

West Virginia Department of Environmental Protection

Austin Caperton
Cabinet Secretary

Permit to Operate



Pursuant to
Title V
of the Clean Air Act

Issued to:

Big Sandy Peaker Plant, LLC
R30-09900080-2019

A handwritten signature in blue ink, appearing to read "Laura M. Crowder", written over a horizontal line.

Laura M. Crowder

Director, Division of Air Quality

Issued: August 22, 2019 • Effective: September 5, 2019
Expiration: August 22, 2024 • Renewal Application Due: February 22, 2024

Permit Number: **R30-09900080-2019**
Permittee: **Big Sandy Peaker Plant, LLC**
Permittee Mailing Address: **1044 North 115th Street, Suite 400, Omaha, NE 68154**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

| | |
|--------------------------|--|
| Facility Location: | Kenova, Wayne County, West Virginia |
| Telephone Number: | 402-691-9500 |
| Type of Business Entity: | LLC |
| Facility Description: | 330 Megawatt (MW) natural gas-fired electric generating peaking station. |
| SIC Codes: | 4911 |
| UTM Coordinates: | 360.9 km Easting • 4245.0 km Northing • Zone 17 |

Permit Writer: Beena Modi

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

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1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

| Emission Unit ID | Emission Point ID | Emission Unit Description | Year Installed | Design Capacity | Control Device |
|--|--------------------|--|----------------|-----------------|--------------------------------------|
| GS-01 (Part 75 Unit ID# GS01 & GS02) | GS-01-1 GS-01-2 | Pratt & Whitney FT8 Twin Pac Natural Gas Turbine GS-01-1&GS-01-2 | 2000 | 599.02 MMBtu/hr | Water Injection & Oxidation Catalyst |
| GS-02 (Part 75 Unit ID# GS03 & GS04) | GS-02-1 GS-02-2 | Pratt & Whitney FT8 Twin Pac Natural Gas Turbine GS-02-1&GS-02-2 | 2000 | 599.02 MMBtu/hr | Water Injection & Oxidation Catalyst |
| GS-03 (Part 75 Unit ID# GS05 & GS06) | GS-03-1 GS-03-2 | Pratt & Whitney FT8 Twin Pac Natural Gas Turbine GS-03-1&GS-03-2 | 2000 | 599.02 MMBtu/hr | Water Injection & Oxidation Catalyst |
| GS-04 (Part 75 Unit ID# GS07 & GS08) | GS-04-1 GS-04-2 | Pratt & Whitney FT8 Twin Pac Natural Gas Turbine GS-04-1&GS-04-2 | 2000 | 599.02 MMBtu/hr | Water Injection & Oxidation Catalyst |
| GS-05 (Part 75 Unit ID # GS09 & GS10) | GS-05-1 GS-05-2 | Pratt & Whitney FT8 Twin Pac Natural Gas Turbine GS-05-1&GS-05-2 | 2000 | 599.02 MMBtu/hr | Water Injection & Oxidation Catalyst |
| GS-06 (Part 75 Unit ID# GS11 & GS12) | GS-06-1 GS-06-2 | Pratt & Whitney FT8 Twin Pac Natural Gas Turbine GS-06-1&GS-06-2 | 2000 | 599.02 MMBtu/hr | Water Injection & Oxidation Catalyst |
| G1 | E1 | Cummins 750DQCB Model QSK23-G3 NR1 Black-Start No.2 Fuel Oil Generator | 2007 | 750kW | N/A |

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

| Permit Number | Date of Issuance |
|---------------|------------------|
| R13-2383C | 10/09/2013 |

2.0 General Conditions

2.1 Definitions

- 2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.
- 2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.
- 2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.
- 2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2 Acronyms

| | | | |
|---------------------------------------|---|------------------------|---|
| CAAA | Clean Air Act Amendments | NSPS | New Source Performance Standards |
| CBI | Confidential Business Information | PM | Particulate Matter |
| CEM | Continuous Emission Monitor | PM₁₀ | Particulate Matter less than 10µm in diameter |
| CES | Certified Emission Statement | pph | Pounds per Hour |
| C.F.R. or CFR | Code of Federal Regulations | ppm | Parts per Million |
| CO | Carbon Monoxide | PSD | Prevention of Significant Deterioration |
| C.S.R. or CSR | Codes of State Rules | psi | Pounds per Square Inch |
| DAQ | Division of Air Quality | SIC | Standard Industrial Classification |
| DEP | Department of Environmental Protection | SIP | State Implementation Plan |
| FOIA | Freedom of Information Act | SO₂ | Sulfur Dioxide |
| HAP | Hazardous Air Pollutant | TAP | Toxic Air Pollutant |
| HON | Hazardous Organic NESHAP | TPY | Tons per Year |
| HP | Horsepower | TRS | Total Reduced Sulfur |
| lbs/hr or lb/hr | Pounds per Hour | TSP | Total Suspended Particulate |
| LDAR | Leak Detection and Repair | USEPA | United States Environmental Protection Agency |
| m | Thousand | UTM | Universal Transverse Mercator |
| MACT | Maximum Achievable Control Technology | VEE | Visual Emissions Evaluation |
| mm | Million | VOC | Volatile Organic Compounds |
| mmBtu/hr | Million British Thermal Units per Hour | | |
| mmft³/hr or mmcf/hr | Million Cubic Feet Burned per Hour | | |
| NA or N/A | Not Applicable | | |
| NAAQS | National Ambient Air Quality Standards | | |
| NESHAPS | National Emissions Standards for Hazardous Air Pollutants | | |
| NO_x | Nitrogen Oxides | | |

2.3. Permit Expiration and Renewal

- 2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]
- 2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]
- 2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]
- 2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

- 2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

- 2.5.1. This permit shall be reopened and revised under any of the following circumstances:
 - a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§30-6.6.a.1.A. or B.
 - b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.
 - c. The Secretary or 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.
 - d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

- 2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

- 2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

- 2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

- 2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

- 2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:
- a. The change must meet all applicable requirements and may not violate any existing permit term or condition.
 - b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted, and any applicable requirement that would apply as a result of the change.
 - c. The change shall not qualify for the permit shield.
 - d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.
 - e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

- f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

- 2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.

[45CSR§30-5.8]

- 2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.

[45CSR§30-5.8.a.]

- 2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

- a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or
- b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

- 2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.

[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

- 2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.
- a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.
 - b. The permit shield shall extend to all terms and conditions under each such operating scenario; and
 - c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

- 2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.

[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

- 2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:
- a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
 - b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
 - c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;
 - d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

- 2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

- a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and
- b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

- 2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

- 2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]
- 2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]
- 2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:
 - a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;
 - b. The permitted facility was at the time being properly operated;
 - c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and
 - d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.

[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.

[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.

[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as "State-enforceable only" shall become "Federally-enforceable" requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.

[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.

[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.

[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

- a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

- b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.
- c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

- 2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

- 2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

- 2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

- 2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.
 - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.
 - b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.
 - c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

- 2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. [45CSR§6-3.1.]
- 3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. [45CSR§6-3.2.]
- 3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them. [40 C.F.R. §61.145(b) and 45CSR34]
- 3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. [45CSR§4-3.1 State-Enforceable only.]
- 3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. [45CSR§11-5.2]
- 3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. [W.Va. Code § 22-5-4(a)(14)]
- 3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:
- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.
 - b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

- 3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

[40 C.F.R. 68]

- 3.1.9. **CSAPR NO_x Annual Trading Program.** The permittee shall comply with the standard requirements set forth in the attached Cross-State Air Pollution Rule (CSAPR) Trading Program Title V Requirements (see APPENDIX B).

[40 CFR §97.406; 45CSR 43]

- 3.1.10. **CSAPR NO_x Ozone Season Group 2 Trading Program.** The permittee shall comply with the standard requirements set forth in the attached Cross-State Air Pollution Rule (CSAPR) Trading Program Title V Requirements (see APPENDIX B).

[40 CFR §97.806; 45CSR 43]

- 3.1.11. **CSAPR SO₂ Group 1 Trading Program.** The permittee shall comply with the standard requirements set forth in the attached Cross-State Air Pollution Rule (CSAPR) Trading Program Title V Requirements (see APPENDIX B).

[40 CFR §97.606; 45CSR 43]

- 3.1.12. The permitted facility shall be constructed and operated in accordance with information filed in Permit Applications R13-2383, R13-2383A, R13-2383B, and R13-2383C, and any amendments thereto. The Director may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to.

[45CSR13, R13-2383, C.3.]

