Tampa Electric Company Big Bend Station

Facility ID No. 0570039 Hillsborough County

Title V Air Operation Permit Renewal

Permit No. 0570039-157-AV

(Renewal of Title V Air Operation Permit No. 0570039-128-AV)



Permitting Authority:

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Permit Review Section
2600 Blair Stone Road
Mail Station #5505
Tallahassee, Florida 32399-2400

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Compliance Authority:

Environmental Protection Commission of Hillsborough County (EPCHC) 3629 Queen Palm Drive Tampa, Florida 33619

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(RICE).

<u>Title V Air Operation Permit Renewal</u> Permit No. 0570039-157-AV

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Appendix NSPS Subpart OOO, SOP for Nonmetallic Mineral Processing Plants.

Appendix NSPS Subpart IIII, SOP for Stationary Compression Ignition (CI) Internal Combustion Engines (ICE).

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FLORIDA DEPARTMENT OF Environmental Protection

Ron DeSantis Governor

Alexis A. Lambert Secretary

Bob Martinez Center 2600 Blair Stone Road Tallahassee, FL 32399-2400

PERMITTEE:

Tampa Electric Company 13031 Wyandotte Road Gibsonton, Florida 33534-5833 Permit No. 0570039-157-AV Big Bend Station Facility ID No. 0570039 Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the above referenced facility. The existing Big Bend Station is located in Hillsborough County at 13031 Wyandotte Road in Gibsonton, Florida. UTM Coordinates are: Zone 17, 363.15 kilometers (km) East, and 3,074.91 km North. Latitude is 27°47'36" North; and Longitude is: 82°24'11" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213, and 62-214. The above named permittee is hereby authorized to operate the facility in accordance with the terms and conditions of this permit.

Executed in Tallahassee, Florida.

0570039-157-AV Effective Date: DATE, 20yy

Renewal Application Due Date: Exp. DATE -225, 20zz

Expiration Date: Eff. DATE + 5 years, 20zz

(Proposed)

David Lyle Read, P.E., Environmental Administrator Permit Review Section Division of Air Resource Management

DLR/hb

Subsection A. Facility Description.

Tampa Electric Company (TECO), Big Bend Station, is a nominal 1,668 megawatt (MW) electric generation facility, which is classified under Standard Industrial Classification Code No. 4911. The facility consists of a fossil fuel fired utility boiler, SGU 4 (Unit 4); two steam turbines; a simple cycle combustion turbine (SCCT) generator peaking unit set consisting of two SCCT (SCCT CT-4A and CT-4B); a combined cycle combustion turbine (CCCT) generator set consisting of two SCCT (CT-5 and CT-6) and heat recovery steam generators (HRSG) connected to a single steam turbine generator that can operate in simple cycle and combined cycle modes; solid fuels, fly ash, limestone, gypsum, slag, bottom ash storage and handling facilities; and fuel oil storage tanks. Unit 4 is fired with natural gas only, solid fuel only, or co-fired natural gas and solid fuels consisting of: coal, petroleum coke with a maximum of 20% by weight, solid fuel blends or solid fuel residual blends. The SCCT (CT-4A and CT-4B) are fired with natural gas and ultra-low sulfur diesel (ULSD). CT-5 and CT-6 are fired exclusively with natural gas. The natural gas distribution system for Unit 4 is supported by two natural gas-fired process heaters. The facility is also supported by five diesel engine driven emergency generators and a surface coating operations for miscellaneous metal parts used by the facility.

Subsection B. Summary of Emissions Units.

EU No.	Emission Unit Description				
	Regulated Emissions Units				
Fossil Fue	Fossil Fuel Fired Steam Generator Unit				
004	Steam Generating Unit 4				
Simple Cy	cle Combustion Turbines				
041	SCCT-4A				
042	SCCT-4B				
Simple-Cy	cle and Combined Cycle Combustion Turbines				
058	Simple Cycle CT-5				
059	Simple Cycle CT-6				
060	Combined Cycle CT-5				
061	Combined Cycle CT-6				
Solid Fuel	Yard				
010	Solid Fuel and Limestone Unloading and Handling Operations				
029	Fuel Blending Bin Cyclone Collectors				
030	Fuel Mill Cyclone Collectors				
046					
047	7 14 2 14 8 4 14 14 8 4 14 14 14 14 14 14 14 14 14 14 14 14 1				
048					
	gerwith Roto-Clone				
039	Unit 4 Coal Bunker with Roto-Clone				
	Handling and Storage				
	012 Limestone Silo A and Baghouses (2)				
013	Limestone Silo B and Baghouses (2)				
023	Limestone Conveyor LB/LC and Baghouse				
	050 Limestone Conveyor LD/LE and Baghouse				
	Handling for Flue Gas Desulfurization (FGD) System				
020	Limestone Conveyors LE/LF/LG/Silo C Belt Feeder Baghouse				
021	Silo C and Baghouse				

SECTION I. FACILITY INFORMATION.

EU No.	Emission Unit Description				
Fly Ash Ho	Fly Ash Handling and Storage Silo No. 3				
014	Fly Ash Silo No. 3 and Baghouse				
Surface Co	pating Operations				
032	Surface Coating of Miscellaneous Metal Parts				
CI ICE					
043	SCCT4 Emergency Diesel Generator (1,495 brake horsepower (HP))				
044	Administrative Emergency Diesel Generator (1,194 HP)				
057	CT-5 & CT-6 Emergency Diesel Generator (1,474 HP)				
064	Steam Turbine No. 1 (ST1) Emergency Diesel Generator (762 HP)				
065	Unit 4 Emergency Diesel Generator (1,865 HP)				
Process H	featers				
051	Process Heaters No. 1				
063	Process Heaters No. 2				
	Unregulated Emissions Units and/or Activities				
	Slag and Bottom Ash Sources BH-001 through BH-004				
036	Gypsum Handling and Storage Sources GH-001 through GH-017				
030	No. 2 Fuel Oil Storage Tanks > 550 gallons				
	Vehicle Refueling Operations				
045	FGD Area Emergency Diesel Generator (550 HP) and Fire Pump Diesel Engine (596 HP)				
062	062 Mechanical Draft Cooling Tower for Combined Cycle Unit				

Also included in this permit are miscellaneous insignificant emissions units and/or activities (see Appendix I, List of Insignificant Emissions Units and/or Activities).

Subsection C. Applicable Regulations.

Based on the Title V air operation permit renewal application received September 12, 2024, this facility is a major source of hazardous air pollutants (HAP). The existing facility is a prevention of significant deterioration (PSD) major source of air pollutants in accordance with Rule 62-212.400, F.A.C. A summary of applicable regulations is shown in the following table.

Regulation	EU Nos.
Federal Rule Citations	
40 CFR 60, Subpart A, General Provisions	004, 010, 020, 021, 029, 030, 041-044, 046-048, 057-061, 064
40 CFR 60, Subpart Y, SOP for Coal Preparation and Processing Plants	010, 029, 030, 046-048
40 CFR 60, Subpart Da, SOP for Electric Utility Steam Generating Units	004
40 CFR 60, Subpart OOO, SOP for Nonmetallic Mineral Processing Plants	020, 021
40 CFR 60, Subpart IIII, SOP for Stationary CI ICE	043, 044, 057, 064, 065
40 CFR 60, Subpart KKKK, SOP for Stationary CT	041, 042, 058-061
40 CFR 60, Subpart TTTT, SOP for GHG Emissions for Electric Generating Units	058-061
40 CFR 63, Subpart A, NESHAP General Provisions	004, 043, 041, 042, 044, 051, 058–061, 063, 064
40 CFR 63, Subpart YYYY, NESHAP for Stationary CT	041 & 042, 058-061
40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE	043, 044, 057, 064, 065

SECTION I. FACILITY INFORMATION.

Regulation	EU Nos.
40 CFR 63, Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters	051, 063
40 CFR 63, Subpart UUUUU, NESHAP: Coal- and Oil-Fired Electric Utility Steam Generating Units with an effective date of April 16, 2015	004
40 CFR 75, Acid Rain Monitoring Provisions	004, 041, 042, 058-061
State Rule Citations	
Chapter 62-214, F.A.C., Requirements for Sources Subject to the Federal Acid Rain Program	004, 041, 042, 058-061
Rule 62-204.800, F.A.C., Federal Regulations Adopted by Reference	004, 010, 020, 021, 029, 030, 041- 044, 046-048, 057-061, 064, 065
Rule 62-212.400, F.A.C., PSD	004, 010, 012-014, 023, 029, 030, 050, 058-061
Rule 62-296.500, F.A.C., Reasonable Available Control Technology (RACT)-Volatile Organic Compounds (VOC) and Nitrogen Oxide (NO _X) Emitting Facilities	032
Rule 62-296.513, F.A.C., Surface Coating of Miscellaneous Metal Parts and Products	032
Rule 62-296.700, F.A.C., RACT Particulate Matter (PM)	004, 048
Rule 62-296.702, F.A.C., Fossil Fuel Steam Generators	004
Rule 62-296.711, F.A.C., Materials Handling, Sizing, Screening, Crushing & Grinding Operations	012-014, 020-021, 029, 030, 048, 050

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The following conditions apply facility-wide to all emission units and activities:

FW1. Appendices. The permittee shall comply with all documents identified in Section V, Appendices, listed in the Table of Contents. Each document is an enforceable part of this permit unless otherwise indicated. [Rule 62-213.440, F.A.C.]

Emissions and Controls

- **FW2.** Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
- **FW3.** General VOC Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, VOC or OS without applying known and existing vapor emission control devices or systems deemed-necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]

{Permitting Note: Nothing is deemed necessary and ordered at this time.}

- **FW4.** General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. Emissions from the following types of activities in Hillsborough County are further subject to a general 5% opacity standard: loading or unloading of materials to or from containers such as rail cars, trucks, ships, storage structures and stockpiles; permanent conveyor systems; storage of materials in structures such as silos or enclosed bins, which have a storage capacity of 50 cubic yards or more; crushing, grinding, sizing and screening operations; and static drop transfer points. These regulations do not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.; and Rule 1-3.52, HCEPC]
- FW5. <u>Unconfined PM</u>. No person shall cause, let, permit, suffer or allow the emissions of unconfined PM from any activity, including vehicular movement; transportation of materials; construction; alteration; demolition or wrecking; or industrially related activities such as loading, unloading, storing or handling; without taking reasonable precautions to prevent such emissions. Reasonable precautions to prevent emissions of unconfined PM at this facility include:
 - a. Chemical or water application to: unpaved roads and parking areas; and unpaved yard areas.
 - b. Paving and maintenance of roads, parking area, and yards.
 - c. Landscaping or planting of vegetation.
 - d. Confining abrasive blasting where possible.
 - e. Other techniques, as necessary.

[Rule 62-296.320(4)(c), F.A.C.; and, proposed by applicant in Title V air operation permit renewal application received September 12, 2024.]

Reports and Fees

See Appendix RR, Facility-wide Reporting Requirements, for additional details and requirements.

FW6. Electronic Annual Operating Report and Title V Annual Emissions Fees. The information required by the Annual Operating Report for Air Pollutant Emitting Facility [Including Title V Source Emissions Fee Calculation] (DEP Form No. 62-210.900(5)) shall be submitted by April 1 of each year, for the previous calendar year, to the Department of Environmental Protection's Division of Air Resource Management. Each Title V source shall submit the annual operating report using the DEP's Electronic Annual Operating Report (EAOR) software, unless the Title V source claims a technical or financial hardship by submitting DEP Form No. 62-210.900(5) to the DEP Division of Air Resource Management instead of using the reporting software. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. Each

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Title V source must pay between January 15 and April 1 of each year an annual emissions fee in an amount determined as set forth in subsection 62-213.205(1), F.A.C. The annual fee shall only apply to those regulated pollutants, except carbon monoxide and greenhouse gases, for which an allowable numeric emission-limiting standard is specified in the source's most recent construction permit or operation permit. Upon completing the required EAOR entries, the EAOR Title V Fee Invoice can be printed by the source showing which of the reported emissions are subject to the fee and the total Title V Annual Emissions Fee that is due. The submission of the annual Title V emissions fee payment is also due (postmarked) by April 1st of each year. A copy of the system-generated EAOR Title V Annual Emissions Fee Invoice and the indicated total fee shall be submitted to: **Major Air Pollution Source Annual Emissions Fee, Post Office Box 3070, Tallahassee, Florida 32315-3070.** Additional information is available by accessing the Title V Annual Emissions Fee On-line Information Center at the following Internet web site:

https://floridadep.gov/air/permitting-compliance/content/title-v-fees. [Rules 62-210.370(3), 62-210.900 & 62-213.205, F.A.C.; and, §403.0872(11), Florida Statutes (2013)]

{Permitting Note: Resources to help the permittee complete the permittee's AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If the permittee have questions or need assistance after reviewing the information posted on the EAOR website, please contact the Department by phone at (850) 717-9000 or email at eaor@dep.state.fl.us.}

{Permitting Note: The Title V Annual Emissions Fee form (DEP Form No. 62-213.900(1)) has been repealed. A separate Annual Emissions Fee form is no longer required to be submitted by March 1st each year.}

FW7. Annual Statement of Compliance. The permittee shall submit an annual statement of compliance to the compliance authority at the address shown on the cover of this permit and to the U.S. EPA at the address shown below within 60 days after the end of each calendar year during which the Title V air operation permit was effective (See also Appendix RR, Conditions RR1 and RR7). The annual statement of compliance can be submitted to the U.S. EPA via the Compliance and Emissions Data Reporting Interface (CEDRI) on EPA's Central Data Exchange (CDX) at https://cdx.epa.gov/. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

U.S. Environmental Protection Agency, Region 4
Atlanta Federal Center
61 Forsyth Street, SW
Atlanta, Georgia 30303
Attn: Air Enforcement Branch

- **FW8.** Prevention of Accidental Releases (Section 112(r) of CAA). If, and when, the facility becomes subject to 112(r), the permittee shall:
 - a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent electronically through EPA's Central Data Exchange system at the following address: https://cdx.epa.gov. Information on electronically submitting risk management plans using the Central Data Exchange system is available at: https://www.epa.gov/rmp. The RMP Reporting Center can be contacted at: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.
 - b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.
 [40 CFR 68]
- **FW9.** Semi-Annual Reports. The permittee shall monitor compliance with the terms and conditions of this permit and shall submit reports at least every six months to the compliance office. Each semi-annual report shall cover the 6-month periods of January 1 June 30 and July 1 December 31. The reports shall be submitted by the 60th day following the end of each calendar half (i.e., March 1st and August 29th of every year). All instances of deviations from permit requirements (including conditions in the referenced

SECTION II. FACILITY-WIDE CONDITIONS.

Appendices) must be clearly identified in such reports, including reference to the specific requirement and the duration of such deviation. If there are no deviations during the reporting period, the report shall so indicate. Any semi-annual reporting requirements contained in applicable federal NSPS or NESHAP requirements may be submitted as part of this report. The submittal dates specified above shall replace the submittal dates specified in the federal rules. All additional reports submitted as part of this report should be clearly identified according to the specific federal requirement. All reports shall include a certification by a responsible official, pursuant to subsection 62-213.420(4), F.A.C. [Rule 62-213.440(1)(b)3.a., F.A.C.; and, 40 CFR 60.19(d), 40 CFR 61.10(h) & 40 CFR 63.10(a)(5)]

For convenience, the below table summarizes the report requirements for the facility.

Overall Facility			
	Overall Facility	Did i G Par	
Report	Reporting Deadline	Related Condition and Regulations	
Title V Semi-Annual Report	Within 60 days after the end	FW9 [Rule 62-213.440(1)(b)3.a,	
•	of each calendar half	F.A.C.; 40 CFR 70.6(a)(3)(iii) (A)]	
Emissions Unit No. 058	- 061 - CTs 5 and 6 and HRSGs	5 and 6	
Report	Reporting Deadline	Related Conditions	
Emissions Performance Test Report	45 days after testing completion	A.35	
Malfunction Excess Emissions Report	Within 1 working day of discovery	A.36	
Excess Emissions Malfunction Report	Quarterly (if requested)	A.36	
NO _X Excess Emissions Report	Semiannual, 30 th day following end of 6-month period	A.37	
CO ₂ Emissions Quarterly Report	Quarterly	A.38	
Notification of Compliance Status	60 calendar days after test	A.39	
Formaldehyde Semiannual Compliance Report	Semiannual	A.40	
Performance Test Report-NESHAP YYYY	60 days after test	A.41	
Emissions Unit No	o. 004 - Steam Generating Unit	4	
Report	Reporting Deadline	Related Conditions	
Malfunction Excess Emissions Report	Quarterly (if requested)	B.44	
Semiannual Reports – NSPS Subpart Da	Semiannual, 30 days at the end of each 6-month period	B.45	
Performance Test & Continuous Monitors Report – NSPS Subpart Da	60 days after test	B.46	
SO ₂ & NO _X Reporting – NSPS Subpart Da	Semiannual, 30 days at the end of the calendar quarter	B.47	
Emissions Monitor Data Report - NSPS Subpart Da	Semiannual	B.48	
SO ₂ & NO _X CEMS Report – NSPS Subpart Da	Semiannual	B.49	
Deviation Report – NESHAP Subpart UUUUU	Quarterly	B.50	
Monitoring System Malfunction Reports- NESHAP Subpart UUUUU	Quarterly	B.51	
Performance Test Reports – NESHAP Subpart UUUUU	Quarterly	B.52	
Electronic Compliance Reports-NESHAP Subpart UUUUU	Quarterly	B.53	
Quarterly CO Report	Quarterly	B.55	
SO ₂ Reporting	Semiannual	B.56	
Actual Emissions Reporting (2024 – 2028)	Annual, within 60 days after end of calendar year	B.57	
Emissions Unit Nos. 041 and 042 - Simple Cycle Combustion Turbine Units 4A and 4B			
Report	Reporting Deadline	Related Conditions	
Malfunction Notification Report	Quarterly (if requested)	C.36	
SIP Excess Emissions Report	Quarterly, within 30 days after	C.37.a	

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	each calendar quarter			
NO _X and SO ₂ Excess Emissions Report	Semiannual	C.37.b		
CO and NOx CEMS RATA Report	Quarterly/Semiannual	C.38.b		
Notification of Compliance Status	60 calendar days after test	C.39.a		
Formaldehyde Semiannual Compliance Report	Semiannual	C.40		
Performance Test Report	60 days after test	C.41		
Actual Emissions Reporting (2019 – 2028)	Annual, 60 days after end of the calendar year	C.42		
Emission Unit No. 032 – Surface Coating and Miscellaneous Metal Parts				
Report Reporting Deadline Related Condition				
Proof of Compliance (EPCHC)	Annually	N.10		
Emission Unit Nos. 051 and 063 – Process Heater Nos. 1 and 2				
Report	Reporting Deadline	Related Conditions		
Tune-Up Compliance Report	Biannual (every 2 years)	P.11.		

(See also Conditions RR2. - RR4. of Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements related to deviations.)

{Permitting Note: EPA has clarified that, pursuant to $40 \, \text{CFR} \, 70.6(a)(3)$, the word "monitoring" is used in a broad sense and means monitoring (i.e., paying attention to) the compliance of the source with all emissions limitations, standards, and work practices specified in the permit.}



Subsection A. Emissions Unit 058 – 061

The Conditions in this section apply to the following emissions units:

	Big Be	end Station Com	nbustion Turb	ines			
EU No.			MW, ISO Conditions at 59°F		t 59°F		
20 110.	Operating Mode	CT No.	MW, Shaft STG MW, Stea	STG MW, Steam	Total MW		
058	Simple-Cycle	CT-5	344		344		
059	Simple-Cycle	CT-6	344		344		
060	Combined-Cycle	CT-5	385	350	1,120		
061		CT-6	385	330	1,120		

These emissions units make up a CCCT generator set. CT-5 and HRSG 5 share a common 350 MW steam turbine-generator (STG) with CT-6 and HRSG 6. Waste heat from CT-5 and CT-6 is routed to HRSG 5 and HRSG 6, respectively, to produce steam, which is fed into the STG. CT-5 and CT-6 can also bypass the HRSG to operate in simple cycle mode. Each CT generator (GE 7HA.02) has a nominal generating capacity of 344 MW in simple-cycle mode and 385 MW in combined-cycle mode. The total nominal generating capacity for the "2-on-1" CCCT set is 1,120 MW when operating in combined-cycle mode. NO_X emissions from each CT are controlled by dry low-NO_X (DLN). When operating in combined-cycle mode, NO_X emissions are further controlled using selective catalytic reduction (SCR).

The nominal design heat input rate to each CT is 3,112 million British thermal units per hour (MMBtu/hour) while operating in simple-cycle mode, based on ambient air temperature of 59 degrees Fahrenheit (°F), 14.7 pounds per square inch (psi) of pressure, the higher heating value (HHV) of natural gas, and 100% load. The nominal design heat input rate to each CT is 3,462 MMBtu/hour while operating in combined-cycle mode, based on ambient air temperature of 59°F, 14.7 psi of pressure, the HHV of natural gas, and 100% load.

CT exhaust exits the CT stack while the CT operates in simple cycle mode and the HRSG stack while the CT operates in combined cycle mode. Nominal exhaust stack for each CT at base load consist of: 142 feet in height, 25 feet in diameter, flow rate of 3,913,022 actual cubic feet per minute (acfm), and exit temperature of 1,094°F. The nominal exhaust stack for each HRSG is: 180 feet in height, and 23 feet in diameter.

{Permitting Note: These emission units are subject to Rule 62-212.400, F.A.C., PSD; Chapter 62-214, F.A.C., Requirements for Sources Subject to the Federal Acid Rain Program; NSPS Subpart A, General Provisions, Subpart KKKK, Standards of Performance for Stationary CT, and Subpart TTTT, Standards of Performance for GHG Emissions for Electric Generating Units, of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b) and (c), F.A.C.; NESHAP Subpart A, General Provisions, and Subpart YYYY, NESHAP for Stationary CT, of 40 CFR 63, adopted and incorporated by reference in Rule 62-204.800(11)(b) & (d), F.A.C.; and 40 CFR 75, Acid Rain.}

Essential Potential to Emit (PTE) Parameters

Camanatina Camanita

A.1. Design Capacity. The nominal generating capacity, ISO conditions at 59°F, of each CT is as follows:

	Generating Capacity	
Unit No.	MW	Description
$058 - 059^{a}$	344	Each CT, Simple-cycle mode.
060 - 061	385	Each CT, Combined-cycle mode.
$060 - 061^{\text{b}}$	1,120	Total combined-cycle system with HRSG and a shared STG.

- a. The permittee shall tune, operate, and maintain two GE 7HA.02 CT.
- b. The HRSG shall be designed to recover exhaust heat energy from one of the two CT and deliver steam to the STG.

[Rules 62-4.160(2), 62-204.800, & 62-210.200(PTE), F.A.C.; and Permit No. 0570039-156-AC]

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- **A.2.** Methods of Operation.
 - a. Fuels. Natural gas, sulfur content of no more than 20 grains per 100 standard cubic feet (gr/100 scf).
 - b. *Performance Curves*. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Permitting and Compliance Authorities. [Rules 62-204.800(8)(b) & 62-210.200(PTE), F.A.C.; 40 CFR 60.4365(a); and Permit No. 0570039-119-AC]
- **A.3.** Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

Control Technology

- **A.4.** Combustion Technology. The permittee shall operate and maintain the DLN combustion system or its equivalent on each CT to control NO_x emissions from the CT. The DLN combustors and automated gas turbine control system shall be tuned to achieve sufficiently low NO_x values to meet the NO_x limits with the additional SCR control technology described below for combined-cycle operation, and without SCR for simple-cycle operation. The system shall be maintained and tuned in accordance with the manufacturer's recommendations or determined best practices. [Permit No. 0570039-119-AC]
- **A.5.** <u>SCR</u>. The permittee shall tune, operate, and maintain an SCR system to control NO_x emissions from each gas turbine for combined-cycle operation. The SCR system shall be operated to achieve the permitted levels for NO_x emissions for combined-cycle operation. The storage of ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68. [Permit No. 0570039-119-AC]
- **A.6.** <u>Circumvention</u>. The permittee shall not circumvent or operate the air pollution control equipment–in such a manner which would violate allowable emission rates established for this unit. [Rule 62-210.650, F.A.C.]
- **A.7.** Good Air Pollution Control Practices.
 - a. *NSPS Subpart KKKK*. The permittee shall operate and maintain each stationary CT, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4333(a)]
 - b. *NESHAP Subpart YYYY*. At all times, the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department 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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6105(c)]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Conditions A.8 - A.11 are based on the specified averaging time of the applicable test method.

- **A.8.** NOx Emissions. As determined by CEMS, NO_x emissions from each CT/HRSG shall not exceed the following:
 - a. Simple Cycle Mode. Based on a 4-hour rolling average:
 - (1) 15 parts per million (ppm) at 15% oxygen (O_2) when operating at >75% peak load.
 - (2) 96 ppm at 15% O_2 when operating at < 75% peak load. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4320, 60.4350(g), & Table 1]
 - b. Combined Cycle Mode. Based on a 30-unit-operating day rolling average:
 - (1) 15 ppm at 15% O_2 when operating at >75% peak load.

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- (2) 96 ppm at 15% O₂ when operating at < 75% peak load. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4320(a), 60.4350(h), & Table 1]
- c. *NO_X Cap.* 1,852 tons/year based on a 12-operating month rolling total from the two turbines, combined, regardless of whether the turbines operate in simple-cycle mode or combined-cycle mode. [Rules 62-210.200(PTE) & 62-212.400(AVOID PSD), F.A.C.; and Permit No. 0570039-156-AC]
- **A.9.** <u>GHG Emissions</u>. As determined by CEMS, carbon dioxide (CO₂) emissions shall not exceed the following:
 - a. NSPS Subpart TTTT.
 - (1) 1,000 pounds per megawatt-hour (lb/MWh) of gross energy output or 1,030 lb/MWh of net energy output, if the CT supplies more than its design efficiency or 50%, whichever is less, times its potential electric output as net-electric sales on both a 12 operating month and a 3-year rolling average basis and combusts more than 90% natural gas on a heat input basis on a 12-operating-month rolling average basis; or
 - (2) 120 lb/MMBtu of heat input, if the CT supplies its design efficiency or 50%, whichever is less, times its potential electric output or less as net-electric sales on either a 12-operating month or a 3-year rolling average basis and combusts more than 90% natural gas on a heat input basis on a 12-operating-month rolling average basis.

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.5520(a)&(b) & Table 2]

{Permitting Note: These emission limits (1 & 2) are applicable at all times of CT operation.}

- b. Simple Cycle Mode.
 - (1) 120 lb/MMBtu on a 12-operating month rolling average basis or a 3-year rolling average basis.
 - (2) Each CT may generate no more than 1,262,701 gross electric output MWh on a 12-operating-month rolling total or a 3-year rolling average basis.
- c. Combined Cycle Mode. 1,000 lb/MWh (based on gross electrical output) on a 12-operating month rolling average basis or a 3-year rolling average basis.

