

Facility Name: **Wansley Combined-Cycle Generating Plant**

City: Franklin

County: Heard

AIRS #: 04-13-14900011

Application #: TV-781659

Date SIP Application Received:

Date Title V Application Received: August 28, 2023

Permit No: 4911-149-0011-V-03-1

Program	Review Engineers	Review Managers
SSPP	Renee Browne	Cynthia Dorrough
SSCP	Michael Susky	Tammy Swindell
ISMU	Joshua Pittman	Dan McCain
TOXICS	Not Applicable	Not Applicable
Permitting Program Manager		Steve Allison

Introduction

This narrative is being provided to assist the reader in understanding the content of the referenced SIP permit to construct and draft operating permit amendment. Complex issues and unusual items are explained in simpler terms and/or greater detail than is sometimes possible in the actual permit. This permit is being issued pursuant to: (1) Sections 391-3-1-.03(1) and 391-3-1-.03(10) of the Georgia Rules for Air Quality Control, (2) Part 70 of Chapter I of Title 40 of the Code of Federal Regulations, and (3) Title V of the Clean Air Act Amendments of 1990. The following narrative is designed to accompany the draft permit and is presented in the same general order as the permit. This narrative is intended only as an adjunct for the reviewer and has no legal standing. Any revisions made to the permit in response to comments received during the public comment period and EPA review process will be described in an addendum to this narrative.

I. Facility Description**A. Existing Permits**

Table 1 below lists the current Title V permit, and all administrative amendments, minor and significant modifications to that permit, and 502(b)(10) attachments.

Table 1: Current Title V Permit and Amendments

Permit/Amendment Number	Date of Issuance	Description
4911-149-0011-V-03-0	November 2, 2023	Title V Renewal

B. Regulatory Status**1. PSD/NSR/RACT**

The facility is located in Heard County, which is in attainment for ozone but was designated as a contributing county with enhanced monitoring. The combined site is one of the 28 PSD named source category (fossil fuel-fired steam electric plants of more than 250 million Btu/hr heat input). Since it has potential emissions of particulate matter (PM), sulfur dioxide (SO₂), nitrogen oxide (NO_x), volatile organic compounds (VOC), and carbon monoxide (CO) greater than 100 tpy, it is a major source under PSD regulations.

The facility went through a PSD review for NO_x, SO₂, CO, VOC and PM/PM₁₀ in November 2000 for the construction and operation of the combustion turbine combined-cycle blocks. Existing Conditions 3.3.3 through 3.3.14 of Title V Permit No. 4911-149-0011-V-01-0 contain all the BACT standards resulting from that PSD review.

2. Title V Major Source Status by Pollutant

Table 2: Title V Major Source Status

Pollutant	Is the Pollutant Emitted?	If emitted, what is the facility's Title V status for the Pollutant?		
		Major Source Status	Major Source Requesting SM Status	Non-Major Source Status
PM	Yes	✓		
PM ₁₀	Yes	✓		
PM _{2.5}	Yes	✓		
SO ₂	Yes	✓		
VOC	Yes	✓		
NO _x	Yes	✓		
CO	Yes	✓		
TRS	N/A			
H ₂ S	N/A			
Individual HAP	Yes			✓
Total HAPs	Yes			✓

II. Proposed Modification

A. Description of Modification

With the retirement of the Georgia Power Units 1 & 2, Southern Power's Units 6 & 7 now constitute a separate stationary source. As a separate source, Southern Power's Units 6 & 7 will not have the potential to exceed the major source threshold for hazardous air pollutants (HAPs) because they will not have the potential to emit more than 10 tpy of any single HAP or 25 tpy of all HAP combined. Therefore, the site will be designated as an area source of HAPs pursuant to the MACT regulations. Since this is an initial designation of a separate source based on its potential to emit and no emission limitation is needed to reduce HAP emissions below the major HAP source threshold (i.e., it is a natural area source, not a synthetic area source), this designation does not constitute a reclassification under the MACT regulations (*e.g.*, 40 CFR 63.1(c)(6)).

