeeping Requirements</u> e.iv.
PM/PM ₁₀ /PM _{2.5}	84.3 tpy	12-month rolling	Emission Calculation; See 5. <u>Specific Recordkeeping Requirements</u> e.iv.
CO _{2e}	1,458,767 tpy	12-month rolling	See 5. <u>Specific Recordkeeping Requirements</u> m.

- c. The permittee must not discharge into the atmosphere from the affected facility any gases that contain an amount of NO_x that exceeds the applicable emission standard and be in accordance with the requirements specified in 40 CFR 60.4320a(b). If the permittee chooses to use NO_x CEMS, input-based emission rates and standards are determined on a 4-operating-hour rolling basis and output-based emission rates and standards are determined on a 30-operating-day rolling basis. Mass-based emission rates are determined on both a 4-operating-hour and 12-calendar-month rolling basis. [40 CFR 60.4320a(a)]
 - i. The NO_x emission standard that is applicable to the affected facility shall be determined on an operating-hour basis, unless the permittee elects to use the alternative provided for in 40 CFR 60.4320a(b)(2). Determining the hourly NO_x emission standards for the affected facility requires recording hourly data and maintaining records according to the requirements in 40 CFR 60.4390a. For hours with multiple emission standards, the applicable standard for that hour is determined based on the condition, excluding periods of monitor downtime, that corresponds to the highest emissions standard. For example, if the affected facility operates at 70 percent or less of its base load rating for any portion of the hour, the emission limit(s) in Table 1 to 40 CFR 60, Subpart KKKKa for combustion turbines operating at 70 percent or less of base load rating shall apply for that hour. [40 CFR 60.4320a(b)(1)]
 - ii. As an alternative to the requirements specified in 40 CFR 60.4320a(b)(1), the permittee

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- may elect to use the lowest NO_x emission standard that is applicable to the affected facility, as determined using Table 1 to 40 CFR 60, Subpart KKKKa, for the entire required compliance period. [40 CFR 60.4320a(b)(2)]
- iii. The permittee must meet the NO_x emission standard as determined by the applicable size category in Table 1 or 2 to 40 CFR 60, Subpart KKKKa. [40 CFR 60.4320a(b)(3)]
1. New, firing natural gas with utilization rate >45 percent, input-based NO_x emission standard is 5 ppm at 15 percent O₂ or 7.9 ng/J (0.018 lb/MMBtu), determined on a 4-operating-hour rolling average basis. Optional output-based NO_x standard is 0.054 kg/MWh-gross (0.12 lb/MWh-gross) 0.055 kg/MWh-net (0.12 lb/MWh-net), determined on a 30-operating-day average basis. [40 CFR 60, Subpart KKKKa, Table 1, Item 1]
 2. New, firing natural gas with utilization rate ≤45 percent and with design efficiency ≥38 percent, input-based NO_x emission standard is 25 ppm at 15 percent O₂ or 40 ng/J (0.092 lb/MMBtu), determined on a 4-operating-hour rolling average basis. Optional output-based NO_x standard is 0.38 kg/MWh-gross (0.83 lb/MWh-gross) 0.39 kg/MWh-net (0.85 lb/MWh-net), determined on a 30-operating-day average basis. [40 CFR 60, Subpart KKKKa, Table 1, Item 2]
 3. New, firing fuel oil, input-based NO_x emission standard is 42 ppm at 15 percent O₂ or 70 ng/J (0.16 lb/MMBtu), determined on a 4-operating-hour rolling average basis. Optional output-based NO_x standard is 0.45 kg/MWh-gross (1.0 lb/MWh-gross), 0.46 kg/MWh-net (1.0 lb/MWh-net), determined on a 30-operating-day average basis. [40 CFR 60, Subpart KKKKa, Table 1, Item 4]
 4. Firing natural gas, alternative mass-based 4-hour NO_x emission standard is 0.38 kg/MW-rated output (0.83 lb/MW-rated output). Alternative mass-based 12-calendar-month NO_x emission standard is 0.44 tonne/MW-rated output (0.48 ton/MW-rated output). [40 CFR 60, Subpart KKKKa, Table 2, Item 1]
 5. Firing fuel oil, alternative mass-based 4-hour NO_x emission standard is 0.82 kg/MW-rated output (1.8 lb/MW-rated output). Alternative mass-based 12-calendar-month NO_x emission standard is 0.74 tonne/MW-rated output (0.81 ton/MW-rated output). [40 CFR 60, Subpart KKKKa, Table 2, Item 2]
 6. *Utilization Rate* means the ratio between the actual heat input to a stationary combustion turbine during a calendar year and the potential heat input to the stationary combustion turbine had it been operated for 8,760 hours during a calendar year at the base load rating. Heat input during a system emergency as defined in 40 CFR 60.4420a is excluded when determining the utilization rate. Actual and potential heat input derived from non-combustion sources (e.g., solar thermal) are not included when calculating the utilization rate. Base load rating does not include any potential heat input to the HRSG. [40 CFR 60.4420a definition for Annual capacity factor]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iv. The permittee must meet the applicable NO_x emission standard during all times that the affected facility is operating (including periods of startup, shutdown, and malfunction). [40 CFR 60.4320a(d)]
- v. If the permittee's combustion turbine operates below 70 percent of the base load rating at any point during an operating hour, the part load standard is applicable during the entire operating hour. For non-part load operating hours, if the permittee's stationary combustion turbine's heat input is greater than or equal to 50 percent fuels other than natural gas at any point during an operating hour, the combustion turbine must meet the corresponding limit for non-natural gas. For non-part load operating hours when the permittee's total heat input is greater than 50 percent natural gas while combusting some portion of non-natural gas fuels, the permittee must meet the corresponding emissions standard as determined by prorating the applicable NO_x standards, based on the applicable size category in Table 1 or 2 to 40 CFR 60, Subpart KKKKa by the heat input from each fuel type. [40 CFR 60.4325a]

Compliance Demonstration Method:

The permittee must demonstrate continuous compliance using a CEMS for measuring NO_x emissions according to the provisions in 40 CFR 60.4345a or, if the permittee elects to comply with the mass-based standard, the methodology in Appendix E to 40 CFR part 75. If the stationary combustion turbine is equipped with a NO_x CEMS, those measurements must be used to determine excess emissions. [40 CFR 60.4333a(c) and 40 CFR 60.4333a(g)]

- I. If the permittee elects to comply with an input-based standard (lb/MMBtu or ppm) and the affected facility includes use of one or more HRSG units, then the permittee must measure both the emissions at the exhaust stack for the HRSG unit and the fuel flow to the CT engine. [40 CFR 60.4333a(e) and (e)(1)]
 - II. If the permittee elects to comply with an output-based standard (lb/MWh), the permittee must measure both the emissions at the exhaust stack for each HRSG unit and the total electrical or mechanical energy output of each CT engine (as applicable). To determine the net or gross energy output of the steam produced by the HRSG unit, the permittee must develop a custom method and provide information, satisfactory to the Administrator or delegated authority, apportioning the net or gross energy output of the steam produced by the HRSG units to each of the affected stationary CTs. [40 CFR 60.4333a(f) and (f)(3)]
- d. The permittee shall not combust in the Combustion Turbine any fuel that contains total potential sulfur emissions in excess of 110 nanograms per Joule (ng/J) (0.90 pounds per megawatt-hour (lb/MWh)) gross energy output or 26 nanograms of SO₂ per Joule (ng SO₂/J) (0.060 lb SO₂/MMBtu) heat input. [40 CFR 60.4330a(a)(1) and (a)(2) and 40 CFR 60.4372a(b)]

Compliance Demonstration Method:

The permittee must demonstrate compliance using one of the methods specified in 40 CFR 60.4333a(d)(1) through (4). [40 CFR 60.4333a(d)]

- I. Conduct an initial performance test according to 40 CFR 60.8 and use the applicable methods in 40 CFR 60.4415a. Thereafter, conduct subsequent fuel sulfur analyses

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- using the applicable methods specified in 40 CFR 60.4360a and at the frequency specified in 60.4370a. [40 CFR 60.4333a(d)(2)]
- II. Conduct an initial performance test according to 40 CFR 60.8 and use the applicable methods in 40 CFR 60.4415a. Compliance with the fuel-based standard may be demonstrated by submitting the fuel records (such as a current, valid purchase contract, tariff sheet, transportation contract, or results of a fuel analysis) to satisfy the requirements of 40 CFR 60.8. Thereafter, maintain records (such as a current, valid purchase contract, tariff sheet, or transportation contract) documenting that total sulfur content for the initial and subsequent fuel combusted in your stationary combustion turbine at all times does not exceed applicable conditions specified in 40 CFR 60.4370a. [40 CFR 60.4333a(d)(3)]
- e. The permittee shall not discharge from any affected EGU into the atmosphere any gases that contain CO₂ in excess of the following values based on a 12-operating-month rolling average basis, which shall apply to the affected EGU at all times. [40 CFR 60.5520(a), (b), 60.5525(a)(1), and 40 CFR 60 Subpart TTTTa Table 1, Item 1] The *Affected EGU* is a “base load combustion turbine” defined in 40 CFR 60.5580a as “a stationary combustion turbine that supplies more than 40 percent of its potential electric output as net-electric sales on both a 12-operating month and a 3-year rolling average basis.”
- i. For 12-operating month averages beginning before January 2032, 360 to 560 kg CO₂/MWh (800 to 1,250 lb CO₂/MWh) of gross energy output; or 370 to 570 kg CO₂/MWh (820 to 1,280 lb CO₂/MWh) of net energy output as determined by the procedures in 40 CFR 60.5525a.
- ii. For 12-operating month averages beginning after December 2031, 43 to 67 kg CO₂/MWh (100 to 150 lb CO₂/MWh) of gross energy output; or 42 to 64 kg CO₂/MWh (97 to 139 lb CO₂/MWh) of net energy output as determined by the procedures in 40 CFR 60.5525a.
- iii. Where the term “gross or net energy output” is used, the term that applies is “gross energy output.” [40 CFR 60.5520a(b)]
- iv. As an alternative to meeting the requirements in 40 CFR 60.5520a(b), the permittee may petition the Administrator in writing to comply with the alternate applicable net energy output standard. If the Administrator grants the petition, beginning on the date the Administrator grants the petition, the affected EGU must comply with the applicable net energy output-based standard included in 40 CFR 60, Subpart TTTTa. Where the term “gross or net energy output” is used, the term that applies is “net energy output.” Owners or operators complying with the net output-based standard must petition the Administrator to switch back to complying with the gross energy output-based standard. [40 CFR 60.5520a(c)]

Compliance Demonstration Method:

Compliance with the applicable CO₂ emission standard of 40 CFR 60, Subpart TTTTa shall be determined on a 12-operating-month rolling average basis. The permittee must be in compliance with the emission standard at all times. However, the permittee must determine

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compliance with the emission standards only at the end of the applicable operating month. See **4. Specific Monitoring Requirements** k. through p., **5. Specific Recordkeeping Requirements** n. through v., and **6. Specific Reporting Requirements** g. through i.

- f. The permittee must limit the concentration of formaldehyde to 91 ppbvd or less at 15-percent O₂, except during turbine startup. The period of time for turbine startup is subject to the limits specified in the definition of startup in 40 CFR 63.6175. [40 CFR 63.6100 referencing Table 1 to 40 CFR 63, Subpart YYYY]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **3. Testing Requirements** e.

3. Testing Requirements:

- a. Within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the CTs, the permittee shall conduct an initial performance test for natural gas and fuel oil to demonstrate compliance with the applicable VOC emission limit under 401 KAR 51:017 using EPA Methods 25, 25A, 18 or ALT-096 or Method 320, or an alternative method approved by the Division in accordance with an approved test protocol. [401 KAR 51:017 and 401 KAR 52:020, Section 10]
 - i. The permittee shall monitor the flue gas flow rate, inlet temperature to the OxCat and pressure drop across the catalyst to establish operating parameters for the OxCat control system.
 - ii. The performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. [401 KAR 50:045, Section 5(1)]
 - iii. Each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with the 401 KAR 51:017 BACT limitation, the arithmetic mean of the results of three runs shall apply. [401 KAR 50:045, Section 9(1)]
 - iv. Subsequent testing shall be performed within 61 months of the previous stack test.
- b. Within 60 days after achieving the maximum production rate but no later than 180 days after initial startup of the CTs, the permittee shall conduct an initial performance test for natural gas and fuel oil to demonstrate compliance with the applicable PM/PM₁₀/PM_{2.5} emission limit under 401 KAR 51:017 by testing filterable and condensable PM using EPA Methods 5 or 201 and 202 or an alternate method approved by the Division in accordance with an approved test protocol. [401 KAR 51:017 and 401 KAR 52:020, Section 10]
 - i. The performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. [401 KAR 50:045, Section 5(1)]
 - ii. Each performance test shall consist of three separate runs using the applicable test method. For the purpose of determining compliance with the 401 KAR 51:017 BACT

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limitation, the arithmetic mean of the results of three runs shall apply. [401 KAR 50:045, Section 9(1)]

- iii. Subsequent testing shall be performed within 61 months of the previous stack test.
- c. The permittee must conduct an initial performance test according to 40 CFR 60.8 using the applicable methods in 40 CFR 60.4400a or 40 CFR 60.4405a. Thereafter, unless the permittee performs continuous monitoring consistent with 40 CFR 60.4335a, 40 CFR 60.4340a, or 40 CFR 60.4345a, the permittee must conduct subsequent performance tests according to the applicable requirements in 40 CFR 60.4333a(b)(1) through (6). [40 CFR 60.4333a(b)]
 - i. The initial performance test shall be conducted to demonstrate compliance with 401 KAR 51:017 NO_x BACT limits for natural gas and fuel oil. [401 KAR 51:017 and 401 KAR 52:020, Section 10]
 - ii. During the performance testing for NO_x, the permittee shall monitor inlet temperature to the SCR and ammonia injection rate for the SCR system. [401 KAR 51:017 and 401 KAR 52:020, Section 10]
 - iii. If the permittee elects to comply with an input-based standard (lb/MMBtu or ppm), the permittee must measure both the total emissions at the exhaust stack for the HRSG unit and the total fuel flow to each CT engine. The applicable emissions standard for the affected facility is equal to the prorated (by heat input) emissions standards of each of the individual CT engines that are exhausted through the single HRSG unit. [40 CFR 60.4333a(e) and (e)(1)]
 - iv. If the permittee elects to comply with an output-based standard (lb/MWh), the permittee must measure both the total emissions at the exhaust stack for the HRSG unit, and the total electrical, mechanical energy, and useful thermal output of the HRSG unit and each CT engine (as applicable). The applicable emissions standard for the affected facility is equal to the most stringent emissions standard for any individual CT engine. [40 CFR 50.4333a(f) and (f)(2)]
- d. If the permittee uses a NO_x CEMS, the initial performance test required by 40 CFR 60 Subpart KKKKa must be performed according to the procedures specified in 40 CFR 60.4405a(b)(1) through (4). [40 CFR 60.4405a(a) and (b)]
 - i. Perform a minimum of nine RATA reference method runs, with a minimum time per run of 21 minutes, at a single load level, within ± 25 percent of 100 percent of the base load rating while the combustion turbine is combusting the fuel that is a normal primary fuel for the CT. The permittee may perform testing at the highest achievable load point, if at least 75 percent of the base load rating cannot be achieved in practice. The ambient temperature must be greater than 0 °F during the RATA runs. The Administrator or delegated authority may approve performance testing below 0 °F if the timing of the required performance test and environmental conditions make it impractical to test at ambient conditions greater than 0 °F. [40 CFR 60.4405a(b)(1)]

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- ii. For each RATA run, concurrently measure the heat input to the unit using a fuel flow meter (or flow meters) or the methodologies in 40 CFR 75 Appendix F, and for units complying with the output-based standard, measure the electrical and thermal output from the unit. [40 CFR 60.4405a(b)(2)]
- iii. Use the test data both to demonstrate compliance with the applicable NO_x emissions standard under 40 CFR 60.4320a and to provide the required reference method data for the RATA of the CEMS described under 40 CFR 60.4342a. [40 CFR 60.4405a(b)(3)]
- iv. Compliance with the applicable emissions standard in 40 CFR 60.4320a is achieved if the sum of the NO_x emissions divided by the heat input (or gross or net energy output) for all the RATA runs, expressed in units of lb/MMBtu, ppm, lb/MWh, or kgs, does not exceed the emissions standard. [40 CFR 60.4405a(b)(4)]
- e. The permittee must conduct the initial performance tests or other initial compliance demonstrations in Table 4 of 40 CFR 63, Subpart YYYYY within 180 calendar days after the compliance date that is specified for the stationary combustion turbine in 40 CFR 63.6095 and according to the provisions in 40 CFR 63.7(a)(2). [40 CFR 63.6110(a)]
 - i. The permittee must demonstrate formaldehyde emissions meet the emission limitations specified in Table 1 to 40 CFR 63, Subpart YYYYY by a performance test initially and on an annual basis using one of the following methods specified in Table 3, Item a. to 40 CFR 63, Subpart YYYYY. Formaldehyde concentration must be corrected to 15-percent O₂, dry basis. Results of this test consist of the average of the three 1-hour runs. Test must be conducted within 10 percent of 100-percent load. [Table 3, Item a. to 40 CFR 63, Subpart YYYYY]
 - 1. Test Method 320 of Appendix A to 40 CFR part 63;
 - 2. ASTM D6348-12e1 (incorporated by reference, see 40 CFR 63.14) provided that the test plan preparation and implementation provisions of Annexes A1 through A8 are followed and the %R as determined in Annex A5 is equal or greater than 70% and less than or equal to 130% (The %R value for each compound must be reported in the test report, and all field measurements must be corrected with the calculated %R value for that compound using the following equation: Reported Results = ((Measured Concentration in Stack)/(%R)) x 100); or
 - 3. Other methods approved by the Administrator.
 - ii. The permittee must select the sampling port location and the number of traverse points using Method 1 or 1A of Appendix A to 40 CFR part 60. The sampling site must be located at the outlet of the air pollution control device. [Table 3, Item b. to 40 CFR 63, Subpart YYYYY]
 - iii. The permittee must determine the O₂ concentration at the sampling port location using Method 3A or 3B of Appendix A to 40 CFR part 60; ANSI/ASME PTC 19.10-1981 (incorporated by reference, see 40 CFR 63.14) (Part 10) manual portion only; ASTM

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- D6522-11 (incorporated by reference, see 40 CFR 63.14) if the turbine is fueled by natural gas. Measurements to determine the O₂ concentration must be made at the same time as the performance test. [Table 3, Item c. to 40 CFR 63, Subpart YYYY]
- iv. The permittee must determine the moisture content at the sampling port location for the purposes of correcting the formaldehyde concentration to a dry basis using Method 4 of Appendix A to 40 CFR part 60 or Test Method 320 of Appendix A to 40 CFR part 63, or ASTM D6348-12e1 (incorporated by reference, see 40 CFR 63.14). Measurements to determine moisture content must be made at the same time as the performance test. [Table 3, Item d. to 40 CFR 63, Subpart YYYY]
 - v. Subsequent performance tests must be performed on an annual basis as specified in Table 3 to 40 CFR 63, Subpart YYYY. [40 CFR 63.6115]
 - vi. Performance tests must be conducted at high load, defined as 100 percent plus or minus 10 percent. Performance tests shall be conducted under such conditions based on representative performance of the affected source for the period being tested. Representative conditions exclude periods of startup and shutdown. The owner or operator may not conduct performance tests during periods of malfunction. The owner or operator must record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of performance tests. [40 CFR 63.6120(c)]
 - vii. The permittee must conduct three separate test runs for each performance test, and each test run must last at least 1 hour. [40 CFR 63.6120(d)]
- f. Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1 and 401 KAR 59:005, Section 2(2)]
- 4. Specific Monitoring Requirements:**
- a. The permittee shall monitor the hours of operation, the amount of natural gas combusted (in MMscf) and the amount of fuel oil combusted (in gallons) on a monthly basis. [401 KAR 52:020, Section 10]
 - b. The permittee shall monitor the total number of hours the CTs combust fuel oil on a monthly basis. [401 KAR 52:020, Section 10]
 - c. The permittee shall monitor the sulfur content of the ULSFO through supplier certifications or procedures in Appendix D to 40 CFR part 75 for representative fuel sampling data. [401 KAR 52:020, Section 10]
 - d. The permittee shall monitor the number and duration of startups and shutdowns, the type of startup (cold, warm, or hot), and the type of fuel used. Each type of startup is defined as follows: [401 KAR 52:020, Section 10]
 - i. *Cold* startups are preceded by over 48 hours of shutdown or any warming event.

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- ii. *Warm* startups are preceded by a shutdown or any warming event between 8 and 48 hours.
- iii. *Hot* startups take place less than 8 hours of the previous shutdown without any warming provisions.
- e. The permittee shall install, calibrate, maintain and operate a continuous emissions monitoring system (CEMS) to monitor CO to determine the hourly CO emission rate in parts per million by volume on a dry basis (ppmvd) at 15% O₂ or the equivalent CO₂ concentration in accordance with 40 CFR 60.13 or 40 CFR part 75. [401 KAR 51:017 and 401 KAR 52:020, Section 10]
 - i. The permittee shall perform and report Quality Assurance (QA) procedures for CO CEMS specified in Appendix F of 40 CFR part 60 according to the schedule for QA procedures specified in Appendix B of 40 CFR part 75.
 - ii. Testing frequency, data validation, out-of-control criteria, and grace period provisions in Appendix B to 40 CFR part 75, and the specifications in Appendix B and Appendix F to 40 CFR part 60 apply to all CO CEMS.
 - iii. The CO CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period while the CT is operating. The permittee shall have at least two data points, with each representing a different 15-minute period, to have a valid hour of data.
 - iv. Measurements to determine moisture content shall be made at the same time and location as the measurements for CO concentration to determine CO concentrations on a dry basis.
 - v. For any hour in which the hourly average O₂ concentration exceeds 19.0 percent O₂ (or the hourly average CO₂ concentration is less than 1.0 percent CO₂), a diluent cap value of 19.0 percent O₂ or 1.0 percent CO₂ (as applicable) may be used in the emission calculations.
- f. The permittee shall install, calibrate, maintain and operate a CO₂ or O₂ CEMS to monitor CO₂ in lb/MWh. As the BACT limit for CO₂ is on an output basis, the permittee shall install, calibrate, maintain, and operate a sufficient number of watt meters to continuously measure and record the hourly gross electric output from the turbine. These measurements shall be performed using 0.2 class electricity metering instrumentation and calibration procedures as specified under ANSI No. C12.20-2010 (incorporated by reference in 40 CFR 60.17). The monitoring plan shall ensure that the meters are installed, calibrated, maintained, and operated to record each component of the determination, hour by hour. [401 KAR 51:017 and 401 KAR 52:020, Section 10]
- g. The permittee shall continuously monitor the following parameters according to **1. Operating Limitations** d.iv., during all periods of operation, excluding periods of startup and shutdown. If the parameters are outside of the operating parameters established during

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

the most recent performance test, the permittee shall take corrective action. [401 KAR 51:017 and 401 KAR 52:020, Section 10]

- i. For the OxCat, the permittee shall continuously monitor the parameters including, but not limited to, the flue gas flow rate, inlet temperature, and pressure drop across the catalyst.
- ii. For the SCR, the permittee shall continuously monitor the parameters including, but not limited to, the flue gas flow rate, inlet temperature, and ammonia injection rate.
- h. The permittee shall install, certify, maintain, and operate a NO_x monitor to determine the hourly average NO_x emissions in the units of the standard with which the permittee is complying. [401 KAR 51:017 and 40 CFR 60.4345a(a)(1)]
 - i. If the permittee elects to comply with an input-based or mass-based emissions standard, the permittee shall install, calibrate, maintain, and operate either a fuel flow meter (or flow meters) or an O₂ or CO₂ CEMS and a stack flow monitor to continuously measure the heat input to the affected facility. [40 CFR 60.4345a(a)(2)]
 - ii. If the permittee elects to comply with an output-based emissions standard, the permittee shall also install, calibrate, maintain, and operate both a watt meter (or meters) to continuously measure the gross electrical output from the affected facility and either a fuel flow meter (or flow meters) or an O₂ or CO₂ CEMS and a stack flow monitor. [40 CFR 60.4345a(a)(3)]
 - iii. If the permittee elects to comply with the part-load NO_x emissions standard, the permittee must install, calibrate, maintain, and operate either a fuel flow meter (or flow meters) or an O₂ or CO₂ CEMS and a stack flow monitor to continuously measure the heat input to the affected facility. [40 CFR 60.4345a(a)(4)]
 - iv. If the permittee combusts natural gas with fuels other than natural gas and elects to comply with the fuels other than natural gas NO_x emissions standard, the permittee shall install, calibrate, maintain, and operate a device to continuously monitor when a fuel other than natural gas fuel is combusted in the combustion turbine engine. [40 CFR 60.4345a(a)(6)]
 - v. Each NO_x CEMS must be installed and certified according to Performance Specification 2 (PS 2) in Appendix B to 40 CFR part 60. The span value must be 125 percent of the highest applicable standard or highest anticipated hourly NO_x emissions rate. Alternatively, span values determined according to Section 2.1.2 in Appendix A to part 75 may be used. For stationary combustion turbines that use post-combustion technology to reduce emissions of NO_x to comply with the requirements of 40 CFR 60 Subpart KKKKa, the permittee may use NO_x and diluent CEMS that are installed and certified according to 40 CFR 75 Appendix A in lieu of 40 CFR 60 Appendix F, Procedure 1 and the requirements of 40 CFR 60.13 with approval from the Administrator or delegated authority, except that the relative accuracy test audit (RATA) of the CEMS must be performed on a lb/MMBtu basis. [40 CFR 60.4345a(b)]

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- vi. During each full operating hour, both the NO_x monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour. For partial operating hours, at least one data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two data points (one in each of two quadrants) are required for each monitor. [40 CFR 60.4345a(c)]
- vii. Each fuel flow meter must be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, fuel flow meters that meet the installation, certification, and quality assurance requirements in 40 CFR 75 Appendix D are acceptable for use under 40 CFR 60 Subpart KKKKa. [40 CFR 60.4345a(d)]
- viii. Each watt meter, steam flow meter, and each pressure or temperature measurement device must be installed, calibrated, maintained, and operated according to manufacturer's instructions. [40 CFR 60.4345a(e)]
- ix. The permittee shall develop, submit to the Administrator or delegated authority for approval, maintain, and adhere to an on-site quality assurance (QA) plan for all of the continuous monitoring equipment the permittee uses to comply with 40 CFR 60 Subpart KKKKa. At a minimum, such a QA plan must address the requirements of 40 CFR 60.13(d), (e), and (h). [40 CFR 60.4345a(f)]
- x. At a minimum, non-out-of-control CEMS hourly averages shall be obtained for 90 percent of all operating hours on a 30-operating-day rolling average basis. [40 CFR 60.4345a(g)]
- i. The NO_x CEMS data shall be used to determine excess emissions in the following manner: [401 KAR 52:020, Section 10]
 - i. If the permittee demonstrates continuous compliance using a CEMS for measuring NO_x emissions, excess emissions are defined as the applicable compliance period for the stationary combustion turbine (either 4-operating-hours, 30-operating-days, or 12-calendar-month), during which the average NO_x emissions from the affected facility measured by the CEMS is greater than the applicable maximum allowable NO_x emissions standard specified in 40 CFR 60.4320a as determined using the procedures specified in 40 CFR 60.4350a that apply to the permittee's stationary combustion turbine. [40 CFR 60.4350a(a)]
 - ii. The NO_x CEMS data for each operating hour as measured according to the requirements in 40 CFR 60.4345a must be used to determine the hourly average NO_x emissions. The hourly average for a given operating hour is the average of all data points for the operating hour. However, for any periods during which the NO_x, diluent, flow, watt, steam pressure, or steam temperature monitors (as applicable) are out-of-control, the data points are not used in determining the hourly average NO_x emissions. All data points that are not collected during out-of-control periods must be used to determine the hourly average NO_x emissions. [40 CFR 60.4350a(b)]

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- iii. For each operating hour in which an hourly average is obtained, the data acquisition and handling system must calculate and record the hourly average NO_x emissions in units of lb/MMBtu or lbs, as applicable, using the appropriate equation from EPA Method 19 in 40 CFR 60 Appendix A-7. For any hour in which the hourly average O₂ concentration exceeds 19.0 percent O₂ (or the hourly average CO₂ concentration is less than 1.0 percent CO₂), a diluent cap value of 19.0 percent O₂ or 1.0 percent CO₂ (as applicable) may be used in the emission calculations. [40 CFR 60.4350a(c)]
- iv. Data used to meet the requirements of 40 CFR 60 Subpart KKKKa shall not include substitute data values derived from the missing data procedures of 40 CFR part 75, nor shall the data be bias adjusted according to the procedures of 40 CFR part 75. For units complying with the 12-calendar-month mass-based standard, emissions for hours of missing data shall be estimated by using the average emissions rate of non-out-of-control hours within ±10 percent of the hourly load value for the missing data period within the 12-calendar-month period. If non-out-of-control data is not available, the maximum hourly emissions rate during the 12-calendar-month period shall be used. [40 CFR 60.4350a(d)]
- v. All required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data must be reduced to hourly averages. However, for any periods during which the flow, watt, steam pressure, or steam temperature monitors (as applicable) are out-of-control, the data points are not used in determining the appropriate hourly average value. [40 CFR 60.4350a(e)]
- vi. Calculate the hourly average NO_x emissions rate, in units of the emissions standard under 40 CFR 60.4320a, using lb/MMBtu or ppm for units complying with the input-based standard, using lbs for units complying with the mass-based standard, or lb/MWh or kg/MWh for units complying with the output-based standard: [40 CFR 60.4350a(f)]
- 1. The gross or net energy output is calculated as the sum of the total electrical and mechanical energy generated by the combustion turbine engine; the additional electrical or mechanical energy (if any) generated by the steam turbine following the heat recovery steam generating unit; the total useful thermal energy output that is not used to generate additional electricity or mechanical output, expressed in equivalent MWh, minus the auxiliary load as calculated using equations 1 and 2 to 40 CFR 60.4350a(f)(1). [40 CFR 60.4350a(f)(1)]

$$P = \frac{(Pe)_t}{T} + \frac{(Pe)_c}{T} - Pe_A + P_S + P_O \quad (\text{Eq. 1})$$

Where:

- P = Gross or net energy output of the CT in MWh;
- (Pe)_t = Electrical or mechanical energy output of the CT in MWh;
- (Pe)_c = Electrical or mechanical output (if any) of the steam turbine in MWh;
- Pe_A = Electric energy used for any auxiliary loads in MWh (only applicable to owners/operators electing to demonstrate compliance on a net output basis);

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- P_S = Useful thermal energy of the steam, measured relative to ISO conditions, not used to generate additional electric or mechanical output, in MWh;
 P_O = Other useful heat recovery, measured relative to ISO conditions, not used for steam generation or performance enhancement of the CT; and
 T = Electric Transmission and Distribution Factor. Equal to 1.0 for all other (non-CHP) combustion turbines.

$$P_S = \frac{Q_m \times H}{3.413 \times 10^6 \text{ Btu/MWh}} \quad (\text{Eq. 2})$$

Where:

- P_S = Useful thermal energy of the steam, measured relative to ISO conditions, not used to generate additional electric or mechanical output, in MWh;
 Q_m = Measured steam flow in lb;
 H = Enthalpy of the steam at measured temperature and pressure relative to ISO conditions, in Btu/lb; and
 3.413×10^6 = Conversion factor from Btu to MWh.

