Facility Name: Effingham Energy Facility

City: Rincon
County: Effingham

AIRS #: 04-13-10300012

Application #: TV-556538
Date Application Received: June 14, 2021

Permit No: 4911-103-0012-V-06-0

Program	Review Engineers	Review Managers
SSPP	Renee Browne	Cynthia Dorrough
ISMU	Marcus Cureton	Dan McCain
SSCP	Michael Susky	Tammy Martiny
Toxics	N/A	N/A
Permitting Program Manager		Stephen Damaske

Introduction

This narrative is being provided to assist the reader in understanding the content of referenced operating permit. Complex issues and unusual items are explained here in simpler terms and/or greater detail than is sometimes possible in the actual permit. The permit is being issued pursuant to: (1) Georgia Air Quality Act, O.C.G.A § 12-9-1, et seq. and (2) Georgia Rules for Air Quality Control, Chapter 391-3-1, and (3) Title V of the Clean Air Act. Section 391-3-1-.03(10) of the Georgia Rules for Air Quality Control incorporates requirements of Part 70 of Title 40 of the Code of Federal Regulations promulgated pursuant to the Federal Clean Air Act. The narrative is intended as an adjunct for the reviewer and to provide information only. It has no legal standing. Any revisions made to the permit in response to comments received during the public participation and EPA review process will be described in an addendum to this narrative.

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I. Facility Description

A. Facility Identification

1. Facility Name: Effingham Energy Facility

2. Parent/Holding Company Name: Oglethorpe Power Corporation

3. Previous and/or Other Name(s): Effingham County Power, LLC

4. Facility Location

3440 McCall Road Rincon, Georgia 31326 (Effingham County)

5. Attainment, Non-attainment Area Location, or Contributing Area

The facility location is designated as an attainment area for all criteria pollutants.

B. Site Determination

There are no other facilities which could possibly be contiguous or adjacent and under common control.

C. Existing Permits

Table 1 below lists all current Title V permits, all amendments, 502(b)(10) changes, and off-permit changes, issued to the facility, based on a comparative review of form A.6, Current Permits, of the Title V application and the "Permit" file(s) on the facility found in the Air Branch office.

Table 1: List of Current Permits, Amendments, and Off-Permit Changes

Permit Number and/or Off- Permit Change	Date of Issuance/ Effectiveness	Purpose of Issuance
4911-103-0012-V-05-0	January 5, 2017	Title V Renewal

D. Process Description

1. SIC Codes(s)

4911

The SIC Code(s) identified above were assigned by EPD's Air Protection Branch for purposes pursuant to the Georgia Air Quality Act and related administrative purposes only and are not intended to be used for any other purpose. Assignment of SIC Codes by EPD's Air Protection Branch for these purposes does not prohibit the facility from using these or different SIC Codes for other regulatory and non-regulatory purposes.

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Should the reference(s) to SIC Code(s) in any narratives or narrative addendum previously issued for the Title V permit for this facility conflict with the revised language herein, the language herein shall control; provided, however, language in previously issued narratives that does not expressly reference SIC Code(s) shall not be affected.

2. Description of Product(s)

This facility produces electricity for sale.

3. Overall Facility Process Description

The existing facility includes two GE Frame 7FA combined-cycle combustion turbines. Each combined-cycle turbine is rated at a generating capacity of 185 MW (at ISO conditions) and includes a heat recovery steam generator (HRSG). Each combustion turbine fires natural gas exclusively and operates in either normal mode or with evaporative cooling. Ancillary equipment includes one auxiliary boiler, a diesel-fired fire-water pump, a fuel pre-heater, a process cooling tower, and two aqueous ammonia storage tanks.

4. Overall Process Flow Diagram

The facility provided a process flow diagram in their Title V permit application.

E. Regulatory Status

1. PSD/NSR

The facility is a major source under PSD regulations because it has the potential emissions of NO_x and SO₂ greater than 100 tons per year (it is one of the 28 named source categories). The facility was originally permitted in 2001 and was permitted as a major source under the PSD regulations.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the	If emitted, what is the facility's Title V status for the pollutant?				
	Pollutant Emitted?	Major Source Status	Major Source Requesting SM Status	Non-Major Source Status		
PM	Y	✓				
PM ₁₀	Y	✓				
PM _{2.5}	Y	✓				
SO_2	Y			✓		
VOC	Y			✓		

¹ Lillis, Edward J., Memorandum on *Determining Prevention of Significant Deterioration (PSD) Applicability Thresholds for Gas Turbine Based Facilities*, February 2, 1993, http://www.epa.gov/ttn/nsr/gen/turbines.pdf.

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	Is the	If emitted, what is the facility's Title V status for the pollutant?				
Pollutant	Pollutant Emitted?	Major Source Status Major Source Requesting SM Status		Non-Major Source Status		
NO _x	Y	✓				
CO	Y	✓				
TRS	N					
H ₂ S	N					
Individual HAP	Y			✓		
Total HAPs	Y			✓		

3. MACT Standards

National Emission Standards for Hazardous Air Pollutants for Area Sources: Industrial Commercial, and Institutional Boilers, 40 CFR 63, Subpart JJJJJJ

The facility is minor for HAPs, thus the facility is an Area Source for HAPs and must meet the requirements of 40 CFR 63 Subpart JJJJJJ for Area Sources.

Natural gas-fired boilers (Source Code: AB1):

This rule applies if you own or operate a boiler combusting solid fossil fuels, biomass, or liquid fuels located at an area source. Since the Natural gas-fired boiler is permitted only to fire natural gas as stated in Permit Condition No. 3.3.2, 40 CFR 63 Subpart JJJJJJJ does not apply to this boiler.

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

The Emergency Firewater Pump (Emission Unit ID No. DWP1)

40 CFR 63 Subpart ZZZZ, "NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)", gives emission standards and work practice requirements for stationary RICE at both major and area sources of HAP. The rule defines existing sources at area sources as units that were constructed or reconstructed before June 12, 2006. Otherwise, the unit is considered a new RICE. The Effingham Energy Facility operates one 235 bhp Emergency Firewater Pump (Emission Unit ID No. DWP1), which is considered an existing unit since the unit was manufactured in 2002. The engine, which meets the definition of emergency unit, does not have any emission limitations or testing requirements per the rule. The Effingham Energy Facility is in compliance with all applicable requirements in the rule, including the Emergency Firewater Pump (Emission Unit ID No. DWP1) being equipped with a non-resettable hour meter.