[Rules 62-204.800(8)(b) & 62-210.200(PTE), F.A.C.; 40 CFR 60.5520(a)&(b) & Table 2; and Permit No. 0570039-156-AC]

- **A.10.** <u>SO2 Emissions</u>. As determined by fuel specifications/analysis, sulfur dioxide (SO₂) emissions from each CT shall be limited to one of the following:
 - a. 110 nanograms per Joule (ng/J) (0.90 lb/MWh) gross output; or
 - b. Shall not burn any fuel which contains total potential sulfur emissions in excess of 26 ng SO_2/J (0.060 lb/MMBtu) heat input.

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4330(a)(1)&(2)]

A.11. Formaldehyde Emissions. As determined by stack test, formaldehyde emissions from each CT shall be limited to 91 parts per billion by volume, dry (ppbvd) or less at 15% O₂, except during turbine startup as specified in Condition **A.21**. [Rule 62-204.800(11)(b), F.A.C.; EPA CMS Plan, 7/25/2023; and 40 CFR 63.6100 & Table 1]

Monitoring of Operations

- **A.12.** Monitoring of Operations. The permittee shall monitor and record the operating rate of each CT on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown, malfunction, and DLN tuning or its equivalent). This shall be accomplished by monitoring daily rates of consumption and heat content of fuel in accordance with the provisions of 40 CFR 75, Appendix D. [Rule 62-4.070(3), F.A.C.; and Permit No. 0570039-119-AC]
- **A.13.** Gross Load Monitoring Meter NESHAP Subpart YYYY. As determined by the EPA approved CMS Plan:
 - a. Gross load must be continuously monitored and recorded at least once every 15 minutes during the formaldehyde emission standard compliance demonstration testing in Condition **A.20**, and continuously thereafter, to successfully demonstrate compliance with the formaldehyde emission standard in Condition

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- **A.11**. An hourly averaged gross load must be determined by using all readings taken at least once every 15 minutes during normal operation hour.
- b. Following the formaldehyde emission standard compliance demonstration testing in Condition A.20, the 4 hour rolling average gross load must be continuously monitored and recorded to serve as an indication of compliance status with the formaldehyde emission standard in Condition A.11. The 4-hour rolling average gross load must be determined by computing the 4-hour average using all hourly averaged readings for the current hour and preceding 3-hours of operation.
- c. During normal operation, the turbines must be operated at or above a gross load of 105 MW, which is indicative of lean premix mode of operation to ensure compliance with the EPA approval.
- d. Data collected during periods of startup (e.g., before achieving 105 MW) may not be included in the 4-hour rolling averages used to indicate compliance with the formaldehyde emission standard in Condition A.11. Startup time must not extend longer than the time specified by the manufacturer's standard operating procedure for startups. Startups must be conducted, to the extent possible, in a manner consistent with ensuring that safety and good air pollution control practices for minimizing emissions are followed.
- e. If the permittee discover an additional parameter (or additional parameters), which indicates additional parametric monitoring operating limits are necessary to assure compliance with the formaldehyde emission standard. The permittee shall submit a revised CMS plan petition to the EPA to revise the COMS plan and incorporate the additional operating limits based on the discovery.

[Rule 62-204.800(11)(b), F.A.C.; Approved EPA CMS Plan, 7/25/2023; and 40 CFR 63.6125(b)]

Continuous Emissions Monitoring Requirements

A.14. NOx CEMS.

- a. NO_X and CO_2 Monitors. The permittee shall calibrate, operate, and maintain a CEMS to measure and record the emissions of NO_X from the CT, for both simple-cycle and combined-cycle operation, in terms of the applicable standards in Condition **A.8**.
 - (1) *NO_X Monitor*: Each NO_X monitor shall be certified pursuant to the specifications of 40 CFR 75. Quality assurance procedures shall conform to the requirements of 40 CFR 75. The required relative accuracy test audit (RATA) tests required for the NO_X monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60.
 - (2) Diluent Monitor: The O_2 or CO_2 content of the flue gas shall be monitored at the location where NO_X is monitored to correct the measured emissions rates to 15% O_2 . If a CO_2 monitor is installed, the O_2 content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

[Rules 62-4.070(3), F.A.C.; 40 CFR 75; and Permit No. 0570039-156-AC]

- b. NSPS Subpart KKKK.
 - (1) For the purpose of demonstrating compliance with the NO_X standards in Condition **A.8.a** and **A.8.b**, the permittee shall comply with the following NO_X CEMS requirements:
 - (a) Each NO_X diluent CEMS shall be certified according to Performance Specification 2 (PS 2) in 40 CFR 60 Subpart KKKK, Appendix B, except the 7-day calibration drift is based on unit operating days, not calendar days. With state approval, Procedure 1 in appendix F to 40 CFR 60 Subpart KKKK is not required. Alternatively, a NO_X diluent CEMS that is installed and certified according to 40 CFR 75, Appendix A, is acceptable for use under 40 CFR 60 Subpart KKKK. The RATA of the CEMS shall be performed on a lb/MMBtu basis.
 - (b) As specified in 40 CFR 60.13(e)(2), during each full unit operating hour, both the NO_x monitor and the diluent monitor must complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each 15-minute quadrant of the hour, to validate the hour. For partial unit operating hours, at least one valid data point must be obtained with each monitor for each quadrant of the hour in which the unit operates. For unit operating hours in which required quality assurance and maintenance activities are performed on the CEMS, a minimum of two

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- valid data points (one in each of two quadrants) are required for each monitor to validate the NO_X emission rate for the hour.
- (c) Each fuel flowmeter shall be calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of 40 CFR 75, Appendix D, are acceptable for use under 40 CFR 60 Subpart KKKK.
- (d) Each watt meter, steam flow meter, and each pressure or temperature measurement device shall be maintained, and operated according to manufacturer's instructions.
- (e) The permittee shall develop and keep on-site a quality assurance (QA) plan for all of the continuous monitoring equipment described in paragraphs **b.(1)(a), (c)**, and **(d)** of this condition. For the CEMS and fuel flow meters, the permittee shall, with state approval, satisfy the requirements of paragraph ((e)) by implementing the QA program and plan described in 40 CFR 75, Appendix B, Section 1.
- (2) CEMS Data. For purposes of identifying excess emissions in accordance with 40 CFR 60, Subpart KKKK:
 - (a) All CEMS data must be reduced to hourly averages as specified in 40 CFR 60.13(h).
 - (b) For each unit operating hour in which a valid hourly average, as described in paragraph **c.(1)(b)** of this condition, is obtained for both NO_x and diluent monitors, the data acquisition and handling system must calculate and record the hourly NO_x emission rate in units of ppm or lb/MMBtu, using the appropriate equation from Method 19 in 40 CFR 60, Appendix A. For any hour in which the hourly average O₂ concentration exceeds 19.0% O₂ (or the hourly average CO₂ concentration is less than 1.0% CO₂), a diluent cap value of 19.0% O₂ or 1.0% CO₂ (as applicable) may be used in the emission calculations.
 - (c) Correction of measured NO_x concentrations to 15% O₂ is not allowed.
 - (d) If a NO_x diluent CEMS has been installed and certified to meet the requirements of 40 CFR 75, states can approve that only quality assured data from the CEMS shall be used to identify excess emissions under 40 CFR 60, Subpart KKKK. Periods where the missing data substitution procedures in 40 CFR 75, Subpart D are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under 40 CFR 60.7(c).
 - (e) All required fuel flow rate, steam flow rate, temperature, pressure, and megawatt data must be reduced to hourly averages.
- (f) Calculate the hourly average emission rates as specified in 40 CFR 4350(f)-(h). [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4345 & 60.4350(a) (h)]

A.15. CO₂ CEMS – NSPS Subpart TTTT.

- a. The permittee shall certify the monitoring systems required for quantifying CO₂ emissions from each CT in accordance with the applicable requirements in 40 CFR 60, Subpart TTTT, and 40 CFR 75.
- b. The CO₂ CEMS shall be quality assured in accordance with the applicable requirements in 40 CFR 75. The CO₂ CEMS shall be capable of producing hourly determinations of CO₂ mass emissions in tons/hour.
- c. The permittee shall provide notifications as specified in 40 CFR 75.61 for any event related to the continuous measurement of CO₂.

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.5535]

A.16. CEMS and CO₂ Monitor Annual Emissions Requirement. The owner or operator shall use data from the NOx CEMS and CO₂ monitoring system when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rule 62-210.370(3), F.A.C. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit. [Rules 62-210.200, and 62-210.370(3), F.A.C.; and Permit No. 0570039-119-AC]

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Test Methods and Procedures

A.17. <u>Test Methods</u>. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments	
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content	
7E	Determination of NO _X Emissions from Stationary Sources (Instrumental Analyzer Procedure)	
19	Determination of SO ₂ Removal Efficiency and PM, SO ₂ , and NO _X Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)	
20	Determination of NO _X , SO ₂ and Diluent Emissions from Stationary Gas Turbines	
320	Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy	
ASTM D6348-12e 1 Determination of Gaseous Compounds by Extractive Direct Interface FTIR Spectroscopy.		

The methods are described in 40 CFR 60 and 63, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used for compliance testing unless prior written approval is received from the administrator of the Department's Permit Review Section in accordance with an alternate sampling procedure pursuant to 62-297.620, F.A.C. [Rules 62-204.800(8)(b) & (11)(b), F.A.C.; 40 CFR 60, Appendix A; 40 CFR 63.6120 & Table 3; and Permit No. 0570039-119-AC]

- **A.18.** Test Notification Requirements NESHAP Subpart YYYY. The permittee shall notify the Compliance Authority in writing of intention to conduct a performance test for formaldehyde at least 60 calendar days before the performance test is scheduled to begin. If a scheduled emissions test needs to be rescheduled, the owner or operator shall submit a revised notification at least seven days prior to the rescheduled emissions test date or arrange a rescheduled test date with the Compliance Authority by mutual agreement. [Rules 62-204.800(11)(b) & 62-297.310(9), F.A.C.; and 40 CFR 63.6145(e)]
- **A.19.** Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.}

- **A.20.** Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), one of the CT shall be tested to demonstrate compliance with the emission standard for formaldehyde in Condition **A.11** in accordance with Condition **A.21**.
 - a. Formaldehyde Emissions.
 - (1) The permittee shall verify the gross load meter's accuracy once annually according to the manufacturers recommended procedures.
 - (2) The permittee shall alternate the CT that is tested each year. If any test results reveal emissions exceeding 75% of the formaldehyde emissions standard in Condition **A.11**, the annual testing shall revert back to testing both CT. If any test reveals a violation of the formaldehyde emissions standard in Condition **A.11**, the remaining unit shall be tested as expeditiously as practicable and revert back to testing both combustion turbines annually.
 - b. NO_X Emissions.
 - (1) The NO_X CEMS shall be used to demonstrate compliance with the NO_X emission limits in Condition **A.8**.

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- (2) NSPS Subpart KKKK. For multiple emissions standards in Condition **A.8.a** and **A.8.b**, 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.
- c. CO_2 Emissions. The CO_2 CEMS is used to demonstrate compliance with the CO_2 emission limits in Condition **A.9**.
- d. SO_2 Emissions. The permittee shall demonstrate annual emissions of SO_2 meeting the requirements specified in Condition **A.24**.

[Rules 62-204.800(8)(b) & (11)(b) and 62-297.310(8), F.A.C.; EPA CMS Plan, 7/25/2023; FDEP Stack Test Waiver, 4/24/2024; 40 CFR 60.4380(b)(3); and 40 CFR 63.6120 & Table 3]

- **A.21.** Formaldehyde Compliance Requirements NESHAP Subpart YYYY. The permittee shall conduct each performance test for formaldehyde in accordance with Table 3 of 40 CFR 63, Subpart YYYY, and the procedures outlined in 40 CFR 63.6120. For the Formaldehyde emission standard compliance demonstration testing event in Condition **A.20**, the permittee shall meet the following:
 - a. Testing shall be performed in combined cycle mode using the procedures in 40 CFR 63.6120 at high load, defined as 100% plus or minus 10%.
 - b. Gross load must be continuously monitored and recorded at least once every 15 minutes during the formaldehyde emission standard compliance demonstration testing in Condition **A.20**.
 - c. Four separate test runs for each testing event must be conducted. Each test run must last at least 1-hour. The 4-hour average gross load must be determined by computing the 4-hour average using all hourly averaged readings taken during the testing event.

[Rule 62-204.800(11)(b), F.A.C.; Approved EPA CMS Plan, 7/25/2023; and 40 CFR 63.6120, 63.6125(b) & Table 3]

- **A.22.** CO₂ Compliance Requirements NSPS Subpart TTTT. The permittee demonstrates compliance with the CO₂ limits in Condition **A.9** with the CO₂ CEMS. The CO₂ CEMS meets the applicable requirements in Condition **A.15**. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.5535] {Permitting Note: The facility is currently using the CO₂ CEMS to demonstrate compliance with the CO₂ limits.}
- **A.23.** CT Startup NESHAP Subpart YYYY. Startup begins at the first firing of fuel in the stationary CT. For simple cycle turbines, startup ends when the stationary CT has reached stable operation or after 1 hour, whichever is less. For combined cycle turbines, startup ends when the stationary CT has reached stable operation or after 3 hours, whichever is less. Turbines in combined cycle configurations that are operating as simple cycle turbines must meet the startup requirements for simple cycle turbines while operating as simple cycle turbines. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6175]
- **A.24.** Fuel Sulfur Monitoring NSPS Subpart KKKK. The permittee shall monitor the total sulfur content of the fuel being fired in the turbine using one of the following methods.
 - a. The use of a current, valid purchase contract, tariff sheet, or transportation contract for the fuel specifying the maximum total sulfur content of all fuels combusted in the affected facility. Alternately, the fuel sampling data specified in Section 2.3.1.4 or 2.3.2.4 of Appendix D to 40 CFR 75 may be used.
 - b. Periodically fuel sampling specified in 40 CFR 60.4415(a)(2). [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4415(a)(1)&(2)]
- **A.25.** Tuning. The following methods of tuning, which are necessary to maintain proper operation of the combustion turbines, are authorized modes of operation:
 - a. *DLN Tuning*. "DLN Tuning" means operating the gas turbine at intermittent loads throughout the full load range in order to adjust and tune the DLN combustion system. DLN tuning shall be conducted in accordance with manufacturer's recommendations (or industry standards). {Permitting Note: For example, a major tuning session would occur after combustor change-out.}
 - b. *Other Tuning*. "Other tuning" shall mean any on-line adjustments necessary following maintenance work to allow the units to operate to manufacturers' recommendations or industry standards.

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- c. Compressor Blade Drying. Following a compressor blade wash in accordance with the manufacturer's recommendations (or industry standards), the permittee may operate a combustion turbine at very low loads to heat and dry the compressor blades. {Permitting Note: A CT would typically operate at approximately 10% of base load or less to perform compressor blade drying.}
- d. Over Speed Trip Test. As a periodic maintenance practice, the permittee may perform over speed trip tests in accordance with the manufacturer's recommendations (or industry standards). {Permitting Note: During this test, the gas turbine is operated at full speed, no load for approximately 5 to 6 hours. The unit is gradually accelerated to 110% speed (3,960 rpm) to initiate a trip and then coasts down normally. Over speed trip tests are typically performed after a long outage or a major component overhaul.} {Permitting Note: If emissions exceed an applicable 40 CFR 60, Subpart KKKK, standard during one of these tuning events, the excess emissions must be included in the excess emissions report required under 40 CFR 60, Subpart KKKK, and Condition A.37.} [Rule 62-4.070(3), F.A.C.; and Permit No. 0570039-119-AC]

Recordkeeping and Reporting Requirements

- **A.26.** CO2 Records NSPS Subpart TTTT. If the permittee is demonstrating compliance with the fuel monitoring requirements to demonstrate compliance with the CO₂ emission standard in Condition **A.9.a(2)** and **b(1)**, the permittee shall keep the following records:
 - a. Electric Sales.
 - (1) Maintain records of electric sales to determine the applicable subcategory and is subject to a heat input-based standard in Condition **A.9.a(2)** and **b(1)**. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.5520(d) & 60.5560(h)]
 - (2) Records of the applicable data recorded, and calculations performed that the permittee used to determine the permittee's affected EGU's gross or net energy output for each operating month. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.5560(d)]
 - b. CO2 Mass Emissions Standard Records. Calculations performed to assess compliance with the applicable CO₂ mass emissions standards in Condition **A.9**. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.5560(f)]
 - c. *Acid Rain Program.* The permittee shall follow the applicable recordkeeping requirements and maintain records as required under 40 CFR 75, Subpart F. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.5560(b)(1)]
 - d. *Record Retention*. The permittee's records shall be in a form suitable and readily available for expeditious review for 3-years after the date of conclusion or each compliance period and on-site for at least 2-years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 60.7. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.5565]
- **A.27.** Monthly Operations Summary. The permittee shall record the following in a written or electronic log for each CT for the previous month of operation: hours of operation; fuel consumption (MMBtu); electricity (MWh) generated; mass of CO₂ emitted; and to update the rolling total and averaging times demonstrating compliance with limits in Condition **A.9.b** and **A.9.c**. Information recorded and stored as an electronic file shall be available for inspection by the Compliance Authority. The fuel consumption shall be monitored in accordance with the provisions of 40 CFR 75, Appendix D. [Rules 62-4.070(3) & 62-204.800(8)(b), F.A.C.; 40 CFR Subpart TTTT; and Permit No. 0570039-156-AC]

A.28. Fuel Sulfur Records.

a. Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D4468-85, D5504-01, D6228-98 and D6667-01, D3246-81 or more recent versions. These methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75, Appendix D. [Rules 62-4.070(3) & 62-4.160(15), F.A.C.; and Permit No. 0570039-119-AC]

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- b. *NSPS Subpart KKKK*. The permittee shall demonstrate compliance with the SO₂ emission limit in Condition **A.10** by obtaining the fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, where the total sulfur content for natural gas use is 20 gr/100 scf of sulfur. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4365(a)]
- **A.29.** Gross Load Meter Records. The permittee shall maintain records of the annual verifications for inspection purposes verifying the gross load meter's accuracy according to the manufacturers recommended procedures. [Rule 62-204.800(11)(b), F.A.C.; EPA CMS Plan, 7/25/2023; and 40 CFR 63.6125(b)]
- **A.30.** Performance Test Records NESHAP Subpart YYYY. The permittee shall record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the permittee shall make available to the Department such records as may be necessary to determine the conditions of performance tests. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6120(c)]
- **A.31.** Records Required NESHAP Subpart YYYY. The permittee shall keep the records as described in paragraphs **a** thorough **c** of this condition.
 - a. Compliance Notifications.
 - (1) A copy of each notification and report that was submitted to comply with 40 CFR 63, Subpart YYYY, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
 - (2) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
 - (3) Records of all maintenance on the air pollution control equipment as required in 40 CFR 63.10(b)(2)(iii).
 - (4) Records of the date, time, and duration of each startup period, recording the periods when the affected source was subject to the standard applicable to startup.
 - [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6155(a)(1),(2),(5)&(6)]
 - b. Deviation Notifications.
 - (1) Record the number of deviations. For each deviation, record the date, time, cause, and duration of the deviation.
 - (2) For each deviation, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
 - (3) Record actions taken to minimize emissions in accordance with 40 CFR 63.6105(c), and any corrective actions taken to return the affected unit to its normal or usual manner of operation. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6155(a)(7)]
 - c. *EPA CEDRI*. Any records required to be maintained by 40 CFR 63, Subpart YYYY, that are submitted electronically via the EPA's CEDRI may be maintained in electronic format following the procedures of 40 CFR 63.6155(d). [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6155(d)]
 - d. Record Retention.
 - (1) The permittee shall maintain all applicable records in such a manner that they can be readily accessed and are suitable for inspection according to 40 CFR 63.10(b)(1).
 - (2) As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
 - (3) The permittee shall retain records of the most recent 2 years on site or the records must be accessible on site. The records of the remaining 3 years may be retained off site.
 - [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6160]
- **A.32.** Acid Rain Records. For affected EGUs subject to the Acid Rain Program, the permittee shall follow the applicable recordkeeping requirements and maintain records as required under 40 CFR 75, Subparts F and G. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.5555(c)(1) & 60.5560(b)(1)] {Permitting Note: A CT is considered an EGU under NSPS Subpart TTTT.}

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A.33. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions
Emissions Performance Test Reports	45 days after testing completion	A.35
Malfunction Excess Emissions Notification	Within 1 working day of discovery	A.36
Excess Emissions Malfunction Report	Quarterly (if requested)	A.36
NO _X Excess Emissions Report	Semiannual	A.37
CO ₂ Emissions Quarterly Report-NSPS TTTT	Quarterly	A.38
Notification of Compliance Status-NESHAP YYYY	60 calendar days after test	A.39
Formaldehyde Semiannual Compliance Report- NESHAP YYYY	Semiannual	A.40
Performance Test Report-NESHAP YYYY	60 days after test	A.41

[Rule 62-213.440(1)(b), F.A.C.]

- **A.34.** Notification Requirements. The permittee shall notify the Compliance Authority within one working day of discovering any emissions that demonstrate non-compliance for a given averaging period. [Permit No. 0570039-119-AC]
- **A.35.** Emissions Performance Test Reports. A report indicating the results of any required emissions performance test shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Compliance Authority to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(10), F.A.C. (see **TR9** in Appendix TR). [Rule 62-297.310(10), F.A.C.]
- **A.36.** <u>Malfunction Excess Emissions Notification and Report.</u> In case of excess emissions resulting from malfunctions, the permittee shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(5), F.A.C.]
- A.37. NOx Excess Emissions Report.
 - a. $\overline{NO_X CEMS NSPS Subpart KKKK}$. Each CT required to continuously monitor NO_X emissions in Condition **A.14.b** or to periodically determine the fuel sulfur content in Condition **A.21**, the permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including start-up, shutdown, and malfunction. The semiannual reports required under 40 CFR 60.7(c) shall be postmarked by the 30th day following the end of each 6-month period. [Rule 62-204.800(8)(b)&(c), F.A.C.; 40 CFR 60.7(c), and 40 CFR 60.4375(a)]
 - b. *NO_X Cap*. To demonstrate compliance with the PSD avoidance NO_X Cap in Condition **A.8.c**, the semiannual report shall also include the 12-month-total NO_X emissions for all six of the 12-month rolling compliance periods that end during the period covered by the report. [Rule 62-4.130, F.A.C.; and Permit No. 0570039-119-AC]
- **A.38.** CO₂ Emissions Quarterly Report NSPS Subpart TTTT. The permittee shall submit quarterly reports no later than 30 days after the end of each quarter with the following information using the ECMPS Client Tool provided by the Clean Air Markets Division in the Office of Atmospheric Programs of EPA:
 - a. *Rolling Average*. Each rolling average CO₂ mass emissions rate for which the last (twelfth) operating month in a 12-operating-month compliance period falls within the calendar quarter. The permittee shall calculate each average CO₂ mass emissions rate for the compliance period according to the procedures in 40 CFR 60.5540. The permittee shall report the dates (month and year) of the first and twelfth operating

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- months in each compliance period for which a CO₂ mass emissions rate calculation is performed. If there are no compliance periods that end in the quarter, the permittee shall include a statement to that effect.
- b. *Violations*. If one or more compliance periods end in the quarter, the permittee shall identify each operating month in the calendar quarter where the EGU violated the applicable CO₂ emission standard.
- c. *No Violations*. If one or more compliance periods end in the quarter and there are no violations for the EGU, the permittee shall include a statement indicating this in the report.
- d. *Percentage of Valid Operating Hours*. The percentage of valid operating hours in each 12-operatingmonth compliance period is calculated as the total number of valid operating hours (as defined in 40 CFR 60.5540(a)(1)) in that period divided by the total number of operating hours in that period, multiplied by 100%).
- e. CO₂ Emissions Standard. Consistent with 40 CFR 60.5520, the following shall occur:
 - (1) The CO₂ emissions standard in Condition **A.9.a**, **A.9.a**(2), **A.9.b.**(1) and **A.9.c** with which the EGU shall comply.
 - (2) An indication whether or not the hourly gross or net energy output (Pgross/net) values used in the compliance determinations are based solely upon gross electrical load.
- f. *Final Quarterly Report*. In the final quarterly report of each calendar year, the permittee shall include the following:
 - (1) Consistent with 40 CFR 60.5520, gross energy output or net energy output sold to an electric grid, as applicable to the units of the emission standard in Condition **A.9.a**, and **A.9.c**, over the four quarters of the calendar year.
- (2) The potential electric output of the EGU. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.5555(a)&(b)]
- **A.39.** Notification of Compliance Status Report NESHAP Subpart YYYY. In order to comply with the emission limitation for formaldehyde in Condition **A.11**, the permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For each performance test required to demonstrate compliance with the emission limitation for formaldehyde, the permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6145(f)]
- **A.40.** Formaldehyde Semiannual Compliance Report NESHAP Subpart YYYY. The permittee shall submit a semiannual compliance report with the following information included:
 - a. Compliance Report.
 - (1) Company name and address.
 - (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - (3) Date of report and beginning and ending dates of the reporting period. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(a)(1)-(3)]
 - b. *Deviation in Semiannual Compliance Report*. Report each deviation in the semiannual compliance report following the procedures in 40 CFR 63.6150(a)(5). [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(a)(5)]
 - c. Submitting the Semiannual Compliance Report. The dates of submittal for the semiannual compliance report are provided in 40 CFR 63.6150(b) of NESHAP Subpart YYYY. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(b)]
 - d. *CEDRI*. If the permittee is required to submit reports following the procedure specified in 40 CFR 63.6150(g), the permittee shall submit reports to the EPA via CEDRI, which can be accessed through the EPA's CDX (https://cdx.epa.gov/). [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(g)]
- **A.41.** Performance Test Report NESHAP Subpart YYYY. The permittee shall within 60 days after the date of completing each performance test required by 40 CFR 63, Subpart YYYY, the permittee shall submit the

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results of the performance test as specified in Condition A.39 following the procedures specified in paragraphs a through c of this condition.

