

PERMIT NO. 4911-207-0042-P-01-0

ISSUANCE DATE: 11/06/2025



GEORGIA

DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Air Quality Permit

In accordance with the provisions of the Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq and the Rules, Chapter 391-3-1, adopted pursuant to and in effect under that Act,

Facility Name: Smarr Combined Cycle Energy Facility

Facility Address: 555 Ray Hartley Road
Smarr, Georgia 31029, Monroe County

Mailing Address: 2100 East Exchange Place
Tucker, Georgia 30084

Facility AIRS Number: 04-13-207-00042

is issued a Permit for the following:

Construction and operation of an electric power generating facility including two combined cycle combustion turbines with duct burners, two fuel gas heaters, two emergency generators, and a fire pump engine.

This Permit is conditioned upon compliance with all provisions of The Georgia Air Quality Act, O.C.G.A. Section 12-9-1, et seq, the Rules, Chapter 391-3-1, adopted and in effect under that Act, or any other condition of this Permit.

This Permit may be subject to revocation, suspension, modification or amendment by the Director for cause including evidence of noncompliance with any of the above; or for any misrepresentation made in Application No. **29663** dated April 8, 2025; any other applications upon which this Permit is based; supporting data entered therein or attached thereto; or any subsequent submittals or supporting data; or for any alterations affecting the emissions from this source.

This Permit is further subject to and conditioned upon the terms, conditions, limitations, standards, or schedules contained in or specified on the attached **30** pages.



Jeffrey W. Cown

Jeffrey W. Cown, Director
Environmental Protection Division

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PART 1.0 FACILITY DESCRIPTION

1.1 Site Determination

This facility, Smarr Combined-Cycle Energy Facility (AIRS No. 207-00042), and the Smarr Energy Facility (AIRS No. 207-00030) are potentially part of the same site for Title V and PSD purposes. To be part of the same site, the facilities must (1) belong to the same industrial grouping, (2) be located on one or more contiguous or adjacent properties, and (3) be under the control of the same person (or persons under common control). The SIC code for both facilities is 4911 – “Electric Services,” so the facilities are part of the same industrial grouping, and the facilities will be on contiguous or adjacent properties.

Smarr Combined-Cycle Energy Facility will be owned and operated by Oglethorpe Power Corporation (OPC), and Smarr Energy Facility is owned by Smarr EMC but operated by OPC under a Management Services Agreement between Smarr EMC and OPC. OPC cannot dictate decisions at the Smarr Energy Facility, and Smarr EMC will not be able to dictate decisions at the Smarr Combined-Cycle Energy Facility. The facilities, therefore, are not under common control, and the two facilities are separate sites for Title V and PSD purposes.

1.2 Previous and/or Other Names

This facility is a greenfield site and has no previous or other names.

1.3 Overall Facility Process Description

Smarr Combined-Cycle Energy Facility will be a natural gas-fired electric power generation facility with a nominal power output of 1,425 megawatts (MW). The facility will have two power blocks each consisting of one combined-cycle combustion turbine (CCCT) and one steam turbine, referred to as a “1-on-1” configuration. Each CCCT will consist of one natural gas-fired General Electric 7HA combustion turbine (CT) exhausting to a heat recovery steam generator (HRSG). Additional heat may be supplied to each HRSG by a natural gas-fired duct burner (DB). Steam produced in the HRSG is used to power the block’s steam generator. Support equipment at the facility will include two 7 MMBtu/hr natural gas-fired fuel gas (dew point) heaters, one 420 horsepower (hp) diesel-fired emergency fire pump engine, and two 2,991 hp diesel-fired emergency generators capable of producing 2,000 kilowatts (kW) electric output each.

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PART 2.0 REQUIREMENTS PERTAINING TO THE ENTIRE FACILITY

2.1 Facility Wide Emission Caps and Operating Limits

None applicable.

2.2 Facility Wide Federal Rule Standards

None applicable.

2.3 Facility Wide SIP Rule Standards

None applicable.

2.4 Facility Wide Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None applicable.

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PART 3.0 REQUIREMENTS FOR EMISSION UNITS

Note: Except where an applicable requirement specifically states otherwise, the averaging times of any of the Emissions Limitations or Standards included in this permit are tied to or based on the run time(s) specified for the applicable reference test method(s) or procedures required for demonstrating compliance.

3.1 Emission Units

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
CCCT1	Combined-Cycle Combustion Turbine 1 General Electric 7HA combustion turbine (CT1) with a heat recovery steam generator (HRSG) and duct burner (DB1) (5,006 MMBtu/hr total at ISO conditions)	40 CFR 52.21(j) 40 CFR 60 Subpart A 40 CFR 60 Subpart KKKK 40 CFR 60 Subpart TTTT or TTTTa, as applicable Acid Rain Regulations CSAPR 391-3-1-.02(2)(b) (for the combustion turbine) 391-3-1-.02(2)(d) (for the duct burner) 391-3-1-.02(2)(g) 391-3-1-.02(2)(nnn)	DLN1	Dry Low NO _x combustor (for the combustion turbine)
			LNB1	Low NO _x Burner (for the duct burner)
			SCR1	Selective Catalytic Reduction
			OC1	Oxidation Catalyst
CCCT2	Combined-Cycle Combustion Turbine 2 General Electric 7HA combustion turbine (CT2) with a heat recovery steam generator (HRSG) and duct burner (DB2) (5,006 MMBtu/hr total at ISO conditions)	40 CFR 52.21(j) 40 CFR 60 Subpart A 40 CFR 60 Subpart KKKK 40 CFR 60 Subpart TTTT or TTTTa, as applicable Acid Rain Regulations CSAPR 391-3-1-.02(2)(b) (for the combustion turbine) 391-3-1-.02(2)(d) (for the duct burner) 391-3-1-.02(2)(g) 391-3-1-.02(2)(nnn)	DLN2	Dry Low NO _x combustor (for the combustion turbine)
			LNB2	Low NO _x Burner (for the duct burner)
			SCR2	Selective Catalytic Reduction
			OC2	Oxidation Catalyst
H1	Fuel Gas (Dew Point) Heater 1 (7 MMBtu/hr)	40 CFR 52.21(j) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	LNB3	Low NO _x Burner
H2	Fuel Gas (Dew Point) Heater 2 (7 MMBtu/hr)	40 CFR 52.21(j) 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)	LNB4	Low NO _x Burner
FP1	Emergency Fire Pump (420 horsepower)	40 CFR 52.21(j) 40 CFR 60 Subpart A 40 CFR 60 Subpart IIII 40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ 391-3-1-.02(2)(b) 391-3-1-.02(2)(g)	N/A	None

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Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
EG1	Emergency Generator 1 (2,991 horsepower) (2,000 kW electric output)	40 CFR 52.21(j) 40 CFR 60 Subpart A 40 CFR 60 Subpart III 40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 391-3-1-.02(2)(mmm)	N/A	None
EG2	Emergency Generator 2 (2,991 horsepower) (2,000 kW electric output)	40 CFR 52.21(j) 40 CFR 60 Subpart A 40 CFR 60 Subpart III 40 CFR 63 Subpart A 40 CFR 63 Subpart ZZZZ 391-3-1-.02(2)(b) 391-3-1-.02(2)(g) 391-3-1-.02(2)(mmm)	N/A	None

* Generally applicable requirements contained in this permit may also apply to emission units listed above. The lists of applicable requirements/standards are intended as a compliance tool and may not be definitive.