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4. Program Applicability (AIRS Program Codes)

Program Code	Applicable (y/n)
Program Code 6 - PSD	Yes
Program Code 8 – Part 61 NESHAP	No
Program Code 9 - NSPS	Yes
Program Code M – Part 63 NESHAP	Yes
Program Code V – Title V	Yes

Regulatory Analysis

II. Facility Wide Requirements

A. Emission and Operating Caps:

None applicable.

B. Applicable Rules and Regulations

Not applicable.

C. Compliance Status

No compliance issues are mentioned in Application TV-556538.

D. Permit Conditions

None applicable.

III. Regulated Equipment Requirements

A. Equipment List for the Process

Emission Units		Applicable	Air Pollution Control Devices	
ID No.	Description	Requirements/Standards	ID No.	Description
AB1	Natural Gas-Fired Auxiliary Boiler with a 17 MMBtu/hr Heat Input Capacity	40 CFR 52.21 40 CFR 60 Subpart A 40 CFR 60 Subpart Dc 391-3-102(2)(d) 391-3-102(2)(g)	N/a	N/a
CT1	Cooling Tower 8 cells	40 CFR 52.21	DE1	Drift Eliminators

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	Emission Units	Applicable A		Air Pollution Control Devices	
ID No.	Description	Requirements/Standards	ID No.	Description	
CTG1	GE 7FA Combustion Turbine, 185 MW	40 CFR 60 Subpart A 40 CFR 60 Subpart GG 40 CFR 52.21 391-3-102(2)(b) and (g) Acid Rain CSAPR	SCR1	Selective Catalytic Reduction (SCR)	
CTG2	GE 7FA Combustion Turbine, 185 MW	40 CFR 60 Subpart A 40 CFR 60 Subpart GG 40 CFR 52.21 391-3-102(2)(b) and (g) Acid Rain CSAPR	SCR2	Selective Catalytic Reduction (SCR)	
DWP1	Emergency Firewater Pump, 235 bhp (2.06 MMBtu/hr)	40 CFR 52.21 391-3-102(2)(b) and (g) 40 CFR 63, Subpart A 40 CFR 63, Subpart ZZZZ	N/a	N/a	
FP1	Natural Gas-fired Preheater with a 1.875 MMBtu/hr Heat Input Capacity	40 CFR 52.21 391-3-102(2)(d) 391-3-102(2)(g)	N/a	N/a	
HRSG1	Heat Recovery Steam Generator (no duct firing)	40 CFR 52.21	N/a	N/a	
HRSG2	Heat Recovery Steam Generator (no duct firing)	40 CFR 52.21	N/a	N/a	
STG1	Steam Turbine Generator, 155 MW	40 CFR 52.21	N/a	N/a	

B. Equipment & Rule Applicability

Facility Regulatory Applicability

State Rules

Georgia Rule for Air Quality Control (Georgia Rule) 391-3-1-.03(1), Construction Permit, requires that any person prior to beginning the construction or modification of any facility which may result in an increase in air pollution shall obtain a permit for the construction or modification of such facility from the Director upon a determination by the Director that the facility can reasonably be expected to comply with all the provisions of the Act and the rules and regulations promulgated there under. Georgia Rule 391-3-1-.03(8)(b) continues that no permit to construct a new stationary source or modify an existing stationary source shall be issued unless such proposed source meets all the requirements for review and for obtaining a permit prescribed in Title I, Part C of the Federal Act [i.e., Prevention of Significant Deterioration of Air Quality (PSD)], and Section 391-3-1-.02(7) of the Georgia Rules (i.e., PSD).

Georgia Rule 391-3-1-.02(2)(b), Visible Emissions, limits the opacity of visible emissions from any air contaminant source, which is subject to some other emission limitation under 391-3-1-.02(2). The opacity of visible emissions from regulated sources may not exceed 40 percent under this general visible emission standard. The existing combustion turbines CTG1 and CTG2 are subject to an emission standard in Rule 391-3-1-.02(2) and are therefore subject to the opacity standard specified by Georgia Rule 391-3-1-.02(2)(b). It is anticipated that the opacity of emissions from the proposed combustion turbines will be well below 40% at all times.

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Georgia Rule 391-3-1-.02(2)(d) Fuel-burning Equipment limits emission of fly ash and/or particulate matter as well as opacity. Georgia Rule (d) is an applicable requirement for the existing auxiliary boiler (AB1) and fuel gas preheater (FP1) because said units meet the definition of "fuel burning equipment" found in Georgia Rule 391-3-1-.01(cc). The following table provides a correlation between proposed equipment and Georgia Rule (d) applicability:

Source Code	Max Heat Input	Description of	Applicable Portion of	Maximum Allowable
	(MMBtu/hr)	Equipment	Georgia Rule (d)	Emission Rate
FP1	1.875	Fuel heater	391-3-102(2)(d)2.(i)	PM< 0.5 lb/MMBtu
AB1	17.0	Auxiliary Boiler	391-3-102(2)(d)2.(ii)	PM <0.38 lb/MMBtu
FP1	NA	Fuel heater	391-3-102(2)(d)3.	20% except for one six- minute period of 27%
AB1		Auxiliary Boiler		

Note 1: Georgia Rule (d) regulates particulate matter as defined by Georgia Rules 391-3-1-.01(xx) and 391-3-1-.01(yy). Particulate matter is PM and not PM10 or PM2.5. The PM emission standard for Georgia Rule (d) includes filterable plus condensable.

Georgia Rule 391-3-1-.02(2)(g), Sulfur Dioxide, applies to all "fuel-burning" sources. The following table provides a correlation between applicable equipment and Georgia Rule (g) requirements.

Source Code	Description of Equipment	Applicable Portion of Georgia Rule (d)	Maximum Allowable Emissions
FP1	Fuel heater	391-3-102(2)(g)2.	2.5 weight percent sulfur
(1.875 MMBtu/hr)			
AB1	Auxiliary Boiler	391-3-102(2)(g)2.	2.5 weight percent sulfur
(17 MMBtu/hr)		-	
CTG1	Combustion Turbine	391-3-102(2)(g)1.	3.0 weight percent sulfur
>1,000 MMBtu/hr		391-3-102(2)(g)2.	
CTG2	Combustion Turbine	391-3-102(2)(g)1.	3.0 weight percent sulfur
>1,000 MMBtu/hr		391-3-102(2)(g)2.	