2. For mechanical drive applications complying with the output-based standard, use Equation 3 to 40 CFR 60.4350a(f)(2): [40 CFR 60.4350a(f)(2)]

$$E = \frac{(NO_x)_m}{BL \times AL} \quad (\text{Eq. 3})$$

Where:

- E = NO_x emissions rate in lb/MWh;
 $(NO_x)_m$ = NO_x emissions rate in lb/h;
 BL = Manufacturer's base load rating of turbine, in MW; and
 AL = Actual load as a percentage of the base load rating.

- vii. For each stationary combustion turbine demonstrating compliance on a heat input-based emissions standard, excess NO_x emissions are determined on a 4-operating-hour averaging period basis using the NO_x CEMS data and procedures specified in 40 CFR 60.4350a(g)(1) and (2) as applicable to the NO_x emissions standard in Table 1 to 40 CFR 60, Subpart KKKKa. [40 CFR 60.4350a(g)]

1. For each 4-operating-hour period, compute the 4-operating-hour rolling average NO_x emissions as the heat input weighted average of the hourly average of NO_x emissions for a given operating hour and the 3 operating hours preceding that operating hour using the applicable equation in 40 CFR 60.4350a(g)(2). Calculate a 4-operating-hour rolling average NO_x emissions rate for any 4-operating-hour period when you have valid CEMS data for at least 3 of those hours (e.g., a valid 4-operating-hour rolling average NO_x emissions rate cannot be calculated if 1 or more continuous monitors was out-of-control for the entire hour for more than 1 hour during the 4-operating-hour period). [40 CFR 60.4350a(g)(1)]
2. If the permittee elects to comply with the applicable heat input-based emissions rate standard, calculate both the 4-operating-hour rolling average NO_x emissions rate and the applicable 4-operating-hour rolling average NO_x emissions standard,

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calculated using hourly values in Table 1 to 40 CFR 60, Subpart KKKKa, using Equation 4 to 40 CFR 60.4350(g)(2). [40 CFR 60.4350a(g)(2)]

$$E = \frac{\sum_{i=1}^4 (E_i \times Q_i)}{\sum_{i=1}^4 Q_i} \quad (\text{Eq. 4})$$

Where:

- E = 4-operating-hour rolling average NO_x emissions (lb/MMBtu or ng/J);
- E_i = Hourly average NO_x emissions rate or emissions standard for operating hour “i” (lb/MMBtu or ng/J); and
- Q_i = Total heat input to stationary combustion turbine for operating hour “i” (MMBtu or J as appropriate).

- viii. For each combustion turbine demonstrating compliance on an output-based standard, the permittee must determine excess emissions on a 30-operating-day rolling average basis. The measured emissions rate is the NO_x emissions measured by the CEMS for a given operating day and the 29 operating days preceding that day. Once each day, calculate a new 30-operating-day average measured emissions rate using all hourly average values based on non-out-of-control NO_x emission data for all operating hours during the previous 30-operating-day operating period. Report any 30-operating-day periods for which the permittee has less than 90 percent data availability as monitor downtime. If the permittee elects to comply with the applicable output-based emissions rate standard, calculate the measured emissions rate using Equation 5 to 40 CFR 60.4350a(h)(1) and calculate the applicable emissions standard using Equation 6 to 40 CFR 60.4350a(h)(1). If the permittee elects to comply with the applicable output-based emissions rate standard and determine the heat input on an hourly basis, calculate the 30-operating-day rolling average NO_x emissions rate using Equation 5, and determine the applicable 30-operating-day rolling average NO_x emissions standard, calculated using values in Table 1 to 40 CFR 60, Subpart KKKKa, using Equation 6. Hours are not subcategorized by load for the purpose of determining the applicable output-based standard. The emissions standard for all hours, regardless of load, is the otherwise applicable full load emissions standard. [40 CFR 60.4350a(h)(1)]

$$E = \frac{\sum_{i=1}^n (E_i \times Q_i)}{\sum_{i=1}^n P_i} \quad (\text{Eq. 5})$$

Where:

- E = 30-operating-day average NO_x measured emissions rate combustion turbines (lb/MWh or ng/J);
- E_i = Hourly average NO_x emissions rate or emissions standard for non-out-of-control operating hour “i” (lb/MMBtu or ng/J);
- Q_i = Total heat input to stationary combustion turbine for non-out-of-control operating hour “i” (MMBtu or J as appropriate);
- P_i = Total gross or net energy output from stationary combustion turbine for non-out-of-control operating hour “i” (MWh or J); and
- n = Total number of operating non-out-of-control hours in the 30-operating-day period.

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- ix. If the permittee elects to comply with the applicable output-based emissions rate standard and elects to not determine the heat input on an hourly basis, the applicable 30-operating-day emissions rolling NO_x standard is the most stringent standard applicable to the combustion turbine. The 30-operating-day rolling NO_x emissions rate is determined as the sum of the hourly emissions divided by the sum of the gross or net output over the 30-operating-day period. [40 CFR 60.4350a(h)(2)]
- x. For each combustion turbine demonstrating compliance on a mass-based standard, the permittee must determine excess NO_x emissions on both a rolling 4-operating-hour and rolling 12-calendar-month basis using the NO_x CEMS data and procedures specified in 40 CFR 60.4350a(i)(1) through (4) as applicable to the NO_x emissions standard in Table 2 to 40 CFR 60, Subpart KKKKa. In addition, during system emergencies each combustion turbine must determine excess NO_x emissions using the procedures specified in 40 CFR 60.4350a(i)(5). [40 CFR 60.4350a(i)]
 - 1. For each 4-operating-hour period, compute the 4-operating-hour rolling NO_x emissions as the sum of the hourly NO_x emissions for a given operating hour and the 3 operating hours preceding that operating hour. Calculate a 4-operating-hour NO_x emissions rate for any 4-operating-hour period when you have valid CEMS data for at least 3 of those hours (*e.g.*, a valid 4-operating-hour rolling NO_x emissions rate cannot be calculated if 1 or more continuous monitors was out-of-control for the entire hour for more than 1 hour during the 4-operating-hour period). [40 CFR 60.4350a(i)(1)]
 - 2. Calculate the applicable 4-operating-hour rolling NO_x emissions standard, calculated using hourly values in Table 2 to 40 CFR 60, Subpart KKKKa, using Equation 7 to 40 CFR 60.4350a(i)(2). [40 CFR 60.4350a(i)(2)]

$$E = \sum_{i=1}^4 (E_i) \quad (\text{Eq. 7})$$

Where:

E = 4-operating hour rolling NO_x emissions (kg or lbs); and

E_i = Hourly NO_x emissions rate or emissions standard for operating hour “i” (kg or lbs).

- 3. For each 12-calendar-month period, compute the 12-calendar-month rolling NO_x emissions as the sum of the hourly NO_x emissions for a given month and the 11 calendar months preceding the calendar month. Emissions during system emergencies are not included when calculating the 12-calendar-month emissions rate. [40 CFR 60.4350a(i)(3)]
- 4. Calculate the applicable 12-calendar-month rolling NO_x emissions standard, calculated using hourly values in Table 2 to 40 CFR 60, Subpart KKKKa, using Equation 8 to 40 CFR 60.4350a(i)(4). Heat input during system emergencies is not included when calculating the 12-calendar-month emissions standard. [40 CFR 60.4350a(i)(4)]
- 5. During system emergencies during which the owner or operator elects to not include emissions or heat input in the 12-calendar month calculations, the

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

applicable average natural gas-fired emissions standard is 0.83 lb NO_x/MW-rated output (1.8 lb NO_x/MW-rated output when firing non-natural gas) or the current emissions rate necessary to comply with the 12-calendar month natural gas-fired emissions standard of 0.48 tons NO_x/MW-rated output (0.81 tons NO_x/MW-rated output when firing non-natural gas) whichever is more stringent. For example, if a combustion turbine operated for 4,000 hours during the current 12-calendar month period the applicable average natural gas-fired emissions standard during the system emergency would be 0.24 lb NO_x/MW-rated output and the applicable average non-natural gas-fired emission standard during the system emergency would be 0.41 lb NO_x/MW-rated output. [40 CFR 60.4350a(i)(5)]

- j. For the purposes of 40 CFR 60 Subpart KKKKa, excess SO₂ emissions are defined as any period during which the permittee combusts a fuel that the permittee does not have appropriate fuel records or that fuel contains sulfur greater than the applicable standard. [40 CFR 60.4385a(b)]
- k. The permittee must prepare a monitoring plan to quantify the hourly CO₂ mass emission rate (tons/h), in accordance with the applicable provisions in 40 CFR 75.53(g) and (h). The electronic portion of the monitoring plan must be submitted using the ECMPS reporting tool and must be in place prior to reporting emissions data and/or the results of monitoring system certification tests under 40 CFR 60, Subpart TTTTa. The monitoring plan must be updated as necessary. Monitoring plan submittals must be made by the Designated Representative (DR), the Alternate DR, or a delegated agent of the DR (see 40 CFR 60.5555a(d) and (e)). [40 CFR 60.5535a(a)]
- l. The permittee must calculate the average CO₂ emissions rate for the affected EGU at the end of the initial and each subsequent 12-operating-month period. For an affected EGU that commenced commercial operation (as defined in 40 CFR 72.2), the first month of the initial compliance period shall be the first operating month (as defined in 40 CFR 60.5580a) after the calendar month in which emissions reporting is required to begin under 40 CFR 60.5555a(c)(3)(i). The permittee must determine the hourly CO₂ mass emissions in kg from the affected EGU(s) according to 40 CFR 60.5535a(b)(1) through (5), or, if applicable, as provided in 40 CFR 60.5535a(c). [401 KAR 51:017; 40 CFR 60.5525a(a)(1); 40 CFR 60.5525a(c)(1)(i); and 40 CFR 60.5535a(b)]
 - i. The permittee must install, certify, maintain, and calibrate a CO₂ continuous emission monitoring system (CEMS) to directly measure and record hourly average CO₂ concentrations in the affected EGU exhaust gases emitted to the atmosphere, and a flow monitoring system to measure hourly average stack gas flow rates, according to 40 CFR 75.10(a)(3)(i). As an alternative to direct measurement of CO₂ concentration, provided that the EGU does not use carbon separation (e.g., carbon capture and storage), the permittee may use data from a certified oxygen (O₂) monitor to calculate hourly average CO₂ concentrations, in accordance with 40 CFR 75.10(a)(3)(iii). If the permittee measures CO₂ concentration on a dry basis, the permittee must also install, certify, operate, maintain, and calibrate a continuous moisture monitoring system, according to 40 CFR 75.11(b). Alternatively, the permittee may either use an appropriate fuel-specific default moisture value from 40 CFR 75.11(b) or submit a

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- petition to the Administrator under 40 CFR 75.66 for a site-specific default moisture value. [401 KAR 51:017 and 40 CFR 60.5535a(b)(1)]
- ii. For each continuous monitoring system that the permittee uses to determine the CO₂ mass emissions, the permittee must meet the applicable certification and quality assurance procedures in 40 CFR 75.20 and Appendices A and B to 40 CFR part 75. [40 CFR 60.5535a(b)(2)]
 - iii. The permittee must use only unadjusted exhaust gas volumetric flow rates to determine the hourly CO₂ mass emissions rate from the affected EGU; the permittee must not apply the bias adjustment factors described in Section 7.6.5 of Appendix A to 40 CFR part 75 to the exhaust gas flow rate data. [40 CFR 60.5535a(b)(3)]
 - iv. The permittee must select an appropriate reference method to setup (characterize) the flow monitor and to perform the on-going RATAs, in accordance with 40 CFR part 75. If the permittee uses a Type-S pitot tube or a pitot tube assembly for the flow RATAs, the permittee must calibrate the pitot tube or pitot tube assembly; the permittee may not use the 0.84 default Type-S pitot tube coefficient specified in Method 2. [40 CFR 60.5535a(b)(4)]
 - v. Calculate the hourly CO₂ mass emissions (kg) as described in 40 CFR 60.5535a(b)(5)(i) through (iv). Perform this calculation only for “valid operating hours,” as defined in 40 CFR 60.5540a(a)(1). [40 CFR 60.5535a(b)(5)]
 1. Begin with the hourly CO₂ mass emission rate (tons/h), obtained either from Equation F-11 in Appendix F to 40 CFR part 75 (if CO₂ concentration is measured on a wet basis), or by following the procedure in Section 4.2 of Appendix F to 40 CFR part 75 (if CO₂ concentration is measured on a dry basis). [40 CFR 60.5535a(b)(5)(i)]
 2. Next, multiply each hourly CO₂ mass emission rate by the EGU or stack operating time in hours (as defined in 40 CFR 72.2), to convert it to tons of CO₂. [40 CFR 60.5535a(b)(5)(ii)]
 3. Finally, multiply the result from 40 CFR 60.5535a(b)(5)(ii) by 907.2 to convert it from tons of CO₂ to kg. Round off to the nearest kg. [40 CFR 60.5535a(b)(5)(iii)]
 4. The hourly CO₂ tons/h values and EGU (or stack) operating times used to calculate CO₂ mass emissions are required to be recorded under 40 CFR 75.57(e) and must be reported electronically under 40 CFR 75.64(a)(6). The permittee must use these data to calculate the hourly CO₂ mass emissions. [40 CFR 60.5535a(b)(5)(iv)]
 - vi. As an alternative to complying with 40 CFR 60.5535a(b) to demonstrate compliance with the 40 CFR 60, Subpart TTTT CO₂ emission limitations, the permittee may determine the hourly CO₂ mass emissions according to 40 CFR 60.5535a(c)(1) through (4). [40 CFR 60.5535a(c)]

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- m. The permittee must install, calibrate, maintain, and operate a sufficient number of watt meters to continuously measure and record the hourly gross electric output or net electric output, as applicable, from the affected EGU(s). These measurements must be performed using 0.2 class electricity metering instrumentation and calibration procedures as specified under ANSI No. C12.20-2010 (incorporated by reference, see 40 CFR 60.17). [40 CFR 60.5535a(d)(1)]
- n. The permittee must apportion the combined hourly gross or net energy output to the individual affected EGUs according to the fraction of the total steam load and/or direct mechanical energy contributed by each EGU to the electric generator. Alternatively, if the EGUs are identical, the permittee may apportion the combined hourly gross or net electrical load to the individual EGUs according to the fraction of the total heat input contributed by each EGU. The permittee may also elect to develop, demonstrate, and provide information satisfactory to the Administrator on alternate methods to apportion the gross or net energy output. The Administrator may approve such alternate methods for apportioning the gross or net energy output whenever the demonstration ensures accurate estimation of emissions regulated under 40 CFR part 60. [40 CFR 60.5535a(e)]
- o. The permittee must monitor on a continuous basis the oxidation catalyst inlet temperature in order to comply with the operating limitations in Table 2 and as specified in Table 5 of 40 CFR 63, Subpart YYYYY. [40 CFR 63.6125(a)]
- p. The permittee must monitor and record the distillate oil usage daily for all new and existing stationary combustion turbines located at the major source with a non-resettable hour meter to measure the number of hours that distillate oil is fired. [40 CFR 63.6125(d)]
- q. If the permittee is required to use a continuous monitoring system (CMS), the permittee shall develop and implement a CMS quality control program that includes written procedures for CMS according to 40 CFR 63.8(d)(1) through (2). The permittee shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of 40 CFR 63 Subpart YYYYY, to be made available for inspection, upon request, by the Administrator. If the performance evaluation plan is revised, the permittee shall keep previous (i.e., superseded) versions of the performance evaluation plan on record to be made available for inspection, upon request, by the Administrator, for a period of 5 years after each revision to the plan. The program of corrective action should be included in the plan required under 40 CFR 63.8(d)(2). [40 CFR 63.6125(e)]
- r. Except for monitor malfunctions, associated repairs, and required quality assurance or quality control activities (including, as applicable, calibration checks and required zero and span adjustments of the monitoring system), the permittee must conduct all parametric monitoring at all times the stationary combustion turbine is operating. [40 CFR 63.6135(a)]
- s. Do not use data recorded during monitor malfunctions, associated repairs, and required quality assurance or quality control activities for meeting the requirements of 40 CFR 63, Subpart YYYYY, including data averages and calculations. The permittee must use all the data collected during all other periods in assessing the performance of the control device

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or in assessing emissions from the new or reconstructed stationary combustion turbine. [40 CFR 63.6135(b)]

- t. The permittee must continuously monitor the inlet temperature to the catalyst and maintain the 4-hour rolling average of the inlet temperature within the range suggested by the catalyst manufacturer. [40 CFR 63.6140(a) referencing Table 5, Item 1. to 40 CFR 63, Subpart YYYY]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the amount of natural gas combusted (in MMscf) and the amount of fuel oil combusted (in gallons) on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the total number of hours the CTs combust fuel oil on a monthly and 12-month rolling total basis. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of the sulfur content of the ULSFO through supplier certifications or procedures in Appendix D to 40 CFR part 75 for representative fuel sampling data. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain records of the number and duration of startups and shutdowns, the type of startup (cold, warm, or hot), and the type of fuel used. [401 KAR 52:020, Section 10]
- e. The permittee shall maintain records of the following: [401 KAR 51:017 and 401 KAR 52:020, Section 10]
 - i. The manufacturer's specifications for the OxCat and SCR;
 - ii. NO_x emissions (in ppmvd) on a 24-hour basis, excluding startups and shutdowns.
 - iii. CO emissions (in ppmvd) on a 24-hour basis, excluding startups and shutdowns.
 - iv. CO, NO_x, PM/PM₁₀/PM_{2.5}, VOC, CO_{2e} emissions (in tons) on a monthly and 12-month rolling total basis, including startups and shutdowns.
 - v. All adjustments, maintenance, and repairs performed on the air pollution control and monitoring equipment.
 - vi. All CEMS calibration checks for a period of five years.
 - vii. The GCOP plan and any revisions.
- f. The permittee shall maintain records of all readings of the flue gas flow rate, inlet temperature to the OxCat and SCR, ammonia injection rate, and pressure drop across the catalyst. If any of the parameters are outside of the ranges specified by the manufacturer, the permittee shall document corrective actions taken. [401 KAR 52:020, Section 10]

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- g. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems and devices; and all other information required by 40 CFR 60, Subpart A recorded in a permanent form suitable for inspection. [40 CFR 60.7(f)]
- h. The permittee shall comply with the following recordkeeping requirements to demonstrate compliance with the SO₂ emissions standard:
 - i. In order to demonstrate compliance with the SO₂ emissions standard according to 40 CFR 60.4333a(d)(2), the fuel analyses may be performed by either the permittee, a service contractor retained by the permittee, the fuel vendor, or any other qualified agency as determined by the Administrator or delegated authority using the sampling frequency specified in 40 CFR 60.4370a. [40 CFR 60.4360a(a)]
 - ii. In order to demonstrate compliance with the SO₂ emissions standard according to 40 CFR 60.4333a(d)(3), the permittee shall maintain on-site records (such as a current, valid purchase contract, tariff sheet, or transportation contract) documenting that total sulfur content for the fuel combusted in the stationary combustion turbine at all times does not exceed the conditions specified in 40 CFR 60.4372a(b) through (e), as applicable to the stationary combustion turbine. [40 CFR 60.4372a(a)]
 - iii. If the permittee complies with the fuel-based standard, the permittee shall submit fuel records (such as a current, valid purchase contract, tariff sheet, transportation contract, or results of a fuel analysis) to satisfy the requirements of 40 CFR 60.8. [40 CFR 60.4415a(a)]
- i. The permittee shall maintain records of information used to demonstrate compliance with 40 CFR 60 Subpart KKKKa as specified in 40 CFR 60.7. [40 CFR 60.4390a(a)]
- j. The permittee shall maintain concurrent records of the total gross or net energy output and emissions data to demonstrate compliance with 40 CFR 60 Subpart KKKKa using the output-based standard. [40 CFR 60.4390a(d)]
- k. The permittee shall maintain continuous records of the appropriate parameters for any continuous monitoring system installed to demonstrate compliance with 40 CFR 60 Subpart KKKKa. [40 CFR 60.4390a(e)]
- l. The permittee shall maintain records of the results of all fuel analyses or a current, valid purchase contract, tariff sheet, or transportation contract to comply with the fuel-based SO₂ standard for 40 CFR 60 Subpart KKKKa. [40 CFR 60.4390a(f)]
- m. For the initial and each subsequent 12-operating-month rolling average compliance period, the permittee must follow the procedures in 40 CFR 60.5540a(a)(1) through (8) to calculate the CO₂ mass emissions rate for the affected EGU(s) in units of the applicable emissions standard (e.g., either kg/MWh or kg/GJ). The permittee must use the hourly CO₂ mass

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emissions calculated under 40 CFR 60.5535a(b) or (c), as applicable, and either the generating load data from 40 CFR 60.5535a(d)(1) for output-based calculations or the heat input data from 40 CFR 60.5535a(d)(2) for heat-input-based calculations. [40 CFR 60.5540a(a)]

- i. Each compliance period shall include only “valid operating hours” in the compliance period, i.e., operating hours for which: [40 CFR 60.5540a(a)(1)]
 1. “Valid data” (as defined in 40 CFR 60.5580a) are obtained for all of the parameters used to determine the hourly CO₂ mass emissions (kg) and, if a heat input-based standard applies, all the parameters used to determine total heat input for the hour are also obtained; and [40 CFR 60.5540a(a)(1)(i)]
 2. The corresponding hourly gross or net energy output value is also valid data (Note: For hours with no useful output, zero is considered to be a valid value). [40 CFR 60.5540a(a)(1)(ii)]
- ii. The permittee shall exclude operating hours in which: [40 CFR 60.5540a(a)(2)]
 1. The substitute data provisions of 40 CFR 75 are applied for any of the parameters used to determine the hourly CO₂ mass emissions or, if a heat input-based standard applies, for any parameters used to determine the hourly heat input; [40 CFR 60.5540a(a)(2)(i)]
 2. An exceedance of the full-scale range of a continuous emission monitoring system occurs for any of the parameters used to determine the hourly CO₂ mass emissions or, if applicable, to determine the hourly heat input; or [40 CFR 60.5540a(a)(2)(ii)]
 3. The total gross or net energy output ($P_{\text{gross/net}}$) or, if applicable, the total heat input is unavailable. [40 CFR 60.5540a(a)(2)(iii)]
- iii. For each compliance period, at least 95 percent of the operating hours in the compliance period shall be valid operating hours, as defined in 40 CFR 60.5540(a)(1). [40 CFR 60.5540a(a)(3)]
- iv. The permittee must calculate the total CO₂ mass emissions by summing the valid hourly CO₂ mass emissions values from 40 CFR 60.5535a for all of the valid operating hours in the compliance period. [40 CFR 60.5540(a)(4)]
- v. For each valid operating hour of the compliance period that was used in 40 CFR 60.5540a(a)(4) to calculate the total CO₂ mass emissions, the permittee must determine P_{gross} (the corresponding hourly gross energy output in MWh) according to the procedures in 40 CFR 60.5540a(a)(5)(i) and (ii), as appropriate for the type of affected EGU. For an operating hour in which a valid CO₂ mass emissions value is determined according to 40 CFR 60.5540a(a)(1)(i), if there is no gross electrical output, but there is mechanical or useful thermal output, the permittee must determine the gross energy output for that hour. In addition, for an operating hour in which a valid CO₂ mass

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emissions value is determined according to 40 CFR 60.5540a(a)(1)(i), but there is no (i.e., zero) gross electrical, mechanical, or useful thermal output, the permittee must use that hour in the compliance determination. [40 CFR 60.5540a(a)(5)]

1. Calculate P_{gross} for the affected EGU using the following equation. All terms in the equation must be expressed in units of MWh. To convert each hourly energy output (consistent with 40 CFR 60.5520a) value reported under 40 CFR part 75 to MWh, multiply by the corresponding EGU operating time: [40 CFR 60.5540a(a)(5)(i)]

$$P_{gross} = \frac{(Pe)_{ST} + (Pe)_{CT} + (Pe)_{IE} - (Pe)_{FW}}{TDF} + [(Pt)_{PS} + (Pt)_{HR} + (Pt)_{IE}] \quad (\text{Eq. 2})$$

Where:

- P_{gross} = In accordance with 40 CFR 60.5520a, gross energy output of your affected EGU for each valid operating hour (as defined in 40 CFR 60.5540a(a)(1)) in MWh.
- $(Pe)_{ST}$ = Electric energy output plus mechanical energy output (if any) of steam turbines in MWh.
- $(Pe)_{CT}$ = Electric energy output plus mechanical energy output (if any) of stationary combustion turbine(s) in MWh.
- $(Pe)_{IE}$ = Electric energy output plus mechanical energy output (if any) of the affected EGU's integrated equipment that provides electricity or mechanical energy to the affected EGU or auxiliary equipment in MWh.
- $(Pe)_{FW}$ = Electric energy used to power boiler feedwater pumps at steam generating units in MWh.
- $(Pt)_{PS}$ = Useful thermal output of steam (measured relative to standard ambient temperature and pressure (SATP) conditions, as applicable) that is used for applications that do not generate additional electricity, produce mechanical energy output, or enhance the performance of the affected EGU. This is calculated using Equation 3 specified in 40 CFR 60.5540a(a)(5)(ii) in MWh.
- $(Pt)_{HR}$ = Non steam useful thermal output (measured relative to SATP conditions, as applicable) from heat recovery that is used for applications other than steam generation or performance enhancement of the affected EGU in MWh.
- $(Pt)_{IE}$ = Useful thermal output (relative to SATP conditions, as applicable) from any integrated equipment is used for applications that do not generate additional steam, electricity, produce mechanical energy output, or enhance the performance of the affected EGU in MWh.
- TDF = Electric Transmission and Distribution Factor of 0.95 for a combined heat and power affected EGU where at least on an annual basis 20.0 percent of the total gross energy output consists of useful thermal output on a 12-operating-month rolling average basis, or 1.0 for all other affected EGUs.

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2. If applicable to the affected EGU (for example, for combined heat and power), the permittee must calculate $(Pt)_{PS}$ using the following equation: [40 CFR 60.5540a(a)(5)(ii)]

$$(Pt)_{PS} = \frac{Q_m \times H}{CF} \quad (\text{Eq. 3})$$

Where:

- Q_m = Measured useful thermal output in kg and lb for the operating hour.
- H = Enthalpy of the useful thermal output at measured temperature and pressure (relative to SATP conditions or the energy in the condensate return line, as applicable) in Joules per kilogram (J/kg) (or Btu/lb).
- CF = Conversion factor of 3.6×10^9 J/MWh or 3.413×10^6 Btu/MWh.