3.2. Monitoring Requirements

- 3.2.1. Reserved

3.3. Testing Requirements

- 3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

- a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.
- b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.
- c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.
- d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:
 1. The permit or rule evaluated, with the citation number and language.
 2. The result of the test for each permit or rule condition.
 3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

- 3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:
 - a. The date, place as defined in this permit and time of sampling or measurements;
 - b. The date(s) analyses were performed;
 - c. The company or entity that performed the analyses;
 - d. The analytical techniques or methods used;
 - e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.

[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.

[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.

[45CSR§§30-4.4. and 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.

[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

US EPA:

Section Chief
U. S. Environmental Protection Agency, Region III
Enforcement and Compliance Assurance Division
Air Section (3ED21)
1650 Arch Street
Philadelphia, PA 19103-2029

DAQ Compliance and Enforcement¹:
DEPAirQualityReports@wv.gov

¹For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses:

DAQ:
DEPAirQualityReports@wv.gov

US EPA:
R3_APD_Permits@epa.gov

[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:

DAQ:
DEPAirQualityReports@wv.gov

[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.
3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.
4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

- b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.

[45CSR§30-5.1.c.3.B.]

- 3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

- 3.6.1. None

3.7. Permit Shield

- 3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
- 3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

| | |
|--------------------------------------|---|
| 45CSR2 | To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers. According to R13-2383C the natural gas turbines are subject to 45CSR2. However, the turbines are not indirect heat exchangers and by definition are not fuel burning units. The turbines use the combustion gases to turn the turbine blades. Therefore, 45CSR2 is not listed as an applicable requirement for the turbines in the Title V permit. |
| 40 C.F.R. Part 60 Subpart KKK | Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant. The Big Sandy Peaker Plant is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both. |

| | |
|--|---|
| 40 C.F.R. Part 60 Subpart KKKK | Standards of Performance for Stationary Combustion Turbines. Big Sandy Peaker Plant's turbines were installed in 2000. The Big Sandy Peaker Plant is not subject to 40 C.F.R. Part 60 Subpart KKKK, which is for turbines that commenced construction, modification or reconstruction after February 18, 2005. |
| 40 C.F.R. Part 63 Subpart HH | National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities. The Big Sandy Peaker Plant is not subject to Subpart HH since the Big Sandy Peaker Plant is not a natural gas production facility. |
| 40 C.F.R. Part 63 Subpart HHH | National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The Big Sandy Peaker Plant is not subject to Subpart HHH since the Big Sandy Peaker Plant is not a natural gas transmission and storage facility. |
| 40 C.F.R. Part 63 Subpart YYYYY | National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines. The Big Sandy Peaker Plant is not subject to Subpart YYYYY since it is not a major source of HAPs. |

4.0 Turbines and Generator Requirements [emission point ID(s): GS-01-1, GS-01-2, GS-02-1, GS-02-2, GS-03-1, GS-03-2, GS-04-1, GS-04-2, GS-05-1, GS-05-2, GS-06-1, GS-06-2, E1]

4.1. Limitations and Standards

4.1.1. The following table provides a list of turbines authorized to operate at the subject facility by this permit. In accordance with the information filed in Permit Application R13-2383 through 2383C, and any amendments or revisions thereto, the sources shall not exceed the specified Maximum Design Heat Input (MDHI), shall utilize the specified control device, and shall combust only the specified fuel:

| Source ID | Source Description | MDHI ⁽¹⁾ (MMBtu/hr) | Fuel Combusted | Control Technology |
|-----------|------------------------------|-----------------------------------|-------------------|--------------------------------------|
| GS-01 | Pratt & Whitney FT8 Twin Pac | 599.02 | Natural Gas | Water Injection & Oxidation Catalyst |
| GS-02 | Pratt & Whitney FT8 Twin Pac | 599.02 | Natural Gas | Water Injection & Oxidation Catalyst |
| GS-03 | Pratt & Whitney FT8 Twin Pac | 599.02 | Natural Gas | Water Injection & Oxidation Catalyst |
| GS-04 | Pratt & Whitney FT8 Twin Pac | 599.02 | Natural Gas | Water Injection & Oxidation Catalyst |
| GS-05 | Pratt & Whitney FT8 Twin Pac | 599.02 | Natural Gas | Water Injection & Oxidation Catalyst |
| GS-06 | Pratt & Whitney FT8 Twin Pac | 599.02 | Natural Gas | Water Injection & Oxidation Catalyst |

(1) As measured @ 32 degrees Fahrenheit, 40% relative humidity, 100% load, and based on a natural gas heating value of 1,020 Btu/scf.

[45CSR13, R13-2383, A.1., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.1.2. The hourly emission rates from each natural-gas fired turbine shall not exceed:

| Pollutant | Hourly Emission Limit (pounds/hour) |
|---|--|
| Carbon Monoxide (CO) | 19.95 |
| Oxides of Nitrogen (NO _x) | 31.10 |
| Particulate Matter < 10 microns (PM ₁₀) | 3.00 |
| Total Suspended Particulate (TSP) | 3.00 |
| Sulfur Dioxide (SO ₂) | 0.68 |
| Volatile Organic Compounds (VOCs) | 3.30 |
| Formaldehyde | 0.04 |

[45CSR13, R13-2383, A.2., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.1.3. The combined annual emission rates from the Pratt & Whitney FT8 Twin Pac units shall not exceed:

| Pollutant | Annual Emission Limit (tons/year) |
|---|-----------------------------------|
| Carbon Monoxide (CO) | 156.74 |
| Oxides of Nitrogen (NO _x) | 245.00 |
| Particulate Matter < 10 microns (PM ₁₀) | 26.17 |
| Total Suspended Particulate (TSP) | 26.17 |
| Sulfur Dioxide (SO ₂) | 5.31 |
| Volatile Organic Compounds (VOCs) | 18.46 |
| Formaldehyde | 0.30 |

[45CSR13, R13-2383, A.3., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.1.4. The facility-wide combined annual consumption of natural gas in the Pratt & Whitney FT8 Twin Pac units shall not exceed 4,614,124,883 standard cubic feet. Compliance with the annual natural gas consumption limit shall be determined using a rolling yearly total. A rolling yearly total shall mean the sum of the natural gas consumed at any given time for the previous twelve (12) consecutive months.

[45CSR13, R13-2383, A.4., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.1.5. A water-injection system shall be maintained and operated for the control of NO_x emissions from each natural-gas fired turbine. The water-injection system shall be monitored pursuant to 40 C.F.R. §60.334(a), Section 4.2.1.

[45CSR13, R13-2383, A.5., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.1.6. An in-stack integrated oxidation catalyst shall be maintained and operated for the control of CO emissions from each natural-gas fired turbine. At such times that are necessary to maintain the performance of the oxidation catalyst, the catalyst shall be replaced.

[45CSR13, R13-2383, A.6., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.1.7. The sulfur content of the natural gas as fired in each natural-gas fired turbine shall not exceed 0.53 grains per 100 scf of gas. Compliance with this requirement shall be in accordance with Section 4.4.5.

[45CSR13, R13-2383, A.7., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.1.8. The turbines are subject to all applicable limitations and standards under 40 C.F.R. Part 60 Subpart GG (any final revisions made to 40 C.F.R. Part 60 Subpart GG will, where applicable, supersede those specifically cited in this section), including the requirements given below in Sections 4.1.9 through 4.1.12, 4.2.1 and 4.2.2.

[45CSR13, R13-2383, A.8., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.1.9. On and after the date on which the performance test required by 40 C.F.R. § 60.8 is completed, every owner or operator subject to the provisions of 40 C.F.R. 60 Subpart GG as specified in 40 C.F.R. §§ 60.332 (b), (c) and (d) shall comply with one of the provisions in 40 C.F.R. §60.332, except as provided in 40 C.F.R. §§ 60.332 (e), (f), (g), (h), (i), (j), (k), and (l).

[45CSR16, 40 C.F.R. § 60.332 (a), 45CSR13, R13-2383, A.8.a., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.1.10. 1. No owner or operator subject to the provisions 40 C.F.R. 60 Subpart GG shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 * (14.4/Y) + F$$

where:

- STD = allowable ISO corrected [if required as given in 40 C.F.R. § 60.335 (b) (1)] NO_x emission concentration (percent volume at 15 percent oxygen and on a dry basis).
- Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt hour.
- F = NO_x emission allowance for fuel-bound nitrogen as defined in 40 C.F.R. § 60.332 (a) (4) [Section 4.1.10.3].