Conclusion – State Rules: The following table specifies the applicable state emission standards:

Emission Unit ID	Equipment	Maximum Allowable	Emission Standard
		Emissions	Legal Authority
AB1	Auxiliary Boiler Fired on NG	PM <0.38 lb/MMBtu	391-3-102(2)(d)2.(ii)
		20% except for one six- minute period of 27%	391-3-102(2)(d)3.
		2.5 weight percent sulfur	391-3-102(2)(g)2.
FP1	Fuel Heater Fired on NG	PM< 0.5 lb/MMBtu	391-3-102(2)(d)2.(i)
		20% except for one six- minute period of 27%	391-3-102(2)(d)3.
		2.5 weight percent sulfur	391-3-102(2)(g)2.

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Emission Unit ID	Equipment	Maximum Allowable	Emission Standard
		Emissions	Legal Authority
CTG1	Combustion Turbine	3.0 weight percent	391-3-102(2)(g)1.
	capable of	sulfur	391-3-102(2)(g)2.
	accommodating NG		391-3-102(2)(b).
		40% opacity	
CTG2	Combustion Turbine	3.0 weight percent	391-3-102(2)(g)1.
	capable of	sulfur	391-3-102(2)(g)2.
	accommodating NG		391-3-102(2)(b).
		40% opacity	
Cooling Tower		NA	No applicable state rule
Fuel Oil Storage Tank		NA	No applicable state rule

Federal Rules

Prevention of Significant Deterioration (40 CFR 52.21)

The regulations for PSD in 40 CFR 52.21 require that any new major source or modification of an existing major source be reviewed to determine the potential emissions of all pollutants subject to regulations under the Clean Air Act. The PSD review requirements apply to any new or modified source which belongs to one of 28 specific source categories having potential emissions of 100 tons per year or more of any regulated pollutant, or to all other sources having potential emissions of 250 tons per year or more of any regulated NSR pollutant. They also apply to any modification of a major stationary source which results in a significant net emission increase of any regulated NSR pollutant.

Georgia has adopted a regulatory program for PSD permits, which the United States Environmental Protection Agency (EPA) has approved as part of Georgia's State Implementation Plan (SIP). This regulatory program is located in the Georgia Rules at 391-3-1-.02(7). This means that Georgia EPD issues PSD permits for new major sources pursuant to the requirements of Georgia's regulations. It also means that Georgia EPD considers, but is not legally bound to accept, EPA comments or guidance. A commonly used source of EPA guidance on PSD permitting is EPA's Draft October 1990 New Source Review Workshop Manual for Prevention of Significant Deterioration and Nonattainment Area Permitting (NSR Workshop Manual). The NSR Workshop Manual is a comprehensive guidance document on the entire PSD permitting process.

The PSD regulations require that any major stationary source or major modification subject to the regulations meet the following requirements:

- Application of BACT for each regulated pollutant that would be emitted in significant amounts;
- Analysis of the ambient air impact;
- Analysis of the impact on soils, vegetation, and visibility;
- Analysis of the impact on Class I areas; and
- Public notification of the proposed plant in a newspaper of general circulation

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Definition of BACT

The PSD regulation requires that BACT be applied to all regulated air pollutants emitted in significant amounts. Section 169 of the Clean Air Act defines BACT as an emission limitation reflecting the maximum degree of reduction that the permitting authority (in this case, EPD), on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such a facility through application of production processes and available methods, systems, and techniques. In all cases BACT must establish emission limitations or specific design characteristics at least as stringent as applicable New Source Performance Standards (NSPS). In addition, if EPD determines that there is no economically reasonable or technologically feasible way to measure the emissions, and hence to impose and enforceable emissions standard, it may require the source to use a design, equipment, work practice or operations standard or combination thereof, to reduce emissions of the pollutant to the maximum extent practicable.

EPA's NSR Workshop Manual includes guidance on the 5-step top-down process for determining BACT. In general, Georgia EPD requires PSD permit applicants to use the top-down process in the BACT analysis, which EPA reviews. The five steps of a top-down BACT review procedure identified by EPA per BACT guidelines are listed below:

Step 1: Identification of all control technologies;

Step 2: Elimination of technically infeasible options;

Step 3: Ranking of remaining control technologies by control effectiveness;

Step 4: Evaluation of the most effective controls and documentation of results; and

Step 5: Selection of BACT.

The following is a discussion of the applicable federal rules and regulations pertaining to the equipment that is the subject of this preliminary determination, which is then followed by the top-down BACT analysis.

New Source Performance Standards

The NSPS are a group of national emission standards for both criteria and other designated pollutants applicable to new, modified or reconstructed sources (40 CFR Part 60). NSPS regulations are incorporated into Georgia Air Quality Rules by reference, Chapter 391-3-1-.02(8).

New Source Performance Standards (NSPS) in 40 CFR Part 60 requires new sources to control emissions to the level achievable by the best-demonstrated technology specified in the applicable provisions. The specific requirements of NSPS applicable to the facility are discussed below:

40 CFR 60 Subpart A (General Provisions) imposes generally applicable requirements for initial notifications, initial compliance testing, monitoring, and record keeping requirements.

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40 CFR 60 Subpart Dc (Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units):

Applicability – **Auxiliary Boiler:** This regulation is applicable to the auxiliary boiler because this boiler has a rated heat input capacity of 17 MMBtu/hr. This auxiliary boiler will only fire natural gas. NSPS Dc does not specify any emission standards for this boiler because of its rated capacity.

Applicability – **Fuel Gas Preheater:** The Division concurred with the applicant's findings that the fuel pre-heater is not subject to this regulation since is input capacity is less than 10 million British Thermal Units per hour.

40 CFR 60 Subpart GG (Standards of Performance for Stationary Gas Turbines):

Applicability: Subpart GG (40 CFR 60.330 et seq.) applies to stationary gas turbines with heat input at peak load of equal to or greater than 10 MMBtu per year, which are constructed after October 3, 1977.

The existing turbines located at the facility are subject to the provisions of Subpart GG. The facility is subject to the standard for nitrogen oxides in 40 CFR 60.332, and standards for sulfur dioxide in 40 CFR 60.333 as well as the appropriate monitoring and test methods/procedures contained in Subpart GG.

Emission Standard: The facility is subject to the standard for nitrogen oxides in 40 CFR 60.332 and standards for sulfur dioxide in 40 CFR 60.333, as well as the appropriate monitoring and test methods/procedures contained in Subpart GG. The allowable NO_x emission rate is specified by the following formula [40 CFR 60.332(a)(1)] because each existing CT has a heat input rating greater than 100 MMBtu/hr:

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

Where: STD = allowable NOx emissions (% volume @ 15% O2, dry).

Y = heat rate in kilojoules per watt hour.

F =fuel bound nitrogen allowance.