- vi. Sources complying with energy output-based standards must calculate the total gross energy output for the affected EGU's compliance period by summing the hourly gross energy output values for the affected EGU determined under 40 CFR 60.5540a(a)(5) for all of the valid operating hours in the applicable compliance period. [40 CFR 60.5540a(6) and (6)(i)]
- vii. The permittee shall calculate the CO₂ mass emissions rate for the affected EGUs (kg/MWh) by dividing the total CO₂ mass emissions value by the total gross or net energy output value. Round off the result to two significant figures if the calculated value is less than 1,000; round the result to three significant figures if the calculated value is greater than 1,000. [40 CFR 60.5540a(7)]
- viii. The permittee may exclude CO₂ mass emissions and output generated from the affected EGU from the calculations for hours during which the affected EGU operated during a system emergency, as defined in 40 CFR 60.5580a, if the permittee can provide the information listed in 40 CFR 60.5560a(i). While operating during a system emergency, the CO₂ emission standard is the applicable emission standard for low load combustion turbines. [40 CFR 60.5540a(a)(8) and (a)(8)(i)]
- n. The permittee must maintain records of the information used to demonstrate compliance with 40 CFR 60, Subpart TTTTa as specified in 40 CFR 60.7(b) and (f). [40 CFR 60.5560a(a)]
- o. The permittee must follow the applicable recordkeeping requirements and maintain records as required under 40 CFR 75, Subpart F. [40 CFR 60.5560a(b)(1)]
- p. The permittee must keep records of the calculations performed to determine the hourly and total CO₂ mass emission (tons) for: [40 CFR 60.5560a(c)]
 - i. Each operating month (for all affected EGUs); and [40 CFR 60.5560a(c)(1)]
 - ii. Each compliance period, including, each 12-operating-month compliance period. [40 CFR 60.5560a(c)(2)]

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- q. The permittee must keep records of the applicable data recorded and calculations performed used to determine the affected EGU's gross or net energy output for each operating month. [40 CFR 60.5560a(d)]
- r. The permittee must keep records of the calculations performed to determine the percentage of valid CO₂ mass emission rates in each compliance period. [40 CFR 60.5560a(e)]
- s. The permittee must keep records of the calculations performed to assess compliance with each applicable CO₂ mass emissions standard in Table 1 to 40 CFR 60, Subpart TTTTa. [40 CFR 60.5560a(f)]
- t. The permittee must keep records of the calculations performed to determine any site-specific carbon-based F-factors used in the emissions calculations (if applicable). [40 CFR 60.5560a(g)]
- u. Records required by 40 CFR 60, Subpart TTTTa must be in a form suitable and readily available for expeditious review. [40 CFR 60.5565a(a)]
 - i. The permittee must maintain each record for 5 years after the date of conclusion of each compliance period. [40 CFR 60.5565a(b)]
 - ii. The permittee must maintain each record on site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 60.7. Records that are accessible from a central location by a computer or other means that instantly provide access at the site meet this requirement. The permittee may maintain the records off site for the remaining years as required by 40 CFR 60, Subpart TTTTa. [40 CFR 60.5565a(c)]
- v. The permittee shall keep records as described in 40 CFR 63.6155(a)(1) through (7): [40 CFR 63.6155(a)]
 - i. A copy of each notification and report that the permittee submitted to comply with 40 CFR 63 Subpart YYYY, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv). [40 CFR 63.6155(a)(1)]
 - ii. Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.6155(a)(2)]
 - iii. Records of all maintenance on the air pollution control equipment as required in 40 CFR 63.10(b)(2)(iii). [40 CFR 63.6155(a)(5)]
 - iv. Records of the date, time, and duration of each startup period, recording the periods when the affected source was subject to the standard applicable to startup. [40 CFR 63.6155(a)(6)]
 - v. Records of deviations as follows: [40 CFR 63.6155(a)(7)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

1. Record the number of deviations. For each deviation, record the date, time, cause, and duration of the deviation. [40 CFR 63.6155(a)(7)(i)]
 2. For each deviation, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions. [40 CFR 63.6155(a)(7)(ii)]
 3. Record actions taken to minimize emissions in accordance with 40 CFR 63.6105(c), and any corrective actions taken to return the affected unit to its normal or usual manner of operation. [40 CFR 63.6155(a)(7)(iii)]
- w. The permittee shall keep the records required in 40 CFR 63 Subpart YYYYY, Table 5 to show continuous compliance with each operating limitation that applies to the permittee. [40 CFR 63.6155(c)]
- x. Any records required to be maintained by 40 CFR 63 Subpart YYYYY that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [40 CFR 63.6155(d)]
- y. The permittee shall keep and maintain records regarding 40 CFR 63 Subpart YYYYY according to the following procedures: [401 KAR 52:020, Section 10]
- i. The permittee shall maintain all applicable records in such a manner that they can be readily accessed and are suitable for inspection according to 40 CFR 63.10(b)(1). [40 CFR 63.6160(a)]
 - ii. As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.6160(b)]
 - iii. The permittee shall retain the most recent 2 years of records on site or the records must be accessible on site. Records of the remaining 3 years may be retained off site. [40 CFR 63.6160(c)]

6. Specific Reporting Requirements:

- a. For each stationary combustion turbine required to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content under 40 CFR 60 Subpart KKKKa, the permittee shall submit reports of excess emissions and monitor downtime in accordance with 40 CFR 60.7(c), as defined in 40 CFR 60.4380a for NO_x and 40 CFR 60.4385a for SO₂. Excess emissions shall be reported for all periods of unit operation, including start-up, shutdown, and malfunction. [40 CFR 60.4375a(a)]
- b. The notification requirements of 40 CFR 60.8 apply to the initial and subsequent performance tests. [40 CFR 60.4375a(b)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. Within 60 days after the date of completing each performance test or continuous emissions monitoring systems (CEMS) performance evaluation that includes a relative accuracy test audit (RATA), the permittee shall submit the results following the procedures specified in 40 CFR 60.4375a(g). The permittee shall submit the report in a file format generated using the EPA's Electronic Reporting Tool (ERT). Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) accompanied by the other information required by 40 CFR 60.8(f)(2) in PDF format. [40 CFR 60.4375a(e)]
- d. For reports required under 40 CFR 60.4375a(a), periods of excess emissions and monitor downtime for stationary combustion turbines using a CEMS, excess emissions are reported as specified in 40 CFR 60.4380a(b)(1) and (2). [40 CFR 60.4380a(b)]
 - i. An excess emission that must be reported is any unit operating period in which the 4-operating-hour average NO_x emissions rate, 30-operating-day rolling average NO_x emissions rate, 4-hour mass-based emissions rate, or the 12-calendar-month mass-based emissions rate exceeds the applicable emissions standard in 40 CFR 60.4320a as determined in 40 CFR 60.4350a. [40 CFR 60.4380a(b)(1)]
 - ii. A period of monitor downtime that must be reported is any operating hour in which the data for any of the following parameters that the permittee uses to calculate the emission rate, as applicable, used to determine compliance, are either missing or out-of-control: NO_x concentration, CO₂ or O₂ concentration, stack flow rate, heat input rate, steam flow rate, steam temperature, steam pressure, or megawatts. The permittee is only required to monitor parameters used for compliance purposes. [40 CFR 60.4380a(b)(2)]
- e. For the purposes of 40 CFR 60 Subpart KKKKa reporting, excess SO₂ emissions are defined as any period during which the permittee combusts a fuel that the permittee does not have appropriate fuel records or that fuel contains sulfur greater than the applicable standard. [40 CFR 60.4385a(b)]
- f. All reports required under 40 CFR 60.7(c) must be electronically submitted via CEDRI by the 30th day following the end of each 6-month period. [40 CFR 60.4395a]
- g. The permittee must prepare and submit the notifications specified in 40 CFR 60.7(a)(1) and (3) and 40 CFR 60.19 as applicable to the affected EGU(s) (see 40 CFR 60 Subpart TTTTa, Table 3). [40 CFR 60.5550a(a)]
- h. The permittee must prepare and submit the notifications specified in 40 CFR 75.61 as applicable to the affected EGU(s). [40 CFR 60.5550a(b)]
- i. The permittee must prepare and submit reports according to 40 CFR 60.5555a(a) through (d), as applicable: [40 CFR 60.5555a(a)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. The permittee must submit electronic quarterly reports as follows. After the permittee has accumulated the first 12-operating months for the affected EGU, the permittee must submit a report for the calendar quarter that includes the twelfth operating month no later than 30 days after the end of that quarter. Thereafter, the permittee must submit a report for each subsequent calendar quarter, no later than 30 days after the end of the quarter. [40 CFR 60.5555a(a)(1)]
- ii. In each quarterly report the permittee shall include the following information, as applicable: [40 CFR 60.5555a(a)(2)]
 1. Each rolling average CO₂ mass emissions rate for which the last (twelfth) operating month in a 12-operating-month compliance period falls within the calendar quarter. The permittee shall calculate each average CO₂ mass emissions rate for the compliance period according to the procedures in 40 CFR 60.5540a. The permittee shall report the dates (month and year) of the first and twelfth operating months in each compliance period for which the permittee performed a CO₂ mass emissions rate calculation. If there are no compliance periods that end in the quarter, the permittee shall include a statement to that effect; [40 CFR 60.5555a(a)(2)(i)]
 2. If one or more compliance periods end in the quarter, the permittee shall identify each operating month in the calendar quarter where the EGU violated the applicable CO₂ emission standard; [40 CFR 60.5555a(a)(2)(ii)]
 3. If one or more compliance periods end in the quarter and there are no violations for the affected EGU, the permittee shall include a statement indicating this in the report; [40 CFR 60.5555a(a)(2)(iii)]
 4. The percentage of valid operating hours in each 12-operating-month compliance period described in 40 CFR 60.5555a(a)(1) (*i.e.*, the total number of valid operating hours (as defined in 40 CFR 60.5540a(a)(1)) in that period divided by the total number of operating hours in that period, multiplied by 100 percent); [40 CFR 60.5555a(a)(2)(iv)]
 5. Consistent with 40 CFR 60.5520a, the CO₂ emissions standard (as identified in 40 CFR 60 Subpart TTTTa Table 1) with which the affected EGU shall comply; and [40 CFR 60.5555a(a)(2)(v)]
 6. Consistent with 40 CFR 60.5520a, an indication whether or not the hourly gross or net energy output ($P_{\text{gross/net}}$) values used in the compliance determinations are based solely upon gross electrical load. [40 CFR 60.5555a(a)(2)(vi)]
- iii. In the final quarterly report of each calendar year, the permittee shall include the following: [40 CFR 60.5555a(a)(3)]
 1. Consistent with 40 CFR 60.5520a, gross energy output or net energy output sold to an electric grid, as applicable to the units of the CO₂ emission standard, over the four quarters of the calendar year; and [40 CFR 60.5555a(a)(3)(i)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. The potential electric output of the EGU. [40 CFR 60.5555a(a)(3)(ii)]
- iv. The permittee shall submit all electronic reports required under 40 CFR 60.5555a(a) using the Emissions Collection and Monitoring Plan Systems (ECMPS) provided by the Clean Air Markets Division in the Office of Atmospheric Program of EPA. [40 CFR 60.5555a(b)]
- v. The permittee shall meet all applicable reporting requirements and submit reports as required under 40 CFR 75 Subpart G. [40 CFR 60.5555a(c)(1)]
- vi. The permittee shall begin submitting the quarterly electronic emissions reports described in 40 CFR 60.5555a(c)(1) in accordance with 40 CFR 75.64(a) (i.e., beginning with data recorded on and after the earlier of): [40 CFR 60.5555a(c)(3)(i)]
 1. The date of provisional certification, as defined in 40 CFR 75.20(a)(3), or [40 CFR 60.5555(c)(3)(i)(A)]
 2. 180 days after the date on which the EGU commences commercial operation (as defined in 40 CFR 72.2. [40 CFR 60.5555(c)(3)(i)(B)]
- vii. If any required monitoring system has not been provisionally certified by the applicable date on which emissions data reporting is required to begin under 40 CFR 60.5555a(c)(3), the maximum (or in some cases, minimum) potential value for the parameter measured by the monitoring system shall be reported until the required certification testing is successfully completed, in accordance with 40 CFR 75.4(j), 40 CFR 75.37(b), or 40 CFR 75 Appendix D, Section 2.4 (as applicable). Operating hours in which CO₂ mass emission rates are calculated using maximum potential values are not “valid operating hours” (as defined in 40 CFR 60.5540a(a)(1)), and shall not be used in the compliance determinations under 40 CFR 60.5540a. [40 CFR 60.5555a(c)(4)]
- viii. Reports required to be submitted under 40 CFR 60.5555a(a) and (c)(1) shall be submitted by: [40 CFR 60.5555a(d)]
 1. The person appointed as the Designated Representative (DR) under 40 CFR 72.20; or [40 CFR 60.5555a(d)(1)]
 2. The person appointed as the Alternate Designated Representative (ADR) under 40 CFR 72.22; or [40 CFR 60.5555a(d)(2)]
 3. A person (or persons) authorized by the DR or ADR under 40 CFR 72.26 to make the required submissions [40 CFR 60.5555a(d)(3)].
- j. The permittee must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in 40 CFR 63.6145(f). [40 CFR 63.6130(b)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- k. The permittee must report each instance in which the permittee did not meet each emission limitation or operating limitation. The permittee must also report each instance in which the permittee did not meet the requirements in Table 7 of 40 CFR 63, Subpart YYYY that apply to the permittee. These instances are deviations from the emission and operating limitations in 40 CFR 63, Subpart YYYY. These deviations must be reported according to the requirements in 40 CFR 63.6150. [40 CFR 63.6140(b)]
- l. The permittee shall submit all of the notifications in 40 CFR 63.7(b) and (c), 40 CFR 63.8(e), 40 CFR 63.8(f)(4), and 40 CFR 63.9(b) and (h) that apply to the turbines by the dates specified. [40 CFR 63.6145(a)]
- m. The permittee must submit a notification of intent to conduct an initial performance test at least 60 calendar days before the initial performance test is scheduled to begin as required in 40 CFR 63.7(b)(1). [40 CFR 63.6145(e)]
- n. The permittee must submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For each performance test required to demonstrate compliance with the emission limitation for formaldehyde, the permittee must submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test. [40 CFR 63.6145(f)]
- o. **Compliance Report.** The owner or operator of a stationary combustion turbine which must meet the emission limitation for formaldehyde must submit a semiannual compliance report according to Table 6 of 40 CFR 63 Subpart YYYY. The semiannual compliance report must contain the information described in 40 CFR 63.6150(a)(1) through (5). The semiannual compliance report, including the excess emissions and monitoring system performance reports of 40 CFR 63.10(e)(3), must be submitted by the dates specified in 40 CFR 63.6150(b)(1) through (5), unless the Administrator has approved a different schedule. The permittee must submit all subsequent reports to the EPA following the procedure specified in 40 CFR 63.6150(g). [40 CFR 63.6150(a)]
 - i. Company name and address. [40 CFR 63.6150(a)(1)]
 - ii. Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report. [40 CFR 63.6150(a)(2)]
 - iii. Date of report and beginning and ending dates of the reporting period. [40 CFR 63.6150(a)(3)]
 - iv. Report each deviation in the semiannual compliance report and the information specified in 40 CFR 63.6150(a)(5)(i) through (iv). [40 CFR 63.6150(a)(5)]
 - 1. Report the number of deviations. For each instance, report the start date, start time, duration, and cause of each deviation, and the corrective action taken. [40 CFR 63.6150(a)(5)(i)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. For each deviation, the report must include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, a description of the method used to estimate the emissions. [40 CFR 63.6150(a)(5)(ii)]
3. Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks), as applicable, and the corrective action taken. [40 CFR 63.6150(a)(5)(iii)]
4. Report the total operating time of the affected source during the reporting period. [40 CFR 63.6150(a)(5)(iv)]
- v. Dates of submittal for the semiannual compliance report are provided in 40 CFR 63.6150(b)(1) through (b)(5). [40 CFR 63.6150(b)]
 1. The first semiannual compliance report must cover the period beginning on the compliance date specified in 40 CFR 63.6095 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date specified in 40 CFR 63.6095. [40 CFR 63.6150(b)(1)]
 2. The first semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified in 40 CFR 63.6095. [40 CFR 63.6150(b)(2)]
 3. Each subsequent semiannual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. [40 CFR 63.6150(b)(3)]
 4. Each subsequent semiannual compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [40 CFR 63.6150(b)(4)]
 5. For each stationary combustion turbine that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established the date for submitting annual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in 40 CFR 63.6150(b)(1) through (4). [40 CFR 63.6150(b)(5)]
- vi. Dates of submittal for the annual report are provided in 40 CFR 63.6150(d)(1) through (d)(5). [40 CFR 63.6150(d)]
 1. The first annual report must cover the period beginning on the compliance date specified in 40 CFR 63.6095 and ending on December 31. [40 CFR 63.6150(d)(1)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. The first annual report must be postmarked or delivered no later than January 31. [40 CFR 63.6150(d)(2)]
 3. Each subsequent annual report must cover the annual reporting period from January 1 through December 31. [40 CFR 63.6150(d)(3)]
 4. Each subsequent annual report must be postmarked or delivered no later than January 31. [40 CFR 63.6150(d)(4)]
 5. For each stationary combustion turbine that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established the date for submitting annual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), the permittee may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in 40 CFR 63.6150(d)(1) through (4). [40 CFR 63.6150(d)(5)]
- vii. If the permittee operates a lean premix gas-fired stationary combustion turbine or a diffusion flame gas-fired stationary combustion turbine as defined by 40 CFR 63 Subpart YYYY, and the permittee uses any quantity of distillate oil to fire any new or existing stationary combustion turbine which is located at the same major source, the permittee must submit an annual report according to 40 CFR 63 Subpart YYYY, Table 6 by the date specified unless the Administrator has approved a different schedule, according to the information described in 40 CFR 63.6150(d)(1) through (5). The permittee must report the data specified in 40 CFR 63.6150(e)(1) through (3). The permittee must submit all subsequent reports to the EPA following the procedure specified in 40 CFR 63.6150(g). [40 CFR 63.6150(e)]
1. The number of hours distillate oil was fired by each new or existing stationary combustion turbine during the reporting period. [40 CFR 63.6150(e)(1)]
 2. The operating limits provided in the permittee's federally enforceable permit, and any deviations from these limits. [40 CFR 63.6150(e)(2)]
 3. Any problems or errors suspected with the meters. [40 CFR 63.6150(e)(3)]
- viii. ***Performance test report.*** Within 60 days after the date of completing each performance test required by 40 CFR 63 Subpart YYYY, the permittee shall submit the results of the performance test (as specified in 40 CFR 63.6145(f)) following the procedures specified in 40 CFR 63.6150(f)(1) through (3). [40 CFR 63.6150(f)]
1. ***Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (<https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert>) at the time of the test.*** Submit the results of the performance test to the EPA via the CEDRI, which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The data must be submitted in a file format generated through the use of the EPA's

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

ERT. Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website. [40 CFR 63.6150(f)(1)]

2. ***Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test.*** The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI. [40 CFR 63.6150(f)(2)]
 3. ***Confidential business information (CBI).*** If the permittee claims some of the information submitted under 40 CFR 63.6150(f)(1) is CBI, the permittee must submit a complete file, including information claimed to be CBI, to the EPA. The file must be generated through the use of the EPA's ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described in 40 CFR 63.6150(f)(1). [40 CFR 63.6150(f)(3)]
- ix. If the permittee is required to submit reports following the procedure specified in this paragraph, the permittee must submit reports to the EPA via CEDRI, which can be accessed through the EPA's CDX (<https://cdx.epa.gov/>). The permittee must use the appropriate electronic report template on the CEDRI website (<https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri>) for 40 CFR 63, Subpart YYYY. The date report templates become available will be listed on the CEDRI website. The report must be submitted by the deadline specified in 40 CFR 63, Subpart YYYY, regardless of the method in which the report is submitted. If the permittee claims some of the information required to be submitted via CEDRI is CBI, submit a complete report, including information claimed to be CBI, to the EPA. The report must be generated using the appropriate form on the CEDRI website. Submit the file on a compact disc, flash drive, or other commonly used electronic storage medium and clearly mark the medium as CBI. Mail the electronic medium to U.S. EPA/OAQPS/CORE CBI Office, Attention: Group Leader, Measurement Policy Group, MD C404-02, 4930 Old Page Rd., Durham, NC 27703. The same file with the CBI omitted must be submitted to the EPA via the EPA's CDX as described earlier in this paragraph. [40 CFR 63.6150(g)]
- x. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of EPA system outage for failure to timely comply with the reporting requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in 40 CFR 63.6150(h)(1) through (7). [40 CFR 63.6150(h)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- xi. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of force majeure for failure to timely comply with the reporting requirement. To assert a claim of force majeure, the permittee must meet the requirements outlined in 40 CFR 63.6150(i)(1) through (5). [40 CFR 63.6150(i)]
 - p. See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.
- 7. Specific Control Equipment Operating Conditions:**
- a. The ammonia injection control system shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices. [401 KAR 50:055 and 51:017]
 - b. The permittee shall monitor and maintain records of the temperature and ammonia injection rate for the SCR system. [401 KAR 52:020, Section 10]
 - c. The permittee shall monitor and maintain records of the temperature, pressure drop, and flue gas flow rate for the OxCat. [401 KAR 52:020, Section 10]
 - d. See **Section E – Source Control Equipment Requirements** for further requirements.
- 8. Compliance Certification Requirements:**
Refer to **Section I**.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 21****CCGT Emergency Diesel Generator Engine****Description:**

Model:	TBD
Maximum Rated Output:	1,250 kW (2,220 HP)
Manufacture Date:	2026
Construction Date:	Proposed September 2026
Maximum Continuous Rating:	12.5 MMBtu/hr
Fuel:	Diesel
Maximum Fuel Rate:	113 gal/hr

Emission Unit 22**CCGT Emergency Fire Pump Engine****Description:**

Model:	TBD
Maximum Rated Output:	231 kW (310 HP)
Manufacture Date:	2026
Construction Date:	Proposed September 2026
Maximum Continuous Rating:	0.788 MMBtu/hr
Fuel:	Diesel
Maximum Fuel Rate:	15.9 gal/hr

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (NO_x, CO, VOC, PM/PM₁₀/PM_{2.5} (filterable + condensable), H₂SO₄, and GHG)

401 KAR 60:005, Section 2(2)(dddd), 40 CFR 60.4200 through 60.4219, Tables 1 through 8 (**Subpart III**), *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*

401 KAR 63:002, Section 2(4)(eeee), 40 CFR 63.6580 through 63.6675, Tables 1a through 8, and Appendix A (**Subpart ZZZZ**), *National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines*

1. Operating Limitations:

- a. The permittee shall prepare and maintain for EUs 21 and 22 a good combustion and operations practices plan (GCOP) within 90 days of startup that defines, measures, and verifies the use of operational and design practices determined as BACT for minimizing CO, NO_x, PM/PM₁₀/PM_{2.5}, VOC, H₂SO₄, and GHG emissions. The permittee shall operate according to the provisions of this plan at all times, including periods of startup, shutdown, and malfunction. The plan shall be incorporated into the plant standard operating procedures (SOP) and shall be made available for the Division's inspection. The plan shall include, but not be limited to: [401 KAR 51:017]
 - i. A list of combustion optimization practices and a means of verifying the practices have occurred;
 - ii. A list of combustion and operation practices to be used to lower energy consumption and a means of verifying the practices have occurred; and

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. A list of the design choices determined to be BACT and verification that designs were implemented in the final construction.

Compliance Demonstration Method:

Compliance shall be demonstrated according to 5. **Specific Recordkeeping Requirements**
a.

- b. For EU 21, the permittee does not have to meet the requirements of 40 CFR 63, Subpart ZZZZ and of 40 CFR 63, Subpart A except for the initial notification requirements of 40 CFR 63.6645(f). [40 CFR 63.6590(b)(1) and (b)(1)(i)]
- c. For EU 22, the permittee shall meet the requirements of 40 CFR Part 63 by meeting the requirements of 40 CFR 60, Subpart IIII. No further requirements apply for EU 22 under 40 CFR Part 63. [40 CFR 63.6590(c)(6)]
- d. The permittee shall operate and maintain stationary CI ICE that achieve the emission standards as required in 40 CFR 60.4204 and 60.4205 over the entire life of the engine. [40 CFR 60.4206]
- e. The permittee shall use diesel fuel that meets the requirements of 40 CFR 1090.305 for nonroad diesel fuel. [40 CFR 60.4207(b)]

Compliance Demonstration Method:

The permittee shall demonstrate compliance by using fuel supplier certification.

- f. The permittee shall do all of the following, except as permitted under 40 CFR 60.4211(g): [40 CFR 60.4211(a)]
 - i. Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions; [40 CFR 60.4211(a)(1)]
 - ii. Change only those emission-related settings that are permitted by the manufacturer; and [40 CFR 60.4211(a)(2)]
 - iii. Meet the requirements of 40 CFR Part 1068, as they apply to the permittee. [40 CFR 60.4211(a)(3)]
- g. The permittee shall operate the emergency stationary ICE according to the requirements in CFR 60.4211(f)(1) through (3). In order for the engine to be considered an emergency stationary ICE under 40 CFR 60, Subpart IIII, any operation other than emergency operation, maintenance and testing, and operation in non-emergency situations for 50 hours per year, as described in CFR 60.4211(f)(1) through (3) is prohibited. If the engine is not operated according to the requirements in CFR 60.4211(f)(1) through (3), the engine will not be considered an emergency engine under 40 CFR 60, Subpart IIII and shall meet all requirements for non-emergency engines. [40 CFR 60.4211(f)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- i. There is no time limit on the use of emergency stationary ICE in emergency situations. [40 CFR 60.4211(f)(1)]
- ii. The permittee may operate the emergency stationary ICE for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by 40 CFR 60.4211(f)(3) counts as part of the 100 hours per calendar year. The permittee may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year. [40 CFR 60.4211(f)(2) and (f)(2)(i)]
- iii. Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing provided in 40 CFR 60.4211(f)(2). Except as provided in 40 CFR 60.4211(f)(3)(i), the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity. The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met: [40 CFR 60.4211(f)(3) and (f)(3)(i)]
 1. The engine is dispatched by the local balancing authority or local transmission and distribution system operator; [40 CFR 60.4211(f)(3)(i)(A)]
 2. The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region. [40 CFR 60.4211(f)(3)(i)(B)]
 3. The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines. [40 CFR 60.4211(f)(3)(i)(C)]
 4. The power is provided only to the facility itself or to support the local transmission and distribution system. [40 CFR 60.4211(f)(3)(i)(D)]
 5. The permittee identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine permittee. [40 CFR 60.4211(f)(3)(i)(E)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

2. **Emission Limitations:**

- a. The permittee shall comply with the following emission standards from 40 CFR 60, Subpart IIII as BACT for these units: [401 KAR 51:017 and 40 CFR 60.4205(b) and (c)]

Pollutant	EU 21 Emission Limit	EU 22 Emission Limit
NO _x + NMHC	4.8 g/HP-hr	3.0 g/HP-hr
CO	2.6 g/HP-hr	2.6 g/HP-hr
PM, PM ₁₀ , PM _{2.5}	0.15 g/HP-hr	0.15 g/HP-hr
CO _{2e}	163 lb/MMBtu	163 lb/MMBtu

- b. For EU 21, the permittee shall comply with the Tier 2 or Tier 3 emission standards for new nonroad CI engines for the same rated power as described in 40 CFR 1039 Appendix I, for all pollutants and the smoke standards as specified in 40 CFR 1039.105. [40 CFR 60.4205(b) and 40 CFR 60.4202(a)(2)]
- c. For EU 22, the permittee shall comply with the emission standards in Table 4 to 40 CFR 60, Subpart IIII, for all pollutants: [40 CFR 60.4205(c)]

Compliance Demonstration Method:

- A. Compliance with the 401 KAR 51:017 BACT limits shall be demonstrated according to **1. Operating Limitations** a.
- B. The permittee shall purchase an engine certified to the emission standards in 40 CFR 60.4205(b), as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in 40 CFR 60.4211(g). [40 CFR 60.4211(c)]
- C. If the permittee does not install, configure, operate, and maintain the engines according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall demonstrate compliance as follows: [40 CFR 60.4211(g)]
- I. The permittee shall keep a maintenance plan and records of conducted maintenance and shall, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, the permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. [40 CFR 60.4211(g)(2) and (g)(3)]
- II. For EU 21, the permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable standards. [40 CFR 60.4211(g)(3)]
- III. See **3. Testing Requirements** (a).

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**3. Testing Requirements:**

- a. If required to demonstrate compliance, the permittee shall conduct performance tests pursuant to the requirements of 40 CFR 60.4212(a) through (e). [40 CFR 60.4212]
- b. Performance testing shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall install a non-resettable hour meter prior to startup of the emergency engine. [40 CFR 60.4209(a)]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the following: [401 KAR 52:020, Section 10]
 - i. Hours of operation for each engine on a monthly basis;
 - ii. The manufacturer's certified emissions certificate, manufacturer's written operating instructions, and any procedures developed by the owner or operator that are approved by the engine manufacturer, over the life of the engine; and
 - iii. GCOP plan and any revisions to it.
- b. If the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the permittee must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The permittee must record the time of operation of the engine and the reason the engine was in operation during that time. [40 CFR 60.4214(b)]
- c. If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the permittee must keep records of any corrective action taken after the backpressure monitor has notified the permittee that the high backpressure limit of the engine is approached. [40 CFR 60.4214(c)]

6. Specific Reporting Requirements:

- a. For EU 21, the permittee shall submit an initial notification not later than 120 days after the engine becomes subject to 40 CFR 63, Subpart ZZZZ. The permittee shall submit the notification electronically in PDF consistent with 40 CFR 63.9(k). The notification should include the information in 40 CFR 63.9(b)(2)(i) through (v), and a statement that the stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE with a site rating of more than 500 brake HP located at a major source of HAP emissions.) [40 CFR 63.6645(c) and 40 CFR 63.6645(f)]
- b. If the permittee operates an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates for the purpose specified in 40 CFR 60.4211(f)(3)(i), the permittee must submit an annual report according to the requirements in 40 CFR 60.4214(d)(1) through (3). [40 CFR 60.4214(d)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. Within 60 days after the date of completing each performance test required by 40 CFR 60, Subpart IIII, the permittee must submit the results of the performance test required following the procedures specified in 40 CFR 60.4214(f)(1) and (2). [40 CFR 60.4214(f)]
- d. If the permittee is required to submit notifications or reports following the procedure specified in 40 CFR 60.4214(g), the permittee must submit notifications or reports to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), which can be accessed through the EPA's Central Data Exchange (CDX) (<https://cdx.epa.gov/>). The EPA will make all the information submitted through CEDRI available to the public without further notice to the permittee. Do not use CEDRI to submit information claimed as CBI. [40 CFR 60.4214(g)]
- e. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of EPA system outage for failure to timely comply with that reporting requirement. To assert a claim of EPA system outage, the permittee must meet the requirements outlined in 40 CFR 60.4214(h)(1) through (7). [40 CFR 60.4214(h)]
- f. If the permittee is required to electronically submit a report through CEDRI in the EPA's CDX, the permittee may assert a claim of force majeure for failure to timely comply with that reporting requirement. To assert a claim of force majeure, the permittee must meet the requirements outlined in 40 CFR 60.4214(i)(1) through (5). [40 CFR 60.4214(i)]
- g. Any records required to be maintained by 40 CFR 60, Subpart IIII that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [40 CFR 60.4214(j)]
- h. See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 25****CCGT 9-Cell Mechanical Draft Cooling Tower****Description:**

Maximum Circulating Water Flow Rate: 165,800 gal/min
Control Device: Drift Eliminators
Construction Date: Proposed September 2026

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (PM/PM₁₀/PM_{2.5} (filterable + condensable))

401 KAR 59:010, *New process operations*

PRECLUDED REGULATION:

401 KAR 63:002, Section 2(4)(j), 40 C.F.R. 63.400 through 63.407, Table 1 (**Subpart Q**), *National Emission Standards for Hazardous Air Pollutants for Industrial Process Cooling Towers*

1. Operating Limitations:

- a. The permittee shall minimize emissions of PM/PM₁₀/PM_{2.5} through the use of drift eliminators certified by the manufacturer to have a 0.0005% drift loss or less. The cooling tower shall be operated and maintained according to the manufacturer's specifications and recommendations at all times. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance with the BACT limitation shall be demonstrated according to **5. Specific Recordkeeping Requirements** b. and d.