- a. Test Methods Supported by EPA's ERT. Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-tool-ert) at the time of the test. Submit the results of the performance test to the EPA via the CEDRI, following the procedures in 40 CFR 63.6150(f)(1).
- b. Test Methods Not Supported by EPA's ERT. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included following the procedures of 40 CFR 63.6150(f)(2).
- c. Confidential Business Information (CBI). If the permittee claims some of the information submitted under paragraph **a** of this condition is CBI, the permittee shall submit a complete file, including information claimed to be CBI, to the EPA, and following the procedures of 40 CFR 63.6150(f)(3). [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(f)]
- d. *EPA System Outage*. If the permittee fails to timely comply with the reporting requirement through CEDRI in the EPA's CDX due to an EPA system outage, the facility must follow the procedures in 40 CFR 63.6150(h). [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(h)]
- e. *Force Majeure*. If the permittee fails to timely comply with the reporting requirement through CEDRI in the EPA's CDX due to a claim of force majeure, the facility must follow the procedures in 40 CFR 63.6150(i). [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(i)]
- **A.42.** Other Reporting Requirements. See Appendix RR, Facility-wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

Other Requirements

- **A.43.** NSPS Provisions. These emission units are subject to the applicable requirements of NSPS Subpart A, General Provisions, Subpart KKKK, Standards of Performance for Stationary CT, and Subpart TTTT, Standards of Performance for GHG Emissions for Electric Generating Units, of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C. [Rule 62-204.800(8)(b) & (c), F.A.C.; and 40 CFR 60 Subparts A, KKKK and TTTT]
- **A.44.** NESHAP Provisions. These emission units are subject to the appliable requirements of NESHAP Subpart A, General Provisions, and Subpart YYYY, Stationary CT. of 40 CFR 63, adopted and incorporated by reference 62-204.800(11)(b), F.A.C. [Rule 62-204.800(11)(b) & (d), F.A.C.; and 40 CFR 63 Subparts A and YYYY]
- **A.45.** Acid Rain Program. The CTs shall meet the applicable requirements of the Acid Rain Monitoring Provisions: Acid Rain Phase II SO₂ and Acid Rain Phase II NOx (40 CFR 75), adopted and incorporated in Rule 62-204.800, F.A.C. [Rule 62-204.800, F.A.C.; and 40 CFR 75]

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Subsection B. Emissions Unit 004

The Conditions in this section apply to the following emissions unit:

EU No	Brief Description
004	Steam Generating Unit No. 4

Unit 4 is fired with natural gas only, solid fuel only, or co-fired natural gas and solid fuels consisting of: coal, petroleum coke with a maximum of 20% by weight, solid fuel blends or solid fuel residual blends. Unit 4 is a 4,330 MMBtu/hour, dry-bottom tangentially fired utility boiler manufactured by Combustion Engineering. The generator nameplate capacity is 486 MW. PM emissions generated during the operation of the unit are controlled by a dry electrostatic precipitator (ESP) manufactured by Belco with a control efficiency of 99.7%. SO₂ emissions are controlled by wet FGD equipment installed in 1995 and manufactured by Research-Cottrell. NO_x emissions are controlled by low-NO_x burners (LNB), a separate overfire air system (SOFA) and SCR system. The SCR system was installed on May 26, 2007. The exhaust stack (BB-04) is equipped with a NO_x and SO₂ CEMS to continuously monitor emissions of NO_x and SO₂. Unit 4 began commercial operation in 1985.

Unit 4 nominal stack (BB-004) parameters are: 490 feet in height; 24 feet in diameter; exit temperature of 127°F; and actual stack gas flow rate of 1,614,250 acfm.

{Permitting Note: This emission unit is subject to Rule 62-212.400, F.A.C., PSD; Rule 62-296.700, F.A.C., RACT PM; NSPS Subpart A, General Provisions, and Subpart Da, Standards of Performance for Electric Utility Steam Generating Units, of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b) and (c), F.A.C.; NESHAP Subpart A, General Provisions, and Subpart UUUUU, NESHAP: Coal-and Oil-Fired Electric Utility Steam Generating Units; of 40 CFR 63, adopted and incorporated by reference in Rule 62-204.800(11)(b) and (d), F.A.C.; Power Plant Sitting Certification, PA 79-12; and 40 CFR 75, Acid Rain.}

Essential PTE Parameters

B.1. <u>Design Capacity</u>. The maximum allowable heat input rate is as follows:

Unit No.	MMBtu/hour Heat Input	Fuel Type
004	4 330	Solid Fuels and Natural Gas

This permitted heat input rate is based on the original design of the unit for firing coal with a certain LHV that was used to design the boiler. At any given time, the actual heat input rate is a function of the actual demand load, the coal mass firing rate, and the fuel properties of the coal being fired at that time. {Permitting Note: For purposes of the Acid Rain program, the actual heat input rate of each of the unit is reported based on the measured exhaust gas flow rate. According to the applicant the Acid Rain CEMS at this site have historically predicted higher heat input rates than methods based on the mass flow and fuel properties of coal.} [Rules 62-4.160(2), 62-210.200(PTE) & 62-212.300(1)(e), F.A.C.; and Permit No. 0570039-091-AC]

- **B.2.** Emissions Unit Operating Rate Limitation during Testing. Testing of emissions shall be conducted with the emissions unit operating at the testing capacity as defined below. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rules 62-297.310(3), F.A.C.]
- **B.3.** Emissions Unit Operating Rate Limitation after Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]
- **B.4.** TECO, Polk Power Station Coal Residual: The permittee shall not fire coal residual from the TECO, Polk Power Station. Coal residual is no longer available at Polk Power Station as a supplementary fuel. [Rules 62-4.070 & 62-210.200(PTE), F.A.C.; and Permit No. 0570039-156-AC]

Subsection B. Emissions Unit 004

B.5. Methods of Operation.

- a. Fuels.
 - (1) Operating Conditions.
 - (a) Normal Operation. The fuels that are allowed to be burned in this unit are:
 - i. Natural gas.
 - ii. Solid fuels consist of:
 - A. Coal,
 - B. Coal blends.
 - C. Coal/petroleum coke blend containing a maximum of 20% petroleum coke by weight,
 - D. Coal blended with coal residual, or
 - E. Coal/petroleum coke blend further blended with coal residual.
 - F. Petroleum coke content of any fuel blend shall not exceed 20% by weight.
 - iii. Solid fuels co-fired with natural gas.
 - (b) Startup, Shutdown, Flame Stabilization. Natural gas.
 - (c) Other Operations.
 - i. Raw coal residual.
 - ii. Supplemental material injection may be injected with the following material as needed for boiler conditioning and energy recovery purposes:
 - A. Magnesium oxide, limestone and fluxing agents may be injected as needed for boiler conditioning.
 - B. Reinjection of on-site generated fly ash for energy recovery.
 - (2) Natural Gas Capacity Unit 4. The maximum amount of natural gas that may be burned at any time in the boiler and two process heaters, combined, is physically limited to 12,000 MMBtu/hour, due to the existing natural gas distribution system capacity at the Big Bend Station.
- b. Evaporation of Excess Recycle Water. A maximum of 730 million gallons/year of recycle water may be evaporated in Unit 4, to maintain the water balance at the Big Bend Station.

{Permitting Note: "Flame Stabilization" is defined as the use of natural gas to stabilize a flame during times of unexpected poor coal quality or equipment failure such as coal piping pluggage. Flame stabilization due to poor coal quality occurs when coal is wet or does not provide the necessary heat to maintain a stable flame. In this situation, natural gas is combusted to provide the additional required heat input to maintain a stable flame. Flame stabilization due to equipment failure occurs when coal piping is plugged, or equipment is otherwise damaged, that results in an inconsistent amount of coal reaching the burners. Under certain conditions, this may result in the burners intermittently seeing large amounts of fuel at one time, causing a potentially explosive flame "puff". In this situation, natural gas must be used for stabilization to prevent flame "puffing" and ensure safe operation. Combustion of natural gas is also necessary during periods of load change to initialize and stabilize the flame until coal flow to the burners reaches steady state. As defined in 62-210.700(3), F.A.C., load change occurs when the operational capacity of a unit is in the 10% to 100% capacity range, other than startup or shutdown, which exceeds 10% of the unit's rated capacity and which occurs at a rate of 0.5% per minute or more.}

[Rules 62-4.070(1) & (3), 62-4.160(2), 62-210.200(PTE) & 62-213.410, F.A.C.; and Permit Nos. 0570039-120-AC & 0570039-127-AC]

B.6. Hours of Operation. These emissions units may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.]

Control Technology

B.7. Low NOx Burners. Unit 4 shall be operated using the LNB and in accordance with the operational procedures that have been developed to minimize NO_x emissions. The permittee shall adhere to good combustion practices to achieve the Best Available Control Technology (BACT) CO emissions limits. [Rules 62-4.070 & 62-212.400(BACT), F.A.C.; and Permit Nos. 0570039-014-AC & 0570039-027-AC (PSD-FL-390)]

Subsection B. Emissions Unit 004

- **B.8.** Separate Overfire Air System. Unit 4 shall be operated using the SOFA and in accordance with the operational procedures that have been developed to minimize NO_x emissions. The permittee shall adhere to good combustion practices to achieve the BACT CO emissions limits. [Rules 62-4.070 & 62-212.400(BACT), F.A.C.; and Permit Nos. 0570039-014-AC & 0570039-027-AC (PSD-FL-390)]
- **B.9.** SCR System.
 - a. The permittee shall operate and maintain the SCR systems for NO_x control.
 - b. The permittee shall operate and maintain the SCR system in accordance with the SCR system supplier's recommendations or in accordance with methods established by the owner/operator through site-specific testing, including operating the SCR system between minimum and maximum operating temperatures, which have been demonstrated by the applicant to assure compliance with the applicable emissions limits.
 - c. The partial SCR system maintenance bypass duct shall be normally closed except during maintenance periods.
 - [Rule 62-4.070(3), F.A.C.; and Permit Nos. 0570039-020-AC, 0570039-026-AC, & 0570039-053-AC]
- **B.10.** FGD System. The permittee shall operate and maintain the FGD systems for SO₂ control. The FGD system is not required to operate when firing natural gas exclusively. At all times, the permittee shall operate the wet FGD technology and the SO₂ CEMS installed on the EGU, when firing coal, consistent with Condition **B.14**. [Rules 62-204.800(11)(b) and 62-212.400(BACT), F.A.C.; 40 CFR 63.9991(c)(2); and Permit Nos. 0570039-003-AC & 0570039-127-AC]
- **B.11.** ESP. The permittee shall operate and maintain the ESP for PM control. The ESP is not required to operate when firing natural gas exclusively. [Rule 62-212.400(BACT), F.A.C.; and Permit Nos. PSD-FL-040 & 0570039-127-AC]
- **B.12.** Control Device Operation. All air pollution control devices shall be in operation according to manufacturer's recommendations whenever the boiler is in operation. {Permitting Note: Under current permitted ductwork configuration, the air pollution control devices cannot be physically bypassed. In the event of a control device malfunction resulting in excess emissions beyond the allowable periods established for this unit, the associated boiler shall be removed from service until such time that the control device resumes normal operation.} [Rule 62-4.070, F.A.C.; and Permit No. 0570039-120-AC]
- **B.13.** <u>Circumvention</u>. The permittee shall not circumvent or operate the air pollution control equipment–in such a manner which would violate allowable emission rates established for this unit. [Rule 62-210.650, F.A.C.]
- **B.14.** Good Air Pollution Control Practices NESHAP Subpart UUUUU. At all times the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the EPA Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source). [Rule 62-204.800(11)(b), F.A.C.; and 63.10000(b)]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Conditions B.15 - B.20 are based on the specified averaging time of the applicable test method.

- **B.15.** CO Emissions. As determined by CEMS, CO emissions shall not exceed 0.20 lb/MMBtu heat input on a heat input weighted 30-boiler operating day rolling average. {Permitting Note: For informational purposes, the CO limit equates to 866 lb/hour and 3,793.1 tons/year.} [Rule 62-212.400(BACT), F.A.C.; and Permit No. 0570039-027-AC (PSD-FL-390)]
- **B.16.** NO_X Emissions. As determined by CEMS, NO_X emissions shall not exceed the following: a. *Solid Fuels*.

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- (1) 0.10 lb/MMBtu heat input based on a 30-day rolling average. {Permitting Note: For informational purposes, the NO_x limit equates to 433 lb/hour and 1,896.5 tons/year.} [Rule 62-213.440, F.A.C.; and Permit No. 0570039-060-AC]
- (2) 0.60 lb/MMBtu (260 nanograms per Joule (ng/J)) based on a 30-boiler operating day rolling average. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.44Da(a)(1)]
- b. *Gaseous Fuels*. 0.20 lb/MMBtu (86 ng/J) based on a 30-boiler operating day rolling average. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.44Da(a)(1)]
- c. Fuels Combusted Simultaneously. The emission limit shall be calculated based on a 30-boiler operating day rolling average as follows:

$$E_n = \frac{0.20w + 0.60z}{100}$$

Where:

- En = Applicable NO_x emissions limit when natural gas and bituminous coal fuel blends are combusted simultaneously (lb/MMBtu heat input);
- w = Percentage of total heat input derived from the combustion of fuels subject to the 0.20 lb/MMBtu heat input standard for natural gas fuel;
- z = Percentage of total heat input derived from the combustion of fuels subject to the 0.60 lb/MMBtu heat input standard for coal fuel (bituminous);

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.44Da(a)(2)]

- **B.17.** SO₂ Emissions. As determined by CEMS, SO₂ emissions shall not exceed the following:
 - a. All Fuels.
 - (1) 0.82 lb/MMBtu heat input and 10% of the potential combustion concentration (90% reduction) based on a 30-day rolling average. {Permitting Note: For informational purposes, the SO₂ limit equates to 3,551 lb/hour and 15,553.4 tons/year.} [Rules 62-4.070(1)&(3) & 62-4.080(1), F.A.C.; and Permit No. 0570039-071-AC (PSD-FL-040B)]
 - (2) 0.20 lb/MMBtu based on a heat input-weighted 30-boiler operating day rolling average. [Florida Regional Haze Plan; and Permit No. 0570039-129-AC]
 - (3) SO_2 Cap. 2,156 lb/hour based on a 30-boiler operating day rolling average including startup and shutdown. [Rules 62-4.070(1)&(3) & 62-4.080(1), F.A.C.; Permit No. 0570039-120-AC]
 - b. Solid Fuels-Coal.
 - (1) 1.20 lb/MMBtu (520 ng/J) heat input and 10% of the potential combustion concentration (90% reduction) based on a 30-day rolling average. *[Permitting Note: Compliance with this emission limit will be demonstrated by complying with the 0.82 lb/MMBtu SO*₂ *limit.}* [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.43Da(a)(1)]
 - (2) 0.20 lb/MMBtu or 1.5 lb/MWh based on a heat input-weighted 30-day rolling average. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.9991 & Table 2] {Permitting Note: The facility has chosen to meet the SO₂ emissions limit and SO₂ CEMS as an alternative to the HCl limit of 0.002 lb/MMBtu.}
 - c. Gaseous Fuels. Based on a 30-day rolling average:
 - (1) 0.80 lb/MMBtu (340 ng/J) heat input and 10% of the potential combustion concentration (90% reduction); or
 - (2) 100% of the potential combustion concentration (0% reduction) when emissions are less than 86 ng/J (0.20 lb/MMBtu) heat input.

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.43Da(b)&(g)]

d. Fuels Combusted Simultaneously. The applicable standard is determined by proration using the following formula for emissions less than 260 ng/J (0.60 lb/MMBtu) heat input, based on a 30-boiler operating day rolling average:

$$E_s = \frac{0.80x + 1.20y}{100}$$
 and $%P_s = \frac{10x + 30y}{100}$

Where:

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- Es = Prorated SO_2 emission limit (lb/MMBtu heat input);
- % Ps = Percentage of potential SO₂ emission allowed;
- x = Percentage of total heat input derived from the combustion of liquid or gaseous fuels (excluding solid-derived fuels); and
- y = Percentage of total heat input derived from the combustion of solid fuel (including solid-derived fuels).
- [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.43Da(g)&(h)]
- **B.18.** PM Emissions. As determined by CEMS, PM emissions shall not exceed the following:
 - a. All Fuels. 0.03 lb/MMBtu. {Permitting Note: Compliance with this emission limit will be demonstrated by complying with the 0.01 lb/MMBtu PM limit. The 0.03 lb/MMBtu limit is equivalent to 0.02 lb/MMBtu on a heat weighted 30-day rolling average.} [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.42Da(a)]
 - b. Solid Fuels Coal.
 - (1) 0.01 lb/MMBtu on a heat input-weighted 30-day rolling average except during periods of startup, shutdown, or malfunction. [Rule 62-213.440, F.A.C.; and Permit No. 0570039-120-AC]
 - (2) *Effective Removal Date 07/06/2027*. 0.030 lb/MMBtu or 0.30 lb/MWh on a heat input-weighted 30-day rolling average. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.9991 & Table 2]
 - (3) *Effective* 07/06/2027. 0.010 lb/MMBtu or 0.10 lb/MWh on a heat input-weighted 30-day rolling average. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.9991 & Table 2]
- **B.19.** Ammonia Slip. As determined by stack test, ammonia slip shall not exceed 10 ppm by volume (ppmv) measured at the stack downstream of all emissions control systems. Annual testing of ammonia slip shall be conducted, and corrective measures taken, if measured values exceed 5 ppmv. [Rule 62-4.070(3), F.A.C.; and Permit No. 0570039-020-AC]
- **B.20.** Hg Emissions. As determined by stack test, mercury (Hg) emissions when firing coal shall not exceed:
 - a. 1.2 pound per trillion British thermal units (lb/TBtu) or 0.013 pound per gigawatt hour (lb/GWh) during 30-boiler operating day performance test. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.9991 & Table 2]
 - b. *LEE Status*. 29 lb/year and 1.2 lb/TBtu or 0.013 lb/GWh during a 30-boiler operating day performance test. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.10000(c)(1)(ii) & 63.10005(h)]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

- **B.21.** Excess Emissions. Excess emissions resulting from startup, shutdown and malfunction shall only apply to unit-specific emission limits established on or before October 23, 2016, pursuant to Rule 62-212.400, F.A.C.
 - a. *Malfunction*. Excess emissions resulting from malfunction of any emissions unit shall be permitted provided (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration.
 - b. *Startup or Shutdown*. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized (see Appendix BOP).
 - c. *Prohibited*. Excess emissions that are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(1), (2) & (7), F.A.C.]

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Monitoring of Operations

- **B.22.** O&M Plan. The permittee shall develop and maintain an O&M Plan as required under the PM RACT rule. All activities shall be documented and made available to the Department and EPCHC upon request for a minimum of 5-years. [Rule 62-296.700(6), F.A.C.]
- **B.23.** Emission Control Equipment Monitoring. The permittee shall submit to the Department a standardized plan or procedure that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible. [Rule 62-213.440(1)(b), F.A.C.; and PA 79-12]
- **B.24.** Site Specific Monitoring Plan NESHAP Subpart UUUUU. The permittee shall meet the monitoring plan requirements for SO₂ and PM CEMS in 40 CFR 63.10000(d) by complying with the 40 CFR 75 and 40 CFR 60 requirements. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.10000(d)] *[Permitting Note: The SO₂ and PM CEMS meet 40 CFR 75 requirements.]*

Continuous Emissions Monitoring Requirements

{Permitting Note: In accordance with the Acid Rain Phase II requirements, the following continuous monitors are installed on this unit: SO_2 , NO_X , CO_2 and stack gas flow. CO CEMS was installed in accordance with BACT requirements.}

- **B.25.** CMS. The permittee shall calibrate, maintain, and operate a CEMS to measure and record emissions of CO, NO_X, SO₂ and PM in a manner sufficient to demonstrate compliance with the CEMS emission standards of this permit. An O₂ or CO₂ continuous monitoring system (CMS) shall be operated.
 - a. SO_2 , NO_X , CO_2 , and PM Certifications. The SO_2 , NO_X , CO_2 (or O_2) and stack gas flow monitors shall be calibrated, maintained, and operated in accordance with the applicable requirements of 40 CFR 75. Quality assurance procedures shall conform to the requirements of 40 CFR 75. Performance Specification 11 and Procedure 2 shall be used to certify each PM CEMS. PM CEMS shall be certified and operated according to Appendix C to 40 CFR 63. Record and report the output of the PM CEMS as specified in 40 CFR 60.10010(i)(1) (4)
 - b. *CO Certification*. The CO monitor shall meet Performance Specification 4 or 4A of 40 CFR 60, Appendix B. Quality assurance procedures for this monitor shall conform to the requirements of 40 CFR 60, Appendix F. The RATA required for the CO monitor shall be performed using EPA Method 10, of Appendix A in 40 CFR 60 and shall be based on a continuous sampling train. Additional requirements applicable to the CO CEMS are given in the attached Appendix CEMS, which is a part of this permit.
 - c. SO₂ CEMS. The permittee shall demonstrate compliance with SO₂ limits in Condition **B.16.c** by means of CEMS. In addition to any other requirements associated with the operation and maintenance of these CEMS (*i.e.*, Acid Rain requirements), operation of the CEMS shall be in accordance with the requirements listed in this permit. The SO₂ CEMS shall meet the applicable requirements in 40 CFR 63.10010(f).
 - d. NOx CEMS. NO_x emissions shall be continuously monitored to confirm compliance with emission standards identified in this permit. Compliance is determined by calculating the heat input-weighted average of all hourly emission rates for NO_x for the 30 successive boiler operating days, except for data obtained during startup, shutdown, malfunction, or abnormal events. "Abnormal events" are defined as an unanticipated interruption, malfunction, or failure of the pipeline or associated equipment utilized to supply ammonia to the Big Bend Station for use in the operation of the SCR control system. Excess emissions occurring from operation of the boilers during an abnormal event are authorized provided that BOP is employed to minimize the amount and duration of the emissions during an abnormal event. Emissions data collected during "abnormal events" may be excluded from the 30-day rolling compliance averages in accordance with this condition. For the purpose of calculating a 30-day rolling average, a boiler operating day is defined as a 24-hour period (between 12:01 a.m. and 12:00 midnight) during which fossil fuel is combusted in a steam operating unit for the entire 24-hours.

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e. Location of Data Collected. The NO_x, SO₂, CO₂, and PM monitoring devices shall meet the applicable requirements of Chapter 62-214, F.A.C., 40 CFR 60.49Da., and 40 CFR 75. NO_x, SO₂ and CO₂ emissions shall be measured in the duct prior to the FGD system. SO₂, CO₂, PM emissions and flowrate shall be monitored in Unit 4 stack (BB004). Measurements of CO₂ shall be monitored at each location to convert NO_x, SO₂ and PM CEMS data to units of lb/MMBtu heat input for proof of compliance. [Rules 62-204.800(8)(b) & (11)(b) & 62-212.400(BACT), F.A.C.; 40 CFR 60.49Da; 40 CFR 63.10000 & 63.10010(a)(1),(b),(f)&(i);40 CFR 63 Appendix C; PA 79-12D; and Permit No. 0570039-156-AC (PSD-FL-390B)]

Test Methods and Procedures

B.26. <u>Test Methods</u>. When required, tests shall be performed in accordance with the following reference methods:

Methods	Description of Method and Comments		
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content		
5, 5B, 5F or 17	Determination of PM Emissions from Stationary Sources		
6, 6A, 6B or 6C	Determination of SO ₂ Emissions from Stationary Sources		
7, 7A, 7C, 7D or 7E	Determination of NO _X Emissions from Stationary Sources		
19	Determination of SO ₂ Removal Efficiency and PM, SO ₂ , and NO _X Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)		
29	Determination of Metals Emissions from Stationary Sources		
30B	Determination of Total Vapor Phase Hg Emissions from Coal-Fired Combustion Sources using Carbon Sorbent Traps		
ANSI/ASME PTC 19.10-1981	Flue and Exhaust Gas Analyses of gas exhaust from stationary combustion sources		
ASTM D6784	Standard Test Method for Elemental, Oxidized, Particle-Bound and Total Mercury in Flue Gas Generated from Coal-Fired Stationary Sources (Ontario Hydro Method)		

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 10007 & Table 5]

B.27. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.

B.28. NSPS Applicability Determination Test. If Unit 4 achieves at least 90% of its design capacity, or 110% of its previously highest achievable capacity, whichever is higher, then the procedures of Appendix C of 40 CFR 60 – Determination of Emission Rate Change must be repeated to determine if an hourly emissions increase of PM, SO₂, and/or NO_x has occurred due to the project authorized by Permit No. 0570039-153-AC. The permittee shall use CEMS data (in pounds per hour) from two representative time periods to perform the determination. The first time period shall use data representative of the highest achievable capacity prior to conducting the authorized work under Permit No. 0570039-153-AC. The second time period shall use data representative of the unit's current highest achievable capacity. The number (n) of runs shall be between 20 and 29 for each time period. Each data set shall be used to conduct a Student's t-test with a 95% confidence interval. If the Student's t-test data shows PM, SO₂, and/or NO_x emissions increases, Unit No. 4 shall become subject to the PM standards in 40 CFR 60.42Da(e), the SO₂ standards in 40 CFR 60.43Da(l), and/or

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the NO_X standards in 40 CFR 60.44Da(g), respectively, and the permittee shall immediately begin complying with all of the provisions applicable to Unit No. 4. The re-test shall be performed within 60 days of Unit 4 meeting the applicable capacity level. [Rules 62-4.070(3), 62-204.800, and 62-297.310(3)(b), F.A.C.; 40 CFR 60.14; and Permit No. 0570039-153-AC]

- **B.29.** Annual Compliance Tests Required. During each calendar year (January 1st to December 31st), the boiler shall be tested to demonstrate compliance with the emissions standards for ammonia slip and Hg in Conditions **B.19** and **B.20**, respectively.
 - a. *Hg Emissions LEE Status*. For a qualifying LEE for Hg emissions limits in Condition **B.20**, the permittee shall conduct a 30-day performance test using Method 30B at least once every 12 calendar months to demonstrate continued LEE status.
 - b. *CO*, *NO_X*, *SO₂* and *PM CEMS*. The CO, NO_X, SO₂ and PM CEMS shall be used to demonstrate continuous compliance with the emission limits in Conditions **B.15**, **B.16**, **B.16.c**, and **B.17.d**, respectively.