2. The use of F in 40 C.F.R. §§ 60.332 (a) (1) and (2) is optional. That is, the owner or operator may choose to apply a NO_x allowance for fuel-bound nitrogen and determine the appropriate F-value in accordance with 40 C.F.R. § 60.332 (a) (4) [Section 4.1.10.3.] or may accept an F-value of zero.
3. If the owner or operator elects to apply a NO_x emission allowance for fuel-bound nitrogen, F shall be defined according to the nitrogen content of the fuel during the most recent performance test required under C.F.R. § 60.8 as follows:

| Fuel-bound nitrogen (percent by weight) | F (NO _x percent by volume) |
|---|---------------------------------------|
| $N \leq .015$ | 0 |
| $0.015 < N \leq 0.1$ | 0.04 (N) |
| $0.1 < N \leq 0.25$ | $0.004 + 0.0067(N - 0.1)$ |
| $N > 0.25$ | 0.005 |

Where:

N = the nitrogen content of the fuel (percent by weight).

or:

Manufacturers may develop and submit to EPA custom fuel-bound nitrogen allowances for each gas turbine model they manufacture. These fuel-bound nitrogen allowances shall be substantiated with data and must be approved for use by the Administrator before the initial performance test required by 40 C.F.R. § 60.8. Notices of approval of custom fuel-bound nitrogen allowances will be published in the Federal Register.

[45CSR16, 40 C.F.R. §§ 60.332 (a) (1), (3), and (4), 45CSR13, R13-2383, A.8.a.1. through 3., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

- 4.1.11. Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with Section 4.1.10. **[45CSR16, 40 C.F.R. § 60.332 (b), 45CSR13, R13-2383, A.8.b., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]**
- 4.1.12. On and after the date on which the performance test required to be conducted by 40 C.F.R. § 60.8 is completed, every owner or operator subject of the provision of 40 C.F.R. 60 Subpart GG shall comply with one or the other of the following conditions:

- a. No owner or operator subject to the provisions of 40 C.F.R. 60 Subpart GG shall cause to be discharged into the atmosphere from any stationary gas turbine any gases which contain sulfur dioxide in excess of 0.015 percent by volume at 15% O₂ and on a dry basis.
- b. No owner or operator subject to the provisions of 40 C.F.R. 60 Subpart GG shall burn in any stationary gas turbine any fuel which contains sulfur in excess of 0.8 percent by weight (8000 ppmw).

[45CSR16, 40 C.F.R. § 60.333, 45CSR13, R13-2383, A.8.c., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.1.13. The gas turbines are Phase II Acid Rain affected units under 45CSR33, as defined by 40 C.F.R. § 72.6, and as such are required to meet the requirements of 40 C.F.R. Parts 72, 73, 74, 75, 76, 77 and 78. These requirements include, but are not limited to:

- a. Hold an Acid Rain permit (Acid Rain Permit is included in Appendix C);
- b. Hold allowances, as of the allowance transfer deadline, in the unit's compliance sub-account of not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit;
- c. Comply with the applicable Acid Rain emissions for sulfur dioxide;
- d. Comply with the applicable Acid Rain emissions for nitrogen oxides;
- e. Comply with the monitoring requirements of 40 C.F.R. Part 75 and section 407 of the Clean Air Act of 1990 and regulations implementing section 407 of the Act;
- f. Submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 C.F.R. Part 72, Subpart I and 40 C.F.R. Part 75.

[45CSR33, 40 C.F.R. Parts 72, 73, 74, 75, 76, 77, and 78. GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.1.14. If you are an owner or operator and must comply with the emission standards specified in 40 C.F.R. Part 60 Subpart IIII, you must do all of the following, except as permitted under 40 C.F.R. § 60.4211 (g) [Condition 4.1.19]:

- (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
- (2) Change only those emission-related settings that are permitted by the manufacturer; and
- (3) Meet the requirements of 40 C.F.R. Parts 89, 94, and/or 1068, as they apply to you.

[45CSR16, 40 C.F.R. § 60.4211 (a), G1]

4.1.15. The Cummins Model QSK23-G3 NR1 black-start generator shall not exceed the specified nominal brake horsepower and heat input, shall combust only the specified fuels below the limited sulfur content, and shall not exceed the specified maximum hours of operation in the following table:

| Source ID No. | Brake Horsepower | MDHI (mmBTU/hr) | Fuel | Sulfur Content (%-by weight) | Maximum Hours of Operation |
|---------------|------------------|-----------------|----------------|------------------------------|----------------------------|
| G1 | 1,135 | 7.01 | No. 2 Fuel Oil | 0.05 | 270 |

[45CSR13, R13-2383, A.10., G1]

4.1.16. Maximum hourly and annual criteria pollutant emissions from the operation of G1 shall not exceed the limits as specified in the following table:

| Pollutant | pounds/hour | tons/year |
|---|-------------|-----------|
| Carbon Monoxide (CO) | 3.23 | 0.44 |
| Nitrogen Oxides (NO _x) | 19.27 | 2.60 |
| Particulate Matter (PM) | 0.40 | 0.06 |
| Particulate Matter < 10 microns (PM ₁₀) | 0.40 | 0.06 |
| Sulfur Dioxide (SO ₂) | 0.35 | 0.05 |
| Volatile Organic Compounds (VOCs) | 0.98 | 0.13 |

Compliance for Nitrogen Oxides (NO_x) emissions will be shown by the more stringent requirement in Section 4.1.17.

[45CSR13, R13-2383, A.11., G1]

4.1.17. Maximum hourly emissions calculations based on Table 1 of 40 C.F.R. Part 60 Subpart IIII as specified in 40 C.F.R. § 60.4205 (a) for G1 are specified in the following table:

| Pollutant | LB/hr ¹ |
|------------------------------------|--------------------|
| Carbon Monoxide (CO) | 21.27 |
| Nitrogen Oxides (NO _x) | 17.26 |
| Particulate Matter (PM) | 1.00 |
| HC | 2.50 |

¹Based on 1.0 g/HP-hr for HC, 6.9 g/HP-hr for NO_x, 8.5 g/HP-hr for CO, 0.40 g/HP-hr for PM, and 1,135 HP-hr.

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in § 60.4205 over the entire life of the engine.

[45CSR16, 40 C.F.R. §§ 60.4205 (a) and 60.4206 and Table 1, G1]

4.1.18. If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs 4.1.18(1) through (3). In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs 4.1.18(1) through (3), is prohibited. If you do not operate the engine according to the requirements in paragraphs 4.1.18(1) through (3), the engine will not be considered an emergency engine under 40 C.F.R. Part 60 Subpart IIII and must meet all requirements for non-emergency engines.

- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.

- (2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs 4.1.18(2)(i) through (iii) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph 4.1.18(3) counts as part of the 100 hours per calendar year allowed by this paragraph 4.1.18(2).
- (i) Emergency stationary ICE 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 owner or operator 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.
 - (ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) 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 and emergency demand response provided in paragraph 4.1.18(2). Except as provided in paragraph 4.1.18(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.
- (i) 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:
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
 - (B) 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.
 - (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (E) The owner or operator 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 owner or operator.

[45CSR16, 40 C.F.R. § 60.4211 (f), G1]

- 4.1.19. If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:

If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must 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 you change emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[45CSR16, 40 C.F.R. §60.4211 (g)(3), G1]

- 4.1.20. Beginning October 1, 2010, G1 shall only consume diesel fuel meeting the following per-gallon standards:

- a. Maximum sulfur content of 15 ppm;
- b. Cetane index or aromatic content as follows:
 - (1) A minimum cetane index of 40; or
 - (2) A maximum aromatic content of 35 % by volume.

[45CSR16, 40 C.F.R. § 60.4207 (b), 40C.F.R. § 80.510 (b), G1]

- 4.1.21. If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.

[45CSR16, 40 C.F.R. § 60.4209 (a), G1]

4.2. Monitoring Requirements

- 4.2.1. The owner or operator of any stationary gas turbine subject to the provisions of 40 C.F.R. Part 60 Subpart GG and using water injection to control NO_x emissions shall install, calibrate, maintain, and operate a continuous monitoring system to monitor and record the fuel consumption and the ratio of water to fuel being fired in the turbine.