- b. The permittee shall not exceed a water flow rate of 165,800 gpm and a TDS concentration of 2,500 ppm. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** and **5. Specific Recordkeeping Requirements** a.

- c. The use of chromium-based water treatment chemicals in the cooling tower is prohibited. [To preclude 40 CFR 63, Subpart Q]

Compliance Demonstration Method:

Compliance with the cooling tower water treatment shall be demonstrated according to **5. Specific Recordkeeping Requirements** c.

2. Emission Limitations:

- a. The permittee shall not allow emissions to exceed the limits in the following table: [401 KAR 51:017 BACT]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Pollutant	Emission Limit	Averaging Period
PM	1.04 lb/hr	Hourly
	4.54 tpy	12-month rolling
PM ₁₀	0.13 lb/hr	Hourly
	0.59 tpy	12-month rolling
PM _{2.5}	1.3×10^{-3} lb/hr	Hourly
	5.5×10^{-3} tpy	12-month rolling

Compliance Demonstration Method:

Compliance shall be demonstrated according to **1. Operating Limitations** b., **4. Specific Monitoring Requirements**, **5. Specific Recordkeeping Requirements** a., and **7. Specific Control Equipment Operating Conditions**.

- b. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]
- c. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
 - i. For process weight rates ≤ 0.50 ton/hour: $E = 2.34$
 - ii. For process weight rates > 0.50 ton/hr and ≤ 30 tons/hr: $E = 3.59P^{0.62}$
 - iii. For process weight rates > 30 tons/hr: $E = 17.31P^{0.16}$

Where: E = rate of emission in lb/hr, and
P = process weight rate in tons/hr.

Compliance Demonstration Method:

The permittee is assumed to be in compliance with the applicable 401 KAR 59:010 opacity and PM emission limitations while the cooling towers are operated and maintained in accordance with the manufacturer's specifications and recommendations.

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1, and 401 KAR 59:005, Section 2(2)]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the amount of water used (in gallons) and hours of operation on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall monitor the TDS (in ppm) of the circulating water on an annual basis to ensure compliance with the BACT emission limits. [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**5. Specific Recordkeeping Requirements:**

- a. The permittee shall maintain records of the amount of water used (in gallons) and hours of operation on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the TDS (in ppm) in the circulating water on an annual basis to ensure compliance with the BACT emission limits. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of the manufacturer's design of the cooling towers and drift eliminators, including drift loss rate. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain records, such as safety data sheets, documenting that chromium-based water treatment chemicals are not purchased or utilized. [401 KAR 52:020, Section 10]
- e. The permittee shall maintain records regarding the maintenance of the drift eliminators. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

7. Specific Control Equipment Operating Conditions:

- a. The drift eliminators for the cooling tower shall be operated to maintain compliance with permitted emission limitations, consistent with manufacturer's specifications and standard operating practices. [401 KAR 50:055]
- b. See **Section E – Source Control Equipment Requirements** for additional requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 26A Fuel Oil Storage Tank #1

Emission Unit 26B Fuel Oil Storage Tank #2

Emission Unit 27 Emergency Generator Diesel Storage Tank

Emission Unit 28 Fire Pump Diesel Storage Tank

Description:

Emission Unit:	Description:	Maximum Capacity	Maximum Throughput	Proposed Construction Date
26A	ULSFO Tank Supporting EU 18	1.66 MMgal	19.065 Mgal/hr	September 2026
26B	ULSFO Tank Supporting EU 19	1.66 MMgal	19.065 Mgal/hr	September 2026
27	Diesel Tank for EU 21	1,000 gallon	113 gal/hr	September 2026
28	Diesel Tank for EU 22	350 gallon	15.9 gal/hr	September 2026

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality (VOC)*

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

1. Operating Limitations:

For EU 26A and 26B, the permittee shall install and operate a submerged fill pipe and overfill/spill protection in each tank as BACT for these units. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** a.

2. Emission Limitations:

Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. No owner or operator shall allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

Based upon the emission rates of toxics and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

3. Testing Requirements:

Testing shall be conducted at such times as may be requested by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of fuel received (in gallons) on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the amount of fuel received (in gallons) on a monthly basis. [401 KAR 52:020, Section 10]
- b. For EU 26A and 26B, the permittee shall maintain records of the installation of submerged fill pipe and overfill/spill protection in each tank. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 29A Natural Gas-Fired HVAC Heaters****Description:**

Three HVAC Heaters > 1 MMBtu/hr

Primary Fuel: Natural Gas

Maximum Continuous Rating: 3.9 MMBtu/hr, each (11.7 MMBtu/hr, total)

Construction Commenced: Proposed September 2026

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (NO_x, CO, VOC, PM/PM₁₀/PM_{2.5} (filterable + condensable), H₂SO₄, and GHG)

401 KAR 59:015, *New indirect heat exchangers*

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

1. Operating Limitations:

- a. The permittee shall prepare and maintain for EUs 29A a good combustion and operations practices plan (GCOP) within 90 days of startup that defines, measures, and verifies the use of operational and design practices determined as BACT for minimizing CO, NO_x, PM/PM₁₀/PM_{2.5}, VOC, H₂SO₄, and GHG emissions. The permittee shall operate according to the provisions of this plan at all times, including periods of startup, shutdown, and malfunction. The plan shall be incorporated into the plant standard operating procedures (SOP) and shall be made available for the Division's inspection. The plan shall include but not be limited to: [401 KAR 51:017]
 - i. A list of combustion optimization practices and a means of verifying the practices have occurred;
 - ii. A list of combustion and operation practices to be used to lower energy consumption and a means of verifying the practices have occurred; and
 - iii. A list of the design choices determined to be BACT and verification that designs were implemented in the final construction.

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements**

- b. The permittee shall utilize natural gas with a maximum sulfur content of 0.5 gr/100 scf to control emissions of H₂SO₄ and PM/PM₁₀/PM_{2.5} (filterable + condensable). [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **Section D – Source Emission Limitations And Testing Requirements**

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. During a startup period or shutdown period, the permittee shall comply with the work practice standards established in 401 KAR 59:015, Section 7. [401 KAR 59:015, Section 7]
- i. The permittee shall comply with 401 KAR 50:055, Section 2(5); [401 KAR 59:015, Section 7(1)(a)]
- ii. The frequency and duration of startup periods or shutdown periods shall be minimized by the affected facility; [401 KAR 59:015, Section 7(1)(b)]
- iii. All reasonable steps shall be taken by the permittee to minimize the impact of emissions on ambient air quality from the affected facility during startup periods and shutdown periods; [401 KAR 59:015, Section 7(1)(c)]
- iv. The actions, including duration of the startup period, of the permittee during startup and shutdown periods, shall be documented in signed, contemporaneous logs or other relevant evidence; [401 KAR 59:015, Section 7(1)(d)]
- v. Startups and shutdowns shall be conducted according to either: [401 KAR 59:015, Section 7(1)(e)]
1. The manufacturer's recommended procedures; or [401 KAR 59:015, Section 7(1)(e)1.]
2. Recommended procedures for a unit of similar design, for which manufacturer's recommended procedures are available, as approved by the cabinet based on documentation provided by the permittee. [401 KAR 59:015, Section 7(1)(e)2.]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** c.

2. Emission Limitations:

- a. The permittee shall not allow emissions of NO_x, CO, VOC, PM/PM₁₀/PM_{2.5} (filterable + condensable), and CO_{2e} to exceed the limits in the following table: [401 KAR 51:017]

Pollutant	Emission Limit
NO _x	0.1 lb/MMBtu
CO	0.082 lb/MMBtu
VOC	0.005 lb/MMBtu
PM/PM ₁₀ /PM _{2.5} (filterable + condensable)	0.003 lb/MMBtu
CO _{2e}	117.1 lb/MMBtu

Compliance Demonstration Methods:

Compliance shall be demonstrated according to **1. Operating Limitations** a. and b.

- b. The permittee shall not cause emissions of particulate matter in excess of 0.10 lb/MMBtu actual heat input. [401 KAR 59:015, Section 4(1)(b)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. The permittee shall not cause emissions of particulate matter in excess of 20 percent opacity, except: [401 KAR 59:015, Section 4(2)]
 - i. A maximum of 27 percent opacity shall be allowed for one 6-minute period in any 60 consecutive minutes; and [401 KAR 59:015, Section 4(2)(a)]
 - ii. For emissions from an affected facility caused by building a new fire, emissions during the period required to bring the boiler up to operating conditions shall be allowed, if the method used is recommended by the manufacturer and the time does not exceed the manufacturer's recommendations. [401 KAR 59:015, Section 4(2)(c)]
- d. The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 0.8 lb/MMBtu actual heat input. [401 KAR 59:015, Section 5(1)(b)1.]

Compliance Demonstration Method:

Compliance with the applicable 401 KAR 59:015 PM, opacity, and SO₂ emission standards is assumed while combusting natural gas. [401 KAR 50:045, Section 4(3)(c)1.]

- e. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

Based upon the emission rates of toxic and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1, and 401 KAR 59:005, Section 2(2)]

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of natural gas combusted (in MMscf) on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the amount of natural gas combusted (in MMscf) on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the GCOP plan and any revisions to it. [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. The permittee shall keep records of the manufacturer's recommended procedures for startup and shutdown, any instance in which the recommended procedures were not followed, and any corrective action taken. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 29B and 29C

Small Natural Gas-Fired HVAC Heaters

Description:

Emission Unit	Description	Primary Fuel	Maximum Continuous Rating	Construction Date
29B	Four HVAC Heaters ≤ 1 MMBtu/hr	Natural Gas	0.06 MMBtu/hr, each (0.24 MMBtu/hr, total)	Proposed September 2026
29C	Three HVAC Heaters ≤ 1 MMBtu/hr	Natural Gas	0.36 MMBtu/hr, each (1.08 MMBtu/hr, total)	Proposed September 2026

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (NO_x, CO, VOC, PM/PM₁₀/PM_{2.5} (filterable + condensable), H₂SO₄, and GHG)

401 KAR 59:010, *New process operations*

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

1. Operating Limitations:

- a. The permittee shall prepare and maintain for EUs 29B and 29C a good combustion and operations practices plan (GCOP) within 90 days of startup that defines, measures, and verifies the use of operational and design practices determined as BACT for minimizing CO, NO_x, PM/PM₁₀/PM_{2.5}, VOC, H₂SO₄, and GHG emissions. The permittee shall operate according to the provisions of this plan at all times, including periods of startup, shutdown, and malfunction. The plan shall be incorporated into the plant standard operating procedures (SOP) and shall be made available for the Division's inspection. The plan shall include but not be limited to: [401 KAR 51:017]
 - i. A list of combustion optimization practices and a means of verifying the practices have occurred;
 - ii. A list of combustion and operation practices to be used to lower energy consumption and a means of verifying the practices have occurred; and
 - iii. A list of the design choices determined to be BACT and verification that designs were implemented in the final construction.

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements**

- b. The permittee shall utilize natural gas with a maximum sulfur content of 0.5 gr/100 scf to control emissions of H₂SO₄ and PM/PM₁₀/PM_{2.5} (filterable + condensable) [401 KAR 51:017]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Compliance Demonstration Method:

Compliance shall be demonstrated according to **Section D – Source Emission Limitations And Testing Requirements**

2. **Emission Limitations:**

- a. The permittee shall not allow emissions of NO_x, CO, VOC, PM/PM₁₀/PM_{2.5} (filterable + condensable) and CO_{2e} to exceed the limits in the following table: [401 KAR 51:017]

Pollutant	Emission Limit (lb/MMbtu) on a 3-hour block average
NO _x	0.1
CO	0.082
VOC	0.005
PM (filterable)	0.003
PM ₁₀ (filterable + condensable)	0.003
PM _{2.5} (filterable + condensable)	0.003
CO _{2e}	117.1

Compliance Demonstration Method:

Compliance shall be demonstrated according to 1. **Operating Limitations** a. and b.

- b. The permittee shall not cause, suffer, allow, or permit any continuous emission into the open air from a control device or stack associated with any affected facility which is equal to or greater than twenty (20) percent opacity. [401 KAR 59:010, Section 3(1)(a)]

Compliance Demonstration Method:

Compliance with the 401 KAR 59:010 opacity standard is assumed.

- c. For emissions from a control device or stack, the permittee shall not cause, suffer, allow or permit the emission into the open air of particulate matter from any affected facility which is in excess of the quantity specified in 401 KAR 59:010, Appendix A: [401 KAR 59:010, Section 3(2)]
- i. For process weight rates ≤ 0.50 ton/hour: $E = 2.34$
- ii. For process weight rates > 0.50 ton/hr and ≤ 30 tons/hr: $E = 3.59P^{0.62}$
- iii. For process weight rates > 30 tons/hr: $E = 17.31P^{0.16}$

Where: E = rate of emission in lb/hr, and
P = process weight rate in tons/hr.

Compliance Demonstration Method:

Compliance with the 401 KAR 59:010 mass emission standard is assumed.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- d. Persons responsible for a source from which hazardous matter or toxic substances may be emitted shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

Based upon the emission rates of toxic and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1, and 401 KAR 59:005, Section 2(2)]

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of natural gas combusted (in MMscf) on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the amount of natural gas combusted (in MMscf) on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of the GCOP plan and any revisions to it. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 30****3 Turbine Circuit Breakers****Description:**

Three (3) 20 kV Turbine Circuit Breakers

Maximum Capacity: 30 lb SF₆, each

Construction Commenced: Proposed September 2026

Emission Unit 31**12 Switchyard/Station Circuit Breakers****Description:**

Twelve (12) 170 kV Switchyard/Station Circuit Breakers with 58 lb SF₆, each

Maximum Capacity: 58 lb SF₆, each

Construction Date: Proposed September 2026

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (GHG)

1. Operating Limitations:

The permittee shall install and operate circuit breakers with a leak detection system for SF₆ as BACT for this unit. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** a.

2. Emission Limitations:

The annual leakage rate of SF₆ shall not exceed 0.5 percent by weight. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance with the annual SF₆ leakage emission limitation shall be demonstrated according to **4. Specific Monitoring Requirements** a. and **5. Specific Recordkeeping Requirements** a.

3. Testing Requirements:

Performance testing shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall install and monitor the leak detection alarms at all times of operation. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records showing the circuit breakers are designed and installed with an annual leak rate less than or equal to 0.5% SF₆ by weight. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain records of inspections and maintenance of the circuit breakers and SF₆ leak detection system. [401 KAR 52:020, Section 10]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- c. The permittee shall maintain records of any leak(s) detected, including the date a leak was identified, location of the leak, date corrective action was taken, and description of the corrective action taken. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 32 CCGT Haul Roads****Description:**

Plant Paved Roadways for the CCGT (EUs 18 and 19)

Control Device: Wet suppression as needed

Construction Date: Proposed 7/1/2026

Emission Unit 35 Coal Storage and Handling Operations for Coal Stockpile #2**Description:**

Truck unloading, coal stockpile, and yard area

Maximum Continuous Rating: 300 tons/hr

Maximum Annual Rating: 463,566 tpy upon the Commercial Operation Date of the Co-fire Project (See **Section D – Source Emission Limitations And Testing Requirements**)

Control Device: Water spray/additives to reduce fugitive emissions

Construction Date: Proposed September 2026

APPLICABLE REGULATIONS:**401 KAR 51:017**, *Prevention of significant deterioration of air quality* (PM/PM₁₀/PM_{2.5} (filterable + condensable))**401 KAR 63:010**, *Fugitive emissions***1. Operating Limitations:**

- a. To ensure emissions are minimized, the permittee shall employ a combination of the following to control fugitive dust emissions as outlined in a dust control plan: surface improvements (pavement), speed limit signage, watering (good work practice), and/or other control methods (dust suppression systems, good housekeeping practices, etc.) as needed. [401 KAR 51:017]

Compliance Demonstration Method:Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements**
b.

- b. A person shall not cause, suffer, or allow any material to be handled, processed, transported, or stored; a building or its appurtenances to be constructed, altered, repaired, or demolished; or a road to be used without taking reasonable precaution to prevent particulate matter from becoming airborne. Reasonable precautions shall include, as applicable: [401 KAR 63:010, Section 3(1)]
 - i. Use if possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the grading of roads or the clearing of land; [401 KAR 63:010, Section 3(1)(a)]
 - ii. Application and maintenance of asphalt, oil, water, or suitable chemicals on roads, materials stockpiles, and other surfaces that can create airborne dusts; [401 KAR 63:010, Section 3(1)(b)]

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

- iii. Covering, at all times while in motion, open bodied trucks transporting materials likely to become airborne; [401 KAR 63:010, Section 3(1)(d)]
- iv. The maintenance of paved roadways in a clean condition; or [401 KAR 63:010, Section 3(1)(e)]
- v. The prompt removal of earth or other material from a paved street to which earth or other material has been transported by trucking or earth moving equipment or erosion by water. [401 KAR 63:010, Section 3(1)(f)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** b. and **5. Specific Recordkeeping Requirements** c.

- c. If dust, fumes, gases, mist, odorous matter, vapors, or any combination thereof escape from a building or equipment in such a manner and amount as to cause a nuisance or to violate any administrative regulation, the secretary may, based on the cause, type, or amount of a fugitive emission, order that the building or equipment in which processing, handling and storage are done be tightly closed and ventilated in such a way that all air and gases and air or gas borne material leaving the building or equipment are treated by removal or destruction of air contaminants before discharge to the open air. [401 KAR 63:010, Section 3(3)]
- d. At all times when in motion, open bodied trucks, operating outside company property, transporting materials likely to become airborne shall be covered. [401 KAR 63:010, Section 4(1)]
- e. A person shall not cause, suffer, or allow earth or other material being transported by truck or earth moving equipment to be deposited onto a paved street or roadway. [401 KAR 63:010, Section 4(3)]

2. Emission Limitations:

The permittee shall not cause, suffer, or allow visible fugitive dust emissions beyond the lot line of the property on which the emissions originate, as determined by Reference Method 22 of Appendix A in 40 C.F.R. Part 60, for: [401 KAR 63:010, Section 3(2)].

- a. More than five (5) minutes of emission time during any sixty (60) minute observation period; or [401 KAR 63:010, Section 3(2)(a)]
- b. More than twenty (20) minutes of emission time during any twenty-four (24) hour period. [401 KAR 63:010, Section 3(2)(b)]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **4. Specific Monitoring Requirements** c. and **5. Specific Recordkeeping Requirements** d.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**3. Testing Requirements:**

Performance testing shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

- a. The permittee shall monitor the haul road usage (in VMT) on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall monitor the reasonable precautions taken to prevent particulate matter from becoming airborne on a daily basis [401 KAR 52:020, Section 10].
- c. If fugitive dust emissions beyond the lot line of the property are observed, the permittee shall conduct U.S. EPA Reference Method 22 (visual determination of fugitive emissions) observations per Appendix A of 40 CFR Part 60 Appendix A. In lieu of conducting U.S. EPA Reference Method 22, the permittee shall immediately perform a corrective action which results in no visible fugitive dust emissions beyond the lot line of the property. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the haul road usage (in VMT) on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain a copy of the dust control plan on site and readily available for the Division's review. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain a log of the reasonable precautions taken to prevent particulate matter from becoming airborne, on a daily basis. Notation of the operating status, down-time, or relevant weather conditions are acceptable for entry to the log. [401 KAR 52:020, Section 10]
- d. The permittee shall maintain a log of the following: [401 KAR 52:020, Section 10]
 - i. Qualitative fugitive emissions observations conducted, including the date, time, initials of observer, and whether any fugitive dust emissions were observed;
 - ii. Any U.S. EPA Reference Method 22 performed and field records identified in Reference Method 22; and
 - iii. Any corrective action taken and the results.

6. Specific Reporting Requirements:

See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

Emission Unit 33

Natural Gas Piping Fugitives

Description:

Natural gas piping components to provide the requisite fuel for the CCGT and Co-fire Projects, as defined in **Section D – Source Emission Limitations and Testing Requirements**.

Construction Date: Proposed September 2026

Piping Component Type	Component Count		
	CCGT	Unit 2 Co-Fire	Total Components
Valves	200	470	670
Relief Valves	16	5	21
Flanges	280	1700	1980
Sampling Connections	2	0	2

NOTE - The natural gas fugitive piping component count listed above reflects an estimated count of the equipment added as part of the CCGT and Co-fire Projects (See **Section D.**) as of the date of issuance of this permit V-26-012 but is not intended to limit the permittee to the exact numbers specified. The permittee may add or remove natural gas fugitive piping components without a permit revision as long as the equipment continues to comply with the applicable requirements listed below and the changes do not result in a significant increase in the potential to emit.

APPLICABLE REGULATIONS:

401 KAR 51:017, *Prevention of significant deterioration of air quality* (VOC and GHG)

STATE-ORIGIN REQUIREMENTS:

401 KAR 63:020, *Potentially hazardous matter or toxic substances*

1. Operating Limitations:

- a. The permittee shall implement an audio/visual/olfactory (AVO) leak detection program for the purpose of detecting leaks of natural gas as BACT. The plan shall be incorporated into the plant's standard operating procedures and shall be made available for the Division's inspection. [401 KAR 51:017]
- b. The permittee shall repair each identified source of leaks of natural gas leaks as soon as practicable, but no later than fifteen (15) calendar days after identification of a leak of natural gas. If repairs cannot be completed within 15 calendar days, the permittee shall notify the Division as soon as practicable to request additional time to complete the repairs. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** a. and **6. Specific Reporting Requirements** a.

2. Emission Limitations:

The permittee shall provide the utmost care and consideration, in the handling of these materials, to the potentially harmful effects of the emissions resulting from such activities. The permittee shall not allow any affected facility to emit potentially hazardous matter or toxic substances in

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)

such quantities or duration as to be harmful to the health and welfare of humans, animals and plants. Evaluation of such facilities as to adequacy of controls and/or procedures and emission potential will be made on an individual basis by the Cabinet. [401 KAR 63:020, Section 3]

Compliance Demonstration Method:

Based upon the emission rates of toxic and hazardous air pollutants determined by the Cabinet using information provided in the application and supplemental information submitted by the source, the Cabinet determines the affected facility to be in compliance with 401 KAR 63:020.

3. Testing Requirements:

Performance testing using the reference methods specified in 401 KAR 50:015 shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall monitor all natural gas piping components for leaks using an AVO leak detection program no less frequently than once per month. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain a copy of the AVO plan as well as any revisions to the plan. [401 KAR 51:017]
- b. The permittee shall maintain records of leaks detected as a result of the AVO leak detection program including, but not limited to, the date the leak was identified, location of the leak, date corrective action was taken, and description of the corrective action taken. [401 KAR 52:020, Section 10]
- c. The permittee shall maintain records of the number of natural gas piping components (valves, connectors, pressure relief valves, and sampling connections) added to the facility as part of the Co-fire and CCGT Projects. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

- a. The permittee shall submit a copy of the AVO plan to be approved by the Division no later than 180 days after the Commercial Operation Date of the Co-Fire Project (See **Section D – Source Emission Limitations And Testing Requirements**). [401 KAR 52:020, Section 10]
- b. The permittee shall include, in the semi-annual monitoring report, any time leaks were identified as a result of the AVO leak detection program, including, but not limited to, the date the leak was identified, location of the leak, date corrective action was taken, and description of the corrective action taken. [401 KAR 52:020, Section 10]
- c. See **Section F – Monitoring, Recordkeeping, and Reporting Requirements** for general reporting requirements.

SECTION B - EMISSION POINTS, EMISSION UNITS, APPLICABLE REGULATIONS, AND OPERATING CONDITIONS (CONTINUED)**Emission Unit 34****Sulfuric Acid Tank****Description:**Aqueous sulfuric acid (93wt% H₂SO₄) storage tank

Maximum Capacity: 3,000 gallons

Construction Date: Proposed September 2026

APPLICABLE REGULATIONS:**401 KAR 51:017**, *Prevention of significant deterioration of air quality* (H₂SO₄)**1. Operating Limitations:**

The permittee shall follow the manufacturer's recommended procedures for filling, storing, and emptying the sulfuric acid storage tank for BACT. [401 KAR 51:017]

Compliance Demonstration Method:

Compliance shall be demonstrated according to **5. Specific Recordkeeping Requirements** b.

2. Emission Limitations:

N/A

3. Testing Requirements:

Performance testing shall be conducted if required by the Cabinet. [401 KAR 50:045, Section 1]

4. Specific Monitoring Requirements:

The permittee shall monitor the amount of sulfuric acid stored (in gallons) on a monthly basis. [401 KAR 52:020, Section 10]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain records of the amount of sulfuric acid stored (in gallons) on a monthly basis. [401 KAR 52:020, Section 10]
- b. The permittee shall maintain on site and ready for expeditious review, the manufacturer's recommended procedures for filling, storing, and emptying the sulfuric acid storage tank. [401 KAR 52:020, Section 10]

6. Specific Reporting Requirements:

See **Section F –Monitoring, Recordkeeping and Reporting Requirements** for general reporting requirements.

SECTION C - INSIGNIFICANT ACTIVITIES

The following listed activities have been determined to be insignificant activities for this source pursuant to 401 KAR 52:020, Section 6. Although these activities are designated as insignificant the permittee must comply with the applicable regulation. Process and emission control equipment at each insignificant activity subject to an opacity standard shall be inspected monthly and a qualitative visible emissions evaluation made. Results of the inspection, evaluation, and any corrective action shall be recorded in a log.

<u>Description</u>	<u>Generally Applicable Regulation</u>
1. Storage vessels containing petroleum or organic liquids with a capacity of less than 10,567 gallons, providing: (a) the vapor pressure of the stored liquid is less than 1.5 psia at storage temperature, or (b) vessels greater than 580 gallons with stored liquids having greater than 1.5 psia vapor pressure are equipped with a permanent submerged fill pipe.	N/A
2. Storage vessels containing inorganic aqueous liquids, except inorganic acids with boiling points below the maximum storage temperature at atmospheric pressure.	N/A
3. #2 oil-fired space heaters or ovens rated at less than 2 MMBtu/hr actual heat input, provided the maximum sulfur content is less than 0.5% by weight.	N/A
4. Machining of metals, providing total solvent usage at the source for this activity does not exceed 60 gallons per month.	N/A
5. Volatile organic compound and hazardous air pollutant storage containers, as follows: a. Tanks, less than 1,000 gallons, and throughput less than 12,000 gallons per year. b. Lubricating oils, hydraulic oils, machining oils, and machining fluids.	N/A
6. Machining where an aqueous cutting coolant continuously floods matching interface.	N/A
7. Degreasing operations, using less than 145 gallons per year.	N/A
8. Maintenance equipment, not emitting HAPS: Brazing, cutting torches, soldering, welding	N/A
9. Underground conveyors	401 KAR 63:010
10. Coal bunker and coal scale exhausts	401 KAR 63:010
11. Blowdown (sight glass, boiler, compressor, pump, cooling tower).	N/A
12. On-site fire and emergency response training	
13. Grinding and machining operations vented through fabric filters, scrubbers, mist eliminators, or electrostatic precipitators (e.g. deburring, buffing, polishing, abrasive blasting, pneumatic conveying, woodworking).	401 KAR 63:010
14. Vents from ash transport systems not operated at positive pressure.	N/A

SECTION C - INSIGNIFICANT ACTIVITIES (CONTINUED)

<u>Description</u>	<u>Generally Applicable Regulation</u>
15. Wastewater treatment (for stream less than 1% oil and grease)	
16. Sanitary sewage treatment	N/A
17. Heat exchanger cleaning and repair	N/A
18. Equipment used exclusively for forging, pressing, drawing, stamping, spinning, or extruding metals. This does not include emissions due to quenching activities.	N/A
19. Repair and maintenance of ESP, fabric filters, etc.	N/A
20. Ash handling, ash pond, and ash pond maintenance	401 KAR 63:010
21. Laboratory fume hoods and vents used exclusively for chemical or physical analysis, or for "bench scale production" R&D.	N/A
22. Covered conveyors for coal or coke that convey less than 200 tons per day.	401 KAR 63:010
23. EU 05 & 09 – Fly ash loadout systems (silos A, B, & C) configured for either.	401 KAR 63:010
24. Wood Unloading Area	401 KAR 63:010
25. Portable Backup Conveyor	401 KAR 63:010
26. DusTreat CF9156 in 850 gal tank	401 KAR 63:010
27. DusTreat DC6109 in 300 gal tote	401 KAR 63:010
28. Powdered Activated Carbon (PAC) System (500 lb/hr max)	401 KAR 59:010
29. 19% Aqueous Ammonia Storage Tank	N/A

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS

1. As required by Section 1b of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26; compliance with annual emissions and processing limitations contained in this permit, shall be based on emissions and processing rates for any twelve (12) consecutive months.
2. Particulate matter, nitrogen oxides, sulfur dioxide, carbon monoxide, greenhouse gas, volatile organic compounds, and visible (opacity) emissions, measured by applicable reference methods, or an equivalent or alternative method specified in 40 C.F.R. Chapter I, or by a test method specified in the state implementation plan shall not exceed the respective limitations specified herein.
3. **The Co-fire project** includes the modification of Cooper Unit 2, EU 02, to add the capability to fire up to 100% natural gas or co-firing natural gas with coal. The **CCGT Project** consists of the construction of two natural gas and ULSFO fired combustion turbines, EU 18 and 19, with associated heat recovery steam generators.
4. **Commercial Operation Date (COD)** shall refer to:
 - a. **Co-Fire Project**, the date on which EU 02 produces electricity for sale following the modification and commissioning to add the capability to fire up to 100% natural gas or co-fire natural gas and coal;
 - b. For the **CCGT Project**, the date on which EU 18 or 19 produces electricity for sale after commissioning is complete.
5. The permittee shall monitor and maintain records of the pipeline quality natural gas sulfur content (in gr/100 dscf), based on fuel quality characteristics in a current, valid purchase contract, tariff sheet, or transportation contract for the fuel. As an alternative, a natural gas fuel sample may be obtained and analyzed, no less frequently than once per calendar year, by the owner or operator, an independent laboratory, or the fuel supplier.
6. Upon the COD of the Co-Fire Project, (See **Section D – Source Emission Limitations And Testing Requirements 4.**) the permittee shall limit the annual coal throughput of Emission Unit 03 and 35 to 463,566 tpy each. [401 KAR 51:017, Section 9]
7. Upon the COD of the Co-Fire Project (See **Section D – Source Emission Limitations And Testing Requirements 4.**) and when co-firing or natural gas firing in the EU 02 (C2) Co-Fired Boiler, NO_x emissions from the combined stack for EU 01 and 02 shall not exceed 890 lb/hr on a 24-hr block average basis. [401 KAR 51:017, Section 9]

Compliance Demonstration Method:

The permittee shall measure NO_x emissions using CEMS to demonstrate compliance with the applicable NO_x emission limits under 401 KAR 51:017, Section 9, as required by **4. Specific Monitoring Requirements** d. under EU 01 and **4. Specific Monitoring Requirements** a. under EU 02 in **Section B**. The 24-hour block average NO_x emission rate for EU 01 and 02 combined will be calculated at the end of each boiler operating day as the sum of NO_x mass (lbs) including non-operational hours divided by 24 hours. [401 KAR 51:017 and 40 CFR 60

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

Appendix B, Performance Specification 2 and 40 CFR 75 Appendix A and 401 KAR 52:020, Section 10]

8. The following units comprise the "EKPC system" and are subject to System-Wide emission limits:
 - a. Unit 1 (124 MW)("Cooper 1") and Unit 2 (240 MW)("Cooper 2") located at the John Sherman Cooper Power Station near Somerset, Kentucky.
 - b. Unit 3 (80 MW)("Dale 3") and Unit 4 (80 MW)("Dale 4") (and shall exclude Units 1 and 2) located at the William C. Dale Power Station near Winchester, Kentucky.
 - c. Unit 1 (344 MW)("Spurlock 1") and Unit 2 (555 MW)("Spurlock 2") located at the Spurlock Power Station near Maysville, Kentucky.