3.2 Equipment Emission Caps and Operating Limits

None Applicable.

3.3 Equipment Federal Rule Standards

Combined-Cycle Combustion Turbines

3.3.1 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart A – “General Provisions,” and Subpart KKKK – “Standards of Performance for Stationary Combustion Turbines,” for the operation of the combined-cycle combustion turbines with ID Nos. CCCT1 and CCCT2.
[40 CFR 60 Subparts A and KKKK]

3.3.2 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS) for Greenhouse Gas emissions as found in 40 CFR Part 60, including without limitation, as applicable, Subpart A – “General Provisions,” Subpart TTTT – “Standards of Performance for Greenhouse Gas Emissions for Electric Generating Units,” and/or Subpart TTTTa – “Standards of Performance for Greenhouse Gas Emissions for Modified Coal-Fired Steam Electric Generating Units and New Construction and Reconstruction Stationary Combustion Turbine Electric Generating Units,” for the operation of the combined-cycle combustion turbines with ID Nos. CCCT1 and CCCT2.
[40 CFR 60 Subparts A, TTTT, and TTTTa]

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- 3.3.3 The Permittee shall not discharge or cause the discharge into the atmosphere from combined-cycle combustion turbines with ID Nos. CCCT1 and CCCT2 any gases which:
- a. Contain nitrogen oxides (NO_x) in excess of 2.0 ppmvd, corrected to 15% oxygen, on a 3-hour rolling average, excluding periods of startup and shutdown.
[40 CFR 52.21(j)]
 - b. Contain carbon monoxide (CO) in excess of 2.0 ppmvd, corrected to 15% oxygen, on a 3-hour rolling average, excluding periods of startup and shutdown.
[40 CFR 52.21(j)]
 - c. Contain total particulate matter (filterable PM plus condensable PM) in excess of 27.8 pounds per hour (lb/hr) [equivalent to 0.0056 lb/MMBtu].
[40 CFR 52.21(j) and 391-3-1-.02(2)(d)2(iii) (subsumed)]
 - d. Contain volatile organic compounds (VOC) in excess of 2.0 ppmvd as methane, corrected to 15% oxygen, excluding periods of startup and shutdown.
[40 CFR 52.21(j)]
 - e. Contain greenhouse gas (GHG) emissions in excess of the emission limitation required by Condition 3.3.2.
[40 CFR 52.21(j)]
 - f. Contain NO_x in excess of the following emission standards on a 30-day rolling average:
[40 CFR 60 Subpart KKKK]
 - i. 15 ppmvd, corrected to 15% oxygen, when operating at or above 579 MW (equivalent to 75 percent of peak load); and
 - ii. 96 ppmvd, corrected to 15% oxygen, when operating at less than 579 MW (equivalent to 75 percent of peak load); and
 - iii. For any 30-unit operating day period during which multiple emission standards apply, the applicable standard is the average of the applicable standards during each hour. For hours with multiple emissions standards, the applicable limit for that hour is determined based on the condition that corresponded to the highest emissions standard.
[40 CFR 60.4380(b)(3)]
 - g. Contain NO_x in excess of 6.0 ppmvd, corrected to 15% oxygen, on a 30-day rolling average, during the period May 1 through September 30 of each year.
[391-3-1-.02(2)(nnn)]
 - h. Exhibit any gases which exhibit visible emissions, the opacity of which is equal to or greater than 40 percent, during periods when the duct burner is not in operation.
[391-3-1-.02(2)(b)]

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- i. Exhibit greater than or equal to 20% opacity except for one 6-minute period in any hour of no more than 27% opacity during periods when the duct burner is in operation.
[391-3-1-.02(2)(d)3]
- 3.3.4 The Permittee shall not discharge or cause the discharge into the atmosphere from each of the combined-cycle combustion turbines with ID Nos. CCCT1 and CCCT2, including emissions occurring during startup, shutdown, and malfunction, as follows:
[40 CFR 52.21(j)]
- a. Contain nitrogen oxides (NO_x) in excess of 182.84 tons per combined-cycle combustion turbine during any twelve consecutive months.
 - b. Contain carbon monoxide (CO) in excess of 130.4 tons per combined-cycle combustion turbine during any twelve consecutive months.
 - c. Contain greenhouse gas (GHG) emissions in excess of 2,608,725 tons carbon dioxide equivalent (CO₂e) per combined-cycle combustion turbine during any twelve consecutive months.
- 3.3.5 The Permittee shall fire only pipeline quality natural gas in the combined-cycle combustion turbines with ID Nos. CCCT1 and CCCT2
[40 CFR 52.21(j), 40 CFR 60.4330(a), and 391-3-1-.02(2)(g) (subsumed)]
- 3.3.6 The Permittee shall not burn any fuel which contains total potential sulfur emissions in excess of 0.060 lb SO₂/MMBtu heat input in the combined-cycle combustion turbines with ID Nos. CCCT1 and CCCT2.
[40 CFR 60.4330(a)2 and 391-3-1-.02(2)(g)2. (subsumed)]
- 3.3.7 The Permittee shall implement the following as BACT on the combined-cycle combustion turbines with ID Nos. CCCT1 and CCCT2.
[40 CFR 52.21(j)]
- a. For nitrogen oxides (NO_x), use Dry Low NO_x (DLN) combustion technology for the combustion turbines, install and operate low NO_x Burners (LNB) for the duct burners, install and operate a selective catalytic reduction (SCR) control device, and use good combustion and operating practices.
 - b. For carbon monoxide (CO) and volatile organic compounds (VOC), install and operate an oxidation catalyst (OC) and use good combustion and operating practices.
 - c. For particulate matter (PM, PM₁₀, and PM_{2.5}), use low sulfur fuel and use good combustion and operating practices.

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- d. For greenhouse gases (GHG), use efficient turbine operation and use good combustion, operating, and maintenance practices.

Determination of whether good combustion, operating, and/or maintenance practices are being used will be based on information available to the Division, upon request, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the sources.

- 3.3.8 For the purposes of showing compliance with the emission limits in Condition 3.3.3, the following definitions of startup and shutdown shall apply:
[40 CFR 52.21(j)(2)]

- a. Except for during special testing periods:
- i. Cold startup is defined as a startup to combined cycle operation following a complete shutdown lasting more than seventy-two (72) hours. Time allocated to a cold startup is zero to 70 minutes or the time from when the combustion turbine is first fired until the NO_x emissions (as determined by the device required by Condition 5.2.1a.) are at or below 2 ppmvd corrected to 15% oxygen and the CO emissions (as determined by the device required by Condition 5.2.1b.) are at or below 2 ppmvd corrected to 15% oxygen (based on 5-minute averages), whichever is less.
 - ii. Warm startup is defined as a startup to combined cycle operation following a complete shutdown lasting eight (8) hours or more, but less than or equal to seventy-two (72) hours. Time allocated to a warm startup is zero to 60 minutes or the time from when the combustion turbine is first fired until the NO_x emissions (as determined by the device required by Condition 5.2.1a.) are at or below 2 ppmvd corrected to 15% oxygen and the CO emissions (as determined by the device required by Condition 5.2.1b.) are at or below 2 ppmvd corrected to 15% oxygen (based on 5-minute averages), whichever is less.
 - iii. Hot startup is defined as a startup to combined cycle operation following a complete shutdown lasting less than eight (8) hours. Time allocated to a hot startup is zero to 30 minutes or the time from when the combustion turbine is first fired until the NO_x emissions (as determined by the device required by Condition 5.2.1a.) are at or below 2 ppmvd corrected to 15% oxygen and the CO emissions (as determined by the device required by Condition 5.2.1b.) are at or below 2 ppmvd corrected to 15% oxygen (based on 5-minute averages), whichever is less.
 - iv. Unit shutdown is defined as the period of time from steady state operation to cessation of combustion turbine firing. Time allocated to a shutdown is not to exceed 30 minutes for planned shutdown.