[45CSR16, 40 C.F.R. § 60.334 (a), 45CSR13, R13-2383, A.8.d., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

- 4.2.2. The owner or operator of any stationary gas turbine subject to the provisions of 40 C.F.R. Part 60 Subpart GG:

1. Shall monitor the total sulfur content of the fuel being fired in the turbine, except as provided in 40 C.F.R. § 60.334 (h) (3). The sulfur content of the fuel must be determined using total sulfur methods described in 40 C.F.R. § 60.335 (b) (10). Alternatively, if the total sulfur content of the gaseous fuel during the most recent performance test was less than 0.4 weight percent (4000 ppmw), ASTM D4084-82, 94, D5504-01, D6228-98, or Gas Processors Association Standard 2377-86 (all of which

are incorporated by reference-see 40 C.F.R. § 60.17), which measure the major sulfur compounds may be used; and

2. Notwithstanding the provisions of 40 C.F.R. § 60.334 (h) (1), the owner or operator may elect not to monitor the total sulfur content of the gaseous fuel combusted in the turbine, if the gaseous fuel is demonstrated to meet the definition of natural gas in 40 C.F.R. § 60.331 (u), regardless of whether an existing custom schedule approved by the administrator for 40 C.F.R. Part 60 Subpart GG requires such monitoring. The owner or operator shall use one of the following sources of information to make the required demonstration:
 - i. The gas quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying that the maximum total sulfur content of the fuel is 20.0 grains/100 scf or less; or
 - ii. Representative fuel sampling data which show that the sulfur content of the gaseous fuel does not exceed 20 grains/100 scf. At a minimum, the amount of fuel sampling data specified in section 2.3.1.4 or 2.3.2.4 of appendix D to part 75 of this chapter is required.
3. Per 40 CFR 60.334(g), the steam or water to fuel ratio or other parameters that are continuously monitored as described in 40 CFR 60.334(a) shall be monitored during the performance test required under §60.8, to establish acceptable values and ranges. The owner or operator may supplement the performance test data with engineering analyses, design specifications, manufacturer's recommendations and other relevant information to define the acceptable parametric ranges more precisely. The owner or operator shall develop and keep on-site a parameter monitoring plan which explains the procedures used to document proper operation of the NO_x emission controls. The plan shall include the parameter(s) monitored and the acceptable range(s) of the parameter(s) as well as the basis for designating the parameter(s) and acceptable range(s). Any supplemental data such as engineering analyses, design specifications, manufacturer's recommendations and other relevant information shall be included in the monitoring plan. For affected units that are also subject to part 75 of this chapter and that use the low mass emissions methodology in §75.19 of this chapter or the NO_x emission measurement methodology in appendix E to part 75, the owner or operator may meet the requirements of this paragraph by developing and keeping on-site (or at a central location for unmanned facilities) a quality-assurance plan, as described in §75.19 (e)(5) or in section 2.3 of appendix E and section 1.3.6 of appendix B to part 75 of this chapter.

[45CSR16, 40 C.F.R. §§ 60.334 (h) (1) and (3), 40 C.F.R. §60.334 (g), 45CSR13, R13-2383, A.8.e., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

- 4.2.3. **CAM monitoring requirement.** The permittee shall calibrate, maintain, and operate a continuous temperature monitoring system with recorder consisting of nine (9) thermocouples to determine “calculated daily average Combustion Turbine Exhaust Gas Temperature (EGT)” at each Combustion Turbine Exhaust before the gases enter the power turbine inlet. The thermocouples used in the monitoring system are to be accurate within plus or minus 0.75 percent per the thermocouple manufacturer’s information.
[45CSR§30-5.1.c. and 40 C.F.R. §§ 64.3 (a), 64.3 (b) and 64.6 (c) (2)]

- 4.2.4. **CAM monitoring requirement.** Compliance with the CO hourly emission limits set forth in Requirement 4.1.2 will be demonstrated if the “calculated daily average Combustion Turbine Exhaust Gas Temperature” generated by the continuous monitoring system in Section 4.2.3 is maintained between 800 to 1390 degree F during normal operations (not including periods of system startup, shutdown or malfunction). An excursion shall be defined as: if during normal operation, the daily average of the “calculated daily average Combustion Turbine Exhaust Gas Temperature” drops below 800 °F or exceeds 1390 °F. The Combustion Turbine Exhaust Gas Temperature shall be recorded once each clock hour at half-past the hour during the normal

operating periods. Daily average temperature will be defined as the average of all valid hourly temperature recordation in a calendar day. Temperatures which fall outside the typical operating range for the system will be investigated to determine if the reading is accurate or if there is a thermocouple or other monitoring system malfunction.

[45CSR§30-12.7. and 40 C.F.R. §§ 64.3 (a), 64.3 (b) and 64.6 (c) (2)]

4.2.5. Proper maintenance.

At all times, the owner or operator shall maintain the monitoring specified in Section 4.2.3, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

[45CSR§30-5.1.c; 40 C.F.R. § 64.7 (b)]

4.2.6. Continued operation.

Except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the owner or operator shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

[45CSR§30-5.1.c., 40 C.F.R. § 64.7 (c)]

4.2.7. Response to excursions or exceedances.

- a. Upon detecting an excursion or exceedance, the owner or operation shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- b. Determination of whether the owner or operator has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

[45CSR§30-5.1.c; 40 C.F.R. § 64.7 (d)]

4.2.8. Documentation of need for improved monitoring.

After approval of monitoring under 40 C.F.R. 64, if the owner or operator identifies a failure to achieve compliance with an emission limitation or standard for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the owner or operator shall promptly notify the permitting authority and, if necessary, submit a proposed modification to the part 70 or 71 permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

[45CSR§30-5.1.c; 40 C.F.R. § 64.7 (e)]

4.2.9. Quality Improvement Plan (QIP)

Based on the results of a determination made under Section 4.2.7.b, the Administrator or the permitting authority may require the owner or operator to develop and implement a QIP. If a QIP is required, then it shall be developed, implemented, and modified as required according to 40 C.F.R. §§ 64.8 (b) through (e). Refer to Section 4.5.1.c for the reporting required when a QIP is implemented.

[45CSR§30-5.1.c.; 40 C.F.R. § 64.8]

- 4.2.10. At a minimum of once a permit term, to determine compliance with Section 4.1.6, the permittee shall analyze the catalyst activity for one of the natural-gas fired turbines. The analysis should be completed following the manufacturer's recommended procedures. If problems are found during the catalyst activity test, the permittee must perform testing on the remaining eleven (11) catalyst beds and replace the catalyst beds that need to be replaced or take other corrective action consistent with the manufacturer's recommendations. The permittee shall test for catalyst activity on a different turbine each permit term. The analysis shall be completed no later than 18 months prior to this permit's expiration date.

[45CSR§30-5.1.c., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.3. Testing Requirements

- 4.3.1. Tests that are required by the Director to determine compliance with the emission limitations set forth in Sections 4.1.2, 4.1.3, and 4.1.16 shall be conducted in accordance with the methods as set forth below. The Director may approve a different test method or approve an alternative method upon written submission of such plan within the protocol submitted under Section 4.3.2. Compliance testing shall be conducted at the maximum permitted operating conditions corrected for ambient temperature unless otherwise specified by the Director. Compliance testing shall be conducted at maximum permitted capacity (in the absence of limits on a piece of equipment, the testing shall be conducted at maximum design capacity) unless otherwise approved by the Director in the protocol submitted under Section 4.3.2.

- a. Tests to determine compliance with TSP and PM₁₀ emission limits shall be conducted in accordance with 40 C.F.R. Part 60 Appendix A Method 5, 5A, 5B, 5C, 5D, 5E, 5F, 5G, or 5H.
- b. Tests to determine compliance with SO₂ emission limits shall be conducted in accordance with 40 C.F.R. Part 60 Appendix A Method 6, 6A, 6B, or 6C.
- c. Tests to determine compliance with CO emission limits shall be conducted in accordance with 40 C.F.R. Part 60 Appendix A Method 10, 10A, or 10B.
- d. Tests to determine compliance with NO_x emission limits shall be conducted in accordance with 40 C.F.R. Part 60 Appendix A Method 7, 7A, 7B, 7C, 7D, or 7E.

- e. Tests to determine compliance with VOC emission limits shall be conducted in accordance with 40 C.F.R. Part 60 Appendix A Method 25, or 25A.

[45CSR13, R13-2383, B.7., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06, G1]

- 4.3.2. With regard to any testing required by the Director, the permittee shall submit to the Director of Air Quality a test protocol detailing the proposed test methods, the date, and the time the proposed testing is to take place, as well as identifying the sampling locations and other relevant information. The test protocol must be received by the Director no less than thirty (30) days prior to the date the testing is to take place. Test results shall be submitted to the Director no more than sixty (60) days after the date the testing takes place.