[Rules 62-204.800(11)(b) and 62-297.310(8), F.A.C.; and 40 CFR 63.10000(c)(1)(ii)]

- **B.30.** NOx, SO2, PM, and CO Emission Rate Calculation. A "30-day rolling average emission rate" for NO_X, SO₂, PM, and CO shall be herein defined as the emission rate expressed as lb/MMBtu and calculated in accordance with the following procedure: first, sum the total pounds of the pollutant in question emitted from the Unit during an operating day and the previous 29-operating days; second, sum the total heat input to the Unit in MMBtu during the operating day and the previous 29-operating days; and third, divide the total number of pounds of the pollutant emitted during the 30-operating days by the total heat input during the 30-operating days. A new 30-day rolling average emission rate shall be calculated for each new operating day. The 30-day rolling average emission rate:
 - a. *Utility Electric Distribution System*. Shall include all emissions and heat input in MMBtu commencing from the time the Unit is synchronized with a utility electric distribution system through the time that the unit ceases to be synchronized with such utility electric distribution system.
 - b. Cold Start Up.
 - May exclude emissions of NO_x and heat input in MMBtu occurring during the fifth and subsequent "Cold Start Up" periods that occur in any 30-day period if inclusion of such emissions would result in a violation of any applicable 30-day rolling average emission rate. A "Cold Start Up Period" occurs whenever there has been no fire in the boiler of a Unit (no combustion of any fossil fuel) for a period of 6-hours of more. The emissions to be excluded during the fifth and subsequent Cold Start Up Periods shall be the lesser of:
 - (1) Those NO_x emissions emitted during the 8-hour period commencing when the Unit is synchronized with a utility electric distribution system and concluding 8-hours later, or
 - (2) Those emitted prior to the time that the flue gas has achieved the SCR operational temperature as specified by the catalyst manufacturer; and
 - (3) May exclude NO_x emissions and heat input in MMBtu occurring during any period of malfunction (as defined at 40 CFR 60.2) of the SCR; and
 - (4) Shall use the methodologies and procedures set forth in 40 CFR 75, Appendix F.
 - c. SO₂ Emission Cap. SO₂ emissions limit in Condition **B.17.a.(3)** shall be reported on a 30-boiler operating day rolling average in the units of lb/hour, updated after each new boiler operating day. Each 30-boiler operating day rolling average emission rate is the average of all of the valid hourly SO₂ emission rates in the 30-boiler operating day period. Boiler operating day means a 24-hour period that begins at midnight and ends the following midnight during which any fuel is combusted at any time in the boiler, including startup, shutdown or malfunction periods. It is not necessary for the fuel to be combusted the entire 24-hour period.

[Rule 62-4.070, F.A.C.; and Permit Nos. 0570039-096-AC & 0570039-127-AC]

B.31. Determination of Heat Input. The heat input shall be calculated as the product of the gross unit heat rate (Btu/kWh) and gross power output (MW). The gross power output shall be measured on an arithmetic average during the compliance demonstration test. The gross unit heat rate during the stack test will be

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calculated using established gross unit heat rate curves for natural gas and solid fuel combustion. [Rule 62-4.070, F.A.C.; and Permit No. 0570039-156-AC]

B.32. Low-Emitting EGU (LEE) Status.

- a. *Hg LEE Status*. The following provisions applies to Hg emissions limit in Condition **B.20** for a low emitting EGU:
 - (1) The EGU may qualify for LEE status for Hg if the permittee collects performance test data that meet the following requirements, and if those data demonstrate:
 - (a) Average emissions less than 10% of the applicable Hg emissions limit in Condition **B.20.a**; or
 - (b) Potential Hg mass emissions of 29.0 or fewer lb/year and compliance with the applicable Hg emission limit in Condition **B.20.b**.
 - (2) For Hg, the permittee shall conduct a 30-boiler operating day performance test using Method 30B in 40 CFR 60, Appendix A–8, to determine whether a unit qualifies for LEE status and meet the applicable requirement in 40 CFR 60.10005(h)(3).
- b. *Not LEE Status*. If the EGU does not qualify as a LEE for Hg, the permittee shall demonstrate initial and continuous compliance through use of a Hg CEMS or a sorbent trap monitoring system, in accordance with 40 CFR 63, Appendix A.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.10000(c)(1)(vi), 63.10005(h)(1)(ii)&(3)]

- **B.33.** Tune-Up. The permittee shall perform periodic tune-ups of the EGU. Conduct periodic performance tune-ups of the EGU, as specified in 40 CFR 63.10021(e)(1) (9). The permittee shall Conduct a tune-up of the EGU burner and combustion controls at least each 36 calendar months, or each 48 calendar months if neural network combustion optimization software is employed. If the EGU is offline when a deadline to perform the tune-up passes, the permittee shall perform the tune-up work practice requirements within 30 days after the re-start of the affected unit. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.9991, 63.10000(e), 63.10021(e) & Table 3]
- **B.34.** Work Practice Standards NESHAP Subpart UUUUU. The permittee shall meet one of the following options for complying with the work practice standards:
 - a. Startup.
 - (1) Paragraph 1. The permittee shall operate all CMS during startup. Startup means either the first-ever firing of fuel in a boiler for the purpose of producing electricity, or the firing of fuel in a boiler after a shutdown event for any purpose. Startup ends when any of the steam from the boiler is used to generate electricity for sale over the grid or for any other purpose (including on site use). For startup of a unit, the permittee shall use clean fuels as defined in 40 CFR 63.10042 for ignition. When the permittee converts to firing coal, the permittee shall engage all of the applicable control technologies except dry scrubber and SCR. The permittee shall start the SCR systems, if present, appropriately to comply with relevant standards applicable during normal operation. The permittee shall comply with all applicable emissions limits at all times except for periods that meet the applicable definitions of startup and shutdown in 40 CFR 63.10042. The permittee shall keep records during startup periods. The permittee shall provide reports concerning activities and startup periods, as specified in 40 CFR 63.10021(h).
 - (2) *Monitoring Data*. The permittee shall collect monitoring data during startup periods, as specified in 40 CFR 63.10020(a). The permittee shall keep records during startup periods, as provided in 40 CFR 63.10021(h) and Conditions **B.35 B.38**. The permittee shall provide reports concerning activities and startup periods, as specified in 40 CFR 63.10011(g) and Conditions **B.52 B.54**.
 - b. *Shutdown*. The permittee shall operate all CMS during shutdown. The permittee shall also collect appropriate data, and the permittee shall calculate the pollutant emission rate for each hour of shutdown for those pollutants for which a CMS is used. While firing coal during shutdown, the permittee shall vent emissions to the main stack and operate all applicable control devices and continue to operate those control devices after the cessation of coal being fed into the EGU and for as long as possible thereafter considering operational and safety concerns. In any case, the permittee shall operate the controls when necessary to comply with other standards made applicable to the EGU by a permit limit or a rule other

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than 40 CFR, Subpart UUUUU, and that requires operation of the control devices. If, in addition to the fuel used prior to initiation of shutdown, another fuel must be used to support the shutdown process, that additional fuel must be one or a combination of the clean fuels defined in 40 CFR 63.10042 and shall be used to the maximum extent possible, taking into account considerations such as not compromising boiler or control device integrity.

- (1) The permittee shall comply with all applicable emission limits at all times except during startup periods and shutdown periods at which time the permittee shall meet this work practice.
- (2) The permittee shall collect monitoring data during shutdown periods, as specified in 40 CFR 63.10020(a). The permittee shall keep records during shutdown periods, as provided in Conditions **B.35 B.38** and 40 CFR 63.10021(h). Any fraction of an hour in which shutdown occurs constitutes a full hour of shutdown.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.9991 & Table 3]

Recordkeeping and Reporting Requirements

- **B.35.** CEMS Recordkeeping NESHAP Subpart UUUUU. For SO₂ and PM CEMS, the permittee shall keep records according to 40 CFR 63.10032(b) and Table 7. [Rule 62-204.800(11)(b), F.A.C.; 40 CFR 63.10032(b) & Table 7]
- **B.36.** Fuel Records NESHAP Subpart UUUUU.
 - a. For the EGU subject to an emission limit, the permittee shall keep the records in paragraphs **a** through **c** of this condition.
 - (1) The permittee shall keep records of monthly fuel use by the EGU, including the type of fuel and amount used.
 - (2) For an EGU that qualifies as a LEE under Condition **B.20.b**, the permittee shall keep annual records that document that the emissions in the previous stack test continue to qualify the unit for LEE status for an applicable pollutant, and document that there was no change in source operations including fuel composition and operation of air pollution control equipment that would cause emissions of the pollutant to increase within the past year.
 - b. Records of performance stack tests, fuel analyses, or other compliance demonstrations and performance evaluations, as required in 40 CFR 63.10(b)(2)(viii).
 - c. If the permittee chooses to rely on paragraph (1) of the definition of "startup" in 40 CFR 63.10042 for the EGU, the permittee shall keep records of the occurrence and duration of each startup or shutdown. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.10032(a)(2),(d)(1)&(3)&(f)(1)]
- **B.37.** Startup Records NESHAP UUUUU. Paragraph 1 startup, the permittee shall keep records of the occurrence and duration of each startup or shutdown. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.10032(f)(1)]
- **B.38.** Malfunction Records NESHAP Subpart UUUUU.
 - a. *Malfunction Occurrence*. The permittee shall keep records of the occurrence and duration of each malfunction of an operation (*i.e.*, process equipment) or the air pollution control and monitoring equipment.
 - b. Actions Taken. The permittee shall keep records of actions taken during periods of malfunction to minimize emissions in accordance with Condition **B.14**, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation.
 - c. Data Not-To-Be Used. Data recorded during monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods, or required monitoring system quality assurance or control activities may not be used in calculations used to report emissions or operating levels.
 - d. *Deviation*. Failure to collect required quality-assured data during monitoring system malfunctions, monitoring system out-of-control periods, or repairs associated with monitoring system malfunctions or monitoring system out-of-control periods is a deviation from the monitoring requirements.

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e. *CEMS*. Records of the date and time that each deviation occurred during a period of malfunction or during another period.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.10020(c) & (d), 10032(b)(4), (g)&(h)]

- **B.39.** Operational Records. The permittee shall establish and maintain the following records from the firing of natural gas and solid fuel in steam generator Unit 4:
 - a. Solid Fuels. Record daily the heat input rate from the firing of solid fuels.
 - b. *Natural Gas*. Record daily the heat input rate from the firing of natural gas. The standard heating value of natural gas, 1,020 Btu/scf, shall be used to calculate the natural gas heat input rate demonstrating compliance with Condition **B.4a.(2)**.
 - c. All Fuels. The permittee shall maintain daily records of operation showing the date, fuels used, and the duration of all startups, shutdowns and malfunctions. Fuel bunkering and petroleum coke usage (weight percent of petroleum coke fired) records shall be maintained on a daily basis to document the percentage limitation on petroleum coke has not been exceeded. The records shall document the amount of natural gas burned and the solid fuel analyses containing information on sulfur content, ash content, and heating values.
 - d. Evaporation of Excess Recycle Water. The permittee shall record the amount of recycled water evaporated at the Big Bend Station demonstrating compliance with Condition **B.4.b**.
 - e. *Records*. Records of the heat input rates of all fuels shall be maintained on-site and made available to the Department and the EPCHC upon request.

[Rule 62-4.070(3), F.A.C.; and Permit Nos. 0570039-109-AC (PSD-FL-040C), 0570039-120-AC, & 0570039-127-AC]

B.40. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions
Malfunction Excess Emissions Report	Quarterly (if requested)	B.44
Semiannual Reports – NSPS Subpart Da	Semiannual	B.45
Performance Test & Continuous Monitors Report – NSPS Subpart Da	60 days after test	B.46
SO ₂ & NO _X Reporting – NSPS Subpart Da	Semiannual	B.47
Emissions Monitor Data Report – NSPS Subpart Da	Semiannual	B.48
SO ₂ & NO _X CEMS Report – NSPS Subpart Da	Semiannual	B.49
Deviation Report – NESHAP Subpart UUUUU	Quarterly	B.50
Monitoring System Malfunction Reports - NESHAP Subpart UUUUU	Quarterly	B.51
Performance Test Reports – NESHAP Subpart UUUUU	Quarterly	B.52
Electronic Compliance Reports-NESHAP Subpart UUUUU	Quarterly	B.53
Quarterly CO Report	Quarterly	B.55
SO ₂ Reporting	Semiannual	B.56
Actual Emissions Reporting (2024 – 2028)	Annual	B.57

[Rule 62-213.440(1)(b), F.A.C.]

- **B.41.** Notifications NESHAP Subpart UUUUU. The permittee shall submit all of the notifications in 40 CFR 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) (h) that apply by the dates specified. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.10030(a)]
- **B.42.** Performance Test Notification NESHAP Subpart UUUUU. When required to conduct a performance test, the permittee shall submit a Notification of Intent to conduct a performance test at least 30 days before the performance test is scheduled to begin. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.10030(d)]
- **B.43.** EGU Cease to Comply Notification— NESHAP Subpart UUUUU. The permittee provide 30 days prior notice of the date the EGU will cease complying with 40 CFR 63 Subpart UUUUU. The notification must identify:

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- a. The name of the owner or operator of the EGU, the location of the facility, the EGU that will cease complying with 40 CFR 63 Subpart UUUUU, and the date of the notice;
- b. The currently applicable subcategory under 40 CFR 63 Subpart UUUUU, and any 40 CFR 60. 62, or 40 CFR 63 and subcategory that will be applicable after the permittee ceases to comply with 40 CFR 63 Subpart UUUUU;
- c. The date on which the permittee became subject to 40 CFR 63 Subpart UUUUU;
- d. The date upon which the permittee will cease complying with 40 CFR 63 Subpart UUUUU, consistent with 40 CFR 63.10000(g).

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.10000(i)(2) & 40 CFR 63.10030(f)]

- **B.44.** Malfunction Excess Emissions Notification and Report. In case of excess emissions resulting from malfunctions, the permittee shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(5), F.A.C.]
- **B.45.** Semiannual Reports NSPS Subpart Da.
 - a. Written Reports. The permittee shall submit the written reports required under 40 CFR 60 Subpart A and Da to the Department semiannually for each six-month period. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period.
 - b. *Electronic Reports*. The permittee may submit electronic quarterly reports for SO₂ and NO_x in lieu of submitting the written reports required under Condition **B.47**, and following the procedures in 40 CFR 60.51Da(k).

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.51Da(j)&(k)]

- **B.46.** Performance Test and Continuous Monitors Report NSPS Subpart Da. For SO₂, NO_X, and PM, the performance test data from the subsequent performance test and from the performance evaluation of the continuous monitors (including the transmissometer) must be reported to the Department. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.51Da(a)]
- **B.47.** SO₂ and NO_x Reporting Requirement NSPS Subpart Da. For SO₂ and NO_x, information as outlined in 40 CFR 60.51Da(b) shall be reported to the Department for each 24-hour period [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.51Da(b)]
- **B.48.** Emissions Monitoring Data Report NSPS Subpart Da. If the minimum quantity of emission data as required by 40 CFR 60.49Da is not obtained for any 30 successive boiler operating days, the information obtained under the requirements of 40 CFR 60.48Da(h) is reported to the Department for that 30-day period as specified in 40 CFR 60.51Da(c)(1)-(5). [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.51Da(c)]
- **B.49.** SO₂ and NO_x CEMS Report NSPS Subpart Da.
 - a. *Data Not Available*. For any periods for which opacity, SO₂ or NO_X emissions data are not available, the permittee shall submit a signed statement indicating if any changes were made in operation of the emission control system during the period of data unavailability, and follow the procedures in 40 CFR 60.51Da(f).
 - b. *Signed Statement*. The permittee shall submit a signed statement following the procedures of 40 CFR 60.51Da(h).

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.51Da(f)&(h)]

B.50. Deviation Report – NESHAP Subpart UUUUU. The permittee shall report each instance in which the facility did not meet an applicable SO₂, PM and Hg emissions limits in Conditions B.17.b.(2), B.18.b.(2) and b.(3), and B.20, respectively, or operating limit in Condition B.34 or failed to conduct a required tune-up in Condition B.33. These instances are deviations from the requirements of 40 CFR 63 Subpart UUUUU. These deviations must be reported according to Conditions B.52 - B.54. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.10021(g)]

Subsection B. Emissions Unit 004

- **B.51.** Monitoring System Malfunction Report NESHAP Subpart UUUUU. Periods of monitoring system malfunctions or monitoring system out-of-control periods, repairs associated with monitoring system malfunctions or monitoring system out-of-control periods and required monitoring system quality assurance or quality control activities excluding zero and span checks must be reported as time the monitor was inoperative (downtime) under 40 CFR 63.10(c). Failure to collect required quality-assured data during monitoring system malfunctions, monitoring system out-of-control periods, or repairs associated with monitoring system malfunctions or monitoring system out-of-control periods is a deviation from the monitoring requirements. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.10020(d)]
- **B.52.** Performance Test Reports NESHAP Subpart UUUUU. For each performance stack test completed, in accordance with Condition **B.53**, submit the applicable reference method information in 40 CFR 63 Subpart UUUUU, Appendix E, Sections 17 31 along with the quarterly compliance report for the calendar quarter in which the test was completed.
 - a. SO_2 RATA. For each RATA of an SO_2 monitoring system completed prior to January 1, 2024, the permittee shall submit a PDF test report in accordance with 40 CFR 63.10031(f)(1).
 - b. SO_2 CEMS. The quarterly compliance reports described in Condition **B.53** shall include the 30-boiler operating day rolling average emission rates for SO_2 , if the permittee has elected to (or are required to) continuously monitor SO_2 .
 - c. The permittee shall submit semiannual compliance reports as required under 40 CFR 63.10031(b), (c), and (d), ending with a report covering the semiannual period from July 1 through December 31, 2023, and Notifications of Compliance Status as required under 40 CFR 63.10031(e), as PDF files. Quarterly compliance reports shall be submitted in XML format thereafter, in accordance with Condition **B.53**, starting with a report covering the first calendar quarter of 2024.
 - d. All reports required by 40 CFR 63 Subpart UUUUU not subject to the requirements in this conditions introductory text and 40 CFR 63.10031(f)(1) (4) must be sent to the EPA at the appropriate address listed in 40 CFR 63.13.
 - e. All reports and notifications described in this conditions introductory text and 40 CFR 63.10031(f)(1) (4) of 40 CFR 63 Subpart UUUUU shall be submitted to the EPA in the specified format and at the specified frequency, using the ECMPS Client Tool, following the procedures in 40 CFR 63.10031(f)(6). [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 10031(f)]
- B.53. Electronic Compliance Reports NESHAP Subpart UUUUU. The permittee shall use the ECMPS Client Tool to submit quarterly electronic compliance reports. Each quarterly compliance report shall include the applicable data elements in 40 CFR 63, Subpart UUUUU, Appendix E, Sections 2 13. For each stack test summarized in the compliance report, the permittee shall also submit the applicable reference method information in 40 CFR 63 Subpart UUUUU, Appendix E, Sections 17 31. The compliance reports and associated Appendix E of 40 CFR 63, Subpart UUUUU, information shall be submitted no later than 60 days after the end of each calendar quarter. [Rule 62-204.800(11)(b), F.A.C.; FDEP Reporting Waiver, 1/2/2025; and 40 CFR 63.10031(g)] {Permitting Note: As a result of the recently updated EPA website on September 4, 2024, the Department has approved a temporarily waiver of the quarterly electronic compliance reports required by §63.10031(g) and the applicable data elements in sections 2 through 13 of Appendix E until such time the *.json format can be excepted in ECMPS 2.0.}
- **B.54.** EPA Electronic Reports NESHAP Subpart UUUUU. The permittee shall submit the applicable reports and notifications required under 40 CFR 63.10031(a) (k) to the EPA electronically, using EPA's Emissions Collection and Monitoring Plan System (ECMPS) Client Tool, following the procedures in 40 CFR 63.10021(f). [Rule 62-204.800(11)(b), F.A.C.; FDEP Reporting Waiver, 1/2/2025; and 40 CFR 63.10021(f)] {Permitting Note: As a result of the recently updated EPA website on September 4, 2024, the Department has approved a temporarily waiver of the quarterly electronic compliance reports required by §63.10031(g) and the applicable data elements in sections 2 through 13 of Appendix E until such time the *.json format can be excepted in ECMPS 2.0.}

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B.55. Quarterly CO Report. Within 30 days following the end of each calendar-quarter, the permittee shall submit a report to the EPCHC summarizing periods of CO emissions in excess of the BACT permit standard following the NSPS format in 40 CFR 60.7(c), Subpart A. In addition, the report shall summarize the CO CEMS system monitor availability for the previous quarter. [Rule 62-212.400, F.A.C.; and Permit No. 0570039-027-AC (PSD-FL-390)]

B.56. SO₂ Reporting.

- a. Semiannual. The permittee shall submit semiannual reports summarizing the SO₂ data for the reporting period and demonstrating compliance with the SO₂ emissions cap. Reports shall be submitted within 30 days following the reporting period. Each report shall summarize each 30-boiler operating day rolling average emission rate during the reporting period along with any background information to explain emissions.
- b. *Emissions Cap Exceedance*. If an exceedance of the SO₂ emissions cap occurs, the permittee shall notify the Compliance Authority within one business day. The permittee shall submit a report to the Compliance Authority within 15 days of occurrence detailing the nature and cause of the exceedance, describing corrective actions taken, and identifying when the unit(s) was returned to compliance. [Rules 62-4.070(1) & (3) & 62-4.080(1), F.A.C.; SO₂ Attainment SIP; and Permit No. 0570039-096-AC]
- **B.57.** Actual Emissions Reporting (2024 2028). Permit No. 0570039-153-AC is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of Subsection 62-212.400(4) through (12), F.A.C., for NO_X, SO₂, PM, and CO emissions. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting, and recordkeeping provisions.
 - a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix TV of this permit.
 - b. The permittee shall report to the Department's permitting and compliance authority within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
 - (1) The name, address, and telephone number of the owner or operator of the major stationary source;
 - (2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix TV of this permit;
 - (3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
 - (4) Any other information that the owner or operator wishes to include in the report.
 - c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.
 - d. The permittee shall compute and report annual emissions in accordance with Rule 62-210.370(2), F.A.C. as provided by Appendix TV of this permit. For this project, the permittee shall use the following methods in reporting the actual annual NO_x, SO₂, PM, and CO emissions for Unit No. 4:
 - (1) The permittee shall use data collected from the CEMS to determine and report the actual annual emissions of NO_x, SO₂, PM, and CO.
 - (2) As defined in Rule 62-210.370(2), F.A.C., the permittee shall use a more accurate methodology if it becomes available.

[Rules 62-210.370 and 62-212.300(1)(e), F.A.C.; and Permit 0570039-153-AC] {Permitting Note: Baseline emissions of NO_X , SO_2 , PM, and CO were determined to be 1,224 TPY, 3,109 TPY, 62 TPY, and 1,699 TPY, respectively. No could have accommodated (CHA) emissions were used in the applicant's PSD applicability

Subsection B. Emissions Unit 004

- analysis. The reporting period shall begin with the first full calendar year following the completion of construction authorized by Permit Nos. 0570039-133-AC and 153-AC.}
- **B.58.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

Other Requirements

- **B.59.** NSPS Provisions. This steam generating unit shall meet the applicable requirements of the NSPS Subpart A, General Provisions, and Subpart Da, Standards of Performance for Electric Utility Steam Generating Units, of 40 CFR 60, adopted and incorporated in Rule 62-204.800(8)(b) and (c), F.A.C. [Rule 62-204.800(8)(b) & (c), F.A.C.; and 40 CFR 60 Subparts A & Da]
- **B.60.** NESHAP Provisions. This steam generating unit is subject to the appliable requirements of NESHAP Subpart A, General Provisions, and Subpart UUUUU, NESHAP: Coal-and Oil-Fired Electric Utility Steam Generating Units, of 40 CFR 63, adopted and incorporated by reference 62-204.800(11)(b) and (d), F.A.C. [Rule 62-204.800(11)(b) & (d), F.A.C.; and 40 CFR 63 Subparts A & UUUUUI]
- **B.61.** Acid Rain Program. This steam generating unit shall meet the applicable requirements of the Acid Rain Monitoring Provisions: Acid Rain Phase II SO₂ and Acid Rain Phase II NOx (40 CFR 75) and Acid Rain NO_x Emission Reduction Program (40 CFR 76), adopted and incorporated in Rule 62-204.800, F.A.C. [Rule 62-204.800, F.A.C.; and Acid Rain Program of 40 CFR 75 & 40 CFR 76]



Subsection C. Emissions Unit 041 & 042

The Conditions in this section apply to the following emissions units:

EU No.	Brief Description
041	SCCT 4A
042	SCCT 4B

These emissions units consist of one aeroderivative SCCT generator peaking unit. SCCT 4A and SCCT 4B are coupled to one common generator, each unit has nominal gross generation capacity of 31 MW, 62 MW, combined. The SCCT may only be operated in the simple cycle mode. Each SCCT fires natural gas and ULSD fuel. Each SCCT is a diffusion flame combustion turbine. Each SCCT is equipped with water injection to control NO_X emissions. Each stack is equipped with a NO_X and carbon monoxide (CO) CEMS to continuously monitor emissions of NO_X and CO. SCCT 4A and 4B began commercial operation on August 15, 2009.

The SCCT operate as synchronous condensers. Solar power generation, battery energy storage systems and other renewable sources create fluctuations in the reactive power on the electrical grid. The synchronous condenser operation controls volt-amps reactive (VARs) to absorb or produce reactive power on a transient basis to stabilize the power grid and protect customers from potential power outages. This operation is critical in providing the necessary reasonable and practical regulatory controls consistent with the public interest. CT operation to initiate synchronize condense mode is expected to be five to six minutes on average. After the initial CT startup, the CT engine is shut off (no combustion) and the generator is driven by power from the grid. Operation as synchronous condensers will displace normal CT operation; therefore, each CT operates up to its normal maximum hours of operation as a synchronous condenser.

Each unit has a separate, but identical, stack with the following nominal parameters: 60 feet in height; 9.5 feet exit diameter; exit temperature of 893°F; and actual volumetric flow rate of 430,737 acfm.

{Permitting Note: These emissions units are subject to Chapter 62-214, F.A.C., Requirements for Sources Subject to the Federal Acid Rain Program; NSPS Subpart A, General Provisions, and Subpart KKKK, Standards of Performance for Stationary CT, of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b) and (c), F.A.C.; NESHAP Subpart A, General Provisions, and Subpart YYYY, NESHAP for Stationary CT, of 40 CFR 63, adopted and incorporated by reference in Rule 62-204.800(11)(b) and (d), F.A.C.; and 40 CFR 75, Acid Rain.}

Essential PTE Parameters

C.1. Design Capacity. The maximum heat input rate is as follows:

	Heat Input	
EU Nos.	MMBtu/hour	Fuel Type
041, 042	342.7	Each CT, Natural Gas
041, 042	302.7	Each CT, ULSD

Heat input rates are based on 100% load, 59°F ambient temperature, and the HHV of the fuel. Heat input rates will vary depending upon turbine characteristics and ambient conditions. The manufacturer's curves shall be reestablished and resubmitted to the Department within 45 days following the replacement of any SCCT components or major turbine tuning session that could reasonably affect the performance of the SCCT. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Rules 62-4.070(3) & 62-210.200(PTE), F.A.C.; and Permit No. 0570039-156-AC]

C.2. <u>Emissions Unit Operating Rate Limitation after Testing</u>. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(3), F.A.C.]

C.3. Methods of Operation.

- a. Fuels. The fuels that are allowed to be burned in these units are:
 - (1) Natural Gas, Primary Fuel. Natural gas shall contain no more than 2.0 gr S/100 scf.

Subsection C. Emissions Unit 041 & 042

- (2) *ULSD*.
 - (a) Maximum sulfur content of 0.0015%, by weight.
 - (b) ULSD fuel shall be fired no more than 500 hours/calendar year each SCCT. Any hour used to fire ULSD will decrease an hour that could have been used to fire natural gas.