Combined-Cycle Mode

 $Y_{100\% \text{ load (max)}} = 9.6 \text{ KJ/W-hr}, Y_{50\% \text{ load (max)}} = 12.4 \text{ KJ/W-hr}, F = 0.0$

 NO_x std $_{100\% \ load \ (max)} = 0.0113 \ \% \ vd \ or \ 113 \ ppmvd$ NO_x std $_{50\% \ load \ (max)} = 0.0087 \ \% \ vd \ or \ 87 \ ppmvd$

The allowable fuel sulfur content is 0.8 percent by weight in accordance with 40 CFR 60.333(b).

Compliance Demonstration: Compliance is demonstrated with an initial performance test using Method 20 and thereafter by monitoring the water-to-fuel injection ratio, and reporting excess emissions based on that ratio. Where units do not employ water injection, EPA has asked that sources propose an alternative method and, where requested, has approved use of NO_x CEMS to identify and report excess emissions

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Federal Rule 40 CFR 60, Subpart Dc "Standard of Performance for Small Industrial Commercial-Institutional Steam Generating Units"

Applicability: Subpart Dc (40 CFR 60.40c eq seq.) affects facilities which are steam generating units with a maximum design heat input capacity equal to or greater than 10 MMBtu per year but less than or equal to 100 MMBtu per year and for which construction is commenced after June 9, 1989. During *Combined Cycle* operation, a 17 MMBtu per year auxiliary AB1 will be located at the facility and will be subject to the record keeping and reporting requirements pursuant to 40 CFR 60.48c(a).

Emission Standard: NSPS Dc does not define any emission standard for the fuel gas heater because it is exclusively fired with natural gas.

Compliance Demonstration: The facility is subject to the reporting and record keeping requirement of 40 CFR 60.48c(g). This portion of NSPS Dc requires the recording of the amount of fuel combusted during each day. In this case, this requirement can be altered, by EPA, pursuant to authority in 40 CFR 60.13(i). EPA notes, "Since there are no applicable emission standards for natural gas combustion in Subpart Dc, the amount of gas burned each day has no bearing on the compliance status of the boiler." In the case of natural gas combustion, EPA Region 4 has approved an alternative fuel usage monthly record keeping frequency.

40 CFR 60 Subpart Kb (Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984): The proposed modification includes a 2.35 million gallon No. 2 fuel oil storage tank. This storage tank meets the NSPS Kb exemption specified by 40 CFR 60.110b(b) and so this NSPS is not an applicable requirement. The Division concurred with the applicant's finding.

National Emissions Standards for Hazardous Air Pollutants

40 CFR 63 Subpart YYYY (National Emissions Standards for Hazardous Air Pollutants for Stationary Combustion Turbines):

Applicability: NESHAP Subpart YYYY applies to stationary combustion turbines located at major sources of HAP emissions. The existing Effingham County Power Plant is a minor source of hazardous air pollutants. The findings of Georgia EPD are that this NESHAP does not apply to the combustion turbines because they are to be located at an area source of HAPs.

40 CFR 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines):

Applicability: NESHAP Subpart ZZZZ applies to a stationary RICE as defined in the regulation at a major source of HAP emissions, which is a plant site that emits or has the potential to emit any single HAP at a rate of 10 tons (9.07 megagrams) or more per year or any combination of HAPs at a

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² See <u>Alternative Fuel Usage Record keeping Frequency Proposed for Boiler at Shaw Industries</u>, U.S. EPA Region IV, August 14, 1996.

rate of 25 tons (22.68 megagrams) or more per year per 40 CFR 63.6585. This regulation is also applicable to an area source which is not a major source.

MACT Standard for Reciprocating Internal Combustion Engines (RICE) promulgated under 40 CFR 63, Subpart ZZZZ is applicable for the Emergency Firewater Pump (Emission Unit ID No. DWP1).

The Emergency Firewater Pump (Emission Unit ID No. DWP1) does not have oxidation catalyst for control of CO emissions.

The diesel-fired Emergency Firewater Pump (Emission Unit ID No. DWP1) is an existing emergency stationary RICE (compression ignition) located at an area source of HAP emissions. The engine must meet the requirements of 40 CFR 63 Subpart ZZZZ.

Per 40 CFR 63 Subpart ZZZZ, the engine is only required to have a work plan per Table 2d, which requires:

- a. Oil and filter changes every 500 hours of operation or annually, whichever comes first;
- b. Inspection of air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary;
- c. Inspection of all hoses and belts every 500 hours of operation or annually, whichever comes first.

40 CFR 63 Subpart DDDDD (National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters) **Applicability:** On February 21, 2011, EPA finalized a rule addressing HAPs emitted from existing and new institutional, commercial, and institutional boilers located at a major source of HAPs. The existing Effingham County Power Plant is a minor source of HAPs. NESHAP DDDDD is not an applicable requirement for this project. The Division concurred with this finding.

40 CFR 64, Compliance Assurance Monitoring [CAM]: Under 40 CFR 64, Compliance Assurance Monitoring (CAM), facilities are required to prepare and submit monitoring plans for certain emissions units as part of Title V operating permit applications. The CAM plans are intended to provide an on-going and reasonable assurance of compliance with emission limits for units equipped with air pollution control devices. Pursuant to 40 CFR 64.2(b)(1)(vi), emission limits for which a Part 70 Permit specifies a continuous compliance determination method are exempt from CAM requirements. Since Condition 5.2.1 of OPC Effingham's permit requires the operation of NO_X and CO CEMS for both CCCT stacks, OPC Effingham has requested in its June 2021 Title V permit renewal application that EPD remove the CAM-related conditions from the facility's permit. Therefore, no CAM documentation was included within the permit renewal application.

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Applicability for NOx Emissions from CT/HRSG combined stack: Emissions of NOx from the combustion turbine/heat recovery steam generator (CT/HRSG) combined stack are proposed to be controlled by selective catalytic reduction. Emissions of NOx from the CT portion of the CT/HRSG train are controlled by dry low NOx combustors for natural gas combustion.

40 CFR 68, Chemical Accident Prevention Provisions: This regulation establishes the list of regulated substances and thresholds, the petition process for adding or deleting substances to the list of regulated substances, the requirements for owners or operators of stationary sources concerning the prevention of accidental releases, and the State accidental release prevention programs approved under section 112(r). The list of substances, threshold quantities, and accident prevention regulations promulgated under 40 CFR 68 do not limit in any way the general duty provisions under section 112(r)(1) [40 CFR 68.1].