[Consent Decree entered September 24, 2007, Section III]

9. Pursuant to the Consent Decree entered September 24, 2007, the permittee shall comply with the following System-Wide 12-Month Rolling Tonnage limitations for NO_x, which apply to all EKPC System units collectively:

For the 12-Month Period Commencing on the Date Specified Below, and Each 12-Month Period Thereafter:	System-wide 12-Month Rolling Tonnage Limitation for NO_x
January 1, 2013	8,500 tons
January 1, 2015	8,000 tons

The System-Wide annual emissions limits for NO_x shall apply prospectively from the specified date on which a 12-month period commences, that is compliance with the cap shall first be determined 12 months following the commencement date specified above, and shall end on the date that the subsequent System-Wide limit, if any, takes effect. The permittee may not use NO_x Allowances to comply with these System-Wide limitations. [Consent Decree entered September 24, 2007, Section V]

10. Pursuant to the Consent Decree entered September 24, 2007, the permittee shall comply with the following System-Wide 12-Month Rolling Tonnage limitations for SO₂, which apply to all EKPC System units collectively:

For the 12-Month Period Commencing on the Date Specified Below, and Each 12-Month Period Thereafter:	System-Wide 12-Month Rolling Tonnage Limitation for SO₂
July 1, 2011	40,000 tons
January 1, 2013	28,000 tons

Each of the System-Wide annual emission limits for SO₂ shall apply prospectively from the specified date on which a 12-month period commences, that is compliance with the cap shall

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

first be determined 12 months following the commencement date specified above, and shall end on the date that the subsequent System-Wide limit, if any, takes effect, the permittee shall not use SO₂ allowances or credits to comply with these System-Wide limitations [Consent Decree entered September 24, 2007, Section VI].

11. "System-wide 12-Month Rolling Tonnage" means the sum of the tons of the pollutant in question emitted from the EKPC System units in the most recent complete month and the previous 11 months. A new System-Wide 12-Month Rolling Tonnage shall be calculated for each new complete month. The calculation of each System-Wide 12-Month Rolling Tonnage shall include the pollutants emitted during periods of startup, shutdown, and Malfunction within each calendar month, except as otherwise provided by the Force Majeure provisions of the Consent Decree entered September 24, 2007.
12. The permittee shall provide to the Division and U.S. EPA sufficient data to demonstrate compliance with Sections **D.9** and **D.10** as part of its annual compliance certification specified in Section **F.9**.
13. Malfunction Events. If the permittee intends to exclude a period of Malfunction, as defined in paragraph 22 of the Consent Decree, from the calculation of any 30-Day Rolling Average Emission Rate, Combined 30-Day Rolling Average Emission Rate, or 30-Day Rolling Average SO₂ Removal Efficiency, the permittee shall notify the U.S. EPA in writing as soon as practicable, but in no event later than 21 days following the date the Malfunction occurs.
 - a. In this notice, the permittee shall describe the anticipated length of time that the Malfunction may persist, the cause or causes of the Malfunction, all measures taken or to be taken by the permittee to minimize the duration of the Malfunction, and the schedule by which the permittee proposes to implement those measures. The permittee shall adopt all reasonable measures to minimize the duration of such Malfunctions, and to prevent the recurrence of such Malfunctions in the future.
 - b. A Malfunction, as defined in paragraph 22 of the Consent Decree, does not constitute a Force Majeure Event unless the Malfunction also meets the definition of a Force Majeure Event, as provided in the Consent Decree. Conversely, a period of Malfunction may be excluded by the permittee from the calculations of emission rates and removal efficiencies, as allowed under this paragraph, regardless of whether the Malfunction constitutes a Force Majeure Event.

[Consent Decree entered September 24, 2007, paragraph 152]

14. Performance standards, emissions limits, and other quantitative standards set by or under the Consent Decree must be met to the number of significant digits in which the standard or limit is expressed. For example, an Emission Rate of 0.100 is not met if the actual Emission Rate is 0.101. The permittee shall round the fourth significant digit to the nearest third significant digit, or the third significant digit to the nearest second significant digit, depending upon whether the limit is expressed to three or two significant digits. For example, if an actual Emission Rate is 0.1004, that shall be reported as 0.100, and shall be in compliance with an Emission Rate of 0.100, and if an actual Emission Rate is 0.1005, that shall be reported as 0.101, and shall not

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

be in compliance with an Emission Rate of 0.100. The permittee shall report data to the number of significant digits in which the standard or limit is expressed. [Consent Decree entered September 24, 2007, paragraph 192]

15. A “30-Day Rolling Average Emission Rate” for a Unit or “Combined 30-Day Rolling Average Emission Rate” for the Spurlock Plant shall be expressed as lb/MMBtu and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Unit (in the case of a 30-Day Rolling Average Emission Rate) or the Spurlock Plant (in the case of a Combined 30-Day Rolling Average Emission Rate) during an Operating Day and the previous twenty-nine (29) Operating Days; second, sum the total heat input to the Unit (in the case of a 30-Day Rolling Average Emission Rate) or the Spurlock Plant (in the case of a Combined 30-Day Rolling Average Emission Rate) in MMBtu during the Operating Day and the previous twenty-nine (29) Operating Days; and third, divide the total number of pounds of the pollutant emitted during the thirty (30) Operating Days by the total heat input during the thirty (30) Operating Days. A new 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day. A new Combined 30-Day Rolling Average Emission Rate shall be calculated for each new Operating Day during which both Spurlock 1 and Spurlock 2 fire Fossil Fuel. Each 30-Day Rolling Average Emission Rate and Combined 30-Day Rolling Average Emission Rate shall include all emissions that occur during all periods of start-up, shutdown and Malfunction within an Operating Day, except as follows:
 - a. For emissions of NO_x from Spurlock 1 only, EKPC shall include all emissions commencing from the time Spurlock 1 is synchronized with a utility electric distribution system through the time that Spurlock 1 ceases to combust fossil fuel and the fire is out in the boiler;
 - b. Emissions of NO_x that occur during the fifth and subsequent Cold Start Up Period(s) that occur in any 30-day period shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate and Combined 30-Day Rolling Average Emission Rate if inclusion of such emissions would result in a violation of any applicable 30-Day Rolling Average Emission Rate or Combined 30-Day Rolling Average Emission Rate, and if EKPC has installed, operated and maintained the SCR in question in accordance with manufacturers’ specifications and good engineering practices. A “Cold Start Up Period” occurs whenever there has been no fire in the boiler of a Unit (no combustion of any fossil fuel) for a period of six hours or more. The emissions to be excluded during the fifth and subsequent Cold Start Up Period(s) shall be the less of (1) those NO_x emissions emitted during the eight hour period commencing when the Unit is synchronized with a utility electric distribution system and concluding eight hours later or (2) those emitted prior to the time that the flue gas has achieved the minimum SCR operational temperature as specified by the catalyst manufacturer;
 - c. For Cold Start Up Periods that occur at Spurlock 1 prior to April 1, 2008, emissions of NO_x that occur during the first and second Cold Start Up Period(s) that occur in any 30-day period shall also be excluded from the calculation of the 30-Day Rolling Average Emission Rate and Combined 30-Day Rolling Average Emission Rate under the same terms and conditions as provided in Subparagraph b; and

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

- d. Emissions that occur during a period of Malfunction shall be excluded from the calculation of the 30-Day Rolling Average Emission Rate and Combined 30-Day Rolling Average Emission Rate if EKPC provides notice of the Malfunction to EPA and takes all reasonable measures to minimize the duration of such Malfunction and prevent the recurrence of such Malfunctions in the future, in accordance with Paragraph 152 (Malfunction Events) of this Consent Decree.

[Consent Decree entered September 24, 2007, paragraph 5]

- 16. “30-Day Rolling Average SO₂ Removal Efficiency” means the percent reduction in the mass of SO₂ achieved by a Unit’s pollution control device over a 30-Operating Day period. This percent reduction shall be calculated by subtracting the outlet 30-Day Rolling Average Emission Rate from the inlet 30-Day Rolling Average Emission Rate, dividing that difference by the inlet 30-Day Rolling Average Emission Rate, and then multiplying by 100. In the event the 30-Day Rolling Average SO₂ Removal Efficiency does not meet the requirements of this consent decree, a 30-Day Rolling Average SO₂ emission rate of 0.100 lb/MMBtu or less shall satisfy the removal efficiency requirement. A new 30-Day Rolling Average SO₂ Removal Efficiency shall be calculated for each new Operating Day. EKPC may exclude Malfunctions from the calculation of a 30-Day Rolling Average SO₂ Removal Efficiency only to the extent that such Malfunctions have been excluded from the underlying 30-Day Rolling Average Emission Rates. [Consent Decree entered September 24, 2007, paragraph 6]
- 17. “PM Emission Rate” means the number of pounds of PM emitted per million BTU of heat input (lb/MMBtu), as measured in annual (or biennial) stack tests in accordance with the reference method set forth in 40 CFR 60 Appendix A, Method 5 (filterable portion only). [Consent Decree entered September 24, 2007, paragraph 40]
- 18. “SO₂ Allowance” means “allowance” as defined at 42 U.S.C. § 7651a(3): “an authorization, allocated to an affected unit by the Administrator [of EPA] under [Subchapter IV of the Act], to emit, during or after a specified calendar year, one ton of sulfur dioxide.” [Consent Decree entered September 24, 2007, paragraph 45].
- 19. FORCE MAJEURE [Consent Decree entered September 24, 2007, paragraphs 143-151]
 - a. For purposes of this Consent Decree, a “Force Majeure Event” shall mean an event that has been or will be caused by circumstances beyond the control of EKPC, its contractors, or any entity controlled by EKPC that delays compliance with any provision of this Consent Decree or otherwise causes a violation of any provision of this Consent Decree despite EKPC’s best efforts to fulfill the obligation. “Best efforts to fulfill the obligation” include using best efforts to anticipate any potential Force Majeure Event and to address the effects of any such event (a) as it is occurring and (b) after it has occurred, such that the delay or violation is minimized to the greatest extent possible. [Paragraph 143]
 - b. Notice of Force Majeure Events. If any event occurs or has occurred that may delay compliance with or otherwise cause a violation of any obligation under this Consent Decree, as to which EKPC intends to assert a claim of Force Majeure, EKPC shall notify the United States in writing as soon as practicable, but in no event later than twenty-one

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

(21) days following the date that the event occurred. In this notice, EKPC shall reference this Paragraph 144 of this Consent Decree and describe the anticipated length of time that the delay or violation may persist, the cause or causes of the delay or violation, all measures taken or to be taken by EKPC to prevent or minimize the delay or violation, the schedule by which EKPC proposes to implement those measures, and EKPC's rationale for attributing a delay or violation to a Force Majeure Event. EKPC shall adopt all reasonable measures to avoid or minimize such delays or violations. EKPC shall be deemed to know of any circumstance which EKPC, its contractors, or any entity controlled by EKPC knew. [Paragraph 144]

- c. Failure to Give Notice. If EKPC fails to comply with the notice requirements of this Section, the Plaintiff may void EKPC's claim for Force Majeure as to the specific event for which EKPC has failed to comply with such notice requirement. [Paragraph 145]
- d. Plaintiff's Response. The Plaintiff shall notify EKPC in writing regarding EKPC's claim of Force Majeure within twenty (20) business days of receipt of the notice provided under Paragraph 144. If the Plaintiff agrees that a delay in performance has been or will be caused by a Force Majeure Event, the Parties shall stipulate to an extension of deadline(s) for performance of the affected compliance requirement(s) by a period equal to the delay actually caused by the event. In such circumstances, an appropriate modification shall be made pursuant to Section XXIII (Modification) of this Consent Decree. [Paragraph 146]
- e. Disagreement. If the Plaintiff does not accept EKPC's claim of Force Majeure, or if the Parties cannot agree on the length of the delay actually caused by the Force Majeure Event, the matter shall be resolved in accordance with Section XVI (Dispute Resolution) of this Consent Decree. [Paragraph 147]
- f. Burden of Proof. In any dispute regarding Force Majeure, EKPC shall bear the burden of proving that any delay in performance or any other violation of any requirement of this Consent Decree was caused by or will be caused by a Force Majeure Event. EKPC shall also bear the burden of proving that EKPC gave the notice required by this Section and the burden of proving the anticipated duration and extent of any delay(s) attributable to a Force Majeure Event. An extension of one compliance date based on a particular event may, but will not necessarily, result in an extension of a subsequent compliance date. [Paragraph 148]
- g. Events Excluded. Unanticipated or increased costs or expenses associated with the performance of EKPC's obligations under this Consent Decree shall not constitute a Force Majeure Event. [Paragraph 149]
- h. Potential Force Majeure Events. The Parties agree that, depending upon the circumstances related to an event and EKPC's response to such circumstances, the kinds of events listed below are among those that could qualify as Force Majeure Events within the meaning of this Section: construction, labor, or equipment delays; Malfunction of a Unit or emission control device; natural gas supply interruption; acts of God; acts of war or terrorism; and orders by a government official, government agency, or other regulatory body acting under and authorized by applicable law that directs EKPC to supply electricity in response to a

SECTION D - SOURCE EMISSION LIMITATIONS AND TESTING REQUIREMENTS (CONTINUED)

system-wide (state-wide or regional) emergency. Depending upon the circumstances and EKPC's response to such circumstances, failure of a permitting authority or the Kentucky Public Service Commission to issue a necessary permit or order with sufficient time for EKPC to achieve compliance with the requirements of this Consent Decree may constitute a Force Majeure Event where the failure of the authority to act is beyond the control of EKPC and EKPC has taken all steps available to it to obtain the necessary permit or order, including, but not limited to: submitting a complete application or request; responding to requests for additional information by the authority in a timely fashion; and accepting lawful terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the authority. [Paragraph 150]

- i. As part of the resolution of any matter submitted to this Court under Section XVI (Dispute Resolution) of this Consent Decree regarding a claim of Force Majeure, the Parties by agreement, or this Court by order, may in appropriate circumstances extend or modify the schedule for completion of work under this Consent Decree to account for the delay in the work that occurred as a result of any delay agreed to by the United States or approved by the Court. EKPC shall be liable for stipulated penalties for its failure thereafter to complete the work in accordance with the extended or modified schedule. [Paragraph 151]
20. Except with respect to the Consent Decree requirements, which are subject to the certain exceptions as provided by the consent decree, or as otherwise specified, the emission limitations herein apply except during periods of startup, shutdown, and malfunction provided that the shutdown ensuing startup of the malfunction were not the result of failure to properly operate and maintain the equipment or careless operation and all reasonable steps were taken to minimize emissions and the impact on air quality from their occurrence. Shutdowns and ensuing startups shall follow manufacturer's recommendations or the source's approved startup and shutdown plan.
 21. Source-wide SO₂ emissions shall not exceed 1,800 tons per year on a twelve (12) month rolling total beginning calendar year 2017 and thereafter. [40 CFR 51.1203(b) and (e)(1)]

Compliance Demonstration Method:

The permittee shall calculate monthly SO₂ emissions for Emission Units 01, 02, 08, 12, 13, 16, 17, 18, 19, 20, 21, 22, 23, 24, 29A, 29B, and 29C and maintain a 12-month rolling total of source-wide SO₂ emissions. Monthly SO₂ emissions shall be determined for Emission Units 01 and 02 using SO₂ CEMS. Monthly SO₂ emissions shall be determined for Emission Units 08, 12, 13, 16-24, 29A, 29B, and 29C using monthly fuel usage and appropriate emission factors to calculate monthly SO₂ emissions. Appropriate emission factors shall be sourced from either AP-42, manufacturer emissions data, or performance testing.

As an alternative to calculating a 12-month rolling total, the permittee may maintain records, such as the Emission Summary in the Statement of Basis created by the Division, demonstrating the source-wide PTE is under 1,800 tpy of SO₂.

SECTION E - SOURCE CONTROL EQUIPMENT REQUIREMENTS

Pursuant to 401 KAR 50:055, Section 2(5), at all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Division which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS

1. Pursuant to Section 1b-IV-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, when continuing compliance is demonstrated by periodic testing or instrumental monitoring, the permittee shall compile records of required monitoring information that include:
 - a. Date, place as defined in this permit, and time of sampling or measurements;
 - b. Analyses performance dates;
 - c. Company or entity that performed analyses;
 - d. Analytical techniques or methods used;
 - e. Analyses results; and
 - f. Operating conditions during time of sampling or measurement.
2. Records of all required monitoring data and support information, including calibrations, maintenance records, and original strip chart recordings, and copies of all reports required by the Division for Air Quality, shall be retained by the permittee for a period of five (5) years and shall be made available for inspection upon request by any duly authorized representative of the Division for Air Quality [Sections 1b-IV-2 and 1a-8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
3. In accordance with the requirements of 401 KAR 52:020, Section 3(1)h, the permittee shall allow authorized representatives of the Cabinet to perform the following during reasonable times:
 - a. Enter upon the premises to inspect any facility, equipment (including air pollution control equipment), practice, or operation;
 - b. To access and copy any records required by the permit;
 - c. Sample or monitor, at reasonable times, substances or parameters to assure compliance with the permit or any applicable requirements.Reasonable times are defined as during all hours of operation, during normal office hours; or during an emergency.
4. No person shall obstruct, hamper, or interfere with any Cabinet employee or authorized representative while in the process of carrying out official duties. Refusal of entry or access may constitute grounds for permit revocation and assessment of civil penalties.
5. Summary reports of any monitoring required by this permit shall be submitted to the Regional Office listed on the front of this permit at least every six (6) months during the life of this permit, unless otherwise stated in this permit. For emission units that were still under construction or which had not commenced operation at the end of the 6-month period covered by the report and are subject to monitoring requirements in this permit, the report shall indicate that no monitoring was performed during the previous six months because the emission unit was not in operation [Sections 1b-V-1 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

6. The semi-annual reports are due by January 30th and July 30th of each year. All reports shall be certified by a responsible official pursuant to 401 KAR 52:020, Section 23. If continuous emission and opacity monitors are required by regulation or this permit, data shall be reported in accordance with the requirements of 401 KAR 59:005, General Provisions, Section 3(3). All deviations from permit requirements shall be clearly identified in the reports.
7. In accordance with the provisions of 401 KAR 50:055, Section 1, the owner or operator shall notify the Regional Office listed on the front of this permit concerning startups, shutdowns, or malfunctions as follows:
 - a. When emissions during any planned shutdowns and ensuing startups will exceed the standards, notification shall be made no later than three (3) days before the planned shutdown, or immediately following the decision to shut down, if the shutdown is due to events which could not have been foreseen three (3) days before the shutdown.
 - b. When emissions due to malfunctions, unplanned shutdowns and ensuing startups are or may be in excess of the standards, notification shall be made as promptly as possible by telephone (or other electronic media) and shall be submitted in writing upon request.
8. The permittee shall promptly report deviations from permit requirements, including those attributable to upset conditions as defined in the permit, the probable cause of such deviations, and any corrective actions or preventive measures taken shall be submitted to the Regional Office listed on the front of this permit. Where the underlying applicable requirement contains a definition of prompt or otherwise specifies a time frame for reporting deviations, that definition or time frame shall govern. Where the underlying applicable requirement does not identify a specific time frame for reporting deviations, prompt reporting, as required by Sections 1b-V, 3 and 4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26, shall be defined as follows:
 - a. For emissions of a hazardous air pollutant or a toxic air pollutant (as identified in an applicable regulation) that continue for more than an hour in excess of permit requirements, the report must be made within 24 hours of the occurrence.
 - b. For emissions of any regulated air pollutant, excluding those listed in F.8.a., that continue for more than two hours in excess of permit requirements, the report must be made within 48 hours.
 - c. All deviations from permit requirements, including those previously reported, shall be included in the semiannual report required by F.6.
9. Pursuant to 401 KAR 52:020, Title V permits, Section 21, the permittee shall annually certify compliance with the terms and conditions contained in this permit, by completing and returning a Compliance Certification Form (DEP 7007CC) (or an alternative approved by the regional office) to the Regional Office listed on the front of this permit and the U.S. EPA in accordance with the following requirements:
 - a. Identification of the term or condition;
 - b. Compliance status of each term or condition of the permit;
 - c. Whether compliance was continuous or intermittent;
 - d. The method used for determining the compliance status for the source, currently and over the reporting period.
 - e. For an emissions unit that was still under construction or which has not commenced operation at the end of the 12-month period covered by the annual compliance certification, the

SECTION F - MONITORING, RECORDKEEPING, AND REPORTING REQUIREMENTS (CONTINUED)

permittee shall indicate that the unit is under construction and that compliance with any applicable requirements will be demonstrated within the timeframes specified in the permit.

- f. The certification shall be submitted by January 30th of each year. Annual compliance certifications shall be sent to the following addresses:

Division for Air Quality	U.S. EPA Region 4
London Regional Office	Air Enforcement Branch
875 S. Main Street	Atlanta Federal Center
London, KY 40741	61 Forsyth St. SW
	Atlanta, GA 30303-8960

10. In accordance with 401 KAR 52:020, Section 22, the permittee shall provide the Division with all information necessary to determine its subject emissions within 30 days of the date the Kentucky Emissions Inventory System (KYEIS) emissions survey is mailed to the permittee.

SECTION G - GENERAL PROVISIONS

1. General Compliance Requirements

- a. The permittee shall comply with all conditions of this permit. Noncompliance shall be a violation of 401 KAR 52:020, Section 3(1)(b), and a violation of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act). Noncompliance with this permit is grounds for enforcement action including but not limited to termination, revocation and reissuance, revision or denial of a permit [Section 1a-3 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- b. The filing of a request by the permittee for any permit revision, revocation, reissuance, or termination, or of a notification of a planned change or anticipated noncompliance, shall not stay any permit condition [Section 1a-6 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- c. This permit may be revised, revoked, reopened and reissued, or terminated for cause in accordance with 401 KAR 52:020, Section 19. The permit will be reopened for cause and revised accordingly under the following circumstances:
 - (1) If additional applicable requirements become applicable to the source and the remaining permit term is three (3) years or longer. In this case, the reopening shall be completed no later than eighteen (18) months after promulgation of the applicable requirement. A reopening shall not be required if compliance with the applicable requirement is not required until after the date on which the permit is due to expire, unless this permit or any of its terms and conditions have been extended pursuant to 401 KAR 52:020, Section 12;
 - (2) The Cabinet or the United States Environmental Protection Agency (U. S. EPA) determines that the permit must be revised or revoked to assure compliance with the applicable requirements;
 - (3) The Cabinet or the U. S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit;
 - (4) New requirements become applicable to a source subject to the Acid Rain Program.

Proceedings to reopen and reissue a permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of the permit for which cause to reopen exists. Reopenings shall be made as expeditiously as practicable. Reopenings shall not be initiated before a notice of intent to reopen is provided to the source by the Division, at least thirty (30) days in advance of the date the permit is to be reopened, except that the Division may provide a shorter time period in the case of an emergency.

- d. The permittee shall furnish information upon request of the Cabinet to determine if cause exists for modifying, revoking and reissuing, or terminating the permit; or to determine compliance with the conditions of this permit [Sections 1a- 7 and 8 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- e. Emission units described in this permit shall demonstrate compliance with applicable requirements if requested by the Division [401 KAR 52:020, Section 3(1)(c)].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- f. The permittee, upon becoming aware that any relevant facts were omitted or incorrect information was submitted in the permit application, shall promptly submit such supplementary facts or corrected information to the permitting authority [401 KAR 52:020, Section 7(1)].
- g. Any condition or portion of this permit which becomes suspended or is ruled invalid as a result of any legal or other action shall not invalidate any other portion or condition of this permit [Section 1a-14 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- h. The permittee shall not use as a defense in an enforcement action the contention that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance [Section 1a-4 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- i. All emission limitations and standards contained in this permit shall be enforceable as a practical matter. All emission limitations and standards contained in this permit are enforceable by the U.S. EPA and citizens except for those specifically identified in this permit as state-origin requirements. [Section 1a-15 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- j. This permit shall be subject to suspension if the permittee fails to pay all emissions fees within 90 days after the date of notice as specified in 401 KAR 50:038, Section 3(6) [Section 1a-10 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- k. Nothing in this permit shall alter or affect the liability of the permittee for any violation of applicable requirements prior to or at the time of permit issuance [401 KAR 52:020, Section 11(3) b].
- l. This permit does not convey property rights or exclusive privileges [Section 1a-9 of the *Cabinet Provisions and Procedures for Issuing Title V Permits* incorporated by reference in 401 KAR 52:020, Section 26].
- m. Issuance of this permit does not relieve the permittee from the responsibility of obtaining any other permits, licenses, or approvals required by the Cabinet or any other federal, state, or local agency.
- n. Nothing in this permit shall alter or affect the authority of U.S. EPA to obtain information pursuant to Federal Statute 42 USC 7414, Inspections, monitoring, and entry [401 KAR 52:020, Section 11(3) d.].
- o. Nothing in this permit shall alter or affect the authority of U.S. EPA to impose emergency orders pursuant to Federal Statute 42 USC 7603, Emergency orders [401 KAR 52:020, Section 11(3) a.].

SECTION G - GENERAL PROVISIONS (CONTINUED)

- p. This permit consolidates the authority of any previously issued PSD, NSR, or Synthetic Minor source preconstruction permit terms and conditions for various emission units and incorporates all requirements of those existing permits into one single permit for this source.
- q. Pursuant to 401 KAR 52:020, Section 11, a permit shield shall not protect the owner or operator from enforcement actions for violating an applicable requirement prior to or at the time of permit issuance. Compliance with the conditions of this permit shall be considered compliance with:
 - (1) Applicable requirements that are included and specifically identified in this permit; and
 - (2) Non-applicable requirements expressly identified in this permit.

2. Permit Expiration and Reapplication Requirements

- a. This permit shall remain in effect for a fixed term of five (5) years following the original date of issue. Permit expiration shall terminate the source's right to operate unless a timely and complete renewal application has been submitted to the Division at least six (6) months prior to the expiration date of the permit. Upon a timely and complete submittal, the authorization to operate within the terms and conditions of this permit, including any permit shield, shall remain in effect beyond the expiration date, until the renewal permit is issued or denied by the Division [401 KAR 52:020, Section 12].
- b. The authority to operate granted shall cease to apply if the source fails to submit additional information requested by the Division after the completeness determination has been made on any application, by whatever deadline the Division sets [401 KAR 52:020, Section 8(2)].

3. Permit Revisions

- a. A minor permit revision procedure may be used for permit revisions involving the use of economic incentive, marketable permit, emission trading, and other similar approaches, to the extent that these minor permit revision procedures are explicitly provided for in the State Implementation Plan (SIP) or in applicable requirements and meet the relevant requirements of 401 KAR 52:020, Section 14(2).
- b. This permit is not transferable by the permittee. Future owners and operators shall obtain a new permit from the Division for Air Quality. The new permit may be processed as an administrative amendment if no other change in this permit is necessary, and provided that a written agreement containing a specific date for transfer of permit responsibility coverage and liability between the current and new permittee has been submitted to the permitting authority within ten (10) days following the transfer.

4. Construction, Start-Up, and Initial Compliance Demonstration Requirements

Pursuant to a duly submitted application the Kentucky Division for Air Quality hereby authorizes the construction of the equipment described herein, emission units 2n, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26A, 26B, 27, 28, 29A 29B/C, 30, 31, 32, 33, 34, and 35 in accordance with the terms and conditions of this permit.