[Rules 62-4.070(3), 62-210.200(PTE) & 62-212.400(PSD), F.A.C.; and Permit No. 0570039-040-AC]

- b. Simple Cycle Mode. Each SCCT shall operate only in the simple cycle mode not to exceed the permitted hours of operation allowed in Conditions C.3.a.(2)(b) and C.4. This restriction is based on the permittee's request, which formed the basis of the PSD applicability and emission standards specified in this permit. For any request to convert these units to combined cycle operation by installing/connecting to heat recovery steam generators, including changes to the fuel or quantity related to combined cycle conversion that may cause an increase in short or long-term emissions, the permittee shall submit a full PSD permit application complete with a proposed BACT determination as if the SCCT peaking units had never been built. [Rules 62-210.200(PTE) & 62-212.400(PSD), F.A.C.; and Permit No. 0570039-040-AC1
- c. Simulated Facility Startup Operation. Subject to the CEMS data exclusions specified in Condition C.15.e, TEC may operate SCCT 4A and 4B at low loads for extended periods of time in order to simulate the conditions experienced following a facility-wide shut down. These simulated periods may be used to develop facility startup protocols and to perform periodic operator training exercises. [Rules 62-4.070 & 62-210.700(5), F.A.C.; and Permit No. 0570039-156-AC]
- d. Synchronous Condenser Operation. Subject to the NO_x and CO CEMS data exclusions specified in Condition C.15.O.7.f, the permittee may operate SCCT-4A and 4B in synchronous condenser mode to control the volt-amps reactive (VAC) to absorb or produce reactive power on a transient basis to stabilize the power grid and protect customers from potential power outages. [Rule 62-4.070, F.A.C.; and Permit No. 0570039-156-AC]
- C.4. Restricted Hours of Operation. SCCT 4A and SCCT 4B are allowed to operate in the peaking service mode and synchronize condense mode for no more than 2,400 hours/calendar year each. To initiate synchronous condenser mode, each CT may be fired for up to a maximum of 10 minutes. [Rules 62-4.070(3), 62-210.200(PTE) & 62-212.400(PSD), F.A.C.; and Permit No. 0570039-156-AC]

Control Technology

C.5. Wet Injection. The permittee shall adjust, operate, and maintain a water injection system to reduce NO_X emissions from each SCCT. The water injection system shall be maintained and adjusted in accordance with the manufacturer's recommendations or determined best practices to minimize emissions. [Rule 62-4.070(3), F.A.C.; and Permit Nos. 0570039-040-AC & 0570039-108-AC]

C.6. Oxidation Catalyst.

- a. The permittee shall adjust, operate, and maintain an oxidation catalyst, Model BASF Camet® (or equivalent) in the exhaust stack of each CT to demonstrate compliance with the applicable requirements of 40 CFR 63, Subpart YYYY (e.g., catalyst inlet temperature monitor). [Permit No. 0570039-141-AC]
- b. The permittee shall operate and maintain the oxidation catalyst systems in accordance with the oxidation catalyst system supplier's recommendations or in accordance with methods established through site-specific testing, including operating the oxidation catalyst system within the inlet operating temperature range suggested by the manufacturer, which has been demonstrated by to ensure compliance with the applicable emission limit.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6125(a)]

C.7. <u>Circumvention</u>. The permittee shall not circumvent or operate the air pollution control equipment in such a manner which would violate allowable emission rates established for this unit. [Rule 62-210.650, F.A.C.]

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C.8. Good Air Pollution Practices.

- a. *NSPS Subpart KKKK*. The permittee shall operate and maintain each stationary CT, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4333(a)]
- b. *NESHAP Subpart YYYY*. At all times, the permittee shall operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if levels required by the applicable standard have been achieved. Determination of whether a source is operating in compliance with operation and maintenance requirements will be based on information available to the Department 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. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6105(c)]

Emission Limitations and Standards

The mass emission rate standards are based on a turbine inlet temperature condition of 59°F, and using the HHV of the fuel. Mass emissions rates may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department. Unless otherwise specified, the averaging times for Conditions C.9 – C.14 are based on the specified averaging time of the applicable test method. Each emission units shall meet the following emission standards:

- C.9. <u>Visible Emissions</u>. As determined by stack test, visible emissions from each SCCT while firing ULSD fuel shall not exceed 10% opacity. [Rule 62-4.070(3), F.A.C.; and Permit No. 0570039-156-AC]
- **C.10.** CO Emissions. As determined by CEMS, CO emissions from each SCCT shall not exceed the following:
 - a. Natural Gas. 210 ppmvd at 15% O₂ based on a 3-hour rolling average.
 - b. ULSD. 51 ppmvd at 15% O₂ based on a 3-hour rolling average.
 - c. *CO Emissions Cap.* 93.6 tons/year based on a 12-month operating total, SCCT 4A and 4B, combined. The emissions cap applies at all times when these units are operating including periods of startup and shutdown.

{Permitting Note: CO is used as a surrogate for VOC emissions as a demonstration of good combustion. The natural gas CO limit of 210 ppmvd at 15% O_2 and No. 2 fuel oil limit of 51 ppmvd @ 15% O_2 are based on the maximum emission rate at 50% load, 20°F air temperature.}

[Rules 62-4.070(1), (3), 62-4.080(1) & 62-210.200(PTE), F.A.C.; and Permit Nos. 0570039-108-AC & 0570039-156-AC]

- **C.11.** NOx Emissions. As determined by CEMS, NO_x emissions from each SCCT shall not exceed the following:
 - a. *Natural Gas*. 25 ppm @ 15% O₂, based on a 4-hour rolling average, when total heat input contribution from natural gas is greater than 50%.
 - b. *ULSD*. 74 ppm @ 15 O₂, based on a 4-hour rolling average, when total heat input contribution from ULSD is greater than 50%.
 - c. 96 ppm @ 15% O_2 , when operating at < 75% peak load, based on a 4-hour rolling average. [Rule 62-204.800(8)(b), F.A.C., and 40 CFR 60.4320, 60.4325 & Table 1]
- **C.12.** <u>SO2 Emissions</u>. As determined by fuel specifications, SO₂ emissions from each SCCT shall not exceed 0.060 lb/MMBtu heat input or 0.90 lb/MW-hour gross output. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4330]
- **C.13.** PM Emissions. As determined by fuel specifications, PM emissions are minimized by complying with the fuel sulfur specifications, combined with the efficient combustion design and operation of the turbines (good combustion). Compliance with the fuel specifications, CO standards, and visible emissions standards

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- shall serve as indicators of good combustion. No PM stack tests are required. {Permitting Note: Maximum expected PM/PM₁₀ emissions from each turbine are approximately 2.5 and 7.5 lb/hour for natural gas and ULSD, respectively.} [Rules 62-4.070(1)&(3) & 62-4.080(1), F.A.C.; and Permit No. 0570039-156-AC]
- **C.14.** Formaldehyde Emissions. As determined by stack test, formaldehyde emissions from each SCCT shall be limited to 91 ppbvd or less at 15% O₂, except during turbine startup as specified in Condition **C.26**. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6100 & Table 1]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS, NESHAP or Acid Rain program provision.

- C.15. Allowable SIP CO and NO_X Data Exclusions. Provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized, CO and NO_X CEMS data collected during periods of startup, shutdown and malfunction may be excluded from the 3-hr rolling average and 4-hr rolling average, respectively, for compliance demonstrations only in accordance with the following requirements. All periods of data excluded shall be consecutive for each such episode and only data obtained during the described episodes (startup, shutdown, malfunction, tuning, true facility-startup events and synchronous condenser operation) may be excluded. As provided by the authority in Rule 62-210.700(5), F.A.C., the following conditions replace the provisions in Rule 62-210.700(1), F.A.C.:
 - a. *Startup*. In accordance with the procedures described in the CEMS Data Requirements of this section, no more than the first 15 minutes of CEMS data indicating exceedances of emission limits shall be excluded for each gas turbine startup. For startups of less than 15 minutes in duration, only those minutes of exceedances attributable to startup shall be excluded. The total duration of a startup event is not limited.
 - b. Shutdown. In accordance with the procedures described in the CEMS Data Requirements of this section, no more than the first 15 minutes of CEMS data indicating exceedances of emission limits shall be excluded for each gas turbine shutdown. For shutdowns less than 15 minutes in duration, only those minutes of exceedances attributable to shutdown shall be excluded. The total duration of a shutdown event is not limited.
 - c. *Malfunction*. In accordance with the procedures described in the CEMS Data Requirements of this section, no more than 120 minutes of CEMS data shall be excluded in a 24-hour period for each gas turbine due to malfunctions. Within one working day of occurrence, the permittee shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data.
 - d. *Tuning*. "Tuning" means adjusting the combustors in accordance with the manufacturer's recommendations (or industry standards) or modifying the water-to-fuel ratio to affect a change in the post-combustion air emissions. Such tuning sessions are infrequent. Excess CEMS emissions data collected during tuning may be excluded from the compliance averages.
 - e. Simulated Facility Startup Testing. Up to 8-hours of CEMS data indicating exceedances of emission limits may be excluded from the compliance demonstration periods for the two simple cycle gas turbines when operating at less than full load for extended periods in relation to simulated or actual facility startup conditions.
 - f. Synchronous Condenser Operation. This operation briefly fires the CT up to 10 minutes, synchronizes to the grid, disengages from generator and is shutdown. As required, the generator continues to spin on grid power to maintain grid stability and provide reliable power to customers. NO_X and CO CEMS data associated with the brief operation of the CT may be excluded as necessary.
 - g. *Excess Emissions Notification*. The permittee shall notify the Compliance Authority within one working day of discovering any emissions in excess of a CEMS standard subject to the specified averaging period. All such reasonably preventable emissions shall be included in any CEMS compliance determinations. All valid emissions data (including data collected during startup, shutdown malfunction and tuning) shall be used to report annual emissions for the Annual Operating Report.

[Rules 62-4.070, 62-210.370(3) & 62-210.700(4)&(5), F.A.C.; and Permit No. 0570039-156-AC]

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C.16. NOx Excess Emissions – NSPS Subpart KKKK.

- a. NO_X CEMS 40 CFR 75. The certified a NO_X diluent CEMS meeting the requirements of 40 CFR 75, the Department can approve that only quality assured data from the CEMS shall be used to identify excess emissions under 40 CFR Subpart KKKK. Periods where the missing data substitution procedures in Subpart D of 40 CFR 75 are applied are to be reported as monitor downtime in the excess emissions and monitoring performance report required under 40 CFR 60.7. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.4350(d)]
- b. NO_X CEMS Data. For turbines using a NO_X CEMS as described in Condition C.21.a:
 - (1) An excess emission is any unit operating period in which the 4-hour rolling average NO_X emission rate exceeds the applicable emission limit in Condition C.11. A "4-hour rolling average NO_X emission rate" is the arithmetic average of the average NO_X emission rate in ppm measured by the continuous emission monitoring equipment for a given hour and the three unit operating hour average NO_X emission rates immediately preceding that unit operating hour. Calculate the rolling average if a valid NO_X emission rate is obtained for at least 3 of the 4 hours.
 - (2) A period of monitor downtime is any unit operating hour in which the data for any of the following parameters are either missing or invalid: NO_x concentration, CO₂ or O₂ concentration, fuel flow rate, steam flow rate, steam temperature, steam pressure, or megawatts. The steam flow rate, steam temperature, and steam pressure are only required if the permittee will use this information for compliance purposes.
 - (3) For operating periods during which multiple emissions 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.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.4380(b)]

Monitoring of Operations

- **C.17.** Fuel Flow Meter NSPS Subpart KKKK. Each fuel flowmeter shall be installed, calibrated, maintained, and operated according to the manufacturer's instructions. Alternatively, with state approval, fuel flowmeters that meet the installation, certification, and quality assurance requirements of Appendix D to 40 CFR 75 are acceptable. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4345(c)]
- **C.18.** Non-Resettable Hour Meter NESHAP Subpart YYYY. The permittee shall monitor and record distillate oil usage daily for all stationary CT with a non-resettable hour meter to measure the number of hours that distillate oil is fired. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6125(d)]
- C.19. Oxidation Catalyst Inlet Temperature Monitor. For each emissions unit, the permittee shall continuously monitor the catalyst inlet temperature at all times the SCCT is operating and maintain the 4-hour rolling average of the catalyst inlet temperature within the range suggested by the catalyst manufacturer, except during monitor malfunctions, associated repairs, and required quality assurance or quality control activities, monitoring. The permittee is not required to use the catalyst inlet temperature data that is recorded during turbine startup in the calculations of the 4-hour rolling average catalyst inlet temperature. [Rules 62-4.070(3) & 62-204.800(11)(b), F.A.C.; 40 CFR 63.6100, 63.6135, 63.6140(a), and Tables 2 & 5] {Permitting Note: The permittee provided the manufacturer's suggested temperature range to the Department with the initial compliance testing report for each SCCT.}
- **C.20.** CMS Quality Control Program. The permittee shall maintain a CMS quality control program for the catalyst inlet temperature monitoring system according to 40 CFR 63.8(d)(1) through (2). The permittee shall keep these written procedures on record for the life of the affected source or until the affected source is no longer subject to the provisions of 40 CFR Subpart YYYY, to be made available for inspection, upon request, by the Department. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6125(e)]

Subsection C. Emissions Unit 041 & 042

Continuous Emissions Monitoring Requirements

- C.21. <u>CEMS</u>. The permittee shall calibrate, maintain and operate the diluent CEMS to measure CO_2 emissions and CEMS to measure and record the emissions of CO and NO_X from each gas turbine in a manner sufficient to demonstrate continuous compliance with the emission standards in Conditions C.10 and C.11.
 - a. *NO_X Monitor*. Each NO_X monitor shall be certified pursuant to the specifications of 40 CFR 75. Quality assurance procedures shall conform to the requirements of 40 CFR 75, Appendix B. The required RATA tests required for the NO_X monitor shall be performed using EPA Method 7E or 20 in 40 CFR 60, Appendix A.
 - b. *CO Monitor*. Each CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A. Quality assurance procedures shall conform to the requirements of 40 CFR 75, Appendix B. The required RATA tests required for the CO monitor shall be performed using EPA Method 10 in 40 CFR 60, Appendix A, and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.
 - c. SO_2 Monitoring. SO_2 monitoring will be in accordance with 40 CFR 75, Appendix D and, Appendix TR requirements (using sulfur content and fuel flow rates).
 - d. CO_2 Diluent Monitor. The CO_2 content of the flue gas shall be monitored at the location where CO and NO_X are monitored to correct the measured emissions rates to 15% O_2 . The O_2 content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75, Appendix B.
 - e. Data Requirements. The CEMS shall be calibrated, maintained and operated in the gas turbine stacks to measure and record the emissions of CO and NO_X in a manner sufficient to demonstrate compliance with the CEMS-based emission limits in Conditions C.10 and C.11. The CEMS shall express the results in units of ppm corrected to 15% O₂. Upon request by the Department, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable NO_X standards in Condition C.11. The permittee shall be in compliance with the terms and conditions contained in Appendix CEMS for EU 041 and EU 042, Standard Continuous Monitoring Requirements, of this permit.
 - f. Annual Emissions Requirement. The permittee shall use data from the NO_x and CO CEMS when calculating annual emissions for purposes of computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for purposes of computing emissions pursuant to the reporting requirements of Rule 62-210.370(3), F.A.C., AOR. In computing the emissions of a pollutant, the permittee shall account for the emissions during periods of startup and shutdown of the emissions unit.
 - g. *Appendix CEMS*. Additional requirements applicable to the CEMS are given in the attached Appendix CEMS SCCT, which is a part of this permit.

[Rules 62-4.070(3), 62-204.800(8)(b), 62-210.200 & 62-210.370(3), F.A.C.; 40 CFR 60.4335(b) & 60.4345; 40 CFR 75; and Permit Nos. 0570039-040-AC & 0570039-127-AC]

Test Methods and Procedures

C.22. <u>Test Methods</u>. When required, tests shall be performed in accordance with the following reference methods:

Methods	Description of Method and Comments	
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content	
5	5 Determination of PM Emissions from Stationary Sources	
7E	7E Determination of NO _X Emissions from Stationary Sources	
6 or 6C	Determination of SO ₂ Emissions from Stationary Sources	
8	Determination of Sulfuric Acid Mist and SO ₂ Emissions from Stationary Sources	
9	Visual Determination of Opacity of Emissions from Stationary Sources	
10	Determination of CO Emissions from Stationary Sources	

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Methods	Description of Method and Comments	
18	18 Measurement of Gaseous Organic Compound Emissions by Gas Chromatography	
19	Determination of SO ₂ Removal Efficiency and PM, SO ₂ and NO _X Emission Rates	
20	20 Determination of NO _X , SO ₂ , and Diluent Emissions from Stationary Gas Turbines	
25A	Determination of Total Gaseous Organic Concentration using a Flame Ionization Analyzer	
320	Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive FTIR	

The above methods are described in 40 CFR 60, Appendix A, and 40 CFR 63, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800(8)(b) & (11)(b), F.A.C.; 40 CFR 60.4350 & 60.4400; 40 CFR 63.6120 & Table 3; and Permit No. 0570039-040-AC]

- **C.23.** Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]
 - {Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.}
- C.24. Annual Compliance Test Required. During each calendar year (January 1st to December 31st), each SCCT shall be tested to demonstrate compliance with the emission standard for opacity and formaldehyde in Conditions C.9 and C.14, respectively. An annual emissions test shall not be required for opacity provided the liquid fuel was not burned for more than 400 hours, other than during startup, during the calendar year. An emissions test for liquid fuel shall be completed no later than 60 days after the unit's burning of that fuel exceeds 400 hours, or by the end of the calendar year, whichever is later. Annual opacity tests are not required when firing natural gas unless specifically requested by the Department or EPCHC. [Rules 62-204.800(11)(b) & 62-297.310(8), F.A.C.; 40 CFR 63.6115 & Table 3; and Permit No. 0570039-127-AC]
- **C.25.** Formaldehyde Compliance Requirements NESHAP Subpart YYYY. The permittee shall meet the applicable requirements for the annual performance test using the test methods as specified in 40 CFR 63.6120(c) and Table 3, as follows:
 - a. Testing shall be performed in combined cycle mode at 90 to 100% of design capacity. The test may be conducted in simple mode if combined cycle mode is unavailable.
 - b. Four (4), 1-hour separate test runs shall be performed during each annual performance test event.
 - c. Testing shall not include any periods of startup, shutdown and malfunction.
 - d. Select the sampling port location and the number of traverse points using Method 1 or 1A of 40 CFR 60, Appendix A.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6120(c) & Table 3]

- **C.26.** SCCT Startup. Startup begins at the first firing of fuel in the stationary CT. For simple cycle turbines, startup ends when the stationary combustion turbine has reached stable operation or after 1 hour, whichever is less. [Rule 62-204.800(11)(b), F.AC.; and 40 CFR 63.6175]
- C.27. Total Sulfur Content of Fuel NSPS Subpart KKKK. The permittee shall demonstrate compliance with the SO₂ emission limit in Condition C.12 by obtaining the fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use is 0.05% by weight or less and the total sulfur content for natural gas use is 20 gr/100 scf of sulfur or less. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4365(a)]

Recordkeeping and Reporting Requirements

C.28. <u>Performance Test Records – NESHAP Subpart YYYY</u>. The permittee shall record the process information that is necessary to document operating conditions during the test and include in such record an explanation to support that such conditions represent normal operation. Upon request, the permittee shall

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make available to the Department such records as may be necessary to determine the conditions of performance tests. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6120(c)]

- **C.29.** Records Required NESHAP Subpart YYYY. The permittee shall keep the records as described in paragraphs **a** through **c** of this condition.
 - a. Compliance Notifications.
 - (1) A copy of each notification and report that was submitted to comply with 40 CFR 63, Subpart YYYY, including all documentation supporting any Initial Notification or Notification of Compliance Status that was submitted, according to the requirements in 40 CFR 63.10(b)(2)(xiv).
 - (2) Records of performance tests and performance evaluations as required in 40 CFR 63.10(b)(2)(viii).
 - (3) Records of all maintenance on the air pollution control equipment as required in 40 CFR 63.10(b)(2)(iii).
 - (4) Records of the date, time, and duration of each startup period, recording the periods when the affected source was subject to the standard applicable to startup.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6155(a)(1),(2),(5)&(6)]

- b. Deviation Notifications.
 - (1) Record the number of deviations. For each deviation, record the date, time, cause, and duration of the deviation.
 - (2) For each deviation, record and retain a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit and a description of the method used to estimate the emissions.
 - (3) Record actions taken to minimize emissions in accordance with 40 CFR 63.6105(c), and any corrective actions taken to return the affected unit to its normal or usual manner of operation. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6155(a)(7)]
- c. Continuous Compliance with Operating Limitation. The permittee shall keep the records required in Condition C.19 to show continuous compliance with each operating limitation that applies to the CT. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6155(c)]
- d. *EPA CEDRI*. Any records required to be maintained by this part that are submitted electronically via the EPA's CEDRI may be maintained in electronic format. This ability to maintain electronic copies does not affect the requirement for facilities to make records, data, and reports available upon request to a delegated air agency or the EPA as part of an on-site compliance evaluation. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6155(d)]
- e. Record Retention.
 - (1) The permittee shall maintain all applicable records in such a manner that they can be readily accessed and are suitable for inspection according to 40 CFR 63.10(b)(1).
 - (2) As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
 - (3) The permittee shall retain records of the most recent 2 years on site or the records must be accessible on site. The records of the remaining 3 years may be retained off site.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6160]

- **C.30.** Acid Rain Records. For affected EGUs subject to the Acid Rain Program, the permittee shall follow the applicable recordkeeping requirements and maintain records as required under 40 CFR 75, Subparts F and G. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.5555(c)(1) & 60.5560(b)(1)]
- **C.31.** Monitoring of Capacity Records. The permittee shall monitor and record the hourly heat input and hours of operation (including the times of startup, shutdown and malfunction)—in accordance with the provisions of 40 CFR 75, Appendix D, and recording the data using a monitoring component of the CEMS required above (see Appendix CEMS SCCT of this permit). [Rule 62-4.070(3), F.A.C.; and Permit No. 0570039-123-AC]
- **C.32.** <u>Monthly Operations Summary</u>. By the 15th calendar day of each month, the permittee shall record in a written or electronic log for each SCCT for the previous month of operation, including when the SCCT are

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used in synchronous condenser operation, and the following for each fuel: fuel consumption, hours of operation and the updated calendar year totals for each. Information recorded and stored as an electronic file shall be available for inspection by the Department or EPCHC. [Rule 62-4.070(3), F.A.C.; and Permit No. 0570039-156-AC]

- **C.33.** <u>Fuel Sulfur Records</u>. The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the following records of the sulfur contents.
 - a. *Natural Gas Sulfur Limit*: Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. The permittee will monitor SO₂ emissions per 40 CFR 75, Appendix D procedures using fuel sulfur content and fuel flow rates.
 - b. *ULSD Fuel Sulfur Limit*: Compliance with the fuel sulfur limit for ULSD fuel shall be demonstrated by keeping each bill of lading report obtained from the vendor indicating the sulfur content, percent by weight, of the ULSD fuel being delivered. As an alternative, a representative sample shall be collected using ASTM D5287. Methods for determining the sulfur content of the ULSD fuel shall be ASTM methods D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gaseous Processors Association Standard 2377, or more recent versions, or through provisions listed in 40 CFR 60, Subpart KKKK that allows alternate sulfur monitoring for ULSD.
 - c. *NSPS Provisions*. The above methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 60.4415 contained in Appendix NSPS Subpart KKKK, Standards of Performance for Stationary CT of this permit.

[Rules 62-4.070(3), 62-4.160(15) & 62-204.800(8)(b), F.A.C.; 40 CFR 60.4365 & 60.4415; and Permit No. 0570039-127-AC]

- **C.34.** CT Replacements. The SCCT may be replaced with a temporary equivalent "like-kind" overhauled or new SCCT while the existing SCCT is undergoing routine maintenance. The replacement SCCT shall not increase the SCCT maximum heat input rate or actual emissions. The replacement SCCT shall be designed and constructed to achieve the emissions standards specified in this permit. The replacement SCCT shall be deemed in compliance with all emissions standards by demonstrating compliance with the NO_x and CO emission standards using data from the CO and NO_x CEMS. The permittee shall meet the following requirements:
 - a. *Report*. The temporary SCCT shall only be used for a maximum of 3-months. The permittee shall notify the Department within one day prior to replacing the SCCT with a temporary SCCT and when the original SCCT is back in operation. The permittee shall notify the EPCHC if additional time is needed for the replacement SCCT.
 - b. *Recordkeeping*. The permittee shall maintain a log on-site to record the date of any SCCT replacement, the manufacturer, model number, and serial number of the SCCT that is replaced during the term of this permit, and the manufacturer, model number, serial number, and the installation and removal date of the replacement SCCT. All records related to any testing shall be maintained on-site for five years and made available to the Department or EPCHC upon request.
 - c. *Compliance Requirements*. The permittee shall comply with the requirements for notification, test methods, test procedures, and reporting required by this permit.
 - d. *PSD Applicability*. If it is determined that the SCCTs actual emissions, heat input or capacity increased as a result of the maintenance performed, the applicant shall submit an application for an air construction permit within 30 days to evaluate PSD applicability resulting from the modification.

[Rule 62-4.170(3), F.A.C.; and Permit No. 0570039-066-AC]

C.35. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions
Malfunction Notification Report	Quarterly (if requested)	C.36
SIP Excess Emissions Report	Quarterly, within 30 days after each	C.37.a

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Report	Reporting Deadline	Related Conditions
	calendar quarter	
NO _X and SO ₂ Excess Emissions Report	Semiannual	C.37.b
CO and NOx CEMS RATA Report	Quarterly/Semiannual	C.38.b
Notification of Compliance Status	60 calendar days after test	C.39.a
Formaldehyde Semiannual Compliance Report	Semiannual	C.40
Performance Test Report	60 days after test	C.41
Actual Emissions Reporting (2019 – 2028)	Annual, 60 days after end of the calendar year	C.42

[Rule 62-213.440(1)(b), F.A.C.]

C.36. Excess Emission Malfunction Notification and Report. In case of excess emissions resulting from malfunctions, the permittee shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rules 62-210.700(5), F.A.C.]

C.37. Excess Emissions Reports.