An owner or operator of a stationary source that has more than a threshold quantity of a regulated substance in a process, as determined under 40 CFR 68.115, must comply with the requirements of this part no later than the date on which a regulated substance is first present above a threshold quantity in a process [40 CFR 68.1(a)(3)]. Process means any activity involving a regulated substance including any use, storage, manufacturing, handling, or on-site movement of such substances, or combination of these activities. For the purposes of this definition, any group of vessels that are interconnected, or separate vessels that are located such that a regulated substance could be involved in a potential release, must be considered a single process [40 CFR 68.3].

Regulated toxic and flammable substances under section 112(r) of the Clean Air Act are the substances listed in Tables 1, 2, 3, and 4. Threshold quantities for listed toxic and flammable substances are specified in the tables [40 CFR 68.130(a)]. Page 25 of the application indicates that Effingham has committed to using an ammonia mixture with an ammonia solution less than the 20 percent, the regulated concentration for aqueous ammonia. Under Table 1 thresholds, ammonia solutions less than 20% are not regulated. Effingham has committed to using a maximum 19% ammonia solution. Therefore, ammonia storage at the facility is not subject to reporting under this regulation.

Federal Rule - Acid Rain Program

Applicability: Title IV of the 1990 Clean Air Act Amendment created a program to control emissions of Sulfur Oxides and Nitrogen Oxides to reduce acid precipitation. The standards are promulgated in 40 CFR Parts 72 through 78. State of Georgia has adopted standards set forth in 40 CFR Parts 72 through 78 by reference in 391-3-1-.13. The Acid Rain Regulations apply to the facility, because each combustion turbine has a nameplate capacity greater than 25MW_e and they are to supply electricity for sale, whether wholesale or retail. The facility submitted a Title IV permit "Phase II Acid Rain" application to the Division.

The significant Modification without Construction Application No. 27997 was received on June 15, 2021 to update the Acid Rain Permit Application for the facility. The current Acid Rain Permit expired December 31, 2020. The new Acid Rain Permit became effective January 1, 2021.

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Emission Standard: No SO₂ allowances are allocated to this facility and the proposed modification by the Acid Rain regulations. As such, the facility will need to acquire SO₂ allowances in amount equal to their annual SO₂ tonnage. The Acid Rain Regulation does not limit NO_x emissions since the units are not classified as coal-fired utility boilers.

NOx emissions are not limited by the Acid Rain Regulation since the units are not classified as coal-fired utility boilers.

Federal Rule – Cross-State Air Pollution Rule (CSAPR)

The U.S. EPA issued the Cross-State Air Pollution Rule (CSAPR) in July 2011. CSAPR originally required 28 states in the eastern half of the United States to significantly improve air quality by reducing power plant emissions (SO₂, annual NOx and ozone season NOx) that cross state lines and contribute to ozone and fine particle pollution (soot) pollution in other states. CSAPR was designed to help states meet the 1997 ozone and fine particle air quality standards and the 2006 fine particle air quality standard.

CSAPR was scheduled to replace the CAIR starting on January 1, 2012. However, the timing of CSAPR's implementation was affected by D.C. Circuit actions that stayed and then vacated CSAPR before implementation. On April 29, 2014, the U.S. Supreme Court reversed the D.C. Circuit's vacatur, and on October 23, 2014, the D.C. Circuit granted EPA's motion to lift the stay and shift the CSAPR compliance deadlines by three years. The EPA revised the compliance deadlines in its regulations, and CSAPR Phase 1 implementation began January 1, 2015 for annual programs and May 1, 2015 for the ozone season program, with Phase 2 to begin in 2017.

On September 7, 2016, the U.S. EPA finalized an update to the CSAPR ozone season program by issuing the CSAPR Update. This rule addresses the summertime (May – September) transport of ozone pollution in the eastern United States that crosses state lines to help downwind states and communities meet and maintain the 2008 ozone national ambient air quality standard (NAAQS).

In the Federal Register Volume 81, No. 207 dated October 26, 2016, on p. 74506, it says,

"One state, Georgia, has an ongoing original CSAPR NOx ozone season FIP requirement with respect to the 1997 ozone NAAQS, but the EPA has found that is does not contribute to interstate transport with the respect to the 2008 ozone NAAQS. The EPA did not reopen comment on Georgia's interstate transport obligation with respect to the 1997 ozone NAAQS in this rule making, so Georgia's original CSAPR NOx ozone season requirements (including its emission budget) continue unchanged.

In addition to reducing interstate ozone transport with respect to the 2008 ozone NAAQS, this rule also addresses the status of outstanding interstate ozone transport obligations with respect to the 1997 ozone NAAQS...."

Further, according to the U.S. EPA's *Map of States Covered by CSAPR*, which is available at https://www.epa.gov/airmarkets/map-states-covered-csapr, Georgia (the only pink state on the map) is covered by CSAPR for both fine particles (SO₂ and annual NOx) and ozone (ozone season NOx).

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The U.S. EPA website also maintains a table indicating the applicable CSAPR programs for Georgia as follows:

States that are affected	by the	Cross-State	Air Pollution	Rule	(CSAPR)
States that are affected					

	Required to Reduce	Required to Reduce	Required to Reduce	Required to Reduce	*SO ₂
	Emissions of NO _X	Emissions of NO _X	Annual Emissions of	Annual Emissions of	
State	during the Ozone	during the Ozone	SO ₂ and NO _X (1997	SO ₂ and NO _X (2006	Group
	Season (1997 Ozone	Season (2008 Ozone	Annual PM _{2.5}	24-Hour PM _{2.5}	Group
	NAAQS)	NAAQS)	NAAQS)	NAAQS)	
Georgia	X		X	X	2

^{*} The final CSAPR divides the states required to reduce SO₂ into two groups. Both groups must reduce their SO₂ emissions beginning in Phase I. Group 1 states must make significant additional reductions in SO₂ emissions for Phase II in order to eliminate their significant contribution to air quality problems in downwind areas.

According to the above, the Division has determined that the facility is still subject to the requirements of CSAPR. Conditions 7.15.1 through 7.15.3 of the proposed Title V renewal permit contain the applicable CSAPR requirements.

Greenhouse Gas (GHG) Reporting Program (40 CFR 98)

In response to the FY2008 Consolidated Appropriations Act (H.R. 2764; Public Law 110-161), EPA issued the Mandatory Reporting of Greenhouse Gases Rule (74 FR 5620) which requires reporting of greenhouse gas (GHG) data and other relevant information from large sources and suppliers in the United States. The purpose of this rule is to collect accurate and timely GHG data to inform future policy decisions. In general, the Rule is referred to as 40 CFR Part 98. Implementation of Part 98 is referred to as the Greenhouse Gas Reporting Program (GHGRP). The GHGRP is not an applicable requirement for the applicant's PSD/Title V permit and is therefore not included.