SECTION G - GENERAL PROVISIONS (CONTINUED)

- a. Construction of any process and/or air pollution control equipment authorized by this permit shall be conducted and completed only in compliance with the conditions of this permit.
- b. Within thirty (30) days following commencement of construction and within fifteen (15) days following start-up and attainment of the maximum production rate specified in the permit application, or within fifteen (15) days following the issuance date of this permit, whichever is later, the permittee shall furnish to the Regional Office listed on the front of this permit in writing, notification of the following:
 - (1) The date when construction commenced.
 - (2) The date of start-up of the affected facilities listed in this permit.
 - (3) The date when the maximum production rate specified in the permit application was achieved.
- c. Pursuant to 401 KAR 52:020, Section 3(2), unless construction is commenced within eighteen (18) months after the permit is issued, or begins but is discontinued for a period of eighteen (18) months or is not completed within a reasonable timeframe then the construction and operating authority granted by this permit for those affected facilities for which construction was not completed shall immediately become invalid. Upon written request, the Cabinet may extend these time periods if the source shows good cause.
- d. Pursuant to 401 KAR 50:055, Section 2(1)(a), an owner or operator of any affected facility subject to any standard within the administrative regulations of the Division for Air Quality shall demonstrate compliance with the applicable standard(s) within sixty (60) days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial start-up of such facility. Pursuant to 401 KAR 52:020, Section 3(3)(c), sources that have not demonstrated compliance within the timeframes prescribed in 401 KAR 50:055, Section 2(1)(a), shall operate the affected facility only for purposes of demonstrating compliance unless authorized under an approved compliance plan or an order of the cabinet.
- e. This permit shall allow time for the initial start-up, operation, and compliance demonstration of the affected facilities listed herein. However, within sixty (60) days after achieving the maximum production rate at which the affected facilities will be operated but not later than 180 days after initial start-up of such facilities, the permittee shall conduct a performance demonstration on the affected facilities in accordance with 401 KAR 50:055, General compliance requirements. Testing must also be conducted in accordance with General Provisions G.5 of this permit.
- f. Terms and conditions in this permit established pursuant to the construction authority of 401 KAR 51:017 or 401 KAR 51:052 shall not expire.

5. Testing Requirements

- a. Pursuant to 401 KAR 50:045, Section 2, a source required to conduct a performance test shall submit a completed Compliance Test Protocol form, DEP form 6028, or a test protocol a source has developed for submission to other regulatory agencies, in a format approved by the cabinet, to the Division's Frankfort Central Office a minimum of sixty (60)

SECTION G - GENERAL PROVISIONS (CONTINUED)

days prior to the scheduled test date. Pursuant to 401 KAR 50:045, Section 7, the Division shall be notified of the actual test date at least thirty (30) days prior to the test.

- b. Pursuant to 401 KAR 50:045, Section 5, in order to demonstrate that a source is capable of complying with a standard at all times, any required performance test shall be conducted under normal conditions that are representative of the source's operations and create the highest rate of emissions. If [When] the maximum production rate represents a source's highest emissions rate and a performance test is conducted at less than the maximum production rate, a source shall be limited to a production rate of no greater than 110 percent of the average production rate during the performance tests. If and when the facility is capable of operation at the rate specified in the application, the source may retest to demonstrate compliance at the new production rate. The Division for Air Quality may waive these requirements on a case-by-case basis if the source demonstrates to the Division's satisfaction that the source is in compliance with all applicable requirements.
- c. Results of performance test(s) required by the permit shall be submitted to the Division by the source or its representative within forty-five days or sooner if required by an applicable standard, after the completion of the fieldwork.

6. Acid Rain Program Requirements

- a. If an applicable requirement of Federal Statute 42 USC 7401 through 7671q (the Clean Air Act) is more stringent than an applicable requirement promulgated pursuant to Federal Statute 42 USC 7651 through 7651o (Title IV of the Act), both provisions shall apply, and both shall be state and federally enforceable.
- b. The permittee shall comply with all applicable requirements and conditions of the Acid Rain Permit and the Phase II permit application (including the Phase II NO_x compliance plan and averaging plan, if applicable) incorporated into the Title V permit issued for this source. The source shall also comply with all requirements of any revised or future acid rain permit(s) issued to this source.

7. Emergency Provisions

- a. Pursuant to 401 KAR 52:020, Section 24(1), an emergency shall constitute an affirmative defense to an action brought for the noncompliance with the technology-based emission limitations if the permittee demonstrates through properly signed contemporaneous operating logs or relevant evidence that:
 - (1) An emergency occurred and the permittee can identify the cause of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During an emergency, the permittee took all reasonable steps to minimize levels of emissions that exceeded the emissions standards or other requirements in the permit; and
 - (4) Pursuant to 401 KAR 52:020, 401 KAR 50:055, and KRS 224.1-400, the permittee notified the Division as promptly as possible and submitted written notice of the emergency to the Division when emission limitations were exceeded due to an emergency. The notice shall include a description of the emergency, steps taken to mitigate emissions, and corrective actions taken.

SECTION G - GENERAL PROVISIONS (CONTINUED)

- (5) This requirement does not relieve the source of other local, state or federal notification requirements.
 - b. Emergency conditions listed in General Condition G.7.a above are in addition to any emergency or upset provision(s) contained in an applicable requirement [401 KAR 52:020, Section 24(3)].
 - c. In an enforcement proceeding, the permittee seeking to establish the occurrence of an emergency shall have the burden of proof [401 KAR 52:020, Section 24(2)].
8. Ozone Depleting Substances
- a. The permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 CFR 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
 - (1) Persons opening appliances for maintenance, service, repair, or disposal shall comply with the required practices contained in 40 CFR 82.156.
 - (2) Equipment used during the maintenance, service, repair, or disposal of appliances shall comply with the standards for recycling and recovery equipment contained in 40 CFR 82.158.
 - (3) Persons performing maintenance, service, repair, or disposal of appliances shall be certified by an approved technician certification program pursuant to 40 CFR 82.161.
 - (4) Persons disposing of small appliances, MVACs, and MVAC-like appliances (as defined at 40 CFR 82.152) shall comply with the recordkeeping requirements pursuant to 40 CFR 82.155.
 - (5) Persons owning commercial or industrial process refrigeration equipment shall comply with the leak repair requirements pursuant to 40 CFR 82.156 and 40 CFR 82.157.
 - (6) Owners/operators of appliances normally containing 50 or more pounds of refrigerant shall keep records of refrigerant purchased and added to such appliances pursuant to 40 CFR 82.166.
 - b. If the permittee performs service on motor (fleet) vehicle air conditioners containing ozone-depleting substances, the source shall comply with all applicable requirements as specified in 40 CFR 82, Subpart B, *Servicing of Motor Vehicle Air Conditioners*.

SECTION G - GENERAL PROVISIONS (CONTINUED)

9. Risk Management Provisions

- a. The permittee shall comply with all applicable requirements of 401 KAR Chapter 68, Chemical Accident Prevention, which incorporates by reference 40 CFR Part 68, Risk Management Plan provisions. If required, the permittee shall comply with the Risk Management Program and submit a Risk Management Plan to U.S. EPA using the RMP* eSubmit software.
- b. If requested, submit additional relevant information to the Division or the U.S. EPA.

SECTION H - ALTERNATE OPERATING SCENARIOS

The alternate operating scenarios set forth below have been approved by the Division based on information supplied with the application and during the application review process. The terms and conditions of each alternate operating scenario have been developed to ensure compliance with the applicable regulations. The permittee, when making a change from one operating scenario to another, shall record contemporaneously in a log at the permitted facility a record of the scenario under which the facility is operating. The permit shield, as provided in Section G shall extend to each alternate operating scenario set forth in this Section. All conditions not specified under an alternate operating scenario shall remain unchanged from their permit values or requirements.

ALTERNATE OPERATING SCENARIO

The conditions for the alternate operating scenario described below apply prior to the Commercial Operation Date of the Co-Fire Project (refer to **Section D – Source Emission Limitations and Testing Requirements** 6. And 7.)

Emission Unit 02 Indirect Heat Exchanger (Unit 2)

Description:

Pulverized Coal-fired, Dry Bottom, Wall-fired Unit

Primary Fuel:

Pulverized Coal

Startup Fuel:

Number Two Fuel Oil

Maximum Continuous Rating:

2,364 MMBtu/hr

Control Devices:

Low NO_x burners; Dry Flue Gas Desulfurization (DFGD); Selective Catalytic Reduction (SCR) (DFGD and PJFF shared with Unit 1; and FuelSolv Treatment

Construction Commenced:

1969; Low NO_x burners installed 1994; FGD, SCR and PJFF installed in 2012; FGD and PJFF in operation since June 30, 2012; Duct reroute to DFGD and PJFF completed April 2016; PM CEMS installed on or before December 31, 2012

APPLICABLE REGULATIONS:

40 CFR 52, Subpart S, Kentucky (BART SIP)

40 CFR Part 75, Continuous Emissions Monitoring

401 KAR 51:240, Cross-State Air Pollution Rule (CSAPR) NO_x annual trading program

401 KAR 51:250, Cross-State Air Pollution Rule (CSAPR) NO_x ozone season group 2 trading program

401 KAR 51:260, Cross-State Air Pollution Rule (CSAPR) SO₂ group 1 trading program

401 KAR 51:160, NO_x requirements for large utility and industrial boilers

401 KAR 52:060, Acid rain permits

401 KAR 61:015, Existing indirect heat exchangers

401 KAR 63:002, Section 2(4)(yyyy), 40 CFR 63.9980 through 63.10042, Tables 1 through 9, and Appendices A through E (Subpart UUUU), National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units

APPLICABLE CONSENT DECREE:

Consent Decree entered September 24, 2007, Civil Action No. 04-34-KSF.

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

Non-Material Change to Consent Decree filed October 7, 2011, Civil Action No. 04-34-KSF.

Terminated by Unopposed Certificate in Support of Condition Termination of Enforcement through Consent Decree Filed on June 16, 2017.

1. Operating Limitations:

- a. During a startup or shutdown period, the permittee shall meet the work practice standards established in 40 CFR Part 63, Table 3 to Subpart UUUUU, to comply with the work practice standard of 401 KAR 61:015. [401 KAR 61:015, Section 9(2)]
- b. The permittee must conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months, or each 48 calendar months if neural network combustion optimization software is employed, [Item 1. To Table 3 to 40 CFR 63, Subpart UUUUU]
- c. The permittee must perform periodic tune-ups of the EGU according to 40 CFR 63.10021(e). [40 CFR 63.10000(e)]
- d. The permittee must be in compliance with the emission limits and operating limits in 40 CFR 63, Subpart UUUUU. These limits apply at all times except during periods of startup and shutdown; however, for coal-fired EGU's the permittee is required to meet the work practice requirements in items 3 and 4 in Table 3 to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10000(a)]
- e. At all times, the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. [40 CFR 63.10000(b)]
- f. During startup: [Item 3 to Table 3 to 40 CFR 63, Subpart UUUUU]
 - i. The permittee must operate all CMS during startup. Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). For startup of a unit, the permittee must use clean fuels as defined in 40 CFR 63.10042 for ignition. Once the permittee converts to firing coal, residual oil, or solid oil-derived fuel, the permittee must engage all of the applicable control technologies except dry scrubber and SCR. The permittee must start the dry scrubber and SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation. The permittee must comply with all applicable emissions limits at all times except for periods that meet the applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in 40 CFR 63, Subpart UUUUU. The permittee must keep records during startup periods, as specified in 40 CFR 63.10011(g) and 63.10021(h) and (i). [Item 3.a.(1) to Table 3 to 40 CFR 63, Subpart UUUUU]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- ii. If the permittee chooses to use just one set of sorbent traps to demonstrate compliance with the applicable Hg emission limit, the permittee must comply with the limit at all times; otherwise, the permittee must comply with the applicable emission limit at all times except for startup and shutdown periods. [Item 3.c. to Table 3 to 40 CFR 63, Subpart UUUUU]
 - iii. The permittee must collect monitoring data during startup periods, as specified in 40 CFR 63.10020(a) and (e). The permittee must keep records during startup periods as provided in 40 CFR 63.10021(h) and 63.10032. The permittee must provide reports concerning activities and startup periods as specified in 40 CFR 63.10011(g), 63.10021(i) and 63.10031. [Item 3.d. to Table 3 to 40 CFR 63, Subpart UUUUU]
- g. During shutdown: [Item 4. To Table 3 to 40 CFR 63, Subpart UUUUU]
- i. The permittee must operate all CMS during shutdown. The permittee must also collect appropriate data, and must calculate the pollutant emission rate for each hour of shutdown for those pollutants for which a CMS is used.
 - ii. While firing coal, residual oil, or solid oil-derived fuel during shutdown, the permittee must vent emissions to the main stack(s) and operate all applicable control devices and continue to operate those control devices after the cessation of coal, residual oil, or solid oil-derived fuel being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. In any case, the permittee must operate the controls when necessary to comply with other standards made applicable to the EGU by a permit limit or rule other than 40 CFR 63, Subpart UUUUU and that require operation of the control devices.
 - iii. If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the clean fuels defined in 40 CFR 63.10042 and must be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity.
 - iv. The permittee must comply with all applicable emission limits at all times except during startup periods and shutdown periods, at which time the permittee must meet this work practice. The permittee must collect monitoring data during shutdown periods, as provided in 40 CFR 63.10020(a). The permittee must keep records during shutdown periods, as provided in 40 CFR 63.10032 and 40 CFR 63.10021(h). Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown. The permittee must provide reports concerning activities and shutdown periods, as specified in 40 CFR 63.10011(g), 63.10021(i) and 63.10031.
- h. The permittee must meet each operating limit in Table 4 to 40 CFR 63, Subpart UUUUU that is applicable. [40 CFR 63.9991(a)(2)]
- i. As provided in 40 CFR 63.6(g), the Administrator may approve use of an alternative to the work practice standards in 40 CFR 63, Subpart UUUUU. [40 CFR 63.9991(b)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- j. If the permittee is required to meet an applicable tune-up work practice standard, the permittee must conduct a performance tune-up according to 40 CFR 63.10021(e). [40 CFR 63.10006(i)]
 - i. For EGUs not employing neural network combustion optimization during normal operation, each performance tune-up specified in 40 CFR 63.10021(e) must be no more than 36 calendar months after the previous performance tune-up. [40 CFR 63.10006(i)(1)]
 - ii. For EGUS employing neural network combustion optimization systems during normal operation, each performance tune-up specified in 40 CFR 63.10021(e) must be no more than 48 calendar months after the previous performance tune-up. [40 CFR 63.10006(i)(2)]
- k. The permittee must conduct periodic performance tune-ups of the EGU, as specified in 40 CFR 63.10021(e)(1) through (9). The permittee must perform an inspection of the burner at least once every 36 calendar months unless your EGU employs neural network combustion optimization during normal operations in which case the permittee must perform an inspection of the burner and combustion controls at least once every 48 calendar months. If the EGU is offline when a deadline to perform the tune-up passes, the permittee shall perform the tune-up of work practice requirements within 30 days after the re-start of the affected unit. [40 CFR 63.10021(e)]
 - i. As applicable, inspect the burner and combustion controls, and clean or replace any components of the burner or combustion controls as necessary upon initiation of the work practice program and at least once every required inspection period. Repair of a burner or combustion control component requiring special order parts may be scheduled as follows: [40 CFR 63.10021(e)(1)]
 - 1. Burner or combustion control component parts needing replacement that affect the ability to optimize NO_x and CO must be installed within 3 calendar months after the burner inspection, [40 CFR 63.10021(e)(1)(i)]
 - 2. Burner or combustion control component parts that do not affect the ability to optimize NO_x and CO may be installed on a schedule determined by the operator. [40 CFR 63.10021(e)(1)(ii)]
 - ii. As applicable, inspect the flame pattern and make any adjustments to the burner or combustion controls necessary to optimize the flame pattern. The adjustment should be consistent with manufacturer's specifications, if available, or in accordance with the best combustion engineering practice for that burner type; [40 CFR 63.10021(e)(2)]
 - iii. As applicable, observe the damper operations as a function of mill and/or cyclone loadings, cyclone and pulverizer coal feeder loadings, or other pulverizers, cyclones, and sensors; [40 CFR 63.10021(e)(3)]
 - iv. As applicable, evaluate windbox pressures and air proportions, making adjustments and effecting repair to dampers, actuators, controls, and sensors; [40 CFR 63.10021(e)(4)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- v. Inspect the system controlling the air-to-fuel ratio and ensure that it is correctly calibrated and functioning properly. Such inspection may include calibrating excess O₂ probes and/or sensors, adjusting overfire air systems, changing software parameters, and calibrating associated actuators and dampers to ensure that the systems are operated as designed. Any component out of calibration, in or near failure, or in a state that is likely to negate combustion optimization efforts prior to the next tune-up, should be corrected or repaired as necessary. [40 CFR 63.10021(e)(5)]
- vi. Optimize combustion to minimize generation of CO and NO_x. This optimization should be consistent with the manufacturer's specifications, if available, or best combustion engineering practice for the applicable burner type. NO_x optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, adjusting combustion zone temperature profiles, and add-on controls such as SCR and SNCR; CO optimization includes burners, overfire air controls, concentric firing system improvements, neural network or combustion efficiency software, control systems calibrations, and adjusting combustion zone temperature profiles. [40 CFR 63.10021(e)(6)]
- vii. While operating at full load or the predominantly operated load, measure the concentration in the effluent stream of CO and NO_x in ppm, by volume and oxygen in volume percent, before and after the tune-up adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). The permittee may use portable CO, NO_x and O₂ monitors for this measurement. EGU's employing neural network optimization systems need only provide a single pre- and post-tune-up value rather than continual values before and after each optimization adjustment made by the system; [40 CFR 63.10021(e)(7)]
- viii. Maintain on-site and submit, if requested by the Administrator, an annual report containing the information in 40 CFR 63.10021(e)(1) through (9) including: [40 CFR 63.10021(e)(8)]
 - 1. The concentration of CO and NO_x in the effluent stream in ppm by volume, and oxygen in volume percent, measured before and after an adjustment of the EGU combustion systems; [40 CFR 63.10021(8)(i)]
 - 2. A description of any corrective actions taken as a part of the combustion adjustment; and [40 CFR 63.10021(8)(ii)]
 - 3. The type(s) and amount(s) of fuel used over the 12 calendar months prior to an adjustment, but only if the unit was physically and legally capable of using more than one type of fuel during that period; [40 CFR 63.10021(8)(iii)]
- 1. The permittee must follow the startup or shutdown requirements as given in Table 3 to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10021(h)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- i. The permittee may use the diluent cap and default gross output values, as described in 40 CFR 63.10007(f), during startup periods or shutdown periods. [40 CFR 63.10021(h)(1)]
- ii. The permittee must operate all CMS, collect data, calculate pollutant emission rates, and record data during startup periods or shutdown periods. [40 CFR 63.10021(h)(2)]
- iii. The permittee may choose to submit an alternative non-opacity emission standard, in accordance with the requirements contained in 40 CFR 63.1011(g)(4). Until promulgation in the Federal Register of the final alternative non-opacity emission standard, the permittee shall comply with paragraph (1) of the definition of “startup” in 40 CFR 63.10021(h)(4)]

Compliance Demonstration Method:

The permittee shall demonstrate compliance with the relevant 40 CFR 63, Subpart UUUUU operating standards according to **5. Specific Recordkeeping Requirements** i., j., k., l., and **6. Specific Reporting Requirements** n. and p.

2. Emission Limitations:

- a. Beginning on December 31, 2012, the permittee shall install and commence continuous operation of year-round SCR technology on Unit 2 so as to achieve and thereafter maintain, a NO_x 30-Day Rolling Average Emission Rate not greater than 0.080 lb/MMBtu. [Consent Decree entered on September 24, 2007, paragraph 53]

Compliance Demonstration Method:

In determining Emission Rates for NO_x, the permittee shall use CEMS in accordance with the procedures specified in the Cooper Station Monitoring Plan approved by U.S. EPA on December 20, 2013 and revised on June 17, 2016, unless otherwise approved by the Permitting Authority and/or U.S. EPA. See also **4. Specific Monitoring Requirements** a. and **Section D – Source Emission Limitations and Testing Requirements.**

- b. The permittee shall install and commence continuous operation of FGD technology (or equivalent SO₂ control technology approved pursuant to paragraph 66) so as to achieve a 30-day Rolling Average SO₂ Removal Efficiency of at least ninety-five percent or a 30-day Rolling Average SO₂ Emission Rate of no greater than 0.100 lb/MMBtu. [Consent Decree entered on September 24, 2007, paragraph 64]

Compliance Demonstration Method:

In determining Emission Rates for SO₂, the permittee shall use CEMS in accordance with the procedures specified in the Cooper Station Monitoring Plan approved by the U.S. EPA on December 20, 2013 and revised on June 17, 2016, unless otherwise approved by the Permitting Authority and/or U.S. EPA. See also **4. Specific Monitoring Requirements** a. and **Section D – Source Emission Limitations and Testing Requirements.**

- c. Beginning on April 15, 2016, filterable particulate matter emissions shall not exceed 0.030 lb/MMBtu. [Consent Decree entered September 24, 2007, paragraph 84]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)***Compliance Demonstration Method:***

The permittee shall demonstrate compliance according to **3. Testing Requirements** a. and **Section D – Source Emission Limitations and Testing Requirements**

- d. The permittee shall not cause emissions of particulate matter in excess of: [401 KAR 61:015, Section 4]
 - i. 0.23 lb/MMBtu. [401 KAR 61:015, Section 4(1)(a)]
 - ii. Greater than forty (40) percent opacity except: [401 KAR 61:015, Section 4(1)(c)]
 - 1. A maximum of sixty (60) percent opacity shall be permissible for not more than one 6 minute period in any sixty (60) consecutive minutes; [401 KAR 61:015, Section 4(1)(c)1.]
 - 2. Emissions from an indirect heat exchanger during building a new fire for the period required to bring the boiler up to operating conditions if the method used is that recommended by the manufacture and the time does not exceed the manufacturer's recommendations. [401 KAR 61:015, Section 4(1)(c)3.]

Compliance Demonstration Method:

The permittee shall demonstrate compliance according to **4. Specific Monitoring Requirements** c. and d. **5. Specific Recordkeeping Requirements** b.

- e. The permittee shall not cause emissions of gases that contain sulfur dioxide in excess of 3.3 lb/MMBtu when combusting solid fuels. [401 KAR 61:015, Section 5(1)]

Compliance Demonstration Method:

The permittee shall demonstrate compliance according to **4. Specific Monitoring Requirements** b. and **5. Specific Recordkeeping Requirements** a.

- f. The permittee must meet the following emission limitations. [40 CFR 63.9991(a)(1)] If the permittee elects to comply with these emission limitations using emissions averaging, the emissions averaging shall be conducted according to 40 CFR 63.10009 and 40CFR 63.10022.

Pollutant	Emission Limit	Compliance Demonstration Method
PM (filterable)	0.030 lb/MMBtu OR 0.30 lb/MWh (Gross)	Quarterly stack testing OR PM CEMS [Item 1. in Table 5. and Table 7 to 40 CFR 63, Subpart UUUUU]
AND		
Hydrogen Chloride (HCl)	2.0E-3 lb/MMBtu OR 2.0E-2 lb/MWh	Quarterly Stack Testing [Item 3 in Table 5 to 40 CFR 63, Subpart UUUUU]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

Pollutant	Emission Limit	Compliance Demonstration Method
AND		
Mercury (Hg)	1.2E0 lb/TBtu OR 1.3E-2 lb/GWh	LEE testing for 30 Days with a sampling period consistent with that given in section 5.2.1 of appendix A to 40 CFR 63, Subpart UUUUU, per Method 30B at appendix A-8 to 40 CFR Part 60 run OR Sorbent Trap Monitoring System [Item 4 in Table 5 to 40 CFR 63, Subpart UUUUU]

3. Testing Requirements:

- a. The permittee shall conduct annual PM performance tests on each EKPC System Unit. This annual stack test requirement may be satisfied by stack tests conducted to demonstrate compliance with other applicable regulations. EKPC may perform biennial rather than annual testing provided that: [Consent Decree entered September 24, 2007, paragraph 86]
 - i. Two of the most recently completed test results from tests conducted in accordance with 40 CFR Part 60, Appendix A-1, Method 5 demonstrate that the PM emissions are equal to or less than 0.012 lb/MMBtu; or
 - ii. The Unit is equipped with a PM CEMS in accordance with paragraphs 88 through 95 of the consent decree entered on September 24, 2007. EKPC shall perform annual rather than biennial testing the year immediately following any test results demonstrating that the particulate matter emissions are greater than 0.015 lb/MMBtu, unless the unit is equipped with a PM CEMS.
- b. Except where 40 CFR 63.10006(b) applies, if the permittee does not use either an HCl CEMS to monitor compliance with the HCl limit or an SO₂ CEMS to monitor compliance with the alternate equivalent SO₂ emission limit, the permittee must conduct all applicable periodic HCl emissions tests according to Table 5 to 40 CFR 63, Subpart UUUUU and 40 CFR 63.10007 at least quarterly, except as otherwise provided in 40 CFR 63.10021(d)(1), and conduct site specific monitoring under a plan as provided in 40 CFR 63.10000(c)(2)(iii). [40 CFR 63.10006(e)]
- c. Notwithstanding the provisions of 40 CFR 63.10021(d)(1), the requirements listed in 40 CFR 63.10006(g) and (h), and the requirements of 40 CFR 63.10006(f)(3), the permittee must complete performance tests as follows: [40 CFR 63.10006(f)(1)]
 - i. At least 45 calendar days, measured from the test's end date, must separate performance tests conducted every quarter; [40 CFR 63.10006(f)(1)(i)]
 - ii. For annual testing: [40 CFR 63.10006(f)(1)(ii)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

1. At least 320 calendar days, measured from the test's end date, must separate performance tests; [40 CFR 63.10006(f)(1)(ii)(A)]
 2. At least 320 calendar days, measured from the test's end date, must separate annual sorbent trap mercury testing for 30-boiler operating day LEE tests; [40 CFR 63.10006(f)(1)(ii)(B)]
 3. At least 230 calendar days, measured from the test's end date, must separate annual sorbent trap mercury testing for 90-boiler operating day LEE tests; and [40 CFR 63.10006(f)(1)(ii)(C)]
- iii. At least 1,050 calendar days, measured from the test's end date, must separate performance tests conducted every 3 years. [40 CFR 63.10006(f)(1)(iii)]
- d. For units demonstrating compliance through quarterly emission testing, the permittee must conduct a performance test in the 4th quarter of a calendar year if the EGU has skipped performance tests in the first 3 quarters of the calendar year. [40 CFR 63.10006(f)(2)]
- e. If the EGU misses a performance test deadline due to being inoperative and if 168 or more boiler operating hours occur in the next test period, the permittee must complete an additional performance test in that period as follows: [40 CFR 63.10006(f)(3)]
- i. At least 15 calendar days must separate two performance tests conducted in the same quarter. [40 CFR 63.10006(f)(3)(i)]
 - ii. At least 107 calendar days must separate two performance tests conducted in the same calendar year. [40 CFR 63.10006(f)(3)(ii)]
 - iii. At least 350 calendar days must separate two performance tests conducted in the same 3 year period. [40 CFR 63.10006(f)(3)(iii)]
- f. If the permittee elects to demonstrate compliance using emissions averaging under 40 CFR 63.10009, the permittee must continue to conduct performance stack tests at the appropriate frequency given in 40 CFR 63.10006(c) through (f). [40 CFR 63.10006(g)]
- g. If a performance test on a non-mercury LEE shows emissions in excess of 50 percent of the emission limit and if the permittee chooses to reapply for LEE status, the permittee must conduct performance tests at the appropriate frequency given in 40 CFR 63.10006(c) through (e) for that pollutant until all performance tests over a consecutive 3-year period show compliance with LEE criteria. [40 CFR 63.10006(h)]
- h. Performance tests to demonstrate compliance with emission or operating limit under 40 CFR 63, Subpart UUUUU must be conducted as specified in 40 CFR 63.10007.
- i. If the permittee uses quarterly performance testing to demonstrate compliance with one or more applicable emission limits in Table 2 to 40 CFR 63, Subpart UUUUU, the permittee: [40 CFR 63.10021(d)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- i. May skip performance testing in those quarters during which less than 168 boiler operating hours occur, except that a performance test must be conducted at least once every calendar year. [40 CFR 63.10021(d)(1)]
- ii. Must conduct the performance test as defined in Table 5 to 40 CFR 63, Subpart UUUUU and calculate the results of the testing in units of the applicable emissions standard; and [40 CFR 63.10021(d)(2)]