- a. *SIP Excess Emissions Report*. Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the EPCHC summarizing periods of CO emissions in excess of the permit emission standards, the CEMS monitor availability for the previous quarter, including periods of startup, shutdown, malfunction, fuel switching and tuning, the RATA tests performed, and the amount of authorized data excluded by following the format in Figure 1 of the appendices section. [Rules 62-4.070(3), F.A.C.; and Permit No. 0570039-123-AC]
- b. NO_X and SO₂ Excess Emissions Report NSPS Subpart KKKK. Each SCCT required to continuously monitor NOx emissions, or to periodically determine the fuel sulfur content. The permittee shall submit reports of excess emissions and monitor downtime, in accordance with 40 CFR 60.7(c). Excess emissions shall be reported for all periods of unit operation, including start-up, shutdown, and malfunction. The semiannual ports required under 40 CFR 60.7(c) shall be post marked by the 30th day following the end of each 6-month period following the procedures per 40 CFR 60.4380(b)(1) (3). {Permitting Note: NSPS monitoring of fuel sulfur for SO₂ emissions is exempt pursuant to 40 CFR 60.4365 because the unit fires natural gas from a pipeline with a valid purchase contract, tariff sheet or transportation contract for the fuel specifying the maximum total sulfur content as 20 gr S/100 scf of gas and has potential sulfur emissions of less than less than 0.060 lb SO₂/MMBtu of heat input. If there are no periods of excess emissions as defined in 40 CFR 60, Subpart KKKK, a statement to that effect may be submitted with the SIP Quarterly Report to suffice for the NSPS Semiannual Report.} [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4375(a) & 60.4380(b)]

C.38. CO and NOx CEMS RATA Notification and Report.

- a. *Notification*. At least 15 days prior to conducting any RATA on a CEMS, the permittee shall notify the EPCHC of the schedule (letter, email, fax, or phone call). A summary of the RATA reports shall be provided upon written request of the EPCHC and in the SIP Excess Emissions Report as specified in Condition C.36.a.
- b. Report. The NO_X RATA shall be submitted with the SIP semiannual or quarterly report and to the EPA Emissions Collection and Monitoring Plan System. The CO RATA shall be submitted with the SIP semiannual or quarterly report.

[Rule 62-4.070(3), F.A.C.; and Permit Nos. 0570039-040-AC & 0570039-127-AC]

C.39. Notification of Compliance Status.

a. *NESHAP Subpart YYYY*. In order to comply with the emission limitation for formaldehyde in Condition C.14, the permittee shall submit a Notification of Compliance Status according to 40 CFR 63.9(h)(2)(ii). For each performance test required to demonstrate compliance with the emission limitation for formaldehyde, the permittee shall submit the Notification of Compliance Status, including the performance test results, before the close of business on the 60th calendar day following the completion of the performance test. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6145(f)]

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- b. *Re-scheduled Test and Revised Notification State Rule*. If a scheduled emissions test needs to be rescheduled, the permittee shall submit a revised notification at least seven days prior to the re-scheduled emissions test date or arrange a re-scheduled test date with the Compliance Authority by mutual agreement. [Rule 62-297.310(9), F.A.C.]
- **C.40.** Formaldehyde Semiannual Compliance Report NESHAP Subpart YYYY. The permittee shall submit a semiannual compliance report with the following information included:
 - a. Compliance Report.
 - (1) Company name and address.
 - (2) Statement by a responsible official, with that official's name, title, and signature, certifying the accuracy of the content of the report.
 - (3) Date of report and beginning and ending dates of the reporting period.
 - [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(a)(1)-(3)]
 - b. Deviation in Semiannual Compliance Report.
 - (1) Report the number of deviations. For each instance, report the start date, start time, duration, and cause of each deviation, and the corrective action taken.
 - (2) For each deviation, the report must include a list of the affected sources or equipment, an estimate of the quantity of each regulated pollutant emitted over any emission limit, a description of the method used to estimate the emissions.
 - (3) Information on the number, duration, and cause for monitor downtime incidents (including unknown cause, if applicable, other than downtime associated with zero and span and other daily calibration checks), as applicable, and the corrective action taken.
 - (4) Report the total operating time of the affected source during the reporting period. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(a)(5)]
 - c. Submitting the Semiannual Compliance Report. Each semiannual compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31. The report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(b)]
 - d. CEDRI. If the permittee is required to submit reports following the procedure specified in paragraphs C.40.a c of this condition and Condition C.41, the permittee shall submit reports to the EPA via CEDRI, which can be accessed through the EPA's CDX (https://cdx.epa.gov/). The permittee shall use the appropriate electronic report template on the CEDRI website (https://www.epa.gov/electronic-reporting-air-emissions/compliance-and-emissions-data-reporting-interface-cedri) for 40 CFR 63, Subpart YYYY. The date report templates become available will be listed on the CEDRI website. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(g)]
- **C.41.** Performance Test Report NESHAP Subpart YYYY. The permittee shall within 60 days after the date of completing each performance test required by 40 CFR 63, Subpart YYYY, the permittee shall submit the results of the performance test as specified in Condition **C.39** following the procedures specified in paragraphs **a** through **c** of this condition.
 - a. Test Methods Supported by EPA ERT. Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test. Submit the results of the performance test through the EPA's Central Data Exchange (CDX) (https://cdx.epa.gov/). The data must be submitted in a file format generated through the use of the EPA's ERT. Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.
 - b. Test Methods Not Supported by EPA ERT. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML

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schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(f)]

reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

- c. *Force Majeure*. If the permittee fails to timely comply with the reporting requirement through CEDRI in the EPA's CDX due to a claim of force majeure, the facility must follow the procedures in 40 CFR 63.6150(i). [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.6150(i)]
- **C.42.** Actual Emissions Reporting (2019 2028): Permit No. 0570039-108-AC is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for CO emissions. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.
 - a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons/year on a calendar year basis, for a period of 10 years following resumption of regular operations after removing the CO oxidation catalyst. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.
 - b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 10-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
 - (1) The name, address and telephone number of the owner or operator of the major stationary source;
 - (2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix RR and Appendix TV of this permit;
 - (3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
 - (4) Any other information that the owner or operator wishes to include in the report.
 - c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.
 - d. For this project, the permit requires the annual reporting of actual annual CO emissions using the CO CEMS data for the following units: EU 041 SCCT 4A and EU 042 SCCT 4B. [Rules 62-210.370 and 62-212.300(1)(e), F.A.C.; and Permit No. 0570039-108-AC]
- C.43. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional

Other Requirements

- C.44. NSPS Provisions. The SCCTs are subject to the applicable requirements of NSPS Subpart A, General Provisions, and Subpart KKKK, Standards of Performance for Stationary CT, of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b) and (c), F.A.C. [Rule 62-204.800(8)(b) & (c), F.A.C.; and 40 CFR 60 Subparts A & KKKK]
- C.45. NESHAP Provisions. The SCCTs are subject to the appliable requirements of NESHAP Subpart A, General Provisions, and Subpart YYYY, NESHAP for Stationary CT, of 40 CFR 63, adopted and incorporated by reference 62-204.800(11)(b) and (d), F.A.C. [Rule 62-204.800(11)(b) & (d), F.A.C.; and 40 CFR 63 Subparts A & YYYY]
- **C.46.** Acid Rain Program. The SCCTs shall meet the applicable requirements of the Acid Rain Monitoring Provisions: Acid Rain Phase II SO₂ and Acid Rain Phase II NOx (40 CFR 75), adopted and incorporated in Rule 62-204.800, F.A.C. [Rule 62-204.800, F.A.C.; and Acid Rain Program of 40 CFR 75]

Subsection D. Emissions Units 010

The Conditions in this section apply to the following emissions unit:

ĺ	EU No.	Brief Description
	010	Solid Fuel and Limestone Unloading and Handling Operations

Solid fuel (consisting of coal and petroleum coke) is unloaded from self-unloading and non-self-unloading ships and barges into the solid fuel yard (EU 010), the blending bins or directly to the tripper room via belt conveyors. Solid fuel may also be received/unloaded by railcar (EU 047) and conveyed to the fuel yard. Solid fuel from the piles is loaded onto belt conveyors using a rail mounted or mobile reclaimer. The solid fuel is then belt conveyed to the blending bins (EU 029), which consist of six storage bins, where the solid fuel may be blended for use at the plant, or transloaded into trucks for shipment off site (EU 046).

The solid fuel yard handling system is used to unload limestone from ocean vessels onto a temporary storage pile located in the fuel yard. The PECO clam shell, self-unloading vessels equipped with clamshells, or self-unloading vessels equipped with boom conveyors may be used to unload solid fuels and limestone at Tampa Electric's dock area to hoppers positioned directly above existing Conveyor D1. The limestone is conveyed to the radial stacker through existing Conveyors D1, E1, F1, and G1 onto a temporary limestone storage pile located in the fuel yard and stored there until transferred via trucks to permanent segregated storage piles located within the east storage area.

The handling capacity for the conveyors and equipment that comprise the solid fuel yard emissions points is not specifically limited; however, the design capacity for the majority of the handling equipment is 4,000 tons/hour. The total annual solid fuel handling capacity is inherently limited by the amount of fuel that Unit 4 (EU 004) can burn (5 - 6 million tons/year) plus the amount of solid fuel that can be transloaded for off-site shipment, 1,428,030 tons/year limit in Transloading and Off-site Transfer of Solid Fuels and Slag (EU 046) and 8,000,000 tons/year of solid fuel that can be received by railcar (EU 047).

The emissions unit contained in this subsection is comprised of the following fuel handling (FH) and limestone handling (LSH) emission points:

	Solid Fuel Yard Unloading and Handling Operations (EU 010)			
Point ID	Brief Description	Pollutant		
	Barge Unloading Operations (Coal/Limestone)			
FH-001/LSH-012	Barge Clamshell to Conveyor D1			
FH-005	Self-Unloading Vessel to Conveyor D1 (Dravo Hopper)			
FH-005A	Self-Unloading Vessel to Conveyor D1 (Hopper A)	Fugitive		
FH-005B	Self-Unloading Vessel to Conveyor D1 (Hopper B)	VE		
FH-005C	Self-Unloading Vessel to Conveyor D1 (Hopper C)			
FH-005D	Self-Unloading Vessel to Conveyor D1 (Hopper D)			
	Coal/Limestone Conveying Operations			
FH-006/LSH-013	Conveyor D1 to Conveyor E1			
FH-007/LSH-014	Conveyor El to Conveyor Y or Conveyor F1			
FH-008a	Conveyor Y to Conveyor Z			
FH-008b	Conveyor Z to West Emergency Pile	Fugitive VE		
FH-012	Conveyor Z to Conveyor P			
FH-013	Conveyor P to North Stacker Conveyor (G2)			
FH-015	North Stacker Conveyor (G2) to North/Middle Storage Pile	Fugitive VE		
FH-016	North Reclaimer to North Reclaimer Conveyor (G2)			
FH-017	North Reclaimer Conveyor (G2) to Conveyor P			
FH-022/LSH-015	Conveyor F1 to South Stacker Conveyor (G1)			
FH-023/LSH-016	South Stacker Conveyor (G1) to South/Center Storage Pile	Fugitive VE		
FH-025	South Reclaimer Conveyor (G1) to Conveyor F1			
FH-028	Conveyor P to Conveyor J2	Fugitive VE		

Subsection D. Emissions Units 010

	Solid Fuel Yard Unloading and Handling Operations (EU 010)		
Point ID	Brief Description	Pollutant	
FH-029	Conveyor J2 to Conveyor Q2		
FH-030	Conveyor F1 to Conveyor J1		
FH-031	Conveyor J1 to Conveyor Q1		
FH-052	Conveyor U to East Emergency Storage Pile	Fugitive VI	
FH-055	Conveyor W1 to Conveyor L1		
FH-056	Conveyor W2 to Conveyor L2		
	Conveyors L1 & L2 to M1 & M2, and Conveyors M1 & M2 to Coal Bunkers		
FH-059 - FH-062	(These enclosed conveyors are located inside an enclosed building and are not		
	subject to emissions limits or testing requirements.)		
	Coal Equipment & Storage		
FH-009	Dozer Operations on West Emergency Storage Pile	F '/'	
FH-010	West Emergency Storage Pile	Fugitive	
FH-011a	Dozer Reclaim from West Emergency Pile to Portable Conveyor	VE	
FH-011b	Portable Conveyor Feeds into Portable Hopper		
FH-011c	Portable Hopper to Conveyor F		
FH-018	Dozer Operations on North Storage Pile		
FH-019	North Storage Pile		
FH-020	Dozer Operations on Middle (Common) Storage Pile		
FH-021	Fuel Storage - Middle (Common) Storage Pile	Fugitive	
FH-024	South Reclaimer to South Reclaimer Conveyor (G1)	VE	
FH-026	Dozer Operations on South Storage Pile		
FH-027	South Storage Pile		
FH-036 - FH-047	Blending Bins to Conveyors T1, T2		
FH-050	Crusher to Conveyor W1		
FH-051	Crusher to Conveyor W2		
FH-053	Dozer Operations on East Emergency Storage Pile		
FH-054	East Emergency Storage Pile	Fugitive	
FH-057	Dozer Reclaim from East Emergency Pile to "K" Feeders	VE	
FH-058	"K" Feeders to Conveyors L1 or L2		
FH-063	Dozer Operations on Storage Pile		
FH-064	Dozer Reclaim from Storage Pile to Loadout or Portable Conveyor		
FH-070	Long Term Storage Pile	Fugitive	
FH-071	Dozer Operations on Long Term Storage Pile	VE	
FH-072	Trucks, Full		
FH-073	Trucks, Empty		
111 0/0	Additional Limestone Handling Operations		
LSH-017	Load Truck at Temporary Fuel Yard (Heading for East Storage Area)		
LSH-018	Unload Trucks at East Storage Area Unload Trucks at East Storage Area		
LSH-018		-	
	Load Trucks in East Storage Area to FGD		
LSH-025	Truck Traffic, Full (Fuel Yard to East Storage Area)		
LSH-026	Truck Traffic, Empty (East Storage Area to Fuel Yard)		
LSH-027	Truck Traffic, Full (East Storage Area to FGD)	Fugitive	
LSH-028	Truck Traffic, Empty (FGD to East Storage Area)		
LSH-035	Store/Reclaim Fuel Yard Pile		
LSH-036	Store/Reclaim East Storage Area		
LSH-038	Wind erosion Fuel Yard Pile	1	
LSH-039	Wind erosion East Storage Area	1	

Subsection D. Emissions Units 010

{Permitting Note: This emission unit is subject to Rules 62-212.400(BACT), F.A.C., PSD; Rule 62-296.320(4)(b), F.A.C., General Visible Emissions; NSPS Subpart A, General Provisions, and Subpart Y, Standards of Performance for Coal Preparation and Processing Plants, of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b) and (c), F.A.C.; Power Plant Siting Certification [PA 79-12]; and Chapter 1-3.52, EPCHC.}

Essential PTE Parameters

- **D.1.** Methods of Operation.
 - a. *Material Handled*. The materials that are allowed to be handled by this emissions unit are coal, petroleum coke, slag, residual coal, and limestone.
 - b. *Equipment and Conveyors*. The PECO clamshell unloader, self-unloading vessels equipped with boom conveyors, or self-unloading vessels equipped with clamshell crane unloaders are used to unload solid fuels (coal and petroleum coke) and limestone.
 - c. Limestone Storage Piles.
 - (1) The temporary storage piles have up to 200,000 tons/year of limestone unloaded from ocean vessels.
 - (2) The permanent east storage pile consists of approximately 100,000 tons/year of limestone. [Rule 62-210.200(PTE), F.A.C.; PA 79-12; and Permit Nos. 0570039-092-AC, 0570039-100-AC & 0570039-156-AC]
- **D.2.** <u>Hours of Operation</u>. These emissions units may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.]

Control Technology

- **D.3.** PM Control Devices. PM emissions shall be controlled by the use of the following control devices:
 - a. *Equipment Enclosure*. All conveyors and conveyor transfer points shall be enclosed to minimize PM emissions excepting the coal handling stacker reclaimer, the tail end conveyor feeding the tripper and the barge unloading belt, which are exempted for feasibility considerations.
 - b. Water Sprays. Water sprays for storage piles, handling equipment, etc., including the handling equipment exempted from the conveyor enclosure requirement as specified in paragraph **a** of this condition, shall be applied during dry periods and as necessary to all unconfined emissions points to maintain opacity below 20%. Water sprays and/or surfactants shall also be applied as necessary within the covered conveyors and drop points.
 - c. *Minimizing Wind Erosion Coal and Limestone Storage Piles*. Storage piles shall be shaped, compacted and oriented to minimize wind erosion.
 - d. Surfactant or Water Spray System for Self-Unloading Vessels. Each vessel self-unloading operation shall utilize dust prevention techniques (i.e., material moisture or surfactant previously applied during vessel loading) and surfactant or water sprays operated as needed to comply with the opacity standards in this permit

{Permitting Note: PA 79-12 requires this emission unit to be controlled by control devices. This requirement is satisfied by complying with these control measures required in Permit No. PSD-FL-040.} [Rule 62-212.400(BACT), F.A.C.; PA 79-12; and Permit Nos. 0570039-100-AC & 0570039-156-AC (PSD-FL-040D]

D.4. Storage Pile Operations – Unconfined PM. The Storage pile operations are subject to Rule 62-296.320(4)(c), F.A.C., Unconfined Emissions of PM. Reasonable precautions to minimize unconfined PM shall be in accordance with Rule 62-296.320(4)(c), F.A.C.; and may include, but shall not be limited to, the coating of roads and construction sites used by contractors and re-grassing or watering areas of disturbed fuel. [Rule 62-296.320(4)(c), F.A.C.; and PA 79-12]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Condition **D.5** are based on the specified averaging time of the applicable test method.

Subsection D. Emissions Units 010

- **D.5.** Visible Emissions. Visible emissions shall not exceed the following:
 - a. *Coal Processing and Preparation*. 10% opacity. Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the 10% opacity limitation.
 - b. *Vessel Unloading Operations and Fuel Yard*. 20% opacity for any unconfined emissions. The general 20% opacity standard does not require regular visible emissions testing.
 - c. *Unconfined Emissions*. Defined in Rule 62-210.200, F.A.C. as "Emissions which escape and become airborne from unenclosed operations, or which are emitted into the atmosphere without being conducted through a stack." Based on this definition, emissions from operations related to the open storage piles (*i.e.*, movable conveyor drops to the storage piles, the open storage piles themselves, dozer operations on the storage piles, the movable coal handling stacker reclaimer, the tail end conveyor feeding the tripper and the barge unloading belt) are considered unconfined emissions subject only to the general 20% opacity standard and regular visible emission testing is not required. TECO is able to meet this limit by maintaining the required enclosures and by operating water sprays or applying surfactants as needed; therefore, additional add-on PM control devices are not needed.

[Rules 62-204.800(8)(b) & 62-296.320(4)(b)1., F.A.C.; 40 CFR 60.254(b); Chapter 1-3.52, EPCHC; and Permit Nos. 0570039-092-AC & 0570039-100-AC]

Test Methods and Procedures

D.6. <u>Test Method</u>. When required, tests shall be performed in accordance with the following reference method:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions.

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-297.310 & 62-204.800, F.A.C.; and Appendix A of 40 CFR 60]

D.7. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.

D.8. <u>Visible Emissions Compliance Requirement</u>. If any affected coal processing and conveying equipment (*e.g.*, breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems are enclosed in a building, and emissions from the building do not exceed any of the standards in **D.5.a** that apply to the affected facility, then the facility shall be deemed to be in compliance with such standards. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.255(c)]

Recordkeeping and Reporting Requirements

D.9. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

Other Requirements

D.10. NSPS Provisions. This coal storage yard shall meet the applicable requirements of the NSPS Subpart A, General Provisions, and Subpart Y, Standards of Performance for Coal Preparation and Processing Plants, of 40 CFR 60, adopted and incorporated in Rule 62-204.800(8)(b) and (c), F.A.C. [Rule 62-204.800(8)(b) & (c), F.A.C.; and 40 CFR 60 Subparts A & Y]

Subsection E. Emissions Units 029 & 030

The Conditions in this section apply to the following emissions units:

EU No.	Brief Description
029	Fuel Blending Bin Cyclone Collectors (FH-032 through FH-035)
030	Fuel Mill Cyclone Collectors (FH-048 and FH-049)

Solid fuel (consisting of coal and petroleum) is unloaded from ships and barges into the solid fuel yard (EU 010), the blending bins or directly to the tripper room via belt conveyors. Solid fuel may also be received/unloaded by railcar (EU 047) and conveyed to the fuel yard. Solid fuel from the storage piles is loaded onto belt conveyors using a rail mounted or mobile reclaimer. The solid fuel is then belt conveyed to the blending bins, which consists of six storage bins, where the solid fuel may be blended for use at the plant, or transloaded into trucks for shipment off site (EU 046). PM emissions from the conveyors in the blending bins are controlled by four rotoclones. One at the conveyor drop and three additional roto-clones (one for every 2-bins) control PM from ventilation of the blending bins. Blending bins can either feed the transloader, or solid fuel can be conveyed, via two parallel belts (T1, T2) to two crushers (each belt has a crusher) or diverted directly to the tripper room. PM emissions from the two crushers and transfer tower are controlled by two roto-clones. The fuel blending bin cyclones collectors and the fuel mill cyclone collectors each have their own emissions points through the roof of the supporting structure with the following emissions parameters: height, approximately 70 feet above grade; diameter, 1.67 feet; exit temperature, 77°F; and, actual stack gas flow rate, 9,400 acfm. These emission units began commercial operation in 1970.

The handling capacity for the conveyors and equipment that comprises the solid fuel yard emissions points is not specifically limited; however, the design capacity for the majority of the handling equipment is 4,000 tons/hour. The total annual solid fuel handling capacity is inherently limited by the amount of fuel that Unit 4 (EU 004) can burn (5 – 6 million tons/year) plus the amount of solid fuel that can be transloaded for off-site shipment, 1,428,030 tons/year limit in Transloading and Off-site Transfer of Solid Fuels and Slag (EU 046), and 8,000,000 tons/year of solid fuel that can be received by railcar (EU 047).

Point ID	Description of Emissions Point		
Fuel Blending Bin Roto-Clone Collectors (EU 029)			
FH-032 - FH-035	Conveyors Q1 and Q2 to Blending Bins		
	Fuel Mill Roto-Clone Collectors (EU 030)		
FH-048	Conveyor T1 to Crusher No. 1		
FH-049	Conveyor T2 to Crusher No. 2		

{Permitting Note: These emission units are subject to Rules 62-212.400, F.A.C., PSD; Rule 62-296.700, F.A.C., RACT PM; Rule 62-296.711, F.A.C., Materials Handling, Sizing, Screening, Crushing and Grinding Operations; NSPS Subpart A, General Provisions, and Subpart Y, Standards of Performance for Coal Preparation and Processing Plants, of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b) and (c), F.A.C.; Power Plant Siting Certification [PA 79-12]; and, Chapter 1-3.52, EPCHC.}

Essential PTE Parameters

- **E.1.** Methods of Operation Materials Handling. The materials that are allowed to be handled by these emissions units are coal, petroleum coke, slag and residual coal. [Rule 62-210.200(PTE), F.A.C.; PA 79-12; and Permit Nos. 0570039-012-AC & 0570039-156-AC]
- **E.2.** <u>Hours of Operation</u>. These emissions units may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.]

Control Technology

E.3. PM Control Devices. PM emissions shall be controlled by use of control devices. [PA 79-12] {Permitting Note: This requirement is satisfied by the use of roto-clone collectors on the blending bins and fuel mill.}

Subsection E. Emissions Units 029 & 030

E.4. <u>Circumvention</u>. The permittee shall not circumvent or operate the air pollution control equipment–in such a manner which would violate allowable emission rates established for this unit. [Rule 62-210.650, F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Conditions **E.5** and **E.6** are based on the specified averaging time of the applicable test method.

- **E.5.** Visible Emissions. As determined by stack test, visible emissions shall not exceed the following:
 - a. 5% opacity.
 - b. 20% opacity from coal processing and conveying equipment, coal storage system, or coal transfer and loading system processing coal. {Permitting Note: Compliance with the 5% opacity limit will show compliance with this emission standard.}

[Rules 62-204.800(8)(b) & 62.296.711(2), F.A.C.; 40 CFR 60.254(a); PA 79-12; and Chapter 1-3.52, EPCHC]

E.6. PM Emissions. Compliance with the visible emissions limitation satisfies the intent of the applicable RACT rules. [Rule 62-296.711(2)(b), F.A.C.; PA 79-12; and Permit No. 0570039-053-AC]

Test Methods and Procedures

E.7. <u>Test Methods</u>. When required, tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments	
9	Visual Determination of the Opacity of Emissions	

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 & 62-296.711, F.A.C.; 40 CFR 60, Appendix A; and Permit No. 0570039-053-AC]

E.8. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.

E.9. Annual Compliance Test Required. During each calendar year (January 1st to December 31st), one of the fuel blending bin roto-clones (FH-032 – FH-035) (EU 029) and one of the fuel mill roto-clones (FH-048 and FH-049) (EU 030) shall be tested to demonstrate compliance with opacity in Condition **E.5**. Each year a different fuel blending bin roto-clone shall be tested in subsequent order (FH-032, FH-033, etc.) and each year a different fuel mill roto-clone will be tested. The duration of the annual test shall be 30 minutes. [Rules 62-4.070(3), 62-297.310(4)(a)2 & (8), and 62-296.711(3)(a), F.A.C.; PA 79-12; and Permit No. 0570039-053-AC]

Recordkeeping and Reporting Requirements

E.10. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

Other Requirements

E.11. NSPS Provisions. These emission units shall meet the applicable requirements of the NSPS Subpart A, General Provisions, and Subpart Y, Standards of Performance for Coal Preparation and Processing Plants, of 40 CFR 60, adopted and incorporated in Rule 62-204.800(8)(b) and (c), F.A.C. [Rule 62-204.800(8)(b) & (c), F.A.C.; and 40 CFR 60 Subparts A & Y]

Subsection F. Emissions Unit 046

The Conditions in this section apply to the following emissions unit:

EU No.	Brief Description	
046	Transloading and Off-site Transfer of Solid Fuels and Slag (by truck, rail and barge)	

This emissions unit is housed within the solid fuel yard and is comprised of transfer and loading equipment designed to take material from the blending bins (EU 029) and/or the storage piles in the fuel yard (EU 010) using mobile equipment to load trucks, railcars and barges for shipment to off-site. The material that is allowed to be loaded for off-site shipment is coal, petroleum coke and slag. The main purpose of the transloading operation is to provide coal and petroleum coke to the TECO, Polk Power Station; however, the permittee is authorized to operate as a fuel and slag supplier to other non-TECO facilities, as well. The coal and petroleum coke are treated with a chemical surfactant prior to arriving at the Big Bend Station. The slag has minimal dust potential due to its glassine properties and therefore does not need to be treated with a chemical surfactant.