[45CSR13, R13-2383, B.8., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06, G1]

- 4.3.3. For the purposes of determining compliance with the maximum sulfur content limits set forth in Section 4.1.15, the applicant shall, at a minimum of once per calendar year, obtain from the No. 2 fuel oil supplier a certification of the sulfur content of the fuel supplied. An alternative means of determining compliance with Section 4.1.15 shall be subject to prior approval from the Director.

[45CSR13, R13-2383, B.12., G1]

- 4.3.4. The permittee shall stack test three of the combustion turbines to determine NO_x and CO emissions. The results of the testing shall be used to demonstrate compliance with the NO_x and CO emissions limits set forth Sections 4.1.2 and 4.1.3. The permittee shall alternate stack testing with a different set of three combustion turbines per permit term. Stack testing shall be completed no later than 18 months prior to the permit's expiration date.

[45CSR§30-5.1.c., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

- 4.3.5. Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to 40 C.F.R. 60, Subpart IIII must do so according to paragraphs (a) through (e) of this section.

- (a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.
- (b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR §1039.101(e) and 40 CFR §1039.102(g)(1), except as specified in 40 CFR §1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.
- (c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR §89.112 or 40 CFR §94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR §89.112 or 40 CFR §94.8, as applicable, determined from the following equation:

$$\text{NTE requirement for each pollutant} = (1.25) \times (\text{STD}) \quad (\text{Eq. 1})$$

Where:

STD = The standard specified for that pollutant in 40 CFR §89.112 or 40 CFR §94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR §89.112 or 40 CFR §94.8 may follow the testing procedures specified in §60.4213 of this subpart, as appropriate.

- (d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in §60.4204(a), §60.4205(a), or §60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in §60.4204(a), §60.4205(a), or §60.4205(c).

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in §60.4204(a), §60.4205(a), or §60.4205(c) may follow the testing procedures specified in §60.4213, as appropriate.

- (e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[45CSR16, 40 C.F.R. §60.4212, G1]

4.4. Recordkeeping Requirements

- 4.4.1. For the purposes of determining compliance with the maximum natural gas consumption limit set forth in Section 4.1.4, the permittee shall maintain certified daily and monthly records. An example form is included as Appendix A. Such records shall be retained by the permittee for at least five (5) years. Certified records shall be made available to the Director or his duly authorized representative upon request.

[45CSR13, R13-2383, B.10., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

- 4.4.2. For the purposes of determining compliance with the maximum hours of operation limit set forth in Section 4.1.15, the permittee shall maintain certified daily and monthly records of the generator hours of operation. An example form is included as Appendix A. Such records shall be retained by the permittee for at least five (5) years. Certified records shall be made available to the Director or his duly authorized representative upon request.

[45CSR13, R13-2383, B.11., G1]

- 4.4.3. **General recordkeeping requirements for CAM,**

- 1. The owner or operator shall comply with the recordkeeping requirements of Sections 3.4.1 and 3.4.2. The owner or operator shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to 40 C.F.R. § 64.8 and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under 40 C.F.R. Part 64 (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

2. Instead of paper records, the owner or operator 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.

[45CSR§30-5.1.c. and 40 C.F.R. § 64.9 (b)]

- 4.4.4. Permittee must comply with the emissions standards specified in 40 C.F.R. § 60.4205 (a) by keeping records of engine manufacturer data indicating compliance with the standards.

[45CSR16, 40 C.F.R. § 60.4211 (b) (3), G1]

- 4.4.5. For the purposes of determining compliance with the maximum fuel sulfur-content limit set forth in Section 4.1.7, the permittee shall either, once per calendar year:

- a. Obtain from the fuel supplier a document certifying the maximum total sulfur content of the fuel gas delivered to the facility; or
- b. Conduct, or have conducted, testing on the fuel gas delivered to the facility to determine maximum total sulfur content. This testing shall be in accordance with 40 C.F.R. § 60.335 (b) (10) and Section 4.3.2.

[45CSR13, R13-2383, B.9., GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

- 4.4.6. If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §§60.4211(f)(2)(ii) and (iii) or that operates for the purposes specified in §60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (1) through (3) of this section.

- (1) The report must contain the following information:

- (i) Company name and address where the engine is located.
- (ii) Date of the report and beginning and ending dates of the reporting period.
- (iii) Engine site rating and model year.
- (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
- (v) Hours operated for the purposes specified in §§60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §§60.4211(f)(2)(ii) and (iii).
- (vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §§60.4211(f)(2)(ii) and (iii).
- (vii) Hours spent for operation for the purposes specified in §60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

- (2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
- (3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.

[45CSR16, 40 C.F.R. §60.4214(d), G1]

4.5. Reporting Requirements

4.5.1. General reporting requirements for CAM.

A report under 40 C.F.R. Part 64 shall include, at a minimum, the information required in Section 3.5.8 and the following information, as applicable.

- a. Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;
- b. Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and
- c. A description of the actions taken to implement a QIP during the reporting period as specified in 40 C.F.R. § 64.8. Upon completion of a QIP, the owner or operator 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.

[45CSR§30-5.1.c; 40 C.F.R. § 64.9 (a) (2)]

4.5.2. For each affected unit that elects to continuously monitor parameters or emissions, or to periodically determine the fuel sulfur content or fuel nitrogen content under this subpart, the owner or operator shall submit reports of excess emissions and monitor downtime, in accordance with §60.7(c). Excess emissions shall be reported for all periods of unit operation, including startup, shutdown and malfunction. For the purpose of reports required under §60.7(c), periods of excess emissions and monitor downtime that shall be reported are defined as follows:

- (1) Nitrogen oxides.
 - (i) For turbines using water or steam to fuel ratio monitoring:
 - (A) An excess emission shall be any unit operating hour for which the average steam or water to fuel ratio, as measured by the continuous monitoring system, falls below the acceptable steam or water to fuel ratio needed to demonstrate compliance with §60.332, as established during the performance test required in §60.8. Any unit operating hour in

which no water or steam is injected into the turbine shall also be considered an excess emission.

- (B) A period of monitor downtime shall be any unit operating hour in which water or steam is injected into the turbine, but the essential parametric data needed to determine the steam or water to fuel ratio are unavailable or invalid.
 - (C) Each report shall include the average steam or water to fuel ratio, average fuel consumption, ambient conditions (temperature, pressure, and humidity), gas turbine load, and (if applicable) the nitrogen content of the fuel during each excess emission. You do not have to report ambient conditions if you opt to use the worst case ISO correction factor as specified in §60.334(b)(3)(ii), or if you are not using the ISO correction equation under the provisions of §60.335(b)(1).
- (2) Sulfur dioxide. If the owner or operator is required to monitor the sulfur content of the fuel under 40 C.F.R. §60.334 (h):
- (i) For samples of gaseous fuel and for oil samples obtained using daily sampling, flow proportional sampling, or sampling from the unit's storage tank, an excess emission occurs each unit operating hour included in the period beginning on the date and hour of any sample for which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 weight percent and ending on the date and hour that a subsequent sample is taken that demonstrates compliance with the sulfur limit.
 - (ii) If the option to sample each delivery of fuel oil has been selected, the owner or operator shall immediately switch to one of the other oil sampling options (*i.e.*, daily sampling, flow proportional sampling, or sampling from the unit's storage tank) if the sulfur content of a delivery exceeds 0.8 weight percent. The owner or operator shall continue to use one of the other sampling options until all of the oil from the delivery has been combusted, and shall evaluate excess emissions according to paragraph 4.5.2(2)(i) of this section. When all of the fuel from the delivery has been burned, the owner or operator may resume using the as-delivered sampling option.
 - (iii) A period of monitor downtime begins when a required sample is not taken by its due date. A period of monitor downtime also begins on the date and hour of a required sample, if invalid results are obtained. The period of monitor downtime shall include only unit operating hours, and ends on the date and hour of the next valid sample.