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- b. Special Testing:
 - i. Special Testing is testing that is required during startup or shutdown for durations longer than allowed for normal startup or shutdown as defined in this condition. Special Testing may be conducted after maintenance activities and/or for equipment commissioning, to tune a unit, or for other diagnostic testing needed to ensure safe, reliable and efficient operation. Special Testing may also be conducted to comply with requirements such as those imposed by the regional entity with electric reliability jurisdiction over the facility. This condition can apply when the units are shutdown prior to completing a normal startup.
 - ii. During any special testing period, the startup or shutdown time shall not exceed 240 additional minutes beyond the time allowed in Condition 3.3.8a. The total duration of special testing shall not exceed 10 additional hours per unit during any twelve consecutive month period.

Fuel Gas (Dew Point) Heaters

- 3.3.9 The Permittee shall not discharge or cause the discharge into the atmosphere from each fuel gas (dew point) heater with ID Nos. H1 and H2 any gases which:
 - a. Contain nitrogen oxides (NO_x) in excess of 0.049 pounds per million Btu (lb/MMBtu). [40 CFR 52.21(j)]
 - b. Contain carbon monoxide (CO) in excess of 0.082 pounds per million Btu (lb/MMBtu). [40 CFR 52.21(j)]
 - c. Contain particulate matter (PM) equal to or exceeding 0.50 pounds per million Btu (lb/MMBtu). [391-3-1-.02(2)(d)2(i)]
 - d. Exhibit greater than or equal to 20% opacity except for one 6-minute period in any hour of no more than 27% opacity. [391-3-1-.02(2)(d)3]
- 3.3.10 The Permittee shall only pipeline quality natural gas in the fuel gas (dew point) heaters with ID Nos. H1 and H2. [40 CFR 52.21(j) and 391-3-1-.02(2)(g) (subsumed)]
- 3.3.11 The Permittee shall implement the following as BACT on the fuel gas (dew point) heaters with ID Nos. H1 and H2. [40 CFR 52.21(j)]
 - a. For nitrogen oxides (NO_x), install and operate low NO_x Burners (LNB).

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- b. For carbon monoxide (CO), volatile organic compounds (VOC), particulate matter (PM, PM₁₀, and PM_{2.5}), and greenhouse gases (GHG), use clean fuel (natural gas) and use good combustion practices.

Determination of whether good combustion practices are being used will be based on information available to the Division, upon request, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the sources.

Emergency Fire Pump and Emergency Generators

- 3.3.12 The Permittee shall comply with all applicable provisions of the New Source Performance Standards (NSPS), 40 CFR Part 60, Subpart A – “General Provisions,” and Subpart III – “Standards of Performance for Stationary Compression Ignition Internal Combustion Engines,” for the operation of the emergency fire pump engine with ID No. FP1 and the emergency generators with ID Nos. EG1 and EG2.
[40 CFR 60 Subparts A and III]
- 3.3.13 The Permittee shall comply with all applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR Part 63, in Subpart A – “General Provisions,” and Subpart ZZZZ – “National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines” for the operation of the emergency fire pump engine with ID No. FP1 and the emergency generators with ID Nos. EG1 and EG2.
[40 CFR 63 Subparts A and ZZZZ]
- 3.3.14 The Permittee shall not operate the emergency fire pump engine with ID No. FP1 for more than 500 hours per twelve consecutive months.
[40 CFR 52.21(j)]
- 3.3.15 The Permittee shall not operate the emergency generators with ID Nos. EG1 and EG2 for more than 200 hours per twelve consecutive months.
[40 CFR 52.21(j) and 391-3-1-.02(2)(mmm)]
- 3.3.16 The Permittee shall operate the emergency fire pump engine with ID No. FP1 and the emergency generators with ID Nos. EG1 and EG2 with diesel fuel that has a maximum sulfur content of 15 parts per million (ppm) (0.0015% by weight) and either a minimum cetane index of 40 or maximum aromatic content of 35 volume percent.
[40 CFR 52.21, 40 CFR 60.4207(b), 40 CFR 1090.305, and 391-3-1-.02(2)(g) (subsumed)]
- 3.3.17 For the emergency fire pump engine with ID No. FP1 and the emergency generators with ID Nos. EG1 and EG2, the Permittee shall purchase engines certified to meet the applicable requirements in 40 CFR 60 Subpart III. The engine shall each be installed and configured according to the specifications and instructions provided by the manufacturers.
[40 CFR 52.21 and 40 CFR 60.4211(c)]

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3.3.18 The emergency fire pump engine with ID No. FP1 and the emergency generators with ID Nos. EG1 and EG2 shall each be operated and maintained according to the manufacturer's written instructions or procedures developed by the Permittee that are approved by the engine manufacturer. The Permittee may only change those emission-related settings that are permitted by the manufacturer.
[40 CFR 60.4211(a)]

3.3.19 The Permittee shall use good combustion practices, limit the hours of operation, and use clean fuels as BACT on the emergency fire pump engine with ID No. FP1 and the emergency generators with ID Nos. EG1 and EG2. Determination of whether good combustion practices are being used will be based on information available to the Division, upon request, which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source. Clean fuels shall mean fuel that meets the requirements of Condition 3.3.16.
[40 CFR 52.21(j)]

3.4 Equipment SIP Rule Standards

3.4.1 The Permittee shall not discharge, or cause the discharge, into the atmosphere, from the emergency fire pump engine with ID No. FP1 and the emergency generators with DI Nos. EG1 and EG2, any gases which exhibit visible emissions, the opacity of which is equal to or greater than 40 percent.
[391-3-1-.02(2)(b)1.]

3.5 Equipment Standards Not Covered by a Federal or SIP Rule and Not Instituted as an Emission Cap or Operating Limit

None Applicable.