Title V Operating Permits Program

The Title V program consolidates all air pollution control requirements into a single, comprehensive "Operating Permit" that covers all aspects of new, modified, or reconstructed source's year-to-year air pollution activities. State of Georgia adopted by reference in 391-3-1-.03(10) the Title V regulations.

Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule

On June 3, 2010 (75 FR 31514-31608), the U.S. EPA issued a final rule that establishes an approach to addressing greenhouse gas emissions from stationary sources under the Clean Air Act (CAA) permitting programs. This final rule sets thresholds for GHG emissions that define when permits under the New Source Review PSD and title V Operating Permit programs are required for new and existing industrial facilities.

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The CAA permitting program emissions thresholds for criteria pollutants such as lead, sulfur dioxide and nitrogen dioxide, are 100 and 250 tpy. While these thresholds are appropriate for criteria pollutants, they are not feasible for GHGs because GHGs are emitted in much higher volumes.

The final rule addresses emissions of a group of six GHGs:

- 1. Carbon dioxide (CO₂)
- 2. Methane (CH₄)
- 3. Nitrous oxide (N₂O)
- 4. Hydrofluorocarbons (HFCs)
- 5. Perfluorocarbons (PFCs)
- 6. Sulfur hexafluoride (SF₆)

Some of these GHGs have a higher global warming potential than others. To address these differences, the international standard practice is to express GHGs in carbon dioxide equivalents (CO₂e). Emissions of gases other than CO₂ are translated into CO₂e by using the gases' global warming potentials. Under this rule, EPA is using CO₂e as the metric for determining whether sources are covered under permitting programs. Total GHG emissions will be calculated by summing the CO₂e emissions of the six aforementioned constituent GHGs.

The Step 2 date of July 1, 2011 has passed, and applicability is addressed as follows for this facility:

- The existing plant has the potential to emit greater than 100,000 tpy CO_{2e} emissions;
- Therefore emissions of GHGs are classified as a "regulated NSR Pollutant"; and
- Potential emissions of GHGs (as CO_{2e}) are greater than 0 tpy and are therefore subject to PSD requirements for BACT.

State and Federal – Startup and Shutdown and Excess Emissions

Excess emission provisions for startup, shutdown, maintenance, and malfunction are provided in Georgia Rule 391-3-1-.02(2)(a)7. Excess emissions from the turbine stack may result during startup and shutdown.

The PSD short term BACT limits do apply during startup and shutdown, and the Division shall not allow excess emissions during startup and shutdown. The Division does have enforcement discretion to verify that³:

- ✓ To the maximum extent practicable the air pollution control equipment, process equipment, or processes were maintained and operated in a manner consistent with good practice for minimizing emissions;
- ✓ Repairs were made in an expeditious fashion when the operator knew or should have known that applicable emission limitations were being exceeded.
- ✓ The amount and duration of the excess emissions (including any bypass) were minimized to the maximum extent practicable during periods of such emissions;

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³ EPA Memorandum dated September 28, 1982 entitled, "Policy on Excess Emissions During Startup, Shutdown, Maintenance, and Malfunctions" from Kathleen M. Bennett to Regions I-X.

- ✓ All possible steps were taken to minimize the impact of the excess emissions on ambient air quality; and
- ✓ The excess emissions are not part of a recurring pattern indicative of inadequate design operation, or maintenance.

In addition to the short term BACT limits. EPD had proposed longer term (i.e. lb/day) limits for NOx and CO emissions that specifically include emissions during startup and shutdown. The excess emission provisions for startup and shutdown in Georgia Rule 391-3-1-.02(2)(a)7 do not apply to these lb/day limits.

Startup and shutdown of the combined-cycle systems are part of *normal source operation* and the regulatory requirements of 40 CFR 52.21(j) apply during all periods of *normal source operation*. The applicant is requesting authorization to operate the new power block at 50% to 100% of the maximum load adjusted for ambient conditions. The following table specifies the startup and shutdown scenario described by the applicant: Note: The applicant approved the information found in this table on November 18, 2011.

Fuel Type	Control Technology	Operational Loads	Notes
Natural Gas	None for this period of startup	~0% to 59.5% of the maximum load adjusted for ambient conditions	Operation classified as startup.
Natural Gas	Dry Low NOx Combustors (DLN) Selective Catalytic Reduction (SCR) Catalytic Oxidation	~60% to 69.9% of maximum load adjusted for ambient conditions.	This operational range is classified as startup. DLN begins at 60% of the maximum load adjusted for ambient conditions.
			SCR is initiated within 5 minutes of DLN initiation.
Natural Gas	DLN Combustors and SCR	~70% to 100% of maximum load adjusted for ambient conditions	Non-startup to baseload operation.
Hybrid Fuel Startup	None for this period of startup	~0% to 10.4% of maximum load adjusted for ambient conditions	Operation is classified as startup. Applicant may only fire natural gas.

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Fuel Type	Control Technology	Operational Loads	Notes
Hybrid Fuel Startup	Water Injection	~50% to 69.9% of	Operation is classified as startup.
	Operation of SCR	adjusted for ambient conditions	as startup.
	Operation of Catalytic Oxidation		
Hybrid Fuel Startup	Water Injection	~70% to 100% of maximum load	Non-startup to baseload operation.
	Operation of SCR	adjusted for ambient conditions.	
	Operation of Catalytic Oxidation		

Both combustion turbines are limited to burn only natural gas as determined by their PSD permit. This requirement subsumes NSPS GG and Georgia Rule (g) limit for sulfur content.

Auxiliary Boiler

The Auxiliary Boiler (Source Code AB1) is subject to Georgia Rule (d) for opacity and particulate matter emissions and Rule (g) for sulfur limitations in the fuel burned. This emission unit is also subject to 40 CFR 60, Subpart Dc, "NSPS for Small Industrial-Commercial-Institutional Steam Generating Units."

 PM/PM_{10} emissions from the boiler is regulated by Georgia Rule 391-3-1-.02(2)(d). Georgia Rule (d) specifies an emission limit of approximately 0.38 pound per million Btu heat input. Since the boiler can only burn natural gas, which has low ash content, no monitoring is required from the boiler.

NOx emissions from the boiler is regulated by 40 CFR 52.21 [PSD-BACT], which specifies an emission limit of 0.098 lb/MMBtu.

CO emissions from the boiler is regulated by 40 CFR 52.21 [PSD-BACT], which specifies an emission limit of 0.082 pound per million Btu heat input.