[45CSR16, 40 C.F.R. §§ 60.334 (j)(1)(i) and (j)(2), GS-01, GS-02, GS-03, GS-04, GS-05, GS-06]

4.6. Compliance Plan

4.6.1. None

4.7. CAM Plan Summary of Requirements for In-Stack Integrated Oxidation Catalyst

| | | Indicator No. 1 |
|-------------|--|--|
| I. | Indicator | Calculated Daily Average Combustion Turbine Exhaust Gas Temperature (EGT) |
| | Monitoring Approach | Monitor Combustion Turbine Exhaust Gas Temperature (EGT) via nine thermocouples (Section 4.2.3.) before gases enter the power turbine inlet. The power turbine exhaust gas is the inlet to the oxidation catalyst bed. |
| II. | Indicator Range or Designated Condition | Exhaust gas temperature from the power turbine that are above 800 degree F ensure the catalyst is operating as designed. (Section 4.2.4.) |
| III. | Performance Criteria | Thermocouples used in the monitoring system are accurate to within $\pm 0.75\%$ per manufacturer's information. (Section 4.2.3.) |
| | A. Data Representativeness | |
| | B. Verification of Operational Status | Not Applicable; Temperature thermocouples are unmodified original equipment. |
| | C. QA/QC Practices and Criteria | Anomalous combustion turbine EGT readings that are outside the known temperature parameters of 800 to 1390 °F for the current combustion turbine operation mode will be investigated. Those readings found to be accurate (i.e., not in error) will be considered valid and included in the daily average. Thermocouples will be calibrated according to manufacturer's recommendations. (Section 4.2.3.) |
| | D. Monitoring Frequency | Continuous during normal turbine operation except for periods of start-up, shutdown, and malfunction. (Section 4.2.4.) |
| | Data Collection Procedures | Temperature data will be recorded once each clock hour at half-past the hour (to avoid most dispatched start-ups occurring at the beginning of the hour). If, at the time of recordation, the combustion turbine is not operating normally (as defined above), the temperature for that hour will be deemed invalid and omitted from the calendar daily average calculation. (Sections 4.2.4 and 4.4.3.) |
| | Data averaging periods | Calendar day average of up to 24 valid hourly data recordation. A temperature excursion will be defined as a daily average combustion turbine EGT below 800 degrees F or above 1390 °F. Daily average temperature will be defined as the average of all valid hourly temperature recordation in a calendar day. See discussion in Monitoring Frequency and Data Collection Procedures for description of valid data. (Section 4.2.4) |

APPENDIX A

Recordkeeping

**ATTACHMENT A - EXAMPLE DATA FORM
 BIG SANDY MONTHLY NATURAL GAS CONSUMPTION REPORT ⁽¹⁾⁽²⁾
 Big Sandy Peaker Plant, LLC - Big Sandy Peaker Plant
 Permit No. R13-2383, Plant ID No. 09900080**

Month, Year:

| Day of Month | Aggregate Facility-Wide Consumption of Natural Gas (scfd/cfm) | Initials |
|---------------------------------------|---|----------|
| 1 | | |
| 2 | | |
| 3 | | |
| 4 | | |
| 5 | | |
| 6 | | |
| 7 | | |
| 8 | | |
| 9 | | |
| 10 | | |
| 11 | | |
| 12 | | |
| 13 | | |
| 14 | | |
| 15 | | |
| 16 | | |
| 17 | | |
| 18 | | |
| 19 | | |
| 20 | | |
| 21 | | |
| 22 | | |
| 23 | | |
| 24 | | |
| 25 | | |
| 26 | | |
| 27 | | |
| 28 | | |
| 29 | | |
| 30 | | |
| 31 | | |
| Total (Tons/Mc.) | | |
| 12 month Rolling Total ⁽³⁾ | | |

NON CONFIDENTIAL

- Note:
- (1) The CERTIFICATION OF DATA ACCURACY statement appearing on the reverse side of this sheet must be completed within fifteen (15) days of the end of the reporting period.
 - (2) This record shall be maintained on site for a period of five (5) years from the date of certification. It shall be made available, upon request, to the Chief or his (her) authorized representative.
 - (3) Twelve month rolling total should not exceed 4,614,124,863 scf.

APPENDIX B

Cross-State Air Pollution Rule Requirements

Cross-State Air Pollution Rule (CSAPR) Trading Program Title V Requirements

| | | |
|--|---|----------------------------------|
| Plant Name: Big Sandy Peaker Plant, LLC | West Virginia ID Number: 099-00080 | ORIS/Facility Code: 55284 |
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1. Owners and operators of the CSAPR subject unit(s) identified in the CSAPR Monitoring Requirements Table below are subject to the requirements of the *CSAPR NO_x Annual Trading Program Requirements*, *CSAPR NO_x Ozone Season Group 2 Trading Program Requirements*, and the *CSAPR SO₂ Group 1 Trading Program Requirements* in Appendix A to this permit.
2. Owners and operators of the CSAPR subject unit(s) identified in the CSAPR Monitoring Requirements Table below are subject to the monitoring requirements specified in the table below.

| CSAPR MONITORING REQUIREMENTS TABLE | | | |
|---|-----------------------|-----------------------|-------------------|
| Description of Monitoring Requirements: | Parameter | | |
| | SO₂ | NO_x | Heat Input |
| Unit ID: GS01, GS02, GS03, GS04, GS05, GS06, GS07, GS08, GS09, GS10, GS11, GS12 | | | |
| Continuous emission monitoring system (CEMS) pursuant to 40 CFR part 75, subpart B (for SO ₂ monitoring) and 40 CFR part 75, subpart H (for NO _x monitoring) | | | |
| Excepted monitoring system pursuant to 40 CFR part 75, appendix D (<i>Optional SO₂ Emissions Data Protocol for Gas-Fired and Oil-Fired Units</i>) | | | |
| Excepted monitoring system pursuant to 40 CFR part 75, appendix E (<i>Optional NO_x Emissions Protocol for Gas-Fired Peaking Units and Oil-Fired Peaking Units</i>) | | | |
| Low Mass Emissions excepted monitoring (LME) pursuant to 40 CFR 75.19 (<i>Optional SO₂, NO_x, and CO₂ Emissions Calculation for Low Mass Emissions (LME) Units</i>) | x | x | x |
| EPA-approved alternative monitoring system pursuant to 40 CFR part 75, subpart E | | | |

3. 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 program.
4. Owners and operators shall submit to the Administrator a monitoring plan for each unit in accordance with 40 CFR 75.53, 75.62 and 75.73, as applicable.
5. Owners and operators that want to use an alternative monitoring system shall submit to the Administrator a petition requesting approval of the alternative monitoring system in accordance with 40 CFR part 75, subpart E, 40 CFR 75.66, and the applicable trading program provisions found in 40 CFR 97.435 (*CSAPR NO_x Annual Trading Program*), 97.835 (*CSAPR NO_x Ozone Season Group 2 Trading Program*) and, 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 <https://www.epa.gov/airmarkets/complete-list-responses-40-cfr-part-75-petitions>.
6. 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*) shall 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 EPA's website at <https://www.epa.gov/airmarkets/complete-list-responses-40-cfr-part-75-petitions>.

CSAPR NO_x Annual Trading Program requirements (40 CFR 97.406)

(a) 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.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) 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 (general monitoring, recordkeeping, and reporting requirements, including: installation, certification, and data accounting; compliance deadlines; reporting data; prohibitions; and long-term cold storage), 97.431 (initial monitoring system certification and recertification procedures), 97.432 (monitoring system out-of-control periods), 97.433 (notifications concerning monitoring), 97.434 (recordkeeping and reporting, including: monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.435 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) 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.

(c) NO_x emissions requirements.

(1) 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 exceed 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.

(2) 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 West Virginia 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 West Virginia 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 West

- Virginia 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 West Virginia 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 such control period.
- (iii). Total NO_x emissions from all CSAPR NO_x Annual units at CSAPR NO_x Annual sources in West Virginia 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 West Virginia 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.
- (3) 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.
- (4) 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 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 for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) 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.
- (6) 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.
- (7) Property right. A CSAPR NO_x Annual allowance does not constitute a property right.
- (d) Title V permit revision requirements.**
- (1) Owners and operators shall not be required to revise the title V permit for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR part 97, subpart AAAAA.

- (2) Owners and operators shall revise the title V permit for any addition of, or change to, a unit's description in the CSAPR Monitoring Requirements Table above. The addition of, or change to, a unit's description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.430 through 97.435 is eligible for minor permit modification procedures in accordance with 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) 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.
- (2) 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.

(f) Liability.

- (1) 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.
- (2) 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.

(g) 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 97.806)

(a) 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.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

- (1) 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 (general monitoring, recordkeeping, and reporting requirements, including: installation, certification, and data accounting; compliance deadlines; reporting data; prohibitions; and long-term cold storage), 97.831 (initial monitoring system certification and recertification procedures), 97.832 (monitoring system out-of-control periods), 97.833 (notifications concerning monitoring), 97.834 (recordkeeping and reporting, including: monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.835 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).
- (2) 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.