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PART 4.0 REQUIREMENTS FOR TESTING

4.1 General Testing Requirements

- 4.1.1 The Permittee shall cause to be conducted a performance test at any specified emission unit when so directed by the Environmental Protection Division (“Division”). The test results shall be submitted to the Division within 60 days of the completion of the testing. Any tests shall be performed and conducted using methods and procedures that have been previously specified or approved by the Division.
[391-3-1-.02(6)(b)1(i)]
- 4.1.2 The Permittee shall provide the Division thirty (30) days (or sixty (60) days for tests required by 40 CFR Part 63) prior written notice of the date of any performance test(s) to afford the Division the opportunity to witness and/or audit the test, and shall provide with the notification a test plan in accordance with Division guidelines.
[391-3-1-.02(3)(a) and 40 CFR 63.7(b)(1)]
- 4.1.3 Performance and compliance tests shall be conducted and data reduced in accordance with applicable procedures and methods specified in the Division’s Procedures for Testing and Monitoring Sources of Air Pollutants. The methods for the determination of compliance with emission limits listed under Sections 3.2, 3.3, 3.4 and 3.5 are as follows:
- a. Method 1 or 1A, as applicable, for the determination of sample point locations.
 - b. Method 2 shall be used for the determination of stack gas flow rate.
 - c. Method 3 or 3A shall be used for the determination of stack gas molecular weight.
 - d. Method 3B shall be used for the determination of the emissions rate correction factor or excess air. Method 3A may be used as an alternative.
 - e. Method 4 shall be used for the determination of stack gas moisture.
 - f. Method 5, 17, and/or 201A in conjunction with Method 202 shall be used for the determination of particulate matter concentration. The minimum sampling time for each run shall be one hour.
 - g. Method 7E shall be used for the determination of nitrogen oxide emissions. The sampling time for each run shall be one hour.
 - h. Method 9 and the procedures contained in Section 1.3 of the above referenced document shall be used for the determination of opacity.
 - i. Method 10 shall be used for the determination of carbon monoxide concentration. The sampling time for each run shall be one hour.

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- j. Method 19 shall be used, when applicable, to convert particulate matter, carbon monoxide, and nitrogen oxides concentrations (i.e., grains/dscf for PM; ppm for gaseous pollutants), as determined using other methods specified in this section, to pollutant emission rates (i.e., lb/MMBtu).
- k. Method 18 or 25A shall be used for the determination of volatile organic compound emissions as methane. The sampling time for each run shall be one hour.
- l. ASMT Test Methods D129, D1552, D2622, or D4294 shall be used for the determination of fuel sulfur content of the diesel fuel.
- m. ASTM D4057 shall be used for the collection of fuel oil samples.

Minor changes in methodology may be specified or approved by the Director or his designee when necessitated by process variables, changes in facility design, or improvement or corrections that, in his opinion, render those methods or procedures, or portions thereof, more reliable.

[391-3-1-.02(3)(a)]

- 4.1.4 The Permittee shall submit performance test results to the US EPA's Central Data Exchange (CDX) using the Compliance and Emissions Data Reporting Interface (CEDRI) in accordance with any applicable NSPS or NESHAP standards (40 CFR 60 or 40 CFR 63) that contain Electronic Data Reporting Requirements. This Condition is only applicable if required by an applicable standard and for the pollutant(s) subject to said standard.

[391-3-1-.02(8)(a) and 391-3-1-.02(9)(a)]

- 4.1.5. All monitoring systems and/or monitoring devices required by the Division shall be installed, calibrated and operational prior to conducting any performance test(s). For any performance test, the Permittee shall, using the monitoring systems and/or monitoring devices, acquire data during each performance test run. All monitoring system and/or monitoring device data acquired during the performance testing shall be submitted with the performance test results.

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4.2 Specific Testing Requirements

Combined-Cycle Combustion Turbines Testing

4.2.1 Within 60 days after achieving the maximum production rate at which each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 will be operated, but not later than 180 days after the initial startup of each combined-cycle combustion turbine, the Permittee shall conduct the following performance tests and furnish to the Division a written report of the results of each performance tests:

- a. Performance tests on each combined-cycle combustion turbine for nitrogen oxide (NO_x) emissions in accordance with 40 CFR 60.4400 to verify compliance with Condition 3.3.3f. If the NO_x CEMS specified in Permit Condition 5.2.1a is used as the initial compliance method, the initial performance test for each NO_x CEMS specified in Permit Condition 5.2.1a for each combined-cycle combustion turbine must be performed in accordance with 40 CFR 60.4405.
[40 CFR 60.4400, 40 CFR 60.4405, 391-3-1-.02(6)(b)1.(i)]
- b. Performance tests on each combined-cycle combustion turbine for particulate matter (PM) emissions, at base load, to verify compliance with Condition 3.3.3c.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1.(i)]
- c. Performance tests on each combined-cycle combustion turbine for volatile organic compounds (VOC), at base load, to verify compliance with Condition 3.3.3d.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1.(i)]

4.2.2 Following the initial performance tests required by Condition 4.2.1 on combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2, the Permittee shall conduct subsequent emission testing for PM from each combined-cycle combustion turbine at 5-year intervals (no more than 62 months). The tests shall be conducted at base load.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1.(i)]

Combined-Cycle Combustion Turbines Testing – Georgia Rule (nnn)

4.2.3 The Permittee shall demonstrate compliance with nitrogen oxides (NO_x) emission limit in Condition 3.3.3g. using the NO_x CEMS required by Condition 5.2.1a. and the following procedures:
[391-3-1-.02(3), 391-3-1-.03(2)(c) and PTM Section 2.121]

- a. For the initial compliance test, NO_x from each combined-cycle combustion turbine are monitored for 30 successive operating days and the 30-day average emission rate is used to determine compliance with the NO_x emission standard in Condition 3.3.3g. The 30-day average emission rate is calculated as the average of all hourly emissions data recorded by the monitoring system during the 30-day test period.

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- b. Following the date on which the initial performance test is completed, the Permittee shall determine compliance with the NO_x emissions standards under Condition 3.3.3g. on a continuous basis through the use of a 30-day rolling average emission rate. A new 30-day rolling average emission rate is calculated each operating day as the average of all of the hourly NO_x emission data for the preceding 30 operating days.
- c. In the event there are less than 30 operating days by the end of the period from May 1 to September 30, then the performance test or monitoring averaging period shall include all the operating days for that period.
- d. An operating day shall be defined as a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the combined-cycle combustion turbine. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Fuel Gas (Dew Point) Heaters Testing

- 4.2.4 Within 60 days after achieving the maximum production rate at which each fuel gas (dew point) heater with ID Nos. H1 and H2 will be operated, but no later than 180 days after the initial startup of each heater, the Permittee shall conduct initial performance tests on each heater for nitrogen oxides (NO_x) and carbon monoxide (CO) to verify compliance with the emission limits in Conditions 3.3.9a. and 3.3.9b.
[391-3-1-.02(3), 391-3-1-.03(2)(c), and 40 CFR 52.21]

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PART 5.0 REQUIREMENTS FOR MONITORING (Related to Data Collection)

5.1 General Monitoring Requirements

- 5.1.1 Any continuous monitoring system required by the Division and installed by the Permittee shall be in continuous operation and data recorded during all periods of operation of the affected facility except for continuous monitoring system breakdowns and repairs. Monitoring system response, relating only to calibration checks and zero and span adjustments, shall be measured and recorded during such periods. Maintenance or repair shall be conducted in the most expedient manner to minimize the period during which the system is out of service.
[391-3-1-.02(6)(b)1]