Point ID	Brief Description
FH-065	Loadout Conveyor to Rail Transfer Conveyor
FH-066	Railcar Loading
FH-067	Non-TEC Fuel Stockpile to Loadout Conveyor
FH-068	Non-TEC Fuel Truck Loading
FH-069	Polk Fuel Truck Loading
FH-074a	Reclaim from Petroleum Coke Storage Pile to Loadout Trucks
FH-074b	Reclaim from Coal Storage Pile to Trucks
FH 074c	Reclaim from Slag Storage Pile to Trucks
FH-075a	Truck Traffic (paved roads, empty trucks)
FH-075b	Truck Traffic (paved roads, full trucks)
FH-076a	Truck Traffic (unpaved roads, empty trucks)
FH-076b	Truck Traffic (unpaved roads, full trucks)
FH-080a	Truck Traffic to Barge Transloading (paved roads, empty trucks)
FH-080b	Truck Traffic to Barge Transloading (paved roads, full trucks)
FH-081a	Truck Traffic to Barge Transloading (unpaved roads, empty trucks)
FH-081b	Truck Traffic to Barge Transloading (unpaved roads, full trucks)

{Permitting Note: This emissions unit is subject to Rule 62-296.320(4)(b) & (4)(c), F.A.C., General Pollutant Emission Limiting Standards; NSPS Subpart A, General Provisions, and Subpart Y, Standards of Performance for Coal Preparation and Processing Plants, of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b) and (c), F.A.C.; and Power Plant Siting Certification [PA 79-12].}

Essential PTE Parameters

F.1. Permitted Capacity. The maximum allowable transloading rate is as follows:

Unit No.	Tons/Hour	Tons/Year	<u>Description</u>
046	4,000	-	Daily average
	-	1,853,030	All solid fuel and slag materials transloaded onto trucks,
			railcars and barges for shipment off-site.

[Rules 62-4.070(3) & 62-210.200(PTE), F.A.C.; and Permit No. 0570039-071-AC (PSD-FL-040B)]

F.2. Methods of Operation.

- a. *Materials Allowed*. The materials that are allowed to be handled by the emissions points that comprise this emissions unit are coal, petroleum coke and slag.
- b. *Material Not Allowed*. The emission points listed above as FH-074a, b and c, FH-075a and b, and FH-076a and b are not allowed to transload residual coal.

[Rules 62-4.070 (3) & 62-210.200(PTE), F.A.C.; PA 79-12; and Permit No. 0570039-025-AC]

Subsection F. Emissions Unit 046

F.3. <u>Hours of Operation</u>. These emissions units may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.]

Control Technology

F.4. Reasonable Precautions to Prevent Unconfined PM Emissions. The transloading, from storage piles of solid fuels (petroleum coke or coal) or slag, to trucks, railcars and barges by mobile equipment (e.g. front-end loaders) is subject to the facility-wide general visible emissions standard of 20%; however, annual visible emissions compliance testing is not required for these sources of fugitive emissions. The solid fuels and slag transloading operations shall be controlled under existing management practices at the facility for minimizing fugitive dust (*e.g.*, watering open storage areas and roads sufficient to minimize entrained dust). Fugitive emissions of PM associated with transloading these solid materials shall be minimized using reasonable precautions such as paving and maintenance of roads, parking areas or yards, or application of water or dust suppressant chemicals at each transloading emission point (*e.g.*, FH-74a for reclaiming from petroleum coke storage pile to trucks, FH-74b for reclaiming from coal storage piles to trucks, and FH-074c for reclaiming from slag storage pile to trucks). Fugitive PM emissions shall also be controlled onsite using reasonable precautions (*e.g.*, tarps, applications of water or chemicals for suppression of road dust) for fugitive emission points associated with transport vehicles on paved and unpaved roads (emission points FH-75a through FH-81b). [Rules 62-4.070 & 62-296.320(4)(b)1., F.A.C.; and Permit No. 0570039-059-AC]

Recordkeeping and Reporting Requirements

- **F.5.** Recordkeeping and Reporting. The number of railcars trucks and barges, and the quantity and type of material loaded and transported off-site by each fuel transloading operation emissions point covered in this permit (*i.e.*, off-loading and loading of fuel or slag *{for export from Big Bend Station}*) shall be recorded, maintained, and kept on file for a minimum of 5-years. The annual quantity of each transloaded material shall be submitted in the AOR. All reports and records required by this permit shall be kept for at least 5-years from the date the information was recorded. [Rule 62-4.160(14)(b), F.A.C.; PA 79-12; and Permit No. 0570039-066-AC]
- **F.6.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

Other Requirements

F.7. NSPS Provisions. This emission unit shall meet the applicable requirements of the NSPS Subpart A, General Provisions, and Subpart Y, Standards of Performance for Coal Preparation and Processing Plants, of 40 CFR 60, adopted and incorporated in Rule 62-204.800(8)(b) and (c), F.A.C. [Rule 62-204.800(8)(b) & (c), F.A.C.; and 40 CFR 60 Subparts A & Y]

Subsection G. Emissions Unit 047

The Conditions in this section apply to the following emissions unit:

EU No	No. Brief Description	
047		Railcar Unloading and Conveying System

The railcar coal unloading system consists of one railcar unloading building and a series of transfer conveyors. The railcar unloading building is an enclosed structure (except for the railcar entrance and exit openings) that unloads coal in a slow and controlled manner. As each railcar passes through the railcar unloading building, the coal is dropped through a stationary safety screen and into collecting hoppers. The coal is discharged from each collecting hopper through a series of slide gates to control the amount of coal dropped onto the variable speed belt conveyor. A water spray and chemical surfactant dust suppression system is used to control fugitive emissions as coal is unloaded into the receiving hopper. The system also includes a secondary spray and chemical surfactant dust suppression system at the end of the variable speed belt conveyor to further minimize fugitive emissions.

A system of conveyors is used to transfer coal from the variable speed belt conveyor in the railcar unloading building to the Conveyors P or F in the solid fuel yard. These transfer conveyors consist of Conveyors C10 through C-16. The fugitive emissions are controlled by enclosed conveyors and totally enclosed drops points at the transfer structures.

{Permitting Note: This emissions unit is subject to NSPS Subpart A, General Provisions, and Subpart Y, Standards of Performance for Coal Preparation and Processing Plants, of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b) and (c), F.A.C.}

This emission unit is comprised of the following:

Point ID	Brief Description
RC-1	Train Car Drop Unloading to Belt Feeder BF-1
RC-2	Transfer from BF-1 to Conveyor C-10
RC-3	Conveyor C-10 to Conveyor C-11
RC-4	Conveyor C-11 to Conveyor C-12
RC-5	Conveyor C-12 to Conveyor C-13
RC-6	Conveyor C-13 to Conveyor C-14
RC-7	Conveyor C-14 to Conveyor C-15
RC-8	Conveyor C-15 to Conveyor C-16 or Conveyor P
RC-9	Conveyor C-16 Drop to Conveyor F1

{Permitting Note: RC-1 (Train Car Drop Unloading to Belt Feeder BF-1, building vent) is the only emission point in the process, RC-2 through RC-9 is completely enclosed.}

Essential PTE Parameters

G.1. Permitted Capacity. The maximum allowable unloading rate is as follows:

Unit No.	Tons/Hour	Tons/Year	<u>Description</u>
047	4,000	-	Daily average
	-	8,000,000	Transfer for the railcar unloading operations.

[Rule 62-210.200(PTE), F.A.C.; and Permit No. 0570039-066-AC]

- **G.2.** Methods of Operation. The materials that are allowed to be handled in the Railcar Unloading and Conveying System are coal, petroleum coke and slag. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0570039-041-AC]
- **G.3.** <u>Hours of Operation</u>. These emissions units may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.]

Subsection G. Emissions Unit 047

Control Technology

- **G.4.** Railcar Coal Unloading Building. The permittee shall utilize the water spray system or chemical dust suppression system in the railcar unloading building to control PM emissions from the railcar unloading hopper. [Rules 62-4.070(3) & 62-210.200(PTE), F.A.C.; and Permit No. 0570039-066-AC]
- **G.5.** Railcar Coal Unloading Conveying System. The permittee shall utilize the water spray system or chemical dust suppression system in the railcar unloading building to control PM emissions from the railcar unloading conveying system. [Rule 62-4.070, F.A.C.; and Permit No. 0570039-066-AC]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Condition G.6. is based on the specified averaging time of the applicable test method.

G.6. <u>Visible Emissions</u>. Visible emissions from any gases shall not exceed 10% opacity. Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the 10% opacity limitation. [Rules 62-204.800(8)(b), F.A.C.; and 40 CFR 60.254(b)]

Test Methods and Procedures

G.7. <u>Test Methods</u>. When required, tests shall be performed in accordance with the following reference methods:

Methods	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.; 40 CFR 60 Appendix A; and 40 CFR 60.255]

G.8. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.

G.9. <u>Visible Emissions Compliance Requirement</u>. The coal processing and conveying equipment (*e.g.*, breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems are enclosed in a building, and emissions from the building do not exceed any of the standards in Condition **G.6.** that apply to the affected facility, then the facility shall be deemed to be in compliance with such standards. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.255(c)]

Reporting and Recordkeeping Requirements

G.10. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

Other Requirements

G.11. NSPS Provisions. This emission unit shall meet the applicable requirements of the NSPS Subpart A, General Provisions, and Subpart Y, Standards of Performance for Coal Preparation and Processing Plants, of 40 CFR 60, adopted and incorporated in Rule 62-204.800(8)(b) and (c), F.A.C. [Rule 62-204.800(8)(b) & (c), F.A.C.; and 40 CFR 60 Subparts A & Y]

Subsection H. Emissions Unit 048

The Conditions in this section apply to the following emissions unit:

EU No.	Brief Description
048	Supplemental Material Handling J3 Conveyor System

This supplemental material handling conveyor system consists of a grizzly in-feed hopper, which feeds material onto a 72-inch covered belt conveyor, a 54-inch covered belt conveyor, and an enclosed hopper at the existing K feeders (FH-103) (which feed into the existing L1 and L2 conveyors). The combination of the grizzly feeder, the 72-inch belt conveyor and the 54-inch belt conveyor will be collectively referred to as the J3 Conveyor System. All static drop points within the new conveyors will be completely enclosed with no emissions to the atmosphere.

The J3 Conveyor System will serve as a supplemental conveyance system for coal, coal blends and coal supplemental additives (such as limestone, flux, magnesium oxide, petroleum coke, ecotherm) for use with the existing conveyance feed system. In the event the use of an existing back up coal conveyor system or related equipment is warranted, the J3 Conveyor System will be available to operate continuously. The maximum throughput rate is designed for 2,000 tons/hour of solid materials, which is about half of the feed rate of the primary (existing) conveyor systems.

Point ID	Brief Description	Pollutant
FH-100	Dozer Stock Pile Operations	Fugitive
FH-101	Dozer Operations to Grizzly Hopper	rugitive
FH-102	J3 Conveyor System (Enclosed Static Drop Point)	
FH-103	J3 Conveyor System to "K" Feeders to L1 or L2 (Enclosed Static Drop Point)	

{Permitting Note: This emissions unit is subject to 62-296.320(4)(c), F.A.C., General Pollutant Emission Limiting Standards; Rule 62-296.700, F.A.C., RACT PM; Rule 62-296.711, F.A.C., Materials Handling, Sizing, Screening, Crushing and Grinding Operations; and NSPS Subpart A, General Provisions, and Subpart Y, Standards of Performance for Coal Preparation and Processing Plants, of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b) and (c), F.A.C.; and Chapter 1-3.52.1 & 52.2, EPCHC.}

Essential PTE Parameters

- **H.1.** Permitted Capacity. The maximum throughout rate for the J3 Conveyor System shall not exceed 2,000 tons/hour. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0570039-057-AC]
- **H.2.** Methods of Operation Materials Handling. The materials that are allowed to be handled by this emissions unit are coal, coal blends and supplemental coal additives. *{Permitting Note: The materials that have been authorized by prior air construction permits to be handled at the Solid Fuel Yard are coal, petroleum coke, slag, beneficiated fly ash, limestone and residual coal.}* [Rule 62-4.070(3), F.A.C.; and Permit Nos. 0570039-057-AC & 0570039-156-AC]
- **H.3.** <u>Hours of Operation</u>. These emissions units may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.]

Control Technology

- **H.4.** Equipment Enclosure. All conveyors and conveyor static drop points shall be enclosed to preclude PM emissions. All covers shall remain in place when the system is in operation and reasonable precautions shall be followed to assure compliance with the opacity limits specified in Condition **H.7**. [Rule 62-4.070(3), F.A.C.; and Permit No. 0570039-057-AC]
- **H.5.** Water Sprays. Water sprays for storage piles, handling equipment, etc., shall be applied during dry periods and as necessary to all unconfined emissions points to maintain opacity below 20%. [Rules 62.4.070(3), 62-4.160(2) & 62-296.320(4)(c), F.A.C.; and Permit No. 0570039-057-AC]
- **H.6.** <u>Minimizing Wind Erosion Storage Piles</u>. Best management practices shall be used to minimize unconfined fugitive emissions from coal, coal blends and supplemental coal additives during operation. Best

Subsection H. Emissions Unit 048

management practices for coal and supplemental material storage piles include, but are not limited to, shaping, compacting and orienting the piles to minimize wind erosion. [Rule 62-4.070(3), F.A.C.; and Permit No. 0570039-057-AC]

Emission Limitations and Standards

Unless otherwise specified, the averaging time for Condition **H.7** is based on the specified averaging time of the applicable test method.

H.7. Visible Emissions.

- a. Visible emissions from any gases shall not exceed 10% opacity. Equipment used in the loading, unloading, and conveying operations of open storage piles are not subject to the 10% opacity limitation.
- b. Fugitive visible emissions shall not exceed 20% opacity for the dozer operations on open storage piles (FH-100 and FH-101) and 5% opacity for the enclosed J3 Conveyor System operations (FH-102 and FH 103).

{Permitting Note: "Unconfined Emissions" are defined in Rule 62-210.200 F.A.C., and Rule 1.3.12 EPCHC, as "Emissions which escape and become airborne from unenclosed operations or which are emitted into the atmosphere without being conducted through a stack." Based on this definition, emissions from operations related to the open storage piles (i.e. dozer operations on the storage piles, the open storage piles themselves, and non-fixed drop points from the dozer into the grizzly hopper) are considered unconfined emissions subject only to the general 20% opacity standard. VE testing is not required for these unconfined fugitive emissions. The conveyors and static conveyor drop/transfer points are generically subject to 5% opacity. TEC is able to meet this limit by maintaining the required enclosures and by following best operating practices; therefore, additional add-on PM control devices are not needed. Because the J3 Conveyor System is fully enclosed with no emissions to the atmosphere, VE testing is not required.} [Rules 62-204.800(8)(b) & 62-296.320(4)(b)1., F.A.C.; 40 CFR 60.254(b); and Rules 1-3.52.1 & 1-3.52.2, EPCHC.]

Monitoring of Operations

H.8. Fugitive Coal Dust Emissions Control Plan: The permittee shall prepare and operate in accordance with a submitted Fugitive Coal Dust Emissions Control Plan that is appropriate for the site conditions. The plan shall identify and describe the control measures used to reduce fugitive coal dust emissions within the fuel yard in accordance with NSPS Subpart Y of 40 CFR 60.254(c). The control plan must be revised as needed to reflect any changes related to this facility. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.254(c)]

Test Methods and Procedures

H.9. <u>Test Methods</u>. When required, tests shall be performed in accordance with the following reference methods:

I	Methods	Description of Method and Comments
	9	Visual Determination of the Opacity of Emissions

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.; 40 CFR 60 Appendix A; and 40 CFR 60.255]

H.10. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.

H.11. Visible Emissions Compliance Requirement. If any affected coal processing and conveying equipment (e.g., breakers, crushers, screens, conveying systems), coal storage systems, or coal transfer and loading systems are enclosed in a building, and emissions from the building do not exceed any of the standards in

Subsection H. Emissions Unit 048

Condition **H.7** that apply to the affected facility, then the facility shall be deemed to be in compliance with such standards. [Rule 62-204.800(8)(b), F.A.C.; and, 40 CFR 60.255(c).]

Recordkeeping and Reporting Requirements

H.12. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

Other Requirements

H.13. NSPS Provisions. This emission unit shall meet the applicable requirements of the NSPS Subpart A, General Provisions, and Subpart Y, Standards of Performance for Coal Preparation and Processing Plants, of 40 CFR 60, adopted and incorporated in Rule 62-204.800(8)(b) and (c), F.A.C. [Rule 62-204.800(8)(b) & (c), F.A.C.; and 40 CFR 60 Subparts A & Y]



Subsection I. Emissions Unit 039

The Conditions in this section apply to the following emissions unit:

EU No.	Brief Description
039 Unit 4 Coal Bunker with Roto-Clone	

This emissions unit is a coal bunker for Unit 4 (EU 004) with an exhaust fan/cyclone collector (Roto-Clone) controlling dust emission from bunker. The maximum annual coal throughput from the bunker is 4,000 tons/hour. Two moving transfer stations via their respective conveyor belts route coal through enclosed chutes to the bunker. Unit 4 Coal Bunker is equipped with a 9,400 acfm, American Air Filter Company, Type D, Roto-Clone to abate dust emissions during ventilation. A number of vent pipes convey fresh air from the bunker to the roto-clone during PM removal. PM removed by the roto-clone is returned to the coal bunker via a hopper and return line.

{Permitting Note: This emissions unit is subject to Chapter 1-3.52, EPCHC. This emissions unit is exempt from the requirements of Rule 62-296.711, F.A.C., RACT-PM, pursuant to Rule 62-296.700(2)(c), F.A.C., Materials Handling, Sizing, Screening, Crushing and Grinding Operations, since it has an allowable emission rate of less than one ton/year.}

Essential PTE Parameters

I.1. Hours of Operation. The hours of operation for bunker loading shall not exceed 4,167 hours/year. [Rule 62-4.070 & 62-210.200(PTE), F.A.C.; and Permit No. 0570039-156-AC]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Conditions **I.2.** and **I.3.** are based on the specified averaging time of the applicable test method.

- **I.2.** <u>Visible Emissions</u>. As determined by stack test, visible emissions from this emissions unit are limited to 5% opacity. [Chapter 1-3.52, EPCHC]
- **I.3.** PM Emissions. As determined by stack test, PM emissions shall not exceed 0.48 lb/hour and 0.99 tons/year from the roto-clone exhaust. {Permitting Note: This PM limitation ensures that allowable emissions are less than one ton/year from each emission unit. Compliance testing for PM emissions is not required provided the opacity limit is maintained.} [Rule 62-296.700(2)(c), F.A.C.]

Test Methods and Procedures

I.4. <u>Test Methods</u>. When required, tests shall be performed in accordance with the following reference methods:

Methods	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of PM Emissions
9	Visual Determination of the Opacity of Emissions from

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and-62-297.310(5)(b), F.A.C.; and 40 CFR 60 Appendix A]

- **I.5.** Annual Compliance Test Required. During each calendar year (January 1st to December 31st), the coal bunker roto-clone unit shall be tested to demonstrate compliance with opacity in Condition **I.2.** The duration of the annual test shall be 30 minutes. [Rules 62-297.310(5)(b) & 62-297.310(8), F.A.C.]
- **I.6.** Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.

Subsection I. Emissions Unit 039

Recordkeeping and Reporting Requirements

- **I.7.** Record of Hours of Operation. The permittee shall monitor the hours of operation of coal bunker loading demonstrating compliance with Condition **I.1.** [Rule 62-4.070, F.A.C.; EPA Resolution of objection, dated 12/14/2000; and Permit No. 0570039-156-AC]
- **I.8.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]



Subsection J. Emissions Units 012 & 013

The Conditions in this section apply to the following emissions units:

EU No.	Brief Description
012	Limestone Silo A with two Baghouses
013	Limestone Silo B with two Baghouses

Limestone is received by truck and conveyed to the limestone storage building. From the storage building it is reclaimed and conveyed to the Limestone Silos A, B and/or C. A fully enclosed bucket elevator and a portable hopper/conveyor system are used as backup system to provide limestone to Silo C. The maximum amount of limestone handled is 1,471,680 tons/year.

{Permitting Note: These emissions units are subject to Rule 62-212.400, F.A.C., PSD; Rule 62-296.700, F.A.C.; RACT PM; Rule 62-296.711, F.A.C., Materials Handling, Sizing, Screening, Crushing and Grinding Operations; Power Plant Siting Certification [PA 79-12]; and Chapter 1-3.52, EPCHC.}

Essential Potential to Emit (PTE) Parameters

J.1. Hours of Operation. These emissions units may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.]

Control Technology

- J.2. <u>Negative Pressures</u>. The limestone silos shall be maintained at negative pressures with the exhaust vented to control systems. [Rule 62-212.400(BACT), F.A.C.; Permit No. 0570039-156-AC (PSD-FL-040D)]
- **J.3.** <u>Limestone Silo A Baghouses</u>. PM emissions from Limestone Silo A are controlled by the two existing baghouses. [Permit No. PSD-FL-040]
- **J.4.** <u>Limestone Silo B Baghouses</u>. PM emissions from Limestone Silo B are controlled by the two existing baghouses. [Permit No. PSD-FL-040]
- **J.5.** <u>Circumvention</u>. The permittee shall not circumvent or operate the air pollution control equipment–in such a manner which would violate allowable emission rates established for this unit. [Rule 62-210.650, F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Conditions **J.6.** and **J.7.** are based on the specified averaging time of the applicable test method.

- **J.6.** <u>Visible Emissions.</u> As determined by stack test, visible emissions from each baghouse shall not exceed 5% opacity. [Rule 62-212.400(BACT), F.A.C.; PA 79-12; Chapter 1-3.52, EPCHC; and Permit No. PSD-FL-040]
- J.7. <u>PM Emissions</u>. As determined by stack test, PM emissions from the limestone silo baghouses combined shall not exceed 0.05 lb/hour. [Rule 62-212.400(BACT), F.A.C.; PA 79-12; Chapter 1-3.52, EPCHC; and Permit No. PSD-FL-040] {Permitting Note: Compliance testing for PM emissions is not required provided the opacity limit is maintained.}

Monitoring of Operations

J.8. System Pressure Monitoring. The required visible emissions test in Condition **J.12.** shall be used to satisfy the periodic monitoring requirements for the limestone handling and storage operations. In addition, the system pressure shall be monitored quarterly to assess that the system is operating under negative pressure as specified in Condition **J.2.** [Rule 62-4.070, F.A.C.; Resolution of objection from USEPA, dated 12/14/2000; and Permit No. 0570039-156-AC]

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS or NESHAP provision.

Subsection J. Emissions Units 012 & 013

- **J.9.** Excess Emissions. Excess emissions resulting from startup, shutdown and malfunction shall only apply to unit-specific emission limits established on or before October 23, 2016, pursuant to Rule 62-212.400, F.A.C.
 - a. *Malfunction*. Excess emissions resulting from malfunction of any emissions unit shall be permitted provided (1) best practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration.
 - b. *Startup or Shutdown*. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
 - c. *Prohibited*. Excess emissions that are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(1),(2)&(7), F.A.C.]

Test Methods and Procedures

J.10. <u>Test Methods</u>. When required, tests shall be performed in accordance with the following reference methods:

Methods	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of PM Emissions
9	Visual Determination of the Opacity of Emissions

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C., and 40 CFR 60, Appendix A]

J.11. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.

- **J.12.** Annual Compliance Test Required. During each calendar year (January 1st to December 31st), the baghouses shall be tested to demonstrate compliance with opacity in Condition **J.6.** Each year a different baghouse shall be tested in subsequent order (*e.g.*, A1, A2, B1, B2, etc.) [Rule 62-297.310(8), F.A.C.]
- **J.13.** <u>Visible Emissions Test in Lieu of PM Test</u>. The visible emissions limit in Condition **J.6.** and the visible emissions testing requirement in Condition **J.12.** may be used in lieu of regularly demonstrating compliance with the PM limitations in Condition **J.7.** If the Department has reason to believe that the PM limitation is not being met, it shall require compliance be demonstrated by conducting a PM test in accordance with EPA Method 5. [Rule 62-296.711(3)(c), F.A.C.]

Recordkeeping and Reporting Requirements

J.14. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

Subsection K. Emissions Units 023 & 050

The Conditions in this section apply to the following emissions units:

	EU No.	Brief Description
	023	Limestone Conveyor LB/LC and Baghouse
ſ	050	Limestone Conveyor LD/LE and Baghouse

Limestone is received by truck and conveyed to the limestone storage building. From the storage building it is reclaimed and conveyed to the Limestone Silos A, B and/or C. A fully enclosed bucket elevator and a portable hopper/conveyor system are used as backup system to provide limestone to Silo C.

PM emissions generated by the transfer of limestone from Handling Conveyor LB to Conveyor LC are controlled by a Sternvent Model DKED18003 baghouse. PM emissions generated by the transfer of limestone from Handling Conveyor LD to Conveyor LE are controlled by a Sternvent Model DKED 18003 baghouse.

{Permitting Note: These emissions units are regulated under Rule 62-212.400, F.A.C., PSD, Rule 62-296.700, F.A.C., RACT PM; Rule 62-296.711, F.A.C., Materials Handling, Sizing, Screening, Crushing and Grinding Operations; Power Plant Siting Certification [PA 79-12]; and Chapter 1-3.52, EPCHC.}

Essential PTE Parameters

K.1. Hours of Operation. These emissions units may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.]

Control Technology

- K.2. <u>Enclosures and Baghouses</u>. All conveyors and conveyor transfer points shall be enclosed to minimize PM emissions. PM emissions generated by the transfer of limestone shall be controlled by a baghouse on conveyor LB to conveyor LC and a baghouse on conveyor LD to conveyor LE. [Rule 62-212.400(BACT), F.A.C.; and Permit No. 0570039-156-AC (PSD-FL-040D)]
- **K.3.** <u>Negative Pressures</u>. The limestone handling conveyor transfer points shall be maintained at negative pressures with the exhaust vented to control systems. [Rule 62-212.400(BACT), F.A.C.; and Permit No. 0570039-156-AC (PSD-FL-040D)]
- **K.4.** <u>Circumvention</u>. The permittee shall not circumvent or operate the air pollution control equipment–in such a manner which would violate allowable emission rates established for this unit. [Rule 62-210.650, F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Conditions **K.5** and **K.6** are based on the specified averaging time of the applicable test method.