(c) NO_x emissions requirements.

(1) 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 exceed 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.

(2) 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 West Virginia 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 West Virginia 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 West Virginia 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 Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in West Virginia 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 CSAPR NO_x Ozone Season Group 2 sources in West Virginia 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 CSAPR NO_x Ozone Season Group 2 units at CSAPR NO_x Ozone Season Group 2 sources in West Virginia 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 Ozone Season Group 2 units at 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.
- (3) Compliance periods.
- (i). A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(1) 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.
- (ii). A CSAPR NO_x Ozone Season Group 2 unit shall be subject to the requirements under paragraph (c)(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.
- (4) Vintage of CSAPR NO_x 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 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 for a control period in a prior year or the control period in the given year or in the immediately following year.
- (5) 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.
- (6) 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.

(7) Property right. A CSAPR NO_x Ozone Season Group 2 allowance does not constitute a property right.

(d) Title V permit revision requirements.

- (1) Owners and operators shall not be required to revise the title V permit for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR part 97, subpart EEEEE.
- (2) Owners and operators shall revise the title V permit for any addition of, or change to, a unit's description in the CSAPR Monitoring Requirements Table above. The addition of, or change to, a unit's description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under subpart H of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.830 through 97.835 is eligible for minor permit modification procedures in accordance with 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) 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.
- (2) 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.

(f) Liability.

- (1) 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.
- (2) 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.

(g) 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 (40 CFR 97.606)

(a) 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.

(b) Emissions monitoring, reporting, and recordkeeping requirements.

(1) 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 (general monitoring, recordkeeping, and reporting requirements, including: installation, certification, and data accounting; compliance deadlines; reporting data; prohibitions; and long-term cold storage), 97.631 (initial monitoring system certification and recertification procedures), 97.632 (monitoring system out-of-control periods), 97.633 (notifications concerning monitoring), 97.634 (recordkeeping and reporting, including: monitoring plans, certification applications, quarterly reports, and compliance certification), and 97.635 (petitions for alternatives to monitoring, recordkeeping, or reporting requirements).

(2) 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.

(c) SO₂ emissions requirements.

(1) 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 exceed 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 CCCC and the Clean Air Act.

(2) 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 West Virginia 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 West Virginia 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 West Virginia 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 West Virginia 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 West Virginia 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 40 CFR 97.610(a) and the state's variability limit under 40 CFR 97.610(b).
 - (iv). It shall not be a violation of 40 CFR part 97, subpart CCCCC or of the Clean Air Act if total SO₂ emissions from all CSAPR SO₂ Group 1 units at CSAPR SO₂ Group 1 sources in West Virginia 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 40 CFR part 97, subpart CCCCC and the Clean Air Act.
- (3) 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 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 40 CFR 97.630(b) and for each control period thereafter.
- (4) Vintage of CSAPR SO₂ Group 1 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 must 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 (c)(2)(i) through (iii) above for a control period in a given year must 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.
- (5) 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 40 CFR part 97, subpart CCCCC.
- (6) Limited authorization. A 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 40 CFR part 97, subpart CCCCC, 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.
- (7) Property right. A CSAPR SO₂ Group 1 allowance does not constitute a property right.
- (d) Title V permit revision requirements.**
- (1) Owners and operators shall not be required to revise the title V permit for any allocation, holding, deduction, or transfer of CSAPR NO_x Annual allowances in accordance with 40 CFR part 97, subpart CCCCC.
 - (2) Owners and operators shall revise the title V permit for any addition of, or change to, a unit's description in the CSAPR

Monitoring Requirements Table above. The addition of, or change to, a unit's description of whether a unit is required to monitor and report NO_x emissions using a continuous emission monitoring system (under subpart B of part 75 of this chapter), an excepted monitoring system (under appendices D and E to part 75 of this chapter), a low mass emissions excepted monitoring methodology (under §75.19 of this chapter), or an alternative monitoring system (under subpart E of part 75 of this chapter) in accordance with §§97.630 through 97.635 is eligible for minor permit modification procedures in accordance with 70.7(e)(2)(i)(B) or 71.7(e)(1)(i)(B).

(e) Additional recordkeeping and reporting requirements.

- (1) 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 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 97.616 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 40 CFR part 97, subpart CCCCC.
 - (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.
- (2) 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 40 CFR 97.618. 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.

(f) Liability.

- (1) 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.
- (2) 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.

(g) Effect on other authorities.

No provision of the CSAPR SO₂ Group 1 Trading Program or exemption under 40 CFR 97.605 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.

APPENDIX C

Acid Rain Permit



west virginia department of environmental protection
Division of Air Quality

Phase II Acid Rain Permit

| | |
|---|---|
| Plant Name: Big Sandy Peaker Plant | Permit #: R33-55284-2020-4 |
| Affected Units: GS01, GS02, GS03, GS04, GS05, GS06, GS07, GS08, GS09, GS10, GS11, GS12 | |
| Operator: Big Sandy Peaker Plant, LLC | ORIS Code: 55284 |
| Effective Date | From: January 1, 2016 To: December 31, 2020 |

Contents:

1. Statement of Basis
2. SO₂ allowances allocated under this permit and NO_x requirements for each affected unit.
3. Comments, notes and justifications regarding permit decisions and changes made to permit application forms during the review process, and any additional requirements or conditions.
4. The permit application forms submitted for this source, as corrected by the West Virginia Division of Air Quality. The owners and operators of the source must comply with the standard requirements and special provisions set forth in the application.

1. Statement of Basis

Statutory and Regulatory Authorities: In accordance with W. Va. Code §22-5-4(a)(16) and Titles IV and V of the Clean Air Act, the West Virginia Department of Environmental Protection, Division of Air Quality issues this permit pursuant to 45CSR33 and 45CSR30.

Permit Approval

William F. Durham, Director
Division of Air Quality

12-14-2015

Date

Promoting a healthy environment

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|--|----------------------------------|
| Plant Name Big Sandy Peaker Plant | Permit # R33-55284-2020-4 |
|--|----------------------------------|

2. SO₂ Allocations for each affected unit

| Unit No. G801 | Year | | | | |
|---|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| SO₂ Allowances | | | | | |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | N/A | N/A | N/A | N/A | N/A |

* This unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73, but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.8(c)(1). Allocations and transfers to, as well as deductions from, a unit's allowance account do not necessitate a revision to this permit (see 40 CFR §72.84)

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None

4. Permit application forms:

Attached

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|------------------------------------|---------------------------|
| Plant Name: Big Sandy Peaker Plant | Permit # R33-55234-2020-4 |
|------------------------------------|---------------------------|

2. SO₂ Allocations for each affected unit

| Unit No. GS02 | SO ₂ Allowances | | | | |
|---|----------------------------|------|------|------|------|
| | Year | | | | |
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | N/A | N/A | N/A | N/A | N/A |

* This unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73 but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.9(c)(1). Allocations and transfers to as well as deductions from, a unit's allowance account do not necessitate a revision to this permit (see 40 CFR §72.84)

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None

4. Permit application forms:

Attached

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|--|----------------------------------|
| Plant Name Big Sandy Peaker Plant | Permit # R33-55284-2020-4 |
|--|----------------------------------|

2. SO₂ Allocations for each affected unit

| Unit No | GS03 | Year | | | | |
|---|------|------|------|------|------|------|
| | | 2016 | 2017 | 2018 | 2019 | 2020 |
| SO ₂ Allowances | | | | | | |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | | N/A | N/A | N/A | N/A | N/A |

* This unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73, but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.9(c)(1). Allocations and transfers to, as well as deductions from, a unit's allowance account do not necessitate a revision to this permit (see 40 CFR §72.84).

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None.

4. Permit application forms:

Attached

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|------------------------------------|---------------------------|
| Plant Name: Big Sandy Peaker Plant | Permit # R33-66284-2020-4 |
|------------------------------------|---------------------------|

2. SO₂ Allocations for each affected unit

| Unit No | Year | | | | |
|---|------|------|------|------|------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| GS04 | | | | | |
| SO₂ Allowances | | | | | |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | N/A | N/A | N/A | N/A | N/A |

* The unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73, but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.9(c)(1). Allocations and transfers to, as well as deductions from, a unit's allowance account do not necessitate a revision to this permit (see 40 CFR §72.84).