5.2 Specific Monitoring Requirements

- 5.2.1 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated pollutants on the following equipment. Each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- a. A Continuous Emissions Monitoring System (CEMS) for measuring nitrogen oxides (NO_x) concentration and diluent concentration (either oxygen or carbon dioxide) of the discharge to the atmosphere from each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2. In addition to the applicable provisions of Section 1.4 of the Division's Procedures for Testing and Monitoring Sources of Air Pollutants (PTM), the NO_x CEMS shall be installed and certified in accordance with the applicable procedures under Performance Specification 2 or 3, Appendix B (PTM), or 40 CFR Part 75 Appendix A. The one-hour average NO_x emissions rates shall be recorded in ppm, corrected to 15 percent oxygen on a dry basis, and in pound per million Btu heat input (lb/MMBtu). The diluent concentration shall be expressed in percent.
[40 CFR 52.21, 40 CFR 60.4335(b)(1), 40 CFR 60.4340(b)(1), and PTM Section 2.121]
- b. A Continuous Emissions Monitoring System (CEMS), for measuring carbon monoxide (CO) concentration and diluent concentration (either oxygen or carbon dioxide) of the discharge to the atmosphere from each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2. The one-hour average CO emissions rates shall be recorded in ppm, corrected to 15 percent oxygen on a dry basis, and in pound per million Btu heat input (lb/MMBtu). The diluent concentration shall be expressed in percent.
[40 CFR 52.21 and 391-3-1-.02(6)(b)1]

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- 5.2.2 The Permittee shall install, calibrate, maintain, and operate a system to continuously monitor and record the indicated parameters on the following equipment. Where such performance specification(s) exist, each system shall meet the applicable performance specification(s) of the Division's monitoring requirements.
[40 CFR 52.21, 391-3-1-.02(6)(b)1, and 40 CFR 70.6(a)(3)(i)]
- a. The volume of natural gas, in cubic feet, burned in each combined-cycle combustion turbines with ID Nos. CCCT1 and CCCT2. Data shall be recorded hourly.
 - b. A non-resettable hour meter on the emergency fire pump engine with ID No. FP1 and on emergency generators with ID Nos. EG1 and EG2. Data shall be recorded monthly.
- 5.2.3 The sulfur content of the pipeline quality natural gas fired in the combined-cycle combustion turbines with ID Nos. CCCT1 and CCCT2 shall be monitored by submittal of a semiannual analysis of the gas by supplier or by the Permittee or a current, valid purchase contract, tariff sheet or transportation contract for the gaseous fuel, specifying the maximum total sulfur content.
[Avoidance of 40 CFR 52.21, 391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 60.4365]

NO_x CEMS Requirements

- 5.2.4 The procedures of Section 1.4 of the Division's Procedures for Testing and Monitoring of Air Pollutants (PTM) shall be followed for the installation, evaluation, and operation of the continuous monitoring systems (CMS) required by Condition 5.2.1a.
[391-3-1-.02(6)(b)1 and PTM Section 2.121.3(b)]
- a. All CMS shall be operated in accordance with the applicable procedures under Performance Specifications 2 or 3 (Appendix B), or 40 CFR Part 75 Appendix A.
 - b. Quarterly accuracy determinations and calibration drift assessments shall be performed in accordance with Procedure 1, Appendix F, or 40 CFR Part 75 Appendix B. For any quarterly linearity testing exempted due to NO_x span values less than 30 ppm, the daily low and high range calibration drift assessments shall be retained as part of the assessment. Low range out of control (OOC) periods shall be any five consecutive daily calibration error or drift assessments of 0.5 ppm or greater or any single day assessment of 1.0 ppm or greater.
 - c. The low-range span for the nitrogen oxides monitor shall be set between 10 and 30 parts per million (ppm).

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- 5.2.5 For purposes of Conditions 4.2.3 and 6.1.7.b.iii, each one-hour average NO_x concentration must be based upon a minimum of 30 minutes of turbine operation and must include a minimum of two data points, with each data point representing a 15-minute period, to be included in the calculation of the 30-day rolling average emission rate. This condition applies during the period May 1 through September 30 of each year.
[391-3-1-.02(6)(b)1 and PTM Section 2.121]

CO CEMS Requirements

- 5.2.6 The Permittee shall use the procedures of Appendix F, Procedure 1 – “Quality Assurance Requirements for Gas Continuous Emissions Monitoring Systems Used for Compliance Determination” contained in the Division’s Procedures for Testing and Monitoring Sources of Air Pollutants (PTM), to assess the quality and accuracy of the data acquired by the carbon monoxide CEMS required by Condition 5.2.1b. The following exceptions to Appendix F, Procedure 1 are allowed:
[52.21 and 391-3-1-.02(6)(b)1]
- a. The cylinder gas audit (CGA) is only required to be conducted in a calendar quarter if the combined-cycle combustion turbine is operated during the quarter.
 - b. A Relative Accuracy Test Audit (RATA) shall be conducted annually or every four operating quarters (not to exceed eight calendar quarters), whichever is greater. For the purpose of this condition an operating quarter is defined as any calendar quarter during which the combined-cycle combustion turbine is operated for at least 168 hours. If a RATA has not been performed by the end of the quarter in which it was due, the Permittee has a grace period of 720 consecutive unit operating hours, following the procedures of 40 CFR 75, Section 2.3.3 of Appendix B, in which to complete the required RATA.
 - c. CGA Tests are only required for analyzer ranges greater than 20 ppm.
- 5.2.7 The Permittee shall obtain carbon monoxide (CO) emissions data from at least 75 percent of the operating hours for each combined-cycle combustion turbine during each calendar month that a turbine is operated. If this minimum data requirement is not met using the CO CEMS required by Condition 5.2.1b, the Permittee may supplement the emissions data with data obtained by conducting sampling using the method prescribed in Condition 4.1.3
[391-3-1-.02(6)(b)1]

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PART 6.0 RECORD KEEPING AND REPORTING REQUIREMENTS

6.1 General Record Keeping and Reporting Requirements

6.1.1 Unless otherwise specified, all records required to be maintained by this Permit shall be recorded in a permanent form suitable for inspection and submission to the Division and to the EPA. The records shall be retained for at least five (5) years following the date of entry.
[391-3-1-.02(6)(b)1(i)]

6.1.2 In addition to any other reporting requirements of this Permit, the Permittee shall report to the Division in writing, within seven (7) days, any deviations from applicable requirements associated with any malfunction or breakdown of process, fuel burning, or emissions control equipment for a period of four hours or more which results in excessive emissions.

The Permittee shall submit a written report that shall contain the probable cause of the deviation(s), duration of the deviation(s), and any corrective actions or preventive measures taken.