4. Specific Monitoring Requirements:

- a. If the permittee demonstrates compliance with any applicable emissions limit through use of a continuous monitoring system (CMS), where a CMS includes a continuous parameter monitoring system (CPMS), as well as a continuous emissions monitoring system (CEMS), the permittee must develop a site specific monitoring plan, if requested, at least 60 days before initial performance evaluation (where applicable) of your CMS. This requirement also applies if the permittee petitions the Administrator for alternative monitoring parameters under 40 CFR 63.8(f). This requirement to develop and submit a site-specific monitoring plan does not apply to affected sources with existing monitoring plans that apply to CEMS and CPMS prepared under appendix B to 40 CFR part 60 or part 75, and that meets the requirements of 40 CFR 63.10010. Using the process described in 40 CFR 63.8(f)(4), the permittee may request approval of monitoring system quality assurance and quality control procedures alternative to those specified in 40 CFR 63.10000(d)(1) and, if approved, include those in the site-specific monitoring plan. The monitoring plan must address the provisions in 40 CFR 63.10000(d)(2) through (5). [40 CFR 63.10000(d)(1)]
- b. The permittee shall install, calibrate, maintain and operate CEMS for measuring NO_x, SO₂ and either oxygen or carbon dioxide emissions. Excluding exempted time periods, if any appropriately averaged emission rate exceeds the applicable standard, the permittee shall, as appropriate, initiate an investigation of the cause of the exceedance and/or the CEM system and make any necessary repairs or take corrective actions as soon as practicable. [401 KAR 61:005, Section 3; 40 CFR 60, Appendix B, Performance Specification 2; 40 CFR 75, Appendix A; and 401 KAR 52:020, Section 10]
- c. The permittee shall install, calibrate, operate, and maintain a continuously monitoring and recording opacity, continuous opacity monitoring system (COM), compliance with 40 CFR 60, Performance Specification 1. Excluding exempted time periods, if any six-minute average opacity value exceeds the opacity standard, the permittee shall: [401 KAR 61:005, Section 3(5)(a)1.a. and 401 KAR 52:020, Section 10]
 - i. Accept the concurrent readout from the COM and perform an inspection of the control equipment and make any necessary repairs; or [401 KAR 52:020, Section 10]
 - ii. Within 30 minutes after the COM indicates exceedance of the opacity standard, determine opacity using US EPA Reference Method 9. If emissions are visible, inspect the COM and/or the control equipment and make any necessary repairs. If US EPA Reference Method 9 cannot be performed, the reason for not performing shall be documents. [401 KAR 52:020, Section 10]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- d. The permittee shall install, calibrate, maintain and operate CEMS for measuring emissions of particulate matter. [401 KAR 52:020, Section 10]
- e. All monitoring systems necessary for compliance with any newly applicable monitoring requirements which apply as a result of the cessation or commencement or recommencement of operations that causes the EGU meet the definition of an EGU subject to 40 CFR 63, Subpart UUUUU must be installed and operational as of the date the source ceases to be or becomes subject to 40 CFR 63, Subpart UUUUU. All calibration and drift checks must be performed as of the date the source ceases to be or becomes subject to 40 CFR 63, Subpart UUUUU. Relative accuracy tests must be performed as of the performance test deadline for PM CEMS, if applicable. Relative accuracy testing for other CEMS need not be repeated if that testing was previously performed consistent with CAA section 112 monitoring requirements or monitoring requirements under 40 CFR 63, Subpart UUUUU. [40 CFR 63.10000(k)]
- f. The permittee must install, certify, operate, maintain, and quality assure each monitoring system necessary for demonstrating compliance with the work practice standards for PM or non-mercury HAP metals during startup periods and shutdown periods. The permittee must collect, record, report, and maintain data obtained from these monitoring systems during startup periods and shutdown periods. [40 CFR 63.10000(l)]
- g. The permittee shall comply with the applicable monitoring requirements of 40 CFR 63.10010, 63.10011, 63.10020, and 63.10021.
- h. For affected units meeting the LEE requirements of 40 CFR 63.10005(h), the permittee must repeat the performance test once every 3 years (once every year for Hg) according to Table 5 to 40 CFR 63, Subpart UUUUU and 40 CFR 63.10007. Should subsequent emissions testing results show the unit does not meet the LEE eligibility requirements, LEE status is lost. If this should occur: [40 CFR 63.10006(b)]
 - i. For all pollutant emission limits except for Hg, the permittee must conduct emissions testing quarterly, except as otherwise provided in 40 CFR 63.10021(d)(1). [40 CFR 63.10006(b)(1)]
 - ii. For Hg, the permittee must install, certify, maintain, and operate a sorbent trap monitoring system in accordance with appendix A to 40 CFR 63, Subpart UUUUU, within 6 calendar months of losing LEE eligibility. The permittee must have 3 calendar years of testing and CEMS or sorbent trap monitoring system data that satisfy the LEE emissions criteria to reestablish LEE status. [40 CFR 63.10006(b)(2)]
- i. Flue gases from the affected units under 40 CFR 63, Subpart UUUUU exhaust to the atmosphere through a variety of different configurations, including but not limited to individual stacks, a common stack configuration or a main stack plus a bypass stack. For the CEMS, and sorbent trap monitoring systems used to provide data under 40 CFR 63, Subpart UUUUU, the continuous monitoring system installation requirements for these exhaust configurations are described in 40 CFR 63.10010(a)(1) through (6). [40 CFR 63.10010(a)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- j. If the permittee uses an oxygen (O₂) or carbon dioxide (CO₂) CEMS to convert measured pollutant concentrations to the units of the applicable emissions limit, the O₂ or CO₂ concentrations shall be monitored at a location that represents emissions to the atmosphere, *i.e.*, at the outlet of the EGU, downstream of all emission control devices. The permittee must install, certify, maintain, and operate the CEMS according to 40 CFR part 75. Use only quality assured O₂ or CO₂ data in the emissions calculations; do not use 40 CFR part 75 substitute data values. [40 CFR 63.10010(b)]
- k. If the permittee is required to use a stack gas flow rate monitor, either for routine operation of a sorbent trap monitoring system or to convert pollutant concentrations to units of an electrical output-based emission standard in Table 2 to 40 CFR 63, Subpart UUUUU, the permittee must install, certify, operate, and maintain the monitoring system and conduct on-going quality-assured flow rate data in the emissions calculations. Do not apply bias adjustment factors to the flow rate data and do not use substitute flow rate data in the calculations. [40 CFR 63.10010(c)]
- l. If the permittee is required to make corrections for stack gas moisture content when converting pollutant concentrations to the units of an emission standard in Table 2 to 40 CFR 63, Subpart UUUUU the permittee must install, certify, operate, and maintain a moisture monitoring system in accordance with 40 CFR Part 75. Alternatively, the permittee may use appropriate fuel-specific default moisture values from 40 CFR 75.11(b) to estimate moisture content of the stack gas. If the permittee installs and operates a moisture monitoring system, do not use substitute moisture data in the emissions calculations. [40 CFR 63.10010(d)]
- m. If the permittee uses a sorbent trap monitoring system, the permittee must install, certify, operate, maintain and quality-assure the data from the monitoring system in accordance with appendix A to 40 CFR 63, Subpart UUUUU. The permittee must calculate and record a 30- (or if alternate emission averaging is used, 90-) boiler operating day rolling average Hg emission rate, in units of the standard, updated after each new boiler operating day. Each 30- (or, if alternate emission averaging is used, 90-) boiler operating day rolling average emission rate, calculated according to section 6.2 of appendix A to 40 CFR 63, Subpart UUUUU, is the average of all the valid hourly Hg emission rates in the preceding 30- (or, if alternate emissions averaging is used, a 90-) boiler operating days. Section 7.1.4.3 of appendix A to 40 CFR 63, Subpart UUUUU explains how to reduce sorbent trap monitoring system data to an hourly basis. [40 CFR 63.10010(g)]
- n. If the permittee chooses to comply with the PM filterable emissions limit in lieu of metal HAP limits, the permittee may choose to install, certify, operate, and maintain a PM CEMS and record and report the output of the PM CEMS as specified in 40 CFR 63.10010(i)(1) through (8). Compliance with the applicable PM emissions limit in Table 1 or 2 to 40 CFR 63, Subpart UUUUU is determined on a 30-boiler operating day rolling average basis. [40 CFR 63.10010(i)]
- o. The permittee must monitor and collect data according to 40 CFR 63.10000(d). [40 CFR 63.10020(a)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- p. The permittee may not use data recorded during EGU startup or shutdown in calculations used to report emissions, except as otherwise provided in 40 CFR 63.10000(c)(1)(vi)(B) and 63.10005(a)(2)(iii). In addition, data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels. The permittee must use all of the quality-assured data collected during all other periods in assessing the operation of the control device and associated control system. [40 CFR 63.10020(c)]
- q. The permittee must demonstrate continuous compliance with each emission limit, operating limit, and work practice standard in Tables 1 through 4 to 40 CFR 63, Subpart UUUUU that is applicable, according to the monitoring specified in Tables 6 and 7 to 40 CFR 63, Subpart UUUUU and 40 CFR 63.10021(b) through (g). [40 CFR 63.10021(a)]
- r. The sulfur content of solid fuels, as burned, shall be determined in accordance with the methods specified by the cabinet. [401 KAR 61:015, Section 6(1)]
- s. The rate of fuel burned for each fuel shall be measured daily or at shorter intervals and recorded. [401 KAR 61:015, Section 6 (3)(a)]
- t. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. [401 KAR 61:015. Section 6(3)(b)]
- u. The average electrical output and the minimum and maximum hourly generation rate shall be measured and recorded daily. [401 KAR 61:015. Section 6(3)(c)]

5. Specific Recordkeeping Requirements:

- a. The permittee shall maintain record of: [401 KAR 52:020, Section 10]
 - i. The sulfur content of each fuel from each fuel analysis;
 - ii. The rate of fuel burned for each fuel type on a daily basis;
 - iii. The heating value and ash content of fuel on a weekly basis;
 - iv. When no excess emissions have occurred and the continuous monitoring system(s) have not been inoperative, repaired, or adjusted;
 - v. Data collected by continuous monitoring systems or as necessary to convert monitoring data to the units of the applicable standard;
 - vi. Results of all compliance tests;
 - vii. Percentage of CEM data (excluding exempted time periods) showing excursions above the PM standard; and
- b. The permittee shall maintain record of US EPA Reference Method 9 readings conducted. [401 KAR 52:020, Section 10]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- c. The actions, including duration of the startup period, of the permittee during startup and shutdown periods, shall be documented by signed contemporaneous logs or other relevant evidence. [401 KAR 61:015, Section 9(d)]
- d. The permittee must keep records according to 40 CFR 63.10032(a)(1) and (2). If the permittee is required to (or elects to) continuously monitor Hg and/or PM emissions, the permittee must keep records required under appendix A and/or appendix B and/or appendix C to 40 CFR 63, Subpart UUUUU. If the permittee elects to conduct periodic (*e.g.* quarterly or annual) performance stack tests, then, for each test completed on or after January 1, 2024, the permittee must keep records of the applicable data elements under 40 CFR 63.7(g). The permittee must also keep records of all data elements and other information in appendix E to 40 CFR 63, Subpart UUUUU that apply to the compliance strategy. [40 CFR 63.10032(a)]
 - i. In accordance with 40 CFR 63.10(b)(2)(xiv), a copy of each notification or report that is submitted to comply with 40 CFR 63, Subpart UUUUU. The permittee must also keep records of all supporting documentation for the initial Notifications of Compliance Status, semiannual compliance reports, or quarterly compliance reports that are submitted. [40 CFR 63.10032(a)(1)]
 - ii. Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in 40 CFR 63.10(b)(2)(viii). [40 CFR 63.10032(a)(2)]
- e. For each CEMS, the permittee must keep records according to 40 CFR 63.10032(b)(1) through (4): [40 CFR 63.10032(b)]
 - i. Records described in 40 CFR 63.10(b)(2)(vi) through (xi). [40 CFR 63.10032(b)(1)]
 - ii. Previous (*i.e.*, superseded) versions of performance evaluation plan as required in 40 CFR 63.8(d)(3). [40 CFR 63.10032(b)(2)]
 - iii. Requests for alternatives to relative accuracy test for CEMS as required in 40 CFR 63.8(f)(6)(i). [40 CFR 63.10032(b)(3)]
 - iv. Records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period. [40 CFR 63.10032(b)(4)]
- f. The permittee must keep the records required in Table 7 to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10032(c)]
- g. The permittee must also keep the records in 40 CFR 63.10032(d)(1) through (3): [40 CFR 63.10032(d)]
 - i. The permittee must keep records of monthly fuel use by each EGU, including the type(s) of fuel and amount(s) used. [40 CFR 63.10032(d)(1)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- ii. For an EGU that qualifies as an LEE under 40 CFR 63.10005(h), the permittee must keep annual records that document that the emissions in the previous stack test(s) continue to qualify the unit for LEE status for an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year. [40 CFR 63.10032(d)(3)]
- h. The permittee must keep records of the occurrence and duration of each startup or shutdown. [40 CFR 63.10032(f)(1)]
- i. The permittee must keep records of the occurrence and duration of each malfunction of an operation (*i.e.* process equipment) or the air pollution control and monitoring equipment. [40 CFR 63.10032(g)]
- j. The permittee must keep records of actions taken during periods of malfunction to minimize emissions in accordance with 40 CFR 63.10000(b), including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.10032(h)]
- k. The permittee must keep records of the type(s) and amount(s) of fuel used during each startup or shutdown. [40 CFR 63.10032(i)]
- l. The permittee must keep records:
 - i. In a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1). [40 CFR 63.10033(a)]
 - ii. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. [40 CFR 63.10033(b)]
 - iii. On site for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee can keep the records off site for the remaining 3 years. [40 CFR 63.10033(c)]
- m. The permittee shall maintain a log of all measurements required by 401 KAR 61:015 and summarized monthly. The record of all measurements and summary shall be retained for at least two years following the date of measurements and summaries. [401 KAR 61:015, Section 6(4)]
- n. The rate of fuel burned shall be measured daily or at shorter intervals and recorded. [401 KAR 61:015, Section 6(3)(a)]
- o. The heating value and ash content of fuels shall be ascertained at least once per week and recorded. [401 KAR 61:015, Section 6(3)(b)]
- p. The average electrical output and the minimum and maximum hourly generation rate shall be measured and recorded daily. [401 KAR 61:015, Section 6(3)(c)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)**q. See Section F – Monitoring, Recordkeeping, and Reporting Requirements****6. Specific Reporting Requirements:**

- a. For each continuous monitoring system, the permittee shall submit, in writing to the cabinet, for every calendar quarter a written report of excess emissions including the nature and cause of the excess emissions, if known, as follows: [401 KAR 61:005, Section 3(15)]
 - i. The averaging period used for data reporting shall correspond to the averaging period specified in the emission test method used to determine compliance with an emission standard for applicable pollutant and source category, and quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter; [401 KAR 61:005, Section 3(15)(a)]
 - ii. For opacity measurements, the summary shall consist of the magnitude in actual percent opacity of six minute averages of opacity greater than the opacity standard in the applicable standard for each hour of operation of the facility, as follows: [401 KAR 61:005, Section 3(15)(b)]
 1. Average values may be obtained by integration over the averaging period or by arithmetically averaging a minimum of four equally spaced instantaneous opacity measurements per minute; [401 KAR 61:005, Section 3(15)(b)1.]
 2. All exempted time periods shall be considered before determining the excess average of opacity (for example if an administrative regulation allows two minutes of opacity measurements in excess of the standard. The source shall report all opacity averages, in any one hour, in excess of the standard, minus the two minute exemption); and [401 KAR 61:005, Section 3(15)(b)2.]
 3. If more than one opacity standard applies, excess emissions data shall be submitted in relation to all applicable standards; [401 KAR 61:005, Section 3(15)(b)3.]
 - iii. For particulate matter measurements, the summary shall be based on 24 hour block averaging times; [401 KAR 61:005, Section 3(15)(c)]
 - iv. For gaseous measurements, the summary shall consist of hourly averages expressed in the units of the applicable standard; [401 KAR 61:005, Section 3(15)(d)]
 - v. Except for zero and span checks, the date and time of each period during which the CEMS was not operating, including proof of the CEMS performance during system repairs and the nature of the repairs or adjustments; [401 KAR 61:005, Section 3(15)(e)]
 - vi. If excess emissions have not occurred and the CEMS have not been inoperative. Repaired, or adjusted, this information shall be included in the report; and [401 KAR 61:005, Section 3(15)(f)]
 - vii. The source shall maintain a file for a minimum of two years from the date of collection of the data or submission to the cabinet of: [401 KAR 61:005, Section 3(15)(g)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

1. All information reported in the quarterly summaries; [401 KAR 61:005, Section 3(15)(g)1.]
 2. All other data collected by the CEMS or as necessary to convert monitoring data to the units of the applicable standard. [401 KAR 61:005, Section 3(15)(g)2.]
- b. The permittee must provide 30 days prior notice of the date the EGU will cease complying with 40 CFR 63, Subpart UUUUU. The notification must identify: [40 CFR 63.10000(i)(2)]
- i. The name of the owner or operator of the EGU, the location of the facility, the EGU that will cease complying with 40 CFR 63, Subpart UUUUU, and the date of the notice; [40 CFR 63.10000(i)(2)(i)]
 - ii. The currently applicable subcategory under 40 CFR 63, Subpart UUUUU. And any 40 CFR part 60, part 62, or part 63 subpart and subcategory that will be applicable after the permittee ceases complying with 40 CFR 63, Subpart UUUUU. [40 CFR 63.10000(i)(2)(ii)]
 - iii. The date on which the permittee became subject to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10000(i)(2)(iii)]
 - iv. The date upon which the permittee will cease complying with 40 CFR 63, Subpart UUUUU, consistent with 40 CFR 63.10000(g). [40 CFR 63.10000(i)(2)(iv)]
- c. Periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunction or monitoring system out-of-control periods, and required monitoring system quality assurance or quality control activities excluding zero and span checks must be reported as time the monitor was inoperative (downtime) under 40 CFR 63.10(c). Failure to collect required quality-assured data during monitoring system malfunctions, monitoring system out-of-control periods, or repairs associated with monitoring system malfunctions or monitoring system out-of-control periods is a deviation from the monitoring requirements. [40 CFR 63.10020(d)]
- d. Report the tune-up date electronically in the quarterly compliance report, in accordance with 40 CFR 63.10031(g) and section 10.2 of appendix E to 40 CFR 63, Subpart UUUUU. The tune-up report date is the date when tune-up requirements in 40 CFR 63.10021(e)(6) and (7) are completed. [40 CFR 63.10021(e)(9)]
- e. The permittee must submit the applicable reports and notifications required under 40 CFR 63.10031(a) through (k) to the Administrator electronically, using EPA's Emission Collection and Monitoring Plan System (ECMPS) reporting tool. If the final date of any time period (or any deadline) for any of these submissions falls on a weekend or a Federal holiday, the time period shall be extended to the next business day. Moreover, if the EPA Host System supporting the ECMPS reporting tool is offline and unavailable for submission of reports for any part of a day when a report would otherwise be due, the deadline is automatically extended until the first business day on which the system becomes available following the outage. Use of the ECMPS reporting tool to submit a report or notification required under 40 CFR 63, Subpart UUUUU satisfies any requirement under

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

40 CFR 63 Subpart A to submit that same report or notification (or the information contained in it) to the appropriate EPA Regional office or state agency whose delegation request has been approved. [40 CFR 63.10021(f)]

- f. The permittee must report each instance in which the permittee did not meet an applicable emissions limit or operating limit in Tables 1 through 4 of 40 CFR 63, Subpart UUUUU or failed to conduct a required tune-up. These instances are deviations from the requirements of 40 CFR 63, Subpart UUUUU. These deviations must be reported according to 40 CFR 63.10031. [40 CFR 63.10021(g)]
- g. The permittee must submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6) and 63.9(b) through (h) that are applicable by the dates specified. [40 CFR 63.10030(a)]
- h. When the permittee is required to conduct a performance test, the permittee must submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [40 CFR 63.10030(d)]
- i. The permittee must submit the notifications in 40 CFR 63.1000(h)(2) and (i)(2) that are applicable by the dates specified. [40 CFR 63.10030(f)]
- j. The permittee must submit each report in 40 CFR 63.10031 that is applicable. [40 CFR 63.10031(a)]
 - i. If the permittee is required to (or elects to) monitor Hg emissions continuously, the permittee must meet the electronic reporting requirements of appendix A to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10031(a)(1)]
 - ii. If the permittee elects to monitor filterable PM emissions continuously, the permittee must meet the electronic reporting requirements of appendix C to 40 CFR 63, Subpart UUUUU. Electronic reporting of hourly PM emissions data shall begin with the later of the first operating hour on or after January 1, 2024; or the first operating hour after completion of the initial PM CEMS correlation test. [40 CFR 63.10031(a)(3)]
- k. The permittee must submit semiannual compliance reports according to the requirements in 40 CFR 63.10031(b)(1) through (5). [40 CFR 63.10031(b)]
- l. The semiannual compliance report must contain the information required in 40 CFR 63.10031(c)(1) through (10): [40 CFR 63.10031(c)]
 - i. The information required by the summary report located in 40 CFR 63.10(e)(3)(vi). [40 CFR 63.10031(c)(1)]
 - ii. The total fuel use by each affected source subject to an emission limit, for each calendar month within the semiannual reporting period, including, but not limited to, a description of the fuel, whether the fuel has received a non-waste determination by EPA or your basis for concluding that the fuel is not a waste, and the total fuel usage amount with units of measure. [40 CFR 63.10031(c)(2)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- iii. Indicate whether the permittee burned new types of fuel during the reporting period. If the permittee did burn new types of fuel, the permittee must include the date of the performance test where that fuel was in use. [40 CFR 63.10031(c)(3)]
- iv. Include the date of the most recent tune-up for each EGU. The date of the tune-up is the date the tune-up provisions specified in 40 CFR 63.10021(e)(6) and (7) were completed. [40 CFR 63.10031(c)(4)]
- v. The permittee must report emergency bypass information annually from EGUs with LEE status. [40 CFR 63.10031(c)(6)]
- vi. A summary of the results of the annual performance tests and documentation of any operating limits that were reestablished during the test, if applicable. If the permittee is conducting stack tests once every 3 years to maintain LEE status, consistent with 40 CFR 63.10006(b), the date of each stack test conducted during the previous 3 years, a comparison of emission level the permittee achieves in each stack test conducted during the previous 3 years the 50 percent emission limit threshold required in 40 CFR 63.10005(h)(1)(i), and a statement as to whether there have been any operational changes since the last stack test that could increase emissions. [40 CFR 63.10031(c)(7)]
- vii. A certification. [40 CFR 63.10031(c)(8)]
- viii. If the permittee has a deviation from any emission limit, work practice standard, or operating limit, the permittee must also submit a brief description of the deviation, the duration of the deviation, emissions point identification, and the cause of the deviation. [40 CFR 63.10031(c)(9)]
- ix. If the permittee had any process or control equipment malfunction(s) during the reporting period, the permittee must include the number, duration, and a brief description for each type of malfunction which occurred during the semiannual reporting period which caused or may have caused any applicable emission limitation to be exceeded. [40 CFR 63.10031(c)(10)]
- m. For EGUS where the permittee relies on a CMS to comply with an emissions or operating limit, the permittee must include in the quarterly compliance reports described in 40 CFR 63.10031(g) the applicable data elements in section 13 of appendix E to 40 CFR 63, Subpart UUUUU for any “deviation” (as defined in 40 CFR 63.10042 and elsewhere in 40 CFR 63, Subpart UUUUU) that occurred during the calendar quarter. If there were no deviations, the permittee must include a statement to that effect in the quarterly compliance report. [40 CFR 63.10031(d)]
- n. The permittee must report all deviations as defined in 40 CFR 63, Subpart UUUUU in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If the source submits a semiannual compliance report pursuant to 40 CFR 63.10031(c) and (d), or two quarterly compliance reports covering the appropriate calendar half pursuant to 40 CFR 63.10031(g) along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the compliance report(s) includes all required information concerning deviations from any

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

emission limit, operating limit, or work practice requirement in 40 CFR 63, Subpart UUUUU, submission of the compliance report(s) satisfies any obligation to report the same deviations in the semiannual monitoring report. Submission of the compliance report(s) does not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permit authority. [40 CFR 63.10031(e)]

- o. For each performance stack test, in accordance with 40 CFR 63.10031(g), the permittee must submit the applicable reference method information in sections 17 through 31 of appendix E of 40 CFR 63, Subpart UUUUU along with the quarterly compliance report for the calendar quarter in which the test was completed. [40 CFR 63.10031(f)]
- i. For each Hg RATA completed, the permittee must submit the applicable reference method information in section 17 through 31 of appendix E to 40 CFR 63, Subpart UUUUU prior to or concurrent with the relevant quarterly emissions report. For correlation tests, RRAs, and RCAs of PM CEMS that are completed, submit the appendix E reference method information together with the summarized electronic test results, in accordance with section 11.4 of appendix B to 40 CFR 63, Subpart UUUUU or section 7.2.4 of appendix C to 40 CFR Part 63, as applicable. [40 CFR 63.10031(f)(1)]
- ii. If, for a particular EGU or a group of EGUs serving a common stack, the permittee has elected to demonstrate compliance using a PM CEMS, the permittee must submit quarterly reports in accordance with 40 CFR 63.10031(f)(6), which include all of the 30-boiler operating day rolling average emission rates derived from the CEMS data. The compliance averages shall be incorporated into the quarterly compliance reports described in 40 CFR 63.10031(g). In addition to the compliance averages for PM CEMS, the quarterly compliance reports described in average emission rates for Hg. Further, if the EGU or common stack is in an averaging plan, the quarterly compliance reports must identify all of the EGUs or common stacks in the plan and must include all of the 30- (or 90-) group boiler operating day rolling weighted average emission rates (WAERs) for the averaging group. [40 CFR 63.10031(f)(2)]
- iii. Quarterly compliance reports shall be submitted in a format specified by the Administrator thereafter, in accordance with 40 CFR 63.10031(g), starting with a report covering the first calendar quarter of 2024. [40 CFR 63.10031(f)(4)]
- iv. The following data elements must be entered into the ECMPS reporting tool at the time of submission of each PDF file: [40 CFR 63.10031(f)(6)]
 - 1. The facility name, physical address, mailing address (if different from the physical address), and county; [40 CFR 63.10031(f)(6)(i)]
 - 2. The ORIS code (or equivalent ID number assigned by EPA's Clean Air Markets Division (CAMD)) and the Facility Registry System (FRS) ID; [40 CFR 63.10031(f)(6)(ii)]
 - 3. The EGU (or EGUs) to which the report applies. Report the EGU IDs as they appear in the CAMD Business System; [40 CFR 63.10031(f)(6)(iii)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

4. If any of the EGUs in 40 CFR 63.10031(f)(6)(iii) share a common stack, indicate which EGUs share the stack. If emissions data are monitored and reported at the common stack according to 40 CFR Part 75, report the ID number of the common stack as it is represented in the electronic monitoring plan required under 40 CFR 75.53. [40 CFR 63.10031(f)(6)(iv)]
 5. If any of the EGUs described in 40 CFR 63.10031(f)(6)(iii) are in an averaging plan under 40 CFR 63.10009, indicate which EGUs are in the plan and whether it is a 30- or 90- day averaging plan; [40 CFR 63.10031(f)(6)(v)]
 6. The identification of each emission point to which report applies. An “emission point” is a point at which source effluent is released to the atmosphere, and is either a dedicated stack that serves one of the EGUs identified in 40 CFR 63.10031(f)(6)(iii) or a common stack that serves two or more of those EGUs. To identify an emission point, associate it with the EGU or stack ID in the CAMD Business system or the electronic monitoring plan (*e.g.*, “Unit 2 stack,” “common stack CS001,” or “multiple stack MS001”); [40 CFR 63.10031(f)(6)(vi)]
 7. An indication of the type of PDF report or notification being submitted; [40 CFR 63.10031(f)(6)(vii)]
 8. The pollutant(s) being addressed in the report; [40 CFR 63.10031(f)(6)(viii)]
 9. The reporting period being covered by the report (if applicable); [40 CFR 63.10031(f)(6)(ix)]
 10. The relevant test method that was performed for a performance test (if applicable); [40 CFR 63.10031(f)(6)(x)]
 11. The data the performance test was completed (if applicable) and the test number (if applicable); and [40 CFR 63.10031(f)(6)(xi)]
 12. The responsible official’s name, title, and phone number; [40 CFR 63.10031(f)(6)(xii)]
- p. The permittee must use the ECMPS reporting tool to submit quarterly electronic compliance reports. Each quarterly compliance report shall include the applicable data elements in sections 2 through 13 of appendix E to 40 CFR 63, Subpart UUUUU. For each stack test summarized in the compliance report, the permittee must also submit the applicable reference method information in sections 17 through 31 of appendix E to 40 CFR 63, Subpart UUUUU. The compliance reports and associated appendix E information must be submitted no later than 60 days after the end of each calendar quarter. [40 CFR 63.10031(g)]
- q. Initial Notifications of Compliance Status (if any) shall be submitted in accordance with 40 CFR 63.9(h)(2)(ii), as PDF files, using the ECMPS reporting tool. The applicable data elements in 40 CFR 63.10031(f)(6)(i) through (xii) must be entered into ECMPS with each Notification. [40 CFR 63.10031(h)]

SECTION H - ALTERNATE OPERATING SCENARIOS (CONTINUED)

- r. If the permittee elects to use a certified PM CEMS to monitor PM emissions continuously to demonstrate compliance with 40 CFR 63, Subpart UUUUU and have begun recording valid data from the PM CEMS prior to November 9, 2020, the permittee must use the PM CEMS prior to November 9, 2020, the permittee must use the EXMPS reporting tool to submit a detailed report of the PS 11 correlation test (see appendix B to 40 CFR part 60) in a PDF file no later than 60 days after that date. For a correlation test completed on or after November 9, 2020, but prior to January 1, 2024, the permittee must submit the PDF report no later than 60 days after the date on which the test is completed. For a correlation test completed on or after January 1, 2024, the permittee must submit the PDF report according to section 7.2.4 of appendix C to 40 CFR 63, Subpart UUUUU. The applicable data elements in 40 CFR 63.10031(f)(6)(i) through (xii) must be entered into the ECMPs reporting tool with the PDF report. [40 CFR 63.10031(j)]
- s. See **Section F – Monitoring, Recordkeeping, and Reporting Requirements.**

7. Specific Control Equipment Operating Conditions:

- a. The pulse jet fabric filter baghouse shall be continuously operated to maximize PM emission reductions, consistent with the manufacturer's specifications, the operational design and maintenance limitations of the units, and good engineering practice. [Consent Decree entered September 24, 2007, Section VII.A]
- b. The permittee shall continuously operate each SCR (or equivalent NO_x control technology approved pursuant to paragraph 54 of the consent decree entered on September 24, 2007) at all times that the unit it serves is in operation, consistent with the technological limitations, manufacturer's specifications, and good engineering and maintenance practices for the SCR or equivalent technology, for minimizing emissions to the extent practicable. [Consent Decree entered September 24, 2007]
- c. The permittee shall continuously operate each FGD (or equivalent SO₂ control technology approved pursuant to paragraph 66 of the consent decree entered on September 24, 2007) covered under the consent decree entered on September 24, 2007, at all times that the unit it serves is in operation, consistent with the technological limitations, manufacturer's specifications, and good engineering and maintenance practices for the FGD or equivalent technology, for minimizing emissions to the extent practicable. [Consent Decree entered on September 24, 2007, Paragraph 67]
- d. All air pollution control equipment necessary for compliance with any newly applicable emission limits which apply as a result of the cessation or commencement or recommencement of operations that cause the EGU to meet the definition of an EGU subject to 40 CFR 63, Subpart UUUUU must be installed and operational as of the date the source ceases to be or becomes subject to 40 CFR 63, Subpart UUUUU. [40 CFR 63.10000(j)]
- e. The permittee shall maintain records regarding the maintenance of control equipment. [401 KAR 52:020, Section 10]

SECTION I - COMPLIANCE SCHEDULE

40 CFR part 64, Compliance Assurance Monitoring (CAM) applies to the following emission points for the specified pollutants. The permittee shall submit a CAM plan meeting the requirements of 40 CFR part 64 upon submittal of the first permit application for a significant permit revision affecting emissions from a Large pollutant-specific emission unit (PSEU), as defined in 40 CFR 64, or upon submittal of the first Title V renewal application that includes the following units:

- a. Combined Cycle Gas Turbine (CCGT) Unit 3 (EU 18) for VOC
- b. Combined Cycle Gas Turbine (CCGT) Unit 4 (EU 19) for VOC

SECTION J - ACID RAIN**1. Statutory and Regulatory Authority:**

In accordance with KRS 224.10-100 and Titles IV and V of the Clean Air Act, the Kentucky Environmental and Public Protection Cabinet, Division for Air Quality issues this permit pursuant to 401 KAR 52:020, Title V permits, 401 KAR 52:060, Acid rain permits, and 40 CFR part 76, Acid Rain Nitrogen Oxides Emission Reduction Program.