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None

4. Permit application forms:

Attached

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|--|----------------------------------|
| Plant Name Big Sandy Peaker Plant | Permit # R33-55284-2020-4 |
|--|----------------------------------|

2. SO₂ Allocations for each affected unit

| Unit No. G805 | Year | | | | |
|---|-------------|-------------|-------------|-------------|-------------|
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| SO₂ Allowances | | | | | |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | N/A | N/A | N/A | N/A | N/A |

* This unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73 but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.8(c)(1). Allocations and transfers to, as well as deductions from, a unit's allowance account do not necessitate a revision to this permit (see 40 CFR §72.84).

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None.

4. Permit application forms:

Attached

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|------------------------------------|---------------------------|
| Plant Name: Big Sandy Peaker Plant | Permit # R33-55284-2020-4 |
|------------------------------------|---------------------------|

2. SO₂ Allocations for each affected unit

| Unit No | SO ₂ Allowances | | | | |
|---|----------------------------|------|------|------|------|
| | Year | | | | |
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| G506 | | | | | |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | N/A | N/A | N/A | N/A | N/A |

* This unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73, but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.9(c)(1). Allocations and transfers to, as well as deductions from a unit's allowance account do not necessitate a revision to this permit (see 40 CFR §72.84).

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None

4. Permit application forms:

Attached

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|---|-----------------------------------|
| Plant Name: Big Sandy Peaker Plant | Permit #: R33-65284-2020-4 |
|---|-----------------------------------|

2. **SO₂ Allocations for each affected unit**

| Unit No. G507 | SO ₂ Allowances | | | | |
|---|----------------------------|------|------|------|------|
| | Year | | | | |
| | 2016 | 2017 | 2018 | 2019 | 2020 |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | N/A | N/A | N/A | N/A | N/A |

* This unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73, but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.9(c)(1). Allocations and transfers to, as well as deductions from, a unit's allowance account do not necessitate a revision to this permit (see 40 CFR §72.84).

3. **Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:**

None

4. **Permit application forms:**

Attached

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|---|-----------------------------------|
| Plant Name: Big Sandy Peaker Plant | Permit #: R33-55284-2020-4 |
|---|-----------------------------------|

2. SO₂ Allocations for each affected unit

| Unit No | GS03 | SO ₂ Allowances | | | | |
|---|------|----------------------------|------|------|------|------|
| | | Year | | | | |
| | | 2016 | 2017 | 2018 | 2019 | 2020 |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | | N/A | N/A | N/A | N/A | N/A |

* This unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73 but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.9(c)(1). Allocations and transfers to, as well as deductions from, a unit's allowance account do not necessitate a revision to this permit (see 40 CFR §72.84).

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None

4. Permit application forms:

Attached

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|------------------------------------|---------------------------|
| Plant Name: Big Sandy Peaker Plant | Permit # R33-55284-2020-4 |
|------------------------------------|---------------------------|

2. SO₂ Allocations for each affected unit

| Unit No. | GS09 | Year | | | | |
|---|------|------|------|------|------|------|
| | | 2016 | 2017 | 2018 | 2019 | 2020 |
| SO ₂ Allowances | | | | | | |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | | N/A | N/A | N/A | N/A | N/A |

* This unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73, but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.9(c)(1). Allocations and transfers to, as well as deductions from, a unit's allowance account do not necessitate a revision to the permit (see 40 CFR §72.84).

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None

4. Permit application forms:

Attached.

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|------------------------------------|---------------------------|
| Plant Name: Big Sandy Peaker Plant | Permit # R33-66284-2020-4 |
|------------------------------------|---------------------------|

2. SO₂ Allocations for each affected unit

| Unit No | GS10 | Year | | | | |
|---|------|------|------|------|------|------|
| | | 2016 | 2017 | 2018 | 2019 | 2020 |
| SO ₂ Allowances | | | | | | |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | | N/A | N/A | N/A | N/A | N/A |

* This unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73, but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.9(c)(1). Allocations and transfers to, as well as deductions from, a unit's allowance account do not necessitate a revision to this permit (see 40 CFR §72.84).

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None

4. Permit application forms:

Attached

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|------------------------------------|----------------------------|
| Plant Name: Big Sandy Peaker Plant | Permit #: R33-55264-2020-4 |
|------------------------------------|----------------------------|

2. SO₂ Allocations for each affected unit:

| Unit No | G511 | Year | | | | |
|---|------|------|------|------|------|------|
| | | 2016 | 2017 | 2018 | 2019 | 2020 |
| SO ₂ Allowances | | | | | | |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | | N/A | N/A | N/A | N/A | N/A |

* This unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73, but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.9(c)(1). Allocations and transfers to, as well as deductions from, a unit's allowance account do not necessitate a revision to this permit (see 40 CFR §72.84).

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None

4. Permit application forms:

Attached

West Virginia Department of Environmental Protection • Division of Air Quality

| | |
|------------------------------------|----------------------------|
| Plant Name: Big Sandy Peaker Plant | Permit #: R33-55284-2020-4 |
|------------------------------------|----------------------------|

2. SO₂ Allocations for each affected unit

| Unit No | G512 | SO ₂ Allowances | | | | |
|---|------|----------------------------|------|------|------|------|
| | | Year | | | | |
| | | 2016 | 2017 | 2018 | 2019 | 2020 |
| Table 2 allowances, as adjusted by 40 CFR Part 73 | | N/A* | N/A* | N/A* | N/A* | N/A* |
| Repowering plan allowances | | N/A | N/A | N/A | N/A | N/A |

* This unit was not eligible for an initial allocation of SO₂ allowances under 40 CFR Part 73, but may acquire such allowances from other sources. This unit is still obligated to hold SO₂ allowances as required under and in accordance with 40 CFR §72.9(c)(1). Allocations and transfers to, as well as deductions from a unit's allowance account do not necessitate a revision to this permit (see 40 CFR §72.64).

3. Comments, notes and justifications regarding decisions, and changes made to the permit application forms during the review process:

None

4. Permit application forms:

Attached



United States
 Environmental Protection Agency
 Acid Rain Program

OMB No. 2060-4258
 Approval expires 11/30/2012

Acid Rain Permit Application

For more information, see instructions and 40 CFR 72.30 and 72.31.

This submission is: New Revised for ARP permit renewal

STEP 1

Identify the facility name, State, and plant (ORIS) code.

| | | |
|---|-------------|---------------------|
| Facility (Source) Name Big Sandy Peaker Plant, LLC | State WV | Plant Code 55264 |
|---|-------------|---------------------|

STEP 2

Enter the unit ID# for every affected unit at the affected source in column "a"

| a | b |
|----------|---|
| Unit ID# | Unit Will Hold Allowances in Accordance with 40 CFR 72.30(c)(1) |
| G501 | Yes |
| G502 | Yes |
| G503 | Yes |
| G504 | Yes |
| G505 | Yes |
| G506 | Yes |
| G507 | Yes |
| G508 | Yes |
| G509 | Yes |
| G5010 | Yes |
| G511 | Yes |
| G512 | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |
| | Yes |

EPA Form 7010-10 (Revised 7-2014)

Facility (Source) Name (from STEP 1)

Permit Requirements

STEP 3

Read the standard requirements.

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

Monitoring Requirements

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

Sulfur Dioxide Requirements

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

Facility (Source) Name (from STEP 1)

Sulfur Dioxide Requirements, Cont'd.

STEP 3, Cont'd.

(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.

(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.

(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain permit application, the Acid Rain permit, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.

(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

Nitrogen Oxides Requirements

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

Excess Emissions Requirements

(1) The designated representative of an affected source that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR part 77.

(2) The owners and operators of an affected source that has excess emissions in any calendar year shall:

- (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR part 77; and
- (ii) Comply with the terms of an approved offset plan, as required by 40 CFR part 77.

Recordkeeping and Reporting Requirements

(1) Unless otherwise provided, the owners and operators of the source and each affected unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the Administrator or permitting authority:

- (i) The certificate of representation for the designated representative for the source and each affected unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with 40 CFR 72.24; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission

Facility (Source) Name (from STEP 1)

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of a new certificate of representation changing the designated representative;

STEP 3, Cont'd. Recordkeeping and Reporting Requirements, Cont'd.

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

Liability

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

Effect on Other Authorities

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

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

Facility (Source) Name (from STEP 1)

any other provision of the Act, including the provisions of title I of the Act relating

STEP 3, Cont'd.

Effect on Other Authorities, Cont'd.

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

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

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

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

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

STEP 4

Read the certification statement, sign, and date.

Certification

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

| | | |
|-----------|---|------------------|
| Name | Todd S. Jarvis | |
| Signature |  | Date |
| | | October 20, 2019 |