[391-3-1-.02(6)(b)1(iv),

6.1.4 The Permittee shall submit a written report containing any excess emissions, exceedances, and/or excursions as described in this permit and any monitor malfunctions for each quarterly period ending March 31, June 30, September 30, and December 31 of each year. All reports shall be postmarked by May 30, August 29, November 29, and February 28, respectively following each reporting period. In the event that there have not been any excess emissions, exceedances, excursions or malfunctions during a reporting period, the report should so state. Otherwise, the contents of each report shall be as specified by the Division's Procedures for Testing and Monitoring Sources of Air Pollutants and shall contain the following:
[391-3-1-.02(6)(b)1

- a. A summary report of excess emissions, exceedances and excursions, and monitor downtime, in accordance with Section 1.5(c) and (d) of the above referenced document, including any failure to follow required work practice procedures.
- b. Total process operating time during each reporting period.
- c. The magnitude of all excess emissions, exceedances and excursions computed in accordance with the applicable definitions as determined by the Director, and any conversion factors used, and the date and time of the commencement and completion of each time period of occurrence.
- d. Specific identification of each period of such excess emissions, exceedances, and excursions that occur during startups, shutdowns, or malfunctions of the affected facility. Include the nature and cause of any malfunction (if known), the corrective action taken or preventive measures adopted.

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- e. The date and time identifying each period during which any required monitoring system or device was inoperative (including periods of malfunction) except for zero and span checks, and the nature of the repairs, adjustments, or replacement. When the monitoring system or device has not been inoperative, repaired, or adjusted, such information shall be stated in the report.
 - f. Certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- 6.1.7 For the purpose of reporting excess emissions, exceedances or excursions in the report required in Condition 6.1.4, the following excess emissions, exceedances, and excursions shall be reported:
[391-3-1-.02(6)(b)1
- a. Excess emissions: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping which is specifically defined, or stated to be, excess emissions by an applicable requirement)
 - i. Any operating period in which the 30-day rolling average NO_x emissions rate determined in accordance with Condition 6.2.3 that exceeds the emission limit in Condition 3.3.3f.
 - b. Exceedances: (means for the purpose of this Condition and Condition 6.1.4, any condition that is detected by monitoring or record keeping that provides data in terms of an emission limitation or standard and that indicates that emissions (or opacity) do not meet the applicable emission limitation or standard consistent with the averaging period specified for averaging the results of the monitoring)
 - i. Any three-hour rolling average NO_x emission rate, except that emissions recorded during startup or shutdown may be omitted, determined in accordance with Condition 6.2.2 which exceeds the emission limit in Condition 3.3.3a. For purposes of this condition, each clock hour begins a new three-hour average.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 52.21]
 - ii. Any twelve consecutive month rolling sum of NO_x emissions, including emissions measured during startup, shutdown, and malfunction, determined in accordance with Condition 6.2.6, on a per turbine basis, that exceeds the emission limit in Condition 3.3.4a.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 52.21]

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- iii. Any 30-day rolling average NO_x emissions, determined in accordance with Condition 4.2.3, which exceeds the emission limit in Condition 3.3.3g. This exceedance only applies during the ozone season (May 1 through September 30 of each year). For purposes of this condition, an operating day is a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted in the combined-cycle combustion turbine.
 - iv. Any three-hour rolling average CO emission rate, except that emissions recorded during startup or shutdown may be omitted, determined in accordance with Condition 6.2.8 which exceeds the emission limit in Condition 3.3.3b. For purposes of this condition, each clock hour begins a new three-hour average.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 52.21]
 - v. Any twelve consecutive month rolling sum of CO emissions, including emissions measured during startup, shutdown, and malfunction, determined in accordance with Condition 6.2.11, on a per turbine basis, that exceeds the emission limit in Condition 3.3.4b.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 52.21]
 - vi. Any twelve consecutive month rolling sum of GHG emissions, including emissions measured during startup, shutdown, and malfunction, determined in accordance with Condition 6.2.14, on a per turbine basis, that exceeds the emission limit in Condition 3.3.4c.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 52.21]
 - vii. Any twelve-month total hours of operation of fire pump engine with ID No. FP1 that exceeds 500 hours.
 - viii. Any twelve-month total hours of operation of emergency generators with ID Nos. EG1 or EG2 that exceeds 200 hours each.
- c. Excursions: (means for the purpose of this Condition and Condition 6.1.4, any departure from an indicator range or value established for monitoring consistent with any averaging period specified for averaging the results of the monitoring)
- i. Any semiannual analysis of the natural gas burned in any combustion turbine whose sulfur content exceeds 20 grains per 100 scf.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), 40 CFR Part 60 Subpart KKKK, and Avoidance of 40 CFR 52.21]

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- d. In addition to the excess emissions, exceedances and excursions specified above, the following should also be included with the report required in Condition 6.1.4:
- i. The 12-consecutive month total NO_x emissions, determined in accordance with Condition 6.2.6, for each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 for each month in the reporting period. The report should contain three 12-consecutive month total NO_x emissions for each combined-cycle combustion turbine.
[40 CFR 52.21]
 - ii. The 12-consecutive month total CO emissions, determined in accordance with Condition 6.2.11, for each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 for each month in the reporting period. The report should contain three 12-consecutive month total CO emissions for each combined-cycle combustion turbine.
[40 CFR 52.21]
 - iii. The 12-consecutive month total GHG emissions, determined in accordance with Condition 6.2.14, for each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 for each month in the reporting period. The report should contain three 12-consecutive month total GHG emissions for each combined-cycle combustion turbine.
[40 CFR 52.21]
 - iv. The 12-consecutive month total hours of operation, determined in accordance with Condition 6.2.20, for the fire pump engine with ID No. FP1 and emergency generators with ID Nos. EG1 and EG2 for each month in the reporting period. The report should contain three 12-consecutive month total hours of operation for each engine.
[40 CFR 52.21]
 - v. The information required by Condition 6.2.15 for each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 with the exception of item 6.2.15b.
[391-3-1-.02(2)(nnn) and PTM Section 2.121.4(b)]
 - vi. Identification of each calendar month for which CO emissions data have not been obtained for 75 percent of the combustion turbine operating hours (as required by Condition 5.2.7) during the months in the reporting period, including reasons for not obtaining sufficient data and a description of corrective actions taken.
[40 CFR 52.21]
 - vii. Identification of the Out-of-Control Periods (as defined in Appendix F, Procedure 1) for the CO CEMS during the quarterly reporting period.
[40 CFR 52.21]

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- viii. Results of any failed daily CO CEMS drift tests and subsequent passed tests and the results of any quarterly accuracy assessments under Appendix F, Procedure 1, during the reporting period.
[40 CFR 52.21]

6.2 Specific Record Keeping and Reporting Requirements

Verification of NO_x Emission Limits

- 6.2.1 For each hour of operation of each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2, the Permittee shall correct the emissions of nitrogen oxides (NO_x) to 15 percent oxygen using the equation below and determine the one-hour average NO_x emission rate. For the purposes of this condition, each clock hour begins a new one-hour period.
[40 CFR 52.21, 391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

$$C_{adj} = C_d \frac{5.9}{20.9 - \%O_2}$$

Where:

C_{adj} = Pollutant concentration corrected to 15 percent O₂, ppm

C_d = Pollutant concentration measured dry basis, ppm

%O₂ = Measured O₂ on a dry basis, percent.