Sulfur dioxide emissions from the boiler is regulated under Georgia Rule 391-3-1-.02(2)(g)2 which specifies for all fuel burning sources less than 100 MMBtu/hr, that the fuel burned cannot contain more than 2.5 percent sulfur, by weight. The boilers is required to only burn natural gas, which has minimal sulfur content so sulfur emissions from the fuel source are expected to be minimal. This requirement subsumes NSPS Dc and Georgia Rule (g) limit for sulfur content.

The boiler is limited to 2,500 hours per year as determined by the PSD determination.

Engines and Other

Emergency Firewater Pump (Source Code DWP1) and Natural Gas-fired Preheater (Source Code FP1) are subject to 40 CFR 52.21(j) for NOx, CO, PM/PM₁₀, SO₂, and visible emissions; and to Georgia Rules 391-3-1-.02(2)(b) and (g) for visible emissions and fuel sulfur content. The PSD

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permit establishes a work practice standard for source code DWP1 of 500 hours on fuel oil combustion during any twelve consecutive months for purposes of the requirements of PSD for NOx, CO, PM/PM₁₀, SO₂, and visible emissions. In addition, the PSD permit limits the fuel oil sulfur content to 0.05 weight percent. Georgia Rule (b) limits the visible emissions to no more than forty (40) percent. Georgia Rule (g)2 limits the fuel sulfur content to no more than 2.5 weight percent. The PSD fuel oil sulfur content limit subsumes Georgia Rule (g)2. Therefore, meeting the fuel oil sulfur content and opacity limits will be expected at all times. The PSD permit establishes a work practice standard for source code FP1 of burning only natural gas and limits NOx and CO emission to 0.05 lb/MMBtu and 0.082 lb/MMBtu, respectively.

The 8-cell Cooling Tower (Source Code CT1), Heat Recovery Steam Generator (no duct firing) (Source Code HRSG1), and the Steam Turbine Generator (Source Code STG1) are only subject to the requirements of 40 CFR 52.21. Source Code CT1 requirements were to install drift Eliminators (Source Code DE1). There are no other requirements from this set of emission units.

C. Permit Conditions

Permit Conditions 3.2.1 and 3.2.2 contain the BACT hourly operational limits for the auxiliary boiler AB1 and the diesel fired water pump DWP1.

Permit Condition 3.3.1 states that the facility is subject to the requirements of 40 CFR 63 Subpart A - "General Provisions" and 40 CFR 63 Subpart GG – "Standards of Performance for Stationary Gas Turbines".

Permit Condition 3.3.2 allows the firing of natural gas only in the combustion turbines CTG1, and CTG2, the auxiliary boiler AB1, and the Natural Gas-fired Preheater FP1.

Permit Condition 3.3.3 allows the firing of low sulfur diesel fuel only in the fire water pump DWP1.

Permit Conditions 3.3.4 and 3.3.5 contain the BACT requirements for the combustion turbines CTG1 and CTG2.

Permit Condition 3.3.6 contains the BACT requirements for the Natural Gas-fired Preheater FP1.

Permit Condition 3.3.7 contains the BACT requirements for the auxiliary boiler AB1.

Permit Condition 3.3.8 provides the BACT definitions of startup and shutdown for the combined cycle combustion turbine operations.

Permit Condition 3.3.9 requires that drift eliminators DE1 are installed on the cooling tower CT1 as BACT.

Permit Condition 3.3.10 includes applicable updated sulfur dioxide/fuel weight sulfur content limits in 40 CFR 60, Subpart GG.

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Permit Condition 3.3.11 states the facility must comply with the requirements of 40 CFR 60 Subpart A – "General Provisions" and 40 CFR Dc – "Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units," for operation of the Auxiliary Boiler with emission Unit ID No. AB1.

Permit Conditions 3.3.12 -3.316 state that the facility must comply with the requirements of National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart A – "General Provisions," and Subpart ZZZZ – "National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines," for the operation of the Emergency Firewater Pump (Emission Unit ID No. DWP1) and what the requirements are.

IV. Testing Requirements (with Associated Record Keeping and Reporting)

A. General Testing Requirements

The permit includes a requirement that the Permittee conduct performance testing on any specified emission unit when directed by the Division. Additionally, a written notification of any performance test(s) is required 30 days (or sixty (60) days for tests required by 40 CFR Part 63) prior to the date of the test(s) and a test plan is required to be submitted with the test notification. Test methods and procedures for determining compliance with applicable emission limitations are listed and test results are required to be submitted to the Division within 60 days of completion of the testing.

B. Specific Testing Requirements

Not applicable.

V. Monitoring Requirements

A. General Monitoring Requirements

Permit Condition 5.1.1 requires that all continuous monitoring systems required by the Division be operated continuously except during monitoring system breakdowns and repairs. Monitoring system response during quality assurance activities is required to be measured and recorded. Maintenance or repair is required to be conducted in an expeditious manner.

B. Specific Monitoring Requirements

Permit Condition 5.2.1 requires a CEMs for monitoring nitrogen oxides per NSPS Subpart GG and carbon monoxide.

Note that the citation blocks of Conditions 5.2.1a. and b. both contain "40 CFR 64.2(b)(1)(vi) (exemption)." Although the cited regulation does not require the operation of a NOx and CO CEMS, it was added based on the facility's request because this is the only place that the permit can include a citation for exempting the facility from the 40 CFR 64 Cam Plan requirements. Please see the next section for detailed explanation.

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Permit Condition 5.2.2 contains the facility parametric monitoring requirements.

Permit Condition 5.2.3 contains the sulfur monitoring requirements for fuel burned in the combustion turbines.

Permit Conditions 5.2.4 and 5.2.5 contain the monitoring requirements to assess the quality and accuracy of the data acquired by the carbon monoxide CEMS required by Condition 5.2.1.b.

Permit Condition 5.2.6 requires the installment of a non-resettable hour meter on the Emergency Firewater Pump (Emission Unit ID No. DWP1).

Permit Condition 5.2.7 contains the time minimization requirements for the Emergency Firewater Pump (Emission Unit ID No. DWP1) during startup.

C. Compliance Assurance Monitoring (CAM)

An emission unit is subject to the provisions of 40 CFR 64, "Compliance Assurance Monitoring" because:

- It is located at a major source that is required to obtain a Title V Permit. [§64.2(a)]
- It is subject to an emission limitation or standard for the applicable pollutant (PM). [§64.2(a)(1)]
- The facility uses a control device to achieve compliance. [§64.2(a)(2)]
- Potential pre-controlled emissions of the applicable pollutant (particulate matter) from such emission unit are at least 100 percent of major source threshold. [§64.2(a)(3)]

The combustion turbines (ID Nos. CTG1 and CTG2) are controlled by the selective catalytic reduction (SCR) to control NOx emissions in order to comply with the NOx BACT limit.