B. Emissions Change

Table 3: Emissions Change Due to Modification

Pollutant	Is the Pollutant Emitted?	Net Actual Emissions Increase (Decrease) (tpy)	Net Potential Emissions Increase (Decrease) (tpy)
PM	Yes	0	0
PM ₁₀	Yes	0	0
PM _{2.5}	Yes	0	0
SO ₂	Yes	0	0
VOC	Yes	0	0
NO _x	Yes	0	0
CO	Yes	0	0
TRS	No	0	0
H ₂ S	No	0	0
Individual HAP	Yes	0	0
Total HAPs	Yes	0	0

C. PSD/NSR Applicability

The modification does not trigger PSD.

IV. Regulated Equipment Requirements

A. Brief Process Description

Wansley Combined-Cycle generating plant includes two combustion turbine combined-cycle blocks. Each combined-cycle block includes two combustion turbines each with a supplementally fired heat recovery steam generator (HRSG). The combined-cycle blocks fire only natural gas.

B. Modified Equipment List for the Process

Emission Units		Applicable Requirements/Standards	Air Pollution Control Devices	
ID No.	Description		ID No.	Description
CT6A	Combustion Turbine Unit 6A	40 CFR 52.21 40 CFR 60 Subpart A 40 CFR 60 Subpart GG Acid Rain 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2.	LC7A SC7A	Low NOx Burner SCR
DB6A	HRSG Duct Burner for Turbine 6A	40 CFR 52.21 40 CFR 60 Subpart A 40 CFR 60 Subpart Da Acid Rain 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)2.	LD7A SC7A	Low NOx Burner SCR
CT6B	Combustion Turbine Unit 6B	40 CFR 52.21 40 CFR 60 Subpart A 40 CFR 60 Subpart GG Acid Rain 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2.	LC7B SC7B	Low NOx Burner SCR
DB6B	HRSG Duct Burner for Turbine 6B	40 CFR 52.21 40 CFR 60 Subpart A 40 CFR 60 Subpart Da Acid Rain 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)2.	LD7B SC7B	Low NOx Burner SCR
CT7A	Combustion Turbine Unit 7A	40 CFR 52.21 40 CFR 60 Subpart A 40 CFR 60 Subpart GG Acid Rain 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2.	LC7A SC7A	Low NOx Burner SCR
DB7A	HRSG Duct Burner for Turbine 7A	40 CFR 52.21 40 CFR 60 Subpart A 40 CFR 60 Subpart Da Acid Rain 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)2.	LD7A SC7A	Low NOx Burner SCR
CT7B	Combustion Turbine Unit 7B	40 CFR 52.21 40 CFR 60 Subpart A 40 CFR 60 Subpart GG Acid Rain 391-3-1-.02(2)(b)1. 391-3-1-.02(2)(g)2.	LC7B SC7B	Low NOx Burner SCR

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DB7B	HRSG Duct Burner for Turbine 7B	40 CFR 52.21 40 CFR 60 Subpart A 40 CFR 60 Subpart Da Acid Rain 391-3-1-.02(2)(d) 391-3-1-.02(2)(g)2.	LD7B SC7B	Low NOx Burner SCR
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* 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.

** HRSG = Heat Recovery Steam Generator

C. Equipment & Rule Applicability

As a separate source with potential to emit below the major source threshold, the Southern Power facility is not required to meet the applicable provisions of the National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A – “General Provisions,” and Subpart YYYY – “National Emission Standard for Hazardous Air Pollutants: Stationary Combustion Turbines,” for operation of the combustion turbines (ID Nos. CT6A, CT6B, CT7A, and CT7B) as the facility is designated as an area source.

D. Permit Conditions

Condition No. 3.3.15 was deleted since the facility is not subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) as found in 40 CFR 63 Subpart A – “General Provisions,” and Subpart YYYY – “National Emission Standard for Hazardous Air Pollutants: Stationary Combustion Turbines,” for operation of the combustion turbines (ID Nos. CT6A, CT6B, CT7A, and CT7B) as the facility is designated an area source.

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.//