- 6.2.2 The Permittee shall calculate and record a three-hour average rolling nitrogen oxides (NO_x) emission rate (in ppmvd corrected to 15 percent oxygen) for each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 using the NO_x emission rate determined in accordance with Condition 6.2.1, excluding emissions collected during periods of startup and shutdown. For the purposes of this condition, each clock hour begins a new three-hour period.
[40 CFR 52.21, 391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 6.2.3 The Permittee shall calculate a 30-day rolling average nitrogen oxides (NO_x) emission rate (in ppmvd corrected to 15% oxygen) for each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 as the arithmetic average of all hourly NO_x emission data in ppmvd corrected to 15% oxygen measured by the CEMS required by Condition 5.2.1a. for a given day and the twenty-nine unit operating days immediately preceding that unit operating day. A new 30-day average is calculated each unit operating day as the average of all hourly NO_x emissions rates for the preceding 30-unit operating days if a valid NO_x emission rate is obtained for at least 75 percent of all operating hours.
[40 CFR 60.4380(b)(1) and 40 CFR 60.4550(h)]

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- 6.2.4 The Permittee shall determine and record the mass emission rate in pounds per hour (lb/hr) of nitrogen oxides (NO_x) from each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 for each hour or portion of each hour of operation. This emission rate must include emissions from all periods of operation including periods of startup and shutdown. The hourly mass emission rate of NO_x from each combined-cycle combustion turbine shall be calculated by multiplying the total NO_x emission (in pounds per million Btu), determined in accordance with the procedures of 40 CFR 75, Section 3 of Appendix F, by the total heat input for that hour determined in accordance with the procedures of 40 CFR 75, Section 5.5 of Appendix F. These records (including calculations) shall be maintained in a form suitable for inspection or submittal.
[40 CFR 52.21, 391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]
- 6.2.5 The Permittee shall use the data obtained from Condition 6.2.4 to determine and record the monthly mass emission rate, in tons per month, of nitrogen oxides (NO_x) from each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2. These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 52.21(j)]
- 6.2.6 The Permittee shall use the records required by Condition 6.2.5 to determine and record the twelve consecutive month total emission rate, in tons, of nitrogen oxides (NO_x) emissions from each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2. A twelve consecutive month total shall be the total for a month in the reporting period plus the totals for the previous eleven consecutive months. These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.
[40 CFR 52.21, 391-3-1-.02(6)(b)1 and 40 CFR 70.6(a)(3)(i)]

Verification of CO Emission Limits

- 6.2.7 For each hour of operation of each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2, the Permittee shall correct the emissions of carbon monoxide (CO) to 15 percent oxygen using the equation in Condition 6.2.1 and determine the one-hour average CO emission rate. For the purposes of this condition, each clock hour begins a new one-hour period.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 52.21]
- 6.2.8 The Permittee shall calculate and record a three-hour average rolling carbon monoxide (CO) emission rate (in ppmvd corrected to 15 percent oxygen) for each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 using the CO emission rate determined in accordance with Condition 6.2.7, excluding emissions collected during periods of startup and shutdown. For the purposes of this condition, each clock hour begins a new three-hour period.
[391-3-1-.02(6)(b)1, 40 CFR 70.6(a)(3)(i), and 40 CFR 52.21]

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6.2.9 The Permittee shall determine and record the mass emission rate in pounds per hour (lb/hr) of carbon monoxide (CO) from each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 for each hour or portion of each hour of operation. This emission rate must include emissions from all periods of operation, but only the one-hour average CO emission rates that have been determined to be valid hourly emission rates shall be used to calculate hourly mass emission rates. The hourly mass emission rate shall be calculated by multiplying the CO emissions in units of pound per million Btu, determined in accordance with the procedures of 40 CFR Part 75, Section 3 of Appendix F (except that K defined in Section 3.3.3 equals 7.26×10^{-8} (lb/dscf)/ppm CO), by the total heat input for that hour determined in accordance with the procedures of 40 CFR Part 75, Section 5.5 of Appendix F. These records (including calculations) shall be maintained in a form suitable for inspection or submittal.

[391-3-1-.02(6)(b)1 and 40 CFR 52.21]

6.2.10 The Permittee shall use the valid hourly carbon monoxide (CO) mass emission rates (pounds per hour), determined in accordance with the requirements of Condition 6.2.9, and all hourly mass emission rates acquired in order to meet the minimum data requirement of Condition 5.2.7, to determine the monthly mass emission rate, in tons of carbon monoxide from each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2. The carbon monoxide mass emission rate from each combined-cycle combustion turbine shall be calculated as follows:

[391-3-1-.02(6)(b)1 and 40 CFR 52.21]

$$CO \text{ emissions } \left(\frac{\text{tons}}{\text{month}} \right) = \left(\frac{E_{CO}}{2000 \text{ lb/ton}} \right) \left(\frac{t_{total}}{t_{valid \text{ data}}} \right)$$

Where:

E_{CO} = Total CO mass emissions from valid data (including all hourly emissions data acquired to meet the minimum data requirements) for each month (lb)

t_{total} = Total operating time for the combustion turbine in the calendar month (hr)

$t_{valid \text{ data}}$ = Total time of valid emissions data (including all hourly emissions data acquired to meet the minimum data requirement in Condition 5.2.7) in the calendar month.

These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.

6.2.11 The Permittee shall use the records required by Condition 6.2.10 to determine and record the twelve-month rolling sum of carbon monoxide (CO) (in tons), for each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2. A twelve-month rolling sum shall be the total CO emissions for each calendar month plus the totals from the previous eleven consecutive months in tons. These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.

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[391-3-1-.02(6)(b)1 and 40 CFR 52.21]

Verification of GHG Emission Limits

- 6.2.12 The Permittee shall determine and record the mass emission rate of greenhouse gases (GHG) emissions in pounds per hour as carbon dioxide equivalent (lb/hr CO₂e) from each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 for each hour or portion of each hour of operation. This emission rate must include emissions from all periods of operation including periods of startup and shutdown. The hourly mass emission rate shall be calculated by multiplying the total GHG emissions in units of pound per million Btu as CO₂e (lb/MMBtu CO₂e) by the total heat input for that hour determined in accordance with the procedures of 40 CFR Part 75, Section 5.5 of Appendix F. For the purposes of this condition, total GHG emissions as CO₂e is the sum of the product of each GHG and its respective global warming potential (GWP) and equals 118.98 lb/MMBtu for natural gas. These records (including calculations) shall be maintained in a form suitable for inspection or submittal.
[40 CFR 52.21, 391-3-1-.02(6)(b)1, and 40 CFR 70.6(a)(3)(i)]
- 6.2.13 The Permittee shall use the records required by Condition 6.2.12 to determine and record the monthly mass emission rate of greenhouse gases (GHG), in tons per month of CO₂e from each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2. These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.
[40 CFR 52.21, 391-3-1-.02(6)(b)1, and 40 CFR 70.6(a)(3)(i)]
- 6.2.14 The Permittee shall use the records required by Condition 6.2.13 to determine and record the 12 consecutive month total greenhouse gases (GHG) emission rate, in tons, of CO₂e emissions from each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2. A 12 consecutive month total shall be the total for a month in the reporting period plus the totals for the previous 11 consecutive months. These records (including calculations) shall be maintained as part of the monthly record suitable for inspection or submittal.
[40 CFR 52.21, 391-3-1-.02(6)(b)1, and 40 CFR 70.6(a)(3)(i)]

Recordkeeping and Reporting Requirements for Georgia Rule (nnn)

- 6.2.15 The Permittee shall for each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2 maintain records of the following information for each operating day:
[391-3-1-.02(6)(b)1, 391-3-1-.02(2)(nnn), and PTM Section 2.121.4(a)]
- a. Calendar date
 - b. The average hourly nitrogen oxides (NO_x) emission rates (expressed as ppm corrected to 15 percent oxygen), unless the affected facility was not in operation for the day.
 - c. The 30-day average NO_x emission rates (expressed as ppm corrected to 15 percent oxygen) calculated at the end of each operating day from the measured hourly NO_x emission rates for the preceding 30 operating days.