2. Permit Requirements:

This Acid Rain Permit covers Acid Rain Units 01, 02, 03, and 04 at the Cooper Station. Units 01 and 02 are coal-fired electric generating units. Units 03 and 04 are combined cycle combustion turbine electric generating units capable of burning either natural gas or ultra low sulfur fuel oil. The Acid Rain Permit Application and NO_x Compliance Plan previously received are hereby incorporated into and made part of this permit and the permittee must comply with the standard requirements and special provisions set forth in the application [40 CFR 72.9(a)(2)].

3. Acid Rain Program Emission and Operating Limitations:

The applicable Acid Rain emission limitations for the permittee are set in 40 CFR 73.10 Table 2, 40 CFR 76.5, and 40 CFR 76.11. The results are listed in the table below:

Plant Name: John S. Cooper Station					
Year for SO₂ Allowances Pursuant to 40 CFR Part 73.10	2026	2027	2028	2029	2030
Emissions Unit 01	3,216*	3,216*	3,216*	3,216*	3,216*
Emissions Unit 02	6,619*	6,619*	6,619*	6,619*	6,619*
NO_x Limits and Requirements					
Pursuant to 40 CFR 76, the Kentucky Division for Air Quality approves a NO_x standard emissions limitation compliance plan for Units 01 and 02. This plan is effective for calendar years 2026 through 2030. Under the NO_x compliance plan, the annual average NO_x emission rate for each year, determined in accordance with 40 CFR 76, shall not exceed the applicable emission limitation, under 40 CFR 76.5(a)(2), of 0.50 lb/MMBtu for dry bottom wall-fired boilers. In addition to the described NO_x compliance plan, this unit shall comply with all other applicable requirements of 40 CFR 76, including the duty to reapply for a NO_x compliance plan and requirements covering excess emissions.					

* The number of allowances allocated to Phase II affected units by the U.S. EPA may change under 40 CFR Part 73. In addition, the number of allowances actually held by an affected source in a unit account may differ from the number allocated by U. S. EPA. Neither of the aforementioned conditions necessitates a revision to the unit SO₂ allowance allocations identified in this permit (See 40 CFR 72.84).

SECTION J - ACID RAIN (CONTINUED)**Consent Decree Requirements:**

For each calendar year beginning with calendar year 2008; the permittee shall surrender to US EPA, or transfer to a nonprofit third party selected by permittee for surrender, SO₂ Allowances allocated to EKPC System Units that are surplus to its Clean Air Act SO₂ Allowance-holding requirements for the EKPC System Units and New Units, collectively, for that year. The permittee shall make such surrender annually, within 45 days of permittee's receipt of US EPA of the Annual Deduction Reports for SO₂. Any surrender need not include the specific SO₂ Allowances that were allocated to EKPC System units, so long as permittee surrenders SO₂ Allowances that are from the same year or an earlier year and that are equal to the number required to be surrendered under paragraph 72 of the September 24, 2007 Consent Decree.

The requirements and procedures for surrender of SO₂ allowances are set forth in the September 24, 2007 Consent Decree as permanent injunction provisions. Therefore, paragraphs 71, 72, 73, 74 and 76 and associated definitions of the September 24, 2007 Consent Decree are incorporated into this permit as if fully set forth herein.

4. Comments, Notes, and Justifications:

Affected units are two coal-fired dry bottom wall-fired boilers and two natural gas or ultra low sulfur fuel oil-fired combined cycle combustion turbines connected to one steam turbine.

5. Permit Application:

The Acid Rain Permit Application is a part of this permit and the source must comply with the standard requirements and special provisions set forth in the applications.

SECTION K – CLEAN AIR INTERSTATE RULE (CAIR)

CSAPR implementation is now in place and replaces requirements under EPA's 2005 Clean Air Interstate Rule.

SECTION L – CROSS-STATE AIR POLLUTION RULE (CSAPR)**Description of CSAPR Monitoring Provisions**

The CSAPR subject units, and the unit-specific monitoring provisions at this source, are identified in the following table. These units are subject to the requirements for the CSAPR NO_x Annual Trading Program, CSAPR NO_x Ozone Season Group 2 Trading Program, and CSAPR SO₂ Group 1 Trading Program.

Unit ID: EU 01, Indirect Heat Exchanger (Unit 1 Coal-fired EGU)					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR 75 Subpart B (for SO ₂ monitoring) and 40 CFR 75 Subpart H (for NO _x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR 75 Appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR 75 Appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR 75 Subpart E
SO ₂	X				
NO _x	X				
Heat input	X				
Unit ID: EU 02, Indirect Heat Exchanger (Unit 2n Coal- and natural gas-fired EGU)					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR 75 Subpart B (for SO ₂ monitoring) and 40 CFR 75 Subpart H (for NO _x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR 75 Appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR 75 Appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR 75 Subpart E
SO ₂	X				
NO _x	X				
Heat input	X				

Unit ID: EU 18 and EU 19, Two Combined Cycle Combustion Turbines (CCGTs Units 3 and 4)					
Parameter	Continuous emission monitoring system or systems (CEMS) requirements pursuant to 40 CFR 75 Subpart B (for SO ₂ monitoring) and 40 CFR 75 Subpart H (for NO _x monitoring)	Excepted monitoring system requirements for gas- and oil-fired units pursuant to 40 CFR 75 Appendix D	Excepted monitoring system requirements for gas- and oil-fired peaking units pursuant to 40 CFR 75 Appendix E	Low Mass Emissions excepted monitoring (LME) requirements for gas- and oil-fired units pursuant to 40 CFR 75.19	EPA-approved alternative monitoring system requirements pursuant to 40 CFR 75 Subpart E
SO ₂		X			
NO _x	X				
Heat input		X			

1. The above description of the monitoring used by a unit does not change, create an exemption from, or otherwise affect the monitoring, recordkeeping, and reporting requirements applicable to the unit under 40 CFR 97.430 through 97.435 (CSAPR NO_x Annual Trading Program), 97.830 through 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and 97.630 through 97.635 (CSAPR SO₂ Group 1 Trading Program). The monitoring, recordkeeping and reporting requirements applicable to each unit are included below in the standard conditions for the applicable CSAPR trading programs.
2. Owners and operators must submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable. The monitoring plan for each unit is available at the EPA's website: <https://easay.epa.gov/ecmps/monitoring-plans>.
3. Owners and operators that want to use an alternative monitoring system must submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E and 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative monitoring system is available on the EPA's website at <http://www.epa.gov/airmarkets/part-75-petition-responses>.
4. Owners and operators that want to use an alternative to any monitoring, recordkeeping, or reporting requirement under 40 CFR 97.430 through 97.434 (CSAPR NO_x Annual Trading Program), 97.830 through 97.834 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.630 through 97.634 (CSAPR SO₂ Group 1 Trading Program) must submit to the Administrator a petition requesting approval of the alternative in accordance with 40 CFR 75.66 and 97.435 (CSAPR NO_x Annual Trading Program), 97.835 (CSAPR NO_x Ozone Season Group 2 Trading Program), and/or 97.635 (CSAPR SO₂ Group 1 Trading Program). The Administrator's response approving or disapproving any petition for an alternative to a

monitoring, recordkeeping, or reporting requirement is available on the EPA's website at <https://www.epa.gov/power-sector/part-75-petition-responses>.

5. The descriptions of monitoring applicable to the unit included above meet the requirement of 401 KAR 51:240, Section 3(25) through 401 KAR 51:240, Section 3(29) (CSAPR NO_x Annual Trading Program), 40 CFR 97.1030 through 40 CFR 97.1034 (CSAPR NO_x Ozone Season Group 3 Trading Program), and 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(29) (CSAPR SO₂ Group 1 Trading Program), and therefore minor permit modification procedures, in accordance with 40 CFR 70.7(e)(2)(i)(B), may be used to add or change this unit's monitoring system description.

CSAPR NO_x Annual Trading Program requirements (401 KAR 51:240, Section 3(4))

i. Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.413 through 97.418.

ii. Emissions monitoring, reporting, and recordkeeping requirements.

- a) The owners and operators, and the designated representative, of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.430 through 97.435.
- b) The emissions data determined in accordance with 40 CFR 97.430 through 97.435 shall be used to calculate allocations of CSAPR NO_x Annual allowances under 40 CFR 97.411(a)(2) and (b) and 97.412 and to determine compliance with the CSAPR NO_x Annual emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.430 through 97.435 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

iii. NO_x emissions requirements.

- a) CSAPR NO_x Annual emissions limitation.
 - i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall hold, in the source's compliance account, CSAPR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.424(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Annual units at the source.
 - ii) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Annual units at a CSAPR NO_x Annual source are in excess of the CSAPR NO_x Annual emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - A. The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall hold the CSAPR NO_x Annual allowances required for deduction under 40 CFR 97.424(d); and

- B. The owners and operators of the source and each CSAPR NO_x Annual unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.
- b) CSAPR NO_x Annual assurance provisions.
- i) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Annual allowances available for deduction for such control period under 40 CFR 97.425(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.425(b), of multiplying:
- A. The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and
- B. The amount by which total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state for such control period exceed the state assurance level.
- ii) The owners and operators shall hold the CSAPR NO_x Annual allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period.
- iii) Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the state NO_x Annual trading budget under 40 CFR 97.410(a) and the state's variability limit under 40 CFR 97.410(b).
- iv) It shall not be a violation of 40 CFR part 97, subpart AAAAA or of the Clean Air Act if total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the CSAPR NO_x Annual units at CSAPR NO_x Annual sources in the state during a control period exceeds the common designated representative's assurance level.

- v) To the extent the owners and operators fail to hold CSAPR NO_x Annual allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - A. The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - B. Each CSAPR NO_x Annual allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart AAAAA and the Clean Air Act.
- c) Compliance periods.
 - i) A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
 - ii) A CSAPR NO_x Annual unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.430(b) and for each control period thereafter.
- d) Vintage of CSAPR NO_x Annual allowances held for compliance.
 - i) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated or auctioned for such control period or a control period in a prior year.
 - ii) A CSAPR NO_x Annual allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (c)(2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Annual allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year.
- e) Allowance Management System requirements. Each CSAPR NO_x Annual allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart AAAAA.
- f) Limited authorization. A CSAPR NO_x Annual allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - i) Such authorization shall only be used in accordance with the CSAPR NO_x Annual Trading Program; and
 - ii) Notwithstanding any other provision of 40 CFR part 97, subpart AAAAA, the Administrator has the authority to terminate or limit the use and duration of such

authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.

g) Property right. A CSAPR NO_x Annual allowance does not constitute a property right.

iv. Title V permit revision requirements.

- a. No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.
- b. A description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under 40 CFR part 75, subpart H), an excepted monitoring system (under 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (under 40 CFR 75.19), and an alternative monitoring system (under 40 CFR part 75, subpart E) in accordance with 40 CFR 97.430 through 97.435 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with 40 CFR 70.7(e)(2) and 71.7(e)(1), provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B).

v. Additional recordkeeping and reporting requirements.

- a) Unless otherwise provided, the owners and operators of each CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) 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 Administrator.
 - i) The certificate of representation under 40 CFR 97.416 for the designated representative for the source and each CSAPR NO_x Annual unit 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 certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.416 changing the designated representative.
 - ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart AAAAA.
 - iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Annual Trading Program.
- b) The designated representative of a CSAPR NO_x Annual source and each CSAPR NO_x Annual unit at the source shall make all submissions required under the CSAPR NO_x Annual Trading Program, except as provided in 40 CFR 97.418. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

vi. Liability.

- a. Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual source or the designated representative of a CSAPR NO_x Annual source shall also apply to the owners and operators of such source and of the CSAPR NO_x Annual units at the source.
- b. Any provision of the CSAPR NO_x Annual Trading Program that applies to a CSAPR NO_x Annual unit or the designated representative of a CSAPR NO_x Annual unit shall also apply to the owners and operators of such unit.

vii. Effect on other authorities.

No provision of the CSAPR NO_x Annual Trading Program or exemption under 40 CFR 97.405 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Annual source or CSAPR NO_x Annual unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

CSAPR NO_x Ozone Season Group 2 Trading Program Requirements (40 CFR 97, Subpart EEEEE)**i. Designated representative requirements.**

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.813 through 97.818.

ii. Emissions monitoring, reporting, and recordkeeping requirements.

- a) The owners and operators, and the designated representative, of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.830 through 97.835.
- b) The emissions data determined in accordance with 40 CFR 97.830 through 97.835 shall be used to calculate allocations of CSAPR NO_x Ozone Season Group 2 allowances under 40 CFR 97.811(a)(2) and (b) and 97.812 and to determine compliance with the CSAPR NO_x Ozone Season Group 2 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.830 through 97.835 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

iii. NO_x emissions requirements.

- a) CSAPR NO_x Ozone Season Group 2 emissions limitation.
 - i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold, in the source's compliance account, CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.824(a) in an amount not less than the tons of total NO_x emissions for such control period from all CSAPR NO_x Ozone Season Group 2 units at the source.

ii) If total NO_x emissions during a control period in a given year from the CSAPR NO_x Ozone Season Group 2 units at a CSAPR NO_x Ozone Season Group 2 source are in excess of the CSAPR NO_x Ozone Season Group 2 emissions limitation set forth in paragraph (c)(1)(i) above, then:

A. The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall hold the CSAPR NO_x Ozone Season Group 2 allowances required for deduction under 40 CFR 97.824(d); and

B. The owners and operators of the source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart EEEEE and the Clean Air Act.

b) CSAPR NO_x Ozone Season Group 2 assurance provisions.

i) If total NO_x emissions during a control period in a given year from all CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such NO_x emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR NO_x Ozone Season Group 2 allowances available for deduction for such control period under 40 CFR 97.825(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.825(b), of multiplying—

A. The quotient of the amount by which the common designated representative's share of such NO_x emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such NO_x emissions exceeds the respective common designated representative's assurance level; and

B. The amount by which total NO_x emissions from all base CSAPR NO_x Ozone Season Group 2 units at base CSAPR NO_x Ozone Season Group 2 sources in the state for such control period exceed the state assurance level.

ii) The owners and operators shall hold the CSAPR NO_x Ozone Season Group 2 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day), or midnight of the first business day thereafter (if November 1 is not a business day), immediately after the year of such control period.

iii) Total NO_x emissions from all CSAPR NO_x Ozone Season Group 2 units at base CSAPR NO_x Ozone Season Group 2 sources in a state during a control period in a given year exceed the state assurance level if such total NO_x emissions exceed the sum, for such control period, of the State NO_x Ozone Season Group 2 trading budget under 40 CFR 97.810(a) and the state's variability limit under 40 CFR 97.810(b).

- iv) It shall not be a violation of 40 CFR part 97, subpart EEEEE or of the Clean Air Act if total NO_x emissions from all base CSAPR NO_x Ozone Season Group 2 units at base CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total NO_x emissions from the base CSAPR NO_x Ozone Season Group 2 units at base CSAPR NO_x Ozone Season Group 2 sources in the state during a control period exceeds the common designated representative's assurance level.
- v) To the extent the owners and operators fail to hold CSAPR NO_x Ozone Season Group 2 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - A. The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - B. Each CSAPR NO_x Ozone Season Group 2 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 40 CFR part 97, subpart EEEEE and the Clean Air Act.
- c) Compliance periods.
 - i) A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) and (2) above for the control period starting on the later of May 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 97.830(b) and for each control period thereafter.
- d) Vintage of CSAPR Ozone Season Group 2 allowances held for compliance.
 - i) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated or auctioned for such control period or a control period in a prior year.
 - ii) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (c)(2)(i) through (iii) above for a control period in a given year must be a CSAPR NO_x Ozone Season Group 2 allowance that was allocated or auctioned for a control period in a prior year or the control period in the given year or in the immediately following year.
 - iii) Except as provided in paragraph (c)(4)(iv) below, a CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(i), (c)(1)(ii)(A), and (c)(2)(i) through (iii) above shall be a CSAPR NO_x Ozone Season Original Group 2 allowance.
 - iv) A CSAPR NO_x Ozone Season Group 2 allowance held for compliance with the requirements under paragraphs (c)(1)(i), (c)(1)(ii)(A), and (c)(2)(i) through (iii) above for a source or group of sources in a state listed in 40 CFR 52.38(b)(2)(ii)(D)(I) for a control period after 2022 must be a CSAPR NO_x Ozone Season Expanded Group 2 allowance.

- e) Allowance Management System requirements. Each CSAPR NO_x Ozone Season Group 2 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 40 CFR part 97, subpart EEEEE.
- f) Limited authorization. A CSAPR NO_x Ozone Season Group 2 allowance is a limited authorization to emit one ton of NO_x during the control period in one year. Such authorization is limited in its use and duration as follows:
 - i) Such authorization shall only be used in accordance with the CSAPR NO_x Ozone Season Group 2 Trading Program; and
 - ii) Notwithstanding any other provision of 40 CFR part 97, subpart EEEEE, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- g) Property right. A CSAPR NO_x Ozone Season Group 2 allowance does not constitute a property right.

iv. Title V permit requirements.

- a) No title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR NO_x Ozone Season Group 2 allowances in accordance with 40 CFR part 97, subpart EEEEE.
- b) A description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under 40 CFR part 75, subpart H), an excepted monitoring system (under 40 CFR part 75, appendices D and E), a low mass emissions excepted monitoring methodology (under 40 CFR 75.19), or an alternative monitoring system (under 40 CFR part 75, subpart E) in accordance with 40 CFR 97.830 through 97.835 may be added to, or changed in, a title V permit using minor permit modification procedures in accordance with 40 CFR 70.7(e)(2) and 71.1(e)(1), provided that the requirements applicable to the described monitoring and reporting (as added or changed, respectively) are already incorporated in such permit. This paragraph explicitly provides that the addition of, or change to, a unit's description as described in the prior sentence is eligible for minor permit modification procedures in accordance with 40 CFR 70.7(e)(2)(i)(B) and 71.7(e)(1)(i)(B).

v. Additional recordkeeping and reporting requirements.

- a) Unless otherwise provided, the owners and operators of each CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall keep on site at the source each of the following documents (in hardcopy or electronic format) 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 Administrator.
 - i) The certificate of representation under 40 CFR 97.816 for the designated representative for the source and each CSAPR NO_x Ozone Season Group 2 unit 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 certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.816 changing the designated representative.

- ii) All emissions monitoring information, in accordance with 40 CFR part 97, subpart EEEEE.
- iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR NO_x Ozone Season Group 2 Trading Program.
- b) The designated representative of a CSAPR NO_x Ozone Season Group 2 source and each CSAPR NO_x Ozone Season Group 2 unit at the source shall make all submissions required under the CSAPR NO_x Ozone Season Group 2 Trading Program, except as provided in 40 CFR 97.818. This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a title V operating permit program in 40 CFR parts 70 and 71.

vi. Liability.

- a) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 source or the designated representative of a CSAPR NO_x Ozone Season Group 2 source shall also apply to the owners and operators of such source and of the CSAPR NO_x Ozone Season Group 2 units at the source.
- b) Any provision of the CSAPR NO_x Ozone Season Group 2 Trading Program that applies to a CSAPR NO_x Ozone Season Group 2 unit or the designated representative of a CSAPR NO_x Ozone Season Group 2 unit shall also apply to the owners and operators of such unit.

vii. Effect on other authorities.

No provision of the CSAPR NO_x Ozone Season Group 2 Trading Program or exemption under 40 CFR 97.805 shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR NO_x Ozone Season Group 2 source or CSAPR NO_x Ozone Season Group 2 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.

CSAPR SO₂ Group 1 Trading Program requirements (401 KAR 51:260, Section 3(4))

i. Designated representative requirements.

The owners and operators shall comply with the requirement to have a designated representative, and may have an alternate designated representative, in accordance with 40 CFR 97.613 through 97.618.

ii. Emissions monitoring, reporting, and recordkeeping requirements.

- a) The owners and operators, and the designated representative, of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR 97.630 through 97.635.
- b) The emissions data determined in accordance with 40 CFR 97.630 through 97.635 shall be used to calculate allocations of CSAPR SO₂ Group 1 allowances under 40 CFR 97.611(a)(2) and (b) and 97.612 and to determine compliance with the CSAPR SO₂ Group 1 emissions limitation and assurance provisions under paragraph (c) below, provided that, for each monitoring location from which mass emissions are reported, the mass emissions amount used in calculating such allocations and determining such compliance shall be the mass emissions amount for the monitoring location determined in accordance with 40 CFR 97.630 through 97.635 and rounded to the nearest ton, with any fraction of a ton less than 0.50 being deemed to be zero.

iii. SO₂ emissions requirements.**a) CSAPR SO₂ Group 1 emissions limitation.**

- i) As of the allowance transfer deadline for a control period in a given year, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall hold, in the source's compliance account, CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.624(a) in an amount not less than the tons of total SO₂ emissions for such control period from all CSAPR SO₂ Group 1 units at the source.
- ii) If total SO₂ emissions during a control period in a given year from the CSAPR SO₂ Group 1 units at a CSAPR SO₂ Group 1 source are in excess of the CSAPR SO₂ Group 1 emissions limitation set forth in paragraph (c)(1)(i) above, then:
 - A. The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall hold the CSAPR SO₂ Group 1 allowances required for deduction under 40 CFR 97.624(d); and
 - B. The owners and operators of the source and each CSAPR SO₂ Group 1 unit at the source shall pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act, and each ton of such excess emissions and each day of such control period shall constitute a separate violation 40 CFR part 97, subpart CCCCC and the Clean Air Act.

b) CSAPR SO₂ Group 1 assurance provisions.

- i) If total SO₂ emissions during a control period in a given year from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state exceed the state assurance level, then the owners and operators of such sources and units in each group of one or more sources and units having a common designated representative for such control period, where the common designated representative's share of such SO₂ emissions during such control period exceeds the common designated representative's assurance level for the state and such control period, shall hold (in the assurance account established for the owners and operators of such group) CSAPR SO₂ Group 1 allowances available for deduction for such control period under 40 CFR 97.625(a) in an amount equal to two times the product (rounded to the nearest whole number), as determined by the Administrator in accordance with 40 CFR 97.625(b), of multiplying:
 - A. The quotient of the amount by which the common designated representative's share of such SO₂ emissions exceeds the common designated representative's assurance level divided by the sum of the amounts, determined for all common designated representatives for such sources and units in the state for such control period, by which each common designated representative's share of such SO₂ emissions exceeds the respective common designated representative's assurance level; and
 - B. The amount by which total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state for such control period exceed the state assurance level.
- ii) The owners and operators shall hold the CSAPR SO₂ Group 1 allowances required under paragraph (c)(2)(i) above, as of midnight of November 1 (if it is a business day),

or midnight of the first business day thereafter (if November 1 is not a business day), immediately after such control period.

- iii) Total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state during a control period in a given year exceed the state assurance level if such total SO₂ emissions exceed the sum, for such control period, of the state SO₂ Group 1 trading budget under 401 KAR 51:260, Section 3(7)(a)(1) and the state's variability limit under 401 KAR 51:260, Section 3(7)(a)(3).
- iv) It shall not be a violation of 401 KAR 51:260, or of the Clean Air Act if total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state during a control period exceed the state assurance level or if a common designated representative's share of total SO₂ emissions from the CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in the state during a control period exceeds the common designated representative's assurance level.
- v) To the extent the owners and operators fail to hold CSAPR SO₂ Group 1 allowances for a control period in a given year in accordance with paragraphs (c)(2)(i) through (iii) above,
 - A. The owners and operators shall pay any fine, penalty, or assessment or comply with any other remedy imposed under the Clean Air Act; and
 - B. Each CSAPR SO₂ Group 1 allowance that the owners and operators fail to hold for such control period in accordance with paragraphs (c)(2)(i) through (iii) above and each day of such control period shall constitute a separate violation of 401 KAR 51:260, and the Clean Air Act.
- c) Compliance periods.
 - i) A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(1) above for the control period starting on the later of January 1, 2015 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:260, Section 3(25) (40 CFR 97.630(b)) and for each control period thereafter.
 - ii) A CSAPR SO₂ Group 1 unit shall be subject to the requirements under paragraph (c)(2) above for the control period starting on the later of January 1, 2017 or the deadline for meeting the unit's monitor certification requirements under 401 KAR 51:260, Section 3(25) (40 CFR 97.630(b)) and for each control period thereafter.
- d) Vintage of allowances held for compliance.
 - i) A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraph (c)(1)(i) above for a control period in a given year shall be a CSAPR SO₂ Group 1 allowance that was allocated for such control period or a control period in a prior year.
 - ii) A CSAPR SO₂ Group 1 allowance held for compliance with the requirements under paragraphs (c)(1)(ii)(A) and (2)(i) through (iii) above for a control period in a given year shall be a CSAPR SO₂ Group 1 allowance that was allocated for a control period

in a prior year or the control period in the given year or in the immediately following year.

- e) Allowance Management System requirements. Each CSAPR SO₂ Group 1 allowance shall be held in, deducted from, or transferred into, out of, or between Allowance Management System accounts in accordance with 401 KAR 51:260.
- f) Limited authorization. CSAPR SO₂ Group 1 allowance is a limited authorization to emit one ton of SO₂ during the control period in one year. Such authorization is limited in its use and duration as follows:
 - i) Such authorization shall only be used in accordance with the CSAPR SO₂ Group 1 Trading Program; and
 - ii) Notwithstanding any other provision of 401 KAR 51:260, the Administrator has the authority to terminate or limit the use and duration of such authorization to the extent the Administrator determines is necessary or appropriate to implement any provision of the Clean Air Act.
- g) Property right. CSAPR SO₂ Group 1 allowance does not constitute a property right.

iv. Title V permit revision requirements.

- a) No Title V permit revision shall be required for any allocation, holding, deduction, or transfer of CSAPR SO₂ Group 1 allowances in accordance with 401 KAR 51:260.
- b) This permit incorporates the CSAPR emissions monitoring, recordkeeping and reporting requirements pursuant to 401 KAR 51:260, Section 3(25) through 401 KAR 51:260, Section 3(30), and the requirements for a continuous emission monitoring system (pursuant to 40 CFR 75, Subparts B and H), an excepted monitoring system (pursuant to 40 CFR 75, Appendices D and E), a low mass emissions excepted monitoring methodology (pursuant to 40 CFR 75.19), and an alternative monitoring system (pursuant to 40 CFR 75, Subpart E). Therefore, the Description of CSAPR Monitoring Provisions table for units identified in this permit may be added to, or changed, in this Title V permit using minor permit modification procedures in accordance with 401 KAR 51:260, Section 3(4) (40 CFR 97.606(d)(2)) and 70.7(e)(2)(i)(B).

v. Additional recordkeeping and reporting requirements.

- a) Unless otherwise provided, the owners and operators of each CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall maintain on site at the source each of the following documents (in hardcopy or electronic format) 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 Administrator.
 - i) The certificate of representation under 401 KAR 51:260, Section 3(13) for the designated representative for the source and each CSAPR SO₂ Group 1 unit 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 certificate of representation and documents are superseded because of the submission of a new certificate of representation under 40 CFR 97.616 changing the designated representative.

- ii) All emissions monitoring information, in accordance with 401 KAR 51:260.
- iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under, or to demonstrate compliance with the requirements of, the CSAPR SO₂ Group 1 Trading Program.
- b) The designated representative of a CSAPR SO₂ Group 1 source and each CSAPR SO₂ Group 1 unit at the source shall make all submissions required under the CSAPR SO₂ Group 1 Trading Program, except as provided in 401 KAR 51:260, Section 3(15). This requirement does not change, create an exemption from, or otherwise affect the responsible official submission requirements under a Title V operating permit program in 40 CFR 70.

vi. Liability.

- a) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 source or the designated representative of a CSAPR SO₂ Group 1 source shall also apply to the owners and operators of such source and of the CSAPR SO₂ Group 1 units at the source.
- b) Any provision of the CSAPR SO₂ Group 1 Trading Program that applies to a CSAPR SO₂ Group 1 unit or the designated representative of a CSAPR SO₂ Group 1 unit shall also apply to the owners and operators of such unit.

vii. Effect on other authorities.

No provision of the CSAPR SO₂ Group 1 Trading Program or exemption under 401 KAR 51:260, Section 3(3) shall be construed as exempting or excluding the owners and operators, and the designated representative, of a CSAPR SO₂ Group 1 source or CSAPR SO₂ Group 1 unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the Clean Air Act.