The combustion turbines are potentially subject to 40 CFR 64. However, NOx and CO emissions from the combined cycle block, via the SCR, are monitored continuously by the NOx CEMS and CO CEMS. According to 40 CFR 64.2(b)(1)(vi), they are exempt from the 40 CFR 64 requirements because of the use of a NOx CEMS and a CO CEMS.

VI. Record Keeping and Reporting Requirements

A. General Record Keeping and Reporting Requirements

The Permit contains general requirements for the maintenance of all records for a period of five years following the date of entry and requires the prompt reporting of all information related to deviations from the applicable requirements. Records, including identification of any excess emissions, exceedances, or excursions from the applicable monitoring triggers, the cause of such occurrence, and the corrective action taken, are required to be kept by the Permittee and reporting is required on a semiannual basis.

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Permit Condition 6.1.4 outlines the quarterly reporting requirements.

Permit Condition 6.1.7a. contains the reporting requirement for the 4-hour rolling average NO_X concentration for excess emissions according to NSPS Subpart GG.

Permit Condition 6.1.7b, i through 6.1.7b.xi. contain the BACT requirement exceedances.

Permit Condition 6.1.7c.i contains the excursion for any value of the natural gas sulfur content which exceeds 2.5 grains per 100 standard cubic feet.

Permit Condition 6.1.7d contains the additional reporting requirements.

Permit Condition 6.1.7d.i. contains the reporting requirements for the hours of operation of the auxiliary boiler AB1 and the Emergency Firewater Pump DWP1 for each month during the quarter.

Permit Condition 6.1.7d.ii. contains the reporting requirements for the twelve consecutive month total hours of operation of the auxiliary boiler AB1 and the Emergency Firewater Pump DWP1 for each month in the quarterly reporting period.

Permit Condition 6.1.7d.iii. contains the reporting requirements for the twelve consecutive month total NOx emissions (tons) from the combustion turbines CTG1 and CTG2, for each month in the quarterly reporting period.

Permit Condition 6.1.7d.iv. contains the reporting requirements for the twelve consecutive month total CO emissions (tons) from the combustion turbines CTG1 and CTG2, for each month in the quarterly reporting period.

B. Specific Record Keeping and Reporting Requirements

Permit Condition 6.2.1 requires the facility to maintain records as they relate to the startup and shutdown of each combustion turbine.

Permit Condition 6.2.2 requires the facility to maintain monthly records of natural gas usage in each combustion turbine.

Permit Condition 6.2.3 tells the facility how to use the hour meters on the Emergency Firewater Pump DWP1 and auxiliary boiler AB1.

Permit Condition 6.2.4 requires the facility to maintain monthly records of natural gas usage in the Auxiliary Boiler (Source Code AB1).

Permit Condition 6.2.5 contains the facility recordkeeping requirements for verifying and documenting that each shipment of diesel fuel received for combustion in Emergency Firewater Pump DWP1 complies with the requirements of Condition 3.3.3.

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Permit Condition 6.2.6 through 6.2.8 are the recordkeeping requirements for determining the twelve consecutive month total of nitrogen oxides emissions (in tons) from each combustion turbine.

Permit Condition 6.2.9 through 6.2.11 are the recordkeeping requirements for determining the twelve consecutive month total of carbon monoxide emissions (in tons) from each combustion turbine.

Permit Condition 6.2.12 does not require the facility to determine the nitrogen content of the natural gas burned in the combustion turbines.

Permit Condition 6.2.13 requires the facility to submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c) for each combustion turbine.

Permit Conditions 6.2.14 and 6.2.15 subject the Emergency Firewater Pump (Emission Unit ID No. DWP1) to the recordkeeping requirements of 40 CFR 63 Subpart ZZZZ.

Permit Condition 6.2.16 requires the facility to provide notice to the Division in advance of any special testing as specified in Condition 3.3.8.

VII. Specific Requirements

A. Operational Flexibility

Not applicable.

B. Alternative Requirements

Not applicable.

C. Insignificant Activities

See Permit Application on GEOS website. See Attachment B of the permit

D. Temporary Sources

Not applicable.

E. Short-Term Activities

Not applicable.

F. Compliance Schedule/Progress Reports

Not applicable.

G. Emissions Trading

Not applicable.

H. Acid Rain Requirements

This facility is subject to requirements in Title IV of the Clean Air Act. They are subject to 40 CFR 72 (permits), 73 (sulfur dioxide), and 75 (monitoring). They are not subject to the nitrogen oxide provisions (40 CFR 76) of the Acid Rain regulations. 40 CFR 76 only applies to affected units that burn coal.

40 CFR 72.50(a)(1) allows a complete Phase II Permit Application to be attached to the Title V Permit as part of the Permit. Effingham County's Phase II Permit Application is attached to the Title V Permit as part of the Permit to ensure that all Acid Rain applicable requirements are incorporated into the Title V Permit.

I. Stratospheric Ozone Protection Requirements

The standard permit condition pursuant to 40 CFR 82, Subpart F has been included in the Title V Permit. These Title VI requirements apply to all air conditioning and refrigeration units containing ozone-depleting substances regardless of the size of the unit or of the source. Since Effingham County Power LLC has some air conditioners, chillers, and refrigerators, 40 CFR 82, Subpart F is an applicable requirement.

Effingham County Power LLC does not service motor vehicles, so 40 CFR 82, Subpart B is not applicable.

J. Pollution Prevention

Not applicable.

K. Specific Conditions

Not applicable.

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VIII. General Provisions

Generic provisions have been included in this permit to address the requirements in 40 CFR Part 70 that apply to all Title V sources, and the requirements in Chapter 391-3-1 of the Georgia Rules for Air Quality Control that apply to all stationary sources of air pollution.

Template Condition 8.14.1 was updated in September 2011 to change the default submittal deadline for Annual Compliance Certifications to February 28.

Template Condition Section 8.27 was updated in August 2014 to include more detailed, clear requirements for emergency generator engines currently exempt from SIP permitting and considered insignificant sources in the Title V permit.

Template Condition Section 8.28 was updated in August 2014 to more clearly define the applicability of the Boiler MACT or GACT for major or minor sources of HAP.

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Addendum to Narrative

The 30-day public review started on month day, year and ended on month day, year. Comments were/were not received by the Division.

//If comments were received, state the commenter, the date the comments were received in the above paragraph. All explanations of any changes should be addressed below.//

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