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- d. Identification of any operating days when the calculated 30-day average NO_x emission rates are in excess of the NO_x emissions limits with the reasons for such excess emissions as well as a description of corrective actions taken.
- e. Identification of any operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.
- f. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.
- g. Identification of the times when the pollutant concentration exceeded the full span of the continuous monitoring system.
- h. Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.
- i. Results of daily CMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1.

Other Combined-Cycle Combustion Turbine Records

- 6.2.16 The Permittee shall provide notice to the Division in advance of any special testing as specified in Condition 3.3.8.
[391-3-1-.02(6)(b)1]
- 6.2.17 The Permittee shall retain monthly records of natural gas usage in each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2.
[391-3-1-.02(6)(b)1 and 40 CFR 60, Subparts KKKK, TTTT, and TTTTa]
- 6.2.18 The Permittee shall maintain the following daily records as they relate to the startup and shutdown of each combined-cycle combustion turbine with ID Nos. CCCT1 and CCCT2. If the combined-cycle combustion turbine was not in operation on any given day, the records shall so note.
[391-3-1-.02(6)(b)1 and 40 CFR 52.21]
 - a. The type of startup initiated.
 - b. The minutes attributed to the startup.
 - c. The minutes attributed to shutdown.
 - d. The minutes attributed to special testing.

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Emergency Fire Pump and Emergency Generators Records

- 6.2.19 The Permittee shall keep records of the following.
[40 CFR 60.4214(a)(2)]
- a. All notifications submitted to comply with 40 CFR 60 Subpart IIII and this permit and all documentation supporting any notification.
 - b. Maintenance conducted on emergency fire pump engine with ID No. FP1 and emergency generators with ID Nos. EG1 and EG2.
 - c. Documentation from the engine manufacturer(s) that emergency fire pump engine with ID No. FP1 and emergency generators with ID Nos. EG1 and EG2 are certified to meet the emission standards of 40 CFR 60 Subpart IIII. The generator manufacturer(s) certifications shall be kept for the life of the engines.
- 6.2.20 The Permittee shall use the records required by Condition 5.2.2b to determine the twelve-month total hours of operation of the fire pump engine with ID No. FP1 and emergency generators with ID Nos. EG1 and EG2. A twelve-month total is the total hours for the calendar month plus the totals from the previous eleven consecutive months. The records (including calculations) required by this condition shall be maintained as part of the monthly record suitable for inspection or submittal.
[40 CFR 52.21]

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PART 7.0 OTHER SPECIFIC REQUIREMENTS

7.1 Specific Conditions

- 7.1.1 The Permittee shall construct and operate the source or modification as defined in Application No. 29663 that is subject to Georgia Rule 391-3-1-.02(7) in accordance with the application submitted pursuant to that rule. If the Permittee constructs or operates a source or modification not in accordance with the application submitted pursuant to that rule or with the terms of any approval to construct, the Permittee shall be subject to appropriate enforcement action.
[40 CFR 52.21(r)(1)]
- 7.1.2 Approval to construct source or modification as defined in Application No. 29663 shall become invalid if construction is not commenced within 18 months after receipt of such approval, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Director may extend the 18- month period upon a satisfactory showing that an extension is justified. This provision does not apply to the time period between construction of the approved phases of a phased construction project; each phase must commence construction within 18 months of the projected and approved commencement date. For purposes of this Permit, the definition of “commence” is given in 40 CFR 52.21(b)(9).
[40 CFR 52.21(r)(2)]
- 7.1.3 The Permittee shall notify the Division in writing within 15 days of commencing construction. The notification should document what activities constituting “commencing construct” have been performed and the date on which they occurred
- 7.1.4 The Permittee shall notify the Division in writing within 15 days of startup of operations of any permitted emission unit.
- 7.1.5 The Permittee shall submit a completed Part 70 Operating Permit application to the Division in the approved format within 12 months after startup of operations of equipment specified in Condition above.

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PART 8.0 GENERAL PROVISIONS

8.1 Modifications

- 8.1.1 Prior to any source commencing a modification as defined in 391-3-1-.01(pp) that may result in air pollution and not exempted by 391-3-1-.03(6), the Permittee shall submit a Permit application to the Division. The application shall be submitted sufficiently in advance of any critical date involved to allow adequate time for review, discussion, or revision of plans, if necessary. Such application shall include, but not be limited to, information describing the precise nature of the change, modifications to any emission control system, production capacity of the plant before and after the change, and the anticipated completion date of the change. The application shall be in the form of a Georgia air quality Permit application to construct or modify (otherwise known as a SIP application) and shall be submitted on forms supplied by the Division, unless otherwise notified by the Division.
[391-3-1-.03(1) through (8)]

8.2 Circumvention

State Only Enforceable Condition.

- 8.2.1 The Permittee shall not build, erect, install, or use any article, machine, equipment or process the use of which conceals an emission which would otherwise constitute a violation of an applicable emission standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of the pollutants in the gases discharged into the atmosphere.
[391-3-1-.03(2)(c)]

8.3 Other General Provisions

- 8.3.1 At all times, including periods of startup, shutdown, and malfunction, the Permittee shall maintain and operate the source, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on any information available to the Division that may include, but is not limited to, monitoring results, observations of the opacity or other characteristics of emissions, review of operating and maintenance procedures or records, and inspection or surveillance of the source.
[391-3-1-.02(2)(a)10]

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State Only Enforceable Condition.

- 8.3.2 No person owning, leasing, or controlling, the operation of any air contaminant sources shall willfully, negligently or through failure to provide necessary equipment or facilities or to take necessary precautions, cause, permit, or allow the emission from said air contamination source or sources, of such quantities of air contaminants as will cause, or tend to cause, by themselves, or in conjunction with other air contaminants, a condition of air pollution in quantities or characteristics or of a duration which is injurious or which unreasonably interferes with the enjoyment of life or use of property in such area of the State as is affected thereby. Complying with Georgia's Rules for Air Quality Control Chapter 391-3-1 and Conditions in this Permit, shall in no way exempt a person from this provision.
[391-3-1-.02(2)(a)1]
- 8.3.3 In cases where conditions of this Permit conflict with each other for any particular source or operation, the most stringent condition shall prevail.
- 8.3.4 The Permittee shall calculate and pay an annual Permit fee to the Division. The amount of the fee shall be determined each year in accordance with the "Procedures for Calculating Air Permit Fees."
- 8.3.5 At any time that the Division determines that additional control of emissions from the facility may reasonably be needed to provide for the continued protection of public health, safety and welfare, the Division reserves the right to amend the provisions of this Permit pursuant to the Division's authority as established in the Georgia Air Quality Act and the rules adopted pursuant to that Act.