- **K.5.** <u>Visible Emissions.</u> As determined by stack test, visible emissions from each baghouse shall not exceed opacity. [Rule 62-4.070, F.A.C.; PA 79-12; Chapter 1-3.52, EPCHC; and Permit No. PSD-FL-040]
- **K.6.** PM Emissions. As determined by stack test, PM emissions from limestone conveyor baghouses combined shall not exceed 0.65 lb/hour. {Permitting Note: Compliance testing for PM emissions is not required provided the opacity limit is maintained.} [Rule 62-4.070, F.A.C.; PA 79-12; Chapter 1-3.52, EPCHC; and Permit No. PSD-FL-040]

Monitoring of Operations

K.7. System Pressure Monitoring. The required annual visible emissions test in Condition **K.11** shall be used to satisfy the periodic monitoring requirements for the limestone handling and storage operations. In addition, the system pressure shall be monitored quarterly to assess that the system is operating under negative pressure as required in Condition **K.3**. [Rule 62-4.070, F.A.C.; Resolution of objection from USEPA, dated 12/14/2000; and Permit No. 0570039-156-AC]

Subsection K. Emissions Units 023 & 050

K.8. Best Operational Practices. The conveyor systems shall be inspected, and maintenance shall be conducted as needed in accordance with BOP. [Rule 62-4.070, F.A.C.; and Permit No. PSD-FL-040]

Test Methods and Procedures

K.9. <u>Test Methods</u>. When required, tests shall be performed in accordance with the following reference methods:

Methods	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of PM Emissions
9	Visual Determination of the Opacity of Emissions

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C., 40 CFR 60, Appendix A; and Permit No. PSD-FL-040]

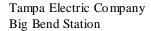
K.10. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.

- **K.11.** Annual Compliance Test Required. During each calendar year (January 1st to December 31st), each baghouse shall be tested to demonstrate compliance with opacity in Condition **K.5**. [Rule 62-297.310(8), F.A.C.]
- **K.12.** <u>Visible Emissions Test in Lieu of PM Test</u>. The visible emissions limit and the visible emissions testing requirement in Condition **K.11** may be used in lieu of regularly demonstrating compliance with the PM limitation in Condition **K.6**. If the Department has reason to believe that the PM limitation is not being met, it shall require compliance be demonstrated by conducting a PM test in accordance with EPA Method 5. [Rule 62-296.711(3)(c), F.A.C.]

Recordkeeping and Reporting Requirements

K.13. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]



Subsection L. Emissions Units 020 & 021

The Conditions in this section apply to the following emissions units:

EU No.	Brief Description
020	Limestone Conveyors LE/LF/LG/Silo C Belt Feeder and Baghouse
021	Limestone Silo C and Baghouse

Limestone is received by truck and conveyed to the limestone storage building. From the storage building it is reclaimed and conveyed to the Limestone Silos A, B and/or C. A fully enclosed bucket elevator and a portable hopper/conveyor system are used as backup system to provide limestone to Silo C. The maximum amount of limestone handled is 1,471,680 tons/year.

Components of the limestone handling system provide limestone for the FGD system. The components are Silo C and its related rotary unloader, belt feeder and wet ball mill, and reversible belt conveyors LF and LG. Conveyors LF and LG replace an existing bifurcated chute which feeds from conveyor LE to Silos A and B. PM emissions from drops from limestone handling conveyors LE, LF and LG and the Silo C belt feeder are controlled by a baghouse (American Air Filter Fabripulse - Model B, size 12-72-1155). PM emissions from displaced air in Silo C are controlled by a baghouse (American Air Filter Fabripak, size 6-16-132). The wet ball mill is a wet process with no expected PM emissions.

{Permitting Note: These emissions units are subject to Rule 62-296.700, F.A.C., RACT PM; Rule 62-296.711, F.A.C., Materials Handling, Sizing, Screening, Crushing and Grinding Operations; NSPS Subpart A, General Provisions, and Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, of 40 CFR 60, adopted and incorporated by reference in Rule 62-204.800(8)(b) and (c), F.A.C.; and Chapter 1-3.52, EPCHC.}

Essential PTE Parameters

L.1. <u>Hours of Operation</u>. These emissions units may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.]

Control Technology

- L.2. Enclosure of Equipment. All conveyors and conveyor transfer points shall be enclosed to minimize PM emissions. PM emissions generated by the transfer of limestone shall be controlled by a baghouse. [Rule 62-212.400(BACT), F.A.C.; and Permit No. 0570039-156-AC (PSD-FL-040D)]
- **L.3.** Baghouse Operating Procedures. Enclosures and baghouses shall be properly operated and maintained at all times in a condition to minimize PM emissions. All operators of air pollution control devices shall be properly trained in plant equipment. PM emissions generated by the transfer of limestone are controlled by a baghouse on conveyors LE/LF/LG/Silo C Belt Feeder and a baghouse on Silo C. [Rule 62-212.400(BACT), F.A.C.; and Permit No. 0570039-156-AC (PSD-FL-040D)]
- **L.4.** <u>Circumvention</u>. The permittee shall not circumvent or operate the air pollution control equipment–in such a manner which would violate allowable emission rates established for this unit. [Rule 62-210.650, F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Conditions **L.5** and **L.6** are based on the specified averaging time of the applicable test method.

- **L.5.** PM Emissions. As determined by stack test, PM emissions from each baghouse shall not exceed 0.03 gr/dscf. {Permitting Note: Compliance testing for PM emissions is not required provided the opacity limit is maintained.} [Rules 62-4.070 & 62-296.711(2)(b), F.A.C.; Chapter 1-3.52, EPCHC; and Permit No. PSD-FL-040]
- **L.6.** <u>Visible Emissions</u>. As determined by stack test, visible emissions from each baghouse shall not exceed the following:

Subsection L. Emissions Units 020 & 021

- a. 5% opacity.
- b. 7% opacity. {Permitting Note: Compliance with this emission limit will be demonstrated by complying with the 5% opacity limit.}
- [Rules 62-4.070, 62-204.800(8)(b) & 62-296.711(2)(b), F.A.C.; 40 CFR 60.672(f); Chapter 1-3.52, EPCHC; and Permit No. PSD-FL-040]

Test Methods and Procedures

L.7. <u>Test Methods</u>. When required, tests shall be performed in accordance with the following reference methods:

Methods	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
5	Determination of PM Emissions
9	Visual Determination of the Opacity of Emissions

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C., 40 CFR 60, Appendix A]

L.8. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.

- **L.9.** Annual Compliance Test Required. During each calendar year (January 1st to December 31st), each baghouse shall be tested to demonstrate compliance with opacity in Condition **L.6**. [Rules 62-4.070 & 62-297.310(8), F.A.C.]
- **L.10.** <u>Visible Emissions Tests in Lieu of PM Tests</u>. The permittee is permitted to comply with the visible emissions limit and the visible emissions testing requirement in lieu of regularly demonstrating compliance with the PM limitations. If the Department has reason to believe that the PM limitations are not being met, it shall require compliance be demonstrated by the test method. [Rules 62.4.070 and 62-296.711(3)(c), F.A.C.]
- **L.11.** <u>Visible Emissions Compliance Tests</u>. Compliance with the visible emissions limits shall be demonstrated by an annual compliance test using EPA Method 9. The duration of the annual visible emissions tests shall be 30 minutes. [Rules 62-4.070, 62-204.800 & 62-297.310(5)(b), F.A.C.; 40 CFR 60.11(b) and Permit No. PSD-FL-040]

Recordkeeping and Reporting Requirements

- **L.12.** Records of Maintenance. The permittee shall make and maintain records of maintenance on the enclosures and baghouses sufficient to demonstrate compliance with the baghouse operating procedures requirements of Condition **L.3**. [Rule 62-4.070, F.A.C.; and Permit No. PSD-FL-040]
- **L.13.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

Other Requirements

L.14. NSPS Provisions. This emission unit shall meet the applicable requirements of the NSPS Subpart A, General Provisions, and Subpart OOO, Standards of Performance for Nonmetallic Mineral Processing Plants, of 40 CFR 60, adopted and incorporated in Rule 62-204.800(8)(b) and (c), F.A.C. [Rule 62-204.800(8)(b)&(c), F.A.C.; and 40 CFR Subparts A & OOO]

Subsection M. Emissions Units 014

The Conditions in this section apply to the following emissions unit:

EU No.	Brief Description
014	Fly Ash Silo No. 3 and Baghouse

Fly Ash Silo No. 3 handles fly ash from Unit 4 (EU 004). Fly ash is pneumatically conveyed to the beneficiation facility through a series of pipes for the Unit 4 precipitator and to the silo for temporary storage. The loading rate to the silo is 15 tons/hour. PM emissions are controlled by a 1,200 dscfm Flex Kleen Model 84-WRTC-80-II-G baghouse.

As necessary, fly ash is unloaded into vacuum trucks during emergencies or maintenance outages. The silo unloading activities are insignificant since these activities occur infrequently and only during emergency conditions when fly ash is unable to be transferred to the beneficiation facility. All fly ash handled is generated on-site.

{Permitting Note: This emissions unit is subject to Rule 62-212.400, F.A.C., PSD, Rule 62-296.700, F.A.C., RACT PM; Rule 62-296.711, F.A.C., Materials Handling, Sizing, Screening, Crushing and Grinding Operations; Power Plant Siting Certification [PA 79-12]; and Chapter 1-3.52, EPCHC.}

Essential PTE Parameters

- **M.1.** <u>Design Capacity</u>. The maximum design loading rate to Fly Ash Silo No. 3 is 15 tons/hour. [Rule 62-4.070, F.A.C.; and Permit No. 0570039-127-AC]
- **M.2.** Hours of Operation. This emissions unit may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.]

Control Technology

- **M.3.** Negative Pressures. Fly Ash Silo No. 3 shall be maintained at negative pressures and vented to a control system. [Rule 62-212.400(BACT), F.A.C.; and Permit No. 0570039-156-AC (PSD-FL-040D)]
- **M.4.** Fly Ash Silo Baghouse. PM emissions from the fly ash silo are controlled by a 1,200 dscfm Flex Kleen Model 84-WRTC-80-II-G baghouse. [Permit No. PSD-FL-040]
- **M.5.** <u>Circumvention</u>. The permittee shall not circumvent or operate the air pollution control equipment–in such a manner which would violate allowable emission rates established for this unit. [Rule 62-210.650, F.A.C.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Conditions M.6 and M.7 are based on the specified averaging time of the applicable test method.

- M.6. PM Emissions. As determined by stack test, PM emissions from Fly Ash Silo No.3 Baghouse shall not exceed 0.2 lb/hour. [Rule 62-212.400(BACT), F.A.C.; PA 79-12; and Permit No. 0570039-066-AC (PSD-FL-040A)]
- M.7. <u>Visible Emissions</u>. As determined by stack test, visible emissions from Fly Ash Silo No.3 Baghouse shall not exceed 5% opacity. [Rules 62-212.400(BACT) & 62-296.711(3)(c), F.A.C.; PA 79-12; Chapter 1-3.52, EPCHC; and Permit Nos. AO29-161082 & 0570039-066-AC (PSD-FL-040A).

Monitoring of Operations

M.8. System Pressure Monitoring. Fly Ash Silo No. 3 system pressure shall be monitored quarterly to assess that the system is operating under negative pressure. [Rule 62-4.070, F.A.C.; Resolution of objection from USEPA, dated 12/14/2000; and Permit No. 0570039-156-AC]

Subsection M. Emissions Units 014

Excess Emissions

Rule 62-210.700 (Excess Emissions), F.A.C. cannot vary any requirement of an NSPS of NESHAP provision.

- **M.9.** Excess Emissions. Excess emissions resulting from startup, shutdown and malfunction shall only apply to unit-specific emission limits established on or before October 23, 2016, pursuant to Rule 62-212.400, F.A.C.
 - a. *Malfunction*. Excess emissions resulting from malfunction of any emissions unit shall be permitted provided (1) best practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration.
 - b. *Startup or Shutdown*. Excess emissions from existing fossil fuel steam generators resulting from startup or shutdown shall be permitted provided that best practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized.
 - c. *Prohibited*. Excess emissions that are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(1),(2)&(7), F.A.C.]

Test Methods and Procedures

M.10. Test Methods. When required, tests shall be performed in accordance with the following reference methods:

Methods	Description of Method and Comments		
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content		
5	Determination of PM Emissions		
9	Visual Determination of the Opacity of Emissions		

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.; and 40 CFR 60, Appendix A]

M.11. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

[Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.

- **M.12.** <u>Annual Compliance Test Required</u>. During each calendar year (January 1st to December 31st), this emission unit shall be tested to demonstrate compliance with opacity in Condition **M.7**. [Rule 62-297.310(8), F.A.C.]
- **M.13.** Operating Conditions during Emissions Testing. Testing of emissions shall be conducted with the emissions unit operating at the testing capacity. Testing capacity is defined as at least 90% of the maximum operation rate specified by the permit. If it is impracticable to test at the testing capacity, an emissions unit may be tested at less than the testing capacity. If an emissions unit is tested at less than the testing capacity, another emissions test shall be conducted and completed no later than 60 days after the emissions unit operation exceeds 110% of the capacity at which its most recent emissions test was conducted. Unit 4 heat input shall be used to demonstrate the fly ash loading rate in Condition **M.1** during the stack test. [Rules 62-4.070 & 62-297.310(3), F.A.C.; and Permit No. 0570039-156-AC]
- **M.14.** Visible Emissions Test in Lieu of PM Test. The visible emissions limit in Condition **M.7** and the visible emissions testing requirement may be used in lieu of regularly demonstrating compliance with the PM limitations in Condition **M.6**. If the Department has reason to believe that the PM limitation is not being met,

Subsection M. Emissions Units 014

it shall require compliance be demonstrated by conducting a PM test in accordance with EPA Method 5. [Rule 62-296.711(3)(c), F.A.C.]

Recordkeeping and Reporting Requirements

M.15. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]



Subsection N. Emissions Units 032

The Conditions in this section apply to the following emissions unit:

EU No.	BriefDescription
032	Surface Coating of Miscellaneous Metal Parts

This emissions unit is for the surface coating of miscellaneous metal parts. These parts include such things as pumps, compressors, conveyor components, fans, blowers, and transformers.

{Permitting Note: This emissions unit is subject to Rule 62-296.500, F.A.C., RACT – VOC and NO_X Emitting Facilities; and Rule 62-296.513, F.A.C., Surface Coating of Miscellaneous Metal Parts and Products.}

Essential PTE Parameters

N.1. Permitted Capacity. The total maximum allowable coating usage is as follows:

Unit No.	Gallons/Hour	Gallons/Year	<u>Description</u>
032	2	-	24-hour basis
	-	7,000	Annually

[Rule 62-210.200(PTE), F.A.C.; and Permit 0570039-156-AC]

N.2. Restricted Hours of Operation. This emissions unit may operate for a total of 3,500 hours/year. [Rule 62-210.200(PTE), F.A.C.; and Permit 0570039-156-AC]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Condition **N.3** are based on the specified averaging time of the applicable test method.

- **N.3.** <u>VOC Emissions</u>. This Condition applies if this emissions unit emits more than 15 lb/day and 3 lb/hour of VOC.
 - a. *Coating Line*. No owner or operator of a coating line for miscellaneous metal parts and products shall cause, allow, or permit the discharge into the atmosphere of any VOC in excess of:
 - (1) 4.3 lb/gallon of coating (0.52 kilograms per liter (kg/l)), excluding water, delivered to a coating applicator that applies clear coatings;
 - (2) 3.5 lb/gallon of coating (0.42 kg/l), excluding water, delivered to a coating applicator in coating application system that is air dried or forced warm air dried at temperatures up to 194°F (90 degrees Celsius);
 - (3) 3.5 lb/gallon of coating (0.42 kg/l), excluding water, delivered to a coating applicator that applies extreme performance coatings; or,
 - (4) 3.0 lb/gallon of coating (0.36 kg/l), excluding water, delivered to a coating applicator for all other coatings and coating application systems.
 - b. *Coating*. If more than one emission limitation in paragraph **a** of this condition above applies to a specific coating, then the least stringent emission limitation shall be applied.
 - c. Solvent Washing. All VOC emissions from solvent washings shall be considered in the emission limitations in paragraph a of this condition above unless the solvent is directed into containers that prevent evaporation into the atmosphere.

[Rule 62-296.513(2), F.A.C.]

Control Technology

N.4. Low Solvent Coating Technology. The VOC emission limits in Condition **N.3.a** shall be achieved by the application of low solvent coating technology. {Permitting Note: This condition applies if this emissions unit emits more than 15 lb/day and 3 lb/hour of VOC.} [Rule 62-296.513(3), F.A.C.]

Subsection N. Emissions Units 032

Test Methods and Procedures

N.5. <u>Test Methods</u>. When required, tests shall be performed in accordance with the following reference methods:

Methods	Description of Method and Comments
24	Determination of Volatile Matter Content, Water Content, Density, Volume Solids, and Weight Solids of Surface Coatings
450/3-84-019	Procedures for Certifying Quantity of VOC Emitted by Paint, Ink, and Other Coatings

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.; and 40 CFR 60, Appendix A]

N.6. <u>Common Testing Requirements</u>. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.

- **N.7.** VOC Compliance Requirements.
 - a. *Adhesives, Coating, and Inks*. The VOC content shall be calculated using a percent solids basis (less water and exempt solvents) for adhesives, coating, and inks, using EPA Method 24. [Rule 62-296.500(2)(b)2, F.A.C.]
 - b. Determine Low Solvent Technology. The test method for VOC shall be EPA Method 24, as described at 40 CFR 60, Appendix A-7, adopted and incorporated by reference at Rule 62-204.800, F.A.C., or EPA 450/3-84-019, Procedures for Certifying Quantity of VOC Emitted by Paint, Ink, and Other Coatings, hereby adopted and incorporated by reference at Chapter 62-297, F.A.C. {Permitting Note: This condition applies if this emissions unit emits more than 15 lb/day and 3 lb/hour of VOC.} [Rules 62-296.513(4)(a)&(c), F.A.C.]

Recordkeeping and Reporting Requirements

- **N.8.** Records of Operation. The permittee shall maintain records of operations for the most recent two year period. The records shall be made available to the local, state, or federal air pollution agency upon request. The records shall include, but not be limited to, the following:
 - a. The rule number applicable to the operation for which the records are being maintained.
 - b. The application method and substrate type (metal etc.).
 - c. The amount and type of adhesive, coatings (including catalyst and reducer for multicomponent coatings), solvent, and/or graphic arts material used at each point of application, including exempt compounds.
 - d. The VOC content as applied in each adhesive, coating, solvent, and/or graphic arts material.
 - e. The date for each application of each adhesive, coating, solvent, and/or graphic arts material.
 - f. The amount of surface preparation, clean-up, wash-up of solvent (including exempt compounds) used and the VOC content of each.

[Rule 62-296.500(2)(b)1., F.A.C.]

N.9. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition
Proof of Compliance (EPCHC)	Annually	N.10

[Rule 62-213.440(1)(b), F.A.C.]

Subsection N. Emissions Units 032

- **N.10.** Annual Compliance Report. Annually, in accordance with a schedule and reporting format provided by the Department or EPCHC, the permittee shall provide EPCHC with proof of compliance with the limitations in this section. [Rule 62-296.500(2)(c), F.A.C.]
- **N.11.** Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]



Subsection O. Emissions Units 043, 044, 057, 064, and 065

The Conditions in this section apply to the following emissions units:

EU No.	Brief Description
043	SCCT4 Emergency Diesel Generator (1,495 HP)
044	Administrative Emergency Diesel Generator (1,194 HP)
057	CT 5 & CT 6 Emergency Diesel Generator (1,474 HP)
064	ST1 Emergency Diesel Generator (762 HP)
065	Unit 4 Emergency Diesel Generator (1,865 HP)

These emissions unit are stationary CI RICE. The SCCT4 emergency diesel generator (EU 043) has a maximum engine rating of 1,495 HP at 100% load with a nominal power rating of 1,115 kilowatts (kW). This emergency diesel generator is used to start the SCCT into operation after a power outage. Administrative emergency diesel generator (EU 044) has a maximum engine rating of 1,194 HP at 100% load with a nominal power rating of 890 kW. The CT-5 & CT-6 emergency diesel engine generator (EU 057) has a maximum engine rating of 1,474 HP at 100% load with a nominal power rating of 1,099 kW. This emergency generator is used to supply emergency backup power for CT-5 and CT-6. ST1 Emergency Diesel Generator (EU 064) has a maximum engine rating of 762 HP at 100% load with a nominal power rating of 568 kW. Unit 4 Emergency Diesel Generator (EU 065) has a maximum engine rating of 1,865 HP at 100% load with a nominal power rating of 1,391 kW.

The following table provides important details for the engines in this subsection:

Engine Identification	Engine Brake HP	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
SCCT4 Emergency Diesel Generator	1,495 (1,115 kW)	2007	<10	Detroit Diesel	16V2000-G84R163-8A36
Administrative Emergency Diesel Generator	1,194 (890 kW)	2011	<10	Detroit Diesel	12V2000-G45-TB
CT-5 & CT-6 Emergency Diesel Generator	1,474 (1,099 kW)	2019	<10	Caterpillar	C32
ST1 Emergency Diesel Generator	762 (568 kW)	2020	<10	Caterpillar	C15
Unit 4 Emergency Diesel Generator	1,865 (1,391 kW)	2023	<10	Kohler	KD36V16

{Permitting Note: These CI RICE are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE and 40 CFR 60, Subpart IIII, NSPS for Stationary CI ICE, adopted in Rules 62.204.800(11)(b) & (8)(b), F.A.C., respectively. These RICE are not used for fire pumps. This permit section addresses "new" stationary CI RICE greater than or equal to 500 HP, with a displacement less than 10 l/cyl, that are located at a major source of HAP emissions and that commenced construction on or after December 19, 2002. In accordance with the provisions of 40 CFR 63.6590(b)(1)(i), these stationary RICE only had to meet the initial notification requirements of 40 CFR 63.6645(f). There are no further requirements for these engines under 40 CFR 63, Subpart ZZZZ.}

Essential PTE Parameters

- **O.1.** Methods of Operation Fuel. The permittee shall follow the ULSD fuel requirements and standards stated below:
 - a. *Sulfur Standard*. The sulfur content shall not exceed = 15 ppm = 0.0015% by weight (ultra-low sulfur) for non-road fuel.
 - b. *Cetane and Aromatic*. The fuel must have a minimum cetane index of 40 or must have a maximum aromatic content of 35 volume percent.

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4207(b) & 1090.305]

O.2. Restricted Hours of Operation.

Subsection O. Emissions Units 043, 044, 057, 064, and 065

- a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4211(f)(1)]
- b. *Other Situations*. The engine is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours/year. The permittee may petition the Department for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours/year. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4211(f)(2)(i)]
- c. *Non-emergency Situations*. The engine may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph **b** of this condition. Except, 50 hours/year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the conditions in 40 CFR 60.4211(f)(3)(i)(A) (E) are met. The 50 hours/year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4211(f)(3)]

Emissions Limitations and Standards

Unless otherwise specified, the averaging times for Conditions **O.3** - **O.6** are based on the specified averaging time of the applicable test method.

- O.3. NOx + Non-Methane Hydrocarbons (NMHC) Emissions. NOx + NMHC emissions shall not exceed 6.4 grams per kilowatt hour (g/kW-hour). [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.4205(b); and 40 CFR 1039, Appendix I, Table 2]
- **O.4.** <u>CO Emissions</u>. CO emissions shall not exceed 3.5 g/kW-hour. [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.4205(b); and 40 CFR 1039, Appendix I, Table 2]
- **O.5.** PM Emissions. PM emissions shall not exceed 0.2 g/kW-hour. [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.4205(b); and 40 CFR 1039, Appendix I, Table 2]
- **O.6.** Smoke Standards. Measure smoke as specified in 40 CFR 60.1039.5015(c) unless the engine is a single-cylinder engine, constant speed engines, or if the engine is certified to a PM emission standard or FEL of 0.07 g/kW-hour or lower. Each engine shall meet the following smoke standards:
 - a. 20 % during the acceleration mode.
 - b. 15% during the lugging mode.
 - c. 50% during the peaks in either the acceleration or lugging modes.

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4202(a)(2) & 40 CFR 1039.105]

Monitoring of Operations

O.7. Hour Meter. The permittee shall install a non-resettable hour meter for each engine if one is not already installed. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4209(a)]

Test Methods and Procedures

O.8. Operation and Maintenance. The permittee shall operate and maintain the engines according to the manufacturer's written instructions. In addition, the permittee may only change those settings that are permitted by the manufacturer. The RICE must be maintained and operated to meet the NO_X + NMHC, CO and PM emissions limits in Conditions **O.3** - **O.5**, respectively, as applicable, over the entire life of the engines. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4211(a)] {Permitting Note: The CT 5 & CT 6

Subsection O. Emissions Units 043, 044, 057, 064, and 065

Emergency Diesel Generator (EU 057), Emergency Diesel Generator (EU 064), and Unit 4 Emergency Diesel Generator (EU 065) have been certified by the manufacturer to meet the emissions standards and shall be maintained in accordance with the manufacturer's emission-related written instructions pursuant to Condition 0.9.}

- **O.9.** Engine Certification Requirements. The permittee shall comply with the NO_X + NMHC, CO and PM emission standards specified in Conditions **O.3 O.5**, respectively. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in Condition **O.10**. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4211(c)]
- **O.10.** Compliance Requirements Due to Loss of Certification. If the permittee does not configure, operate, and maintain the engines and control device according to the manufacturer's emission-related written instructions, or the permittee changes emission-related settings in a way that is not permitted by the manufacturer, the permittee shall keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engines in a manner consistent with good air pollution control practice for minimizing emissions. The permittee shall conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after the permittee changes emission-related settings in a way that is not permitted by the manufacturer. The permittee shall conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter, to demonstrate compliance with the applicable emission standards. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4211(g)(3)] {Permitting Note: The SCCT4 Diesel Generator (EU 043) and Administrative Emergency Diesel Generator (EU 044) are no longer certified engines and shall be tested every 8,760 hours of engine operation or 3 years, whichever comes first, and keep a maintenance plan in accordance with Conditions **0.10, 0.11**, and **0.12**.}
- **O.11.** <u>Testing Requirements</u>. In the event performance tests are required pursuant to Condition **O.10**, the following requirements shall be met:
 - a. *Testing Procedures*. The performance test must be conducted according to the in-use testing procedures in 40 CFR Part 1039, Subpart F. Link to Subpart F
 - b. *NTE Standards*. Exhaust emissions from these engines must not exceed the not-to-exceed (NTE) numerical requirements, rounded to the same number of decimal places as the applicable NO_x + NMHC, CO and PM emissions standards (STD) in Conditions **O.3 O.5**, respectively, as applicable, determined from the following equation:

NTE Requirement for Each Pollutant = (1.25) x (STD) (Eq. 1)

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4212(a) & (c)]

O.12. <u>Common Testing Requirements</u>. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

{Permitting Note: Air compliance test notifications can now be completed online in the Department's Business Portal. To access this online process, go to http://www.fldepportal.com/go/home.}

Recordkeeping and Reporting Requirements

- **O.13.** Hours of Operation Records. The permittee shall keep records of the operation of these engines in emergency and non-emergency services that are recorded through the non-resettable hour meter. The permittee shall record the time of operation of the engine and the reason the engine was in operation during that time. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4214(b)]
- **O.14.** <u>Maintenance Records</u>. To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing must be performed, the permittee shall keep the following records:

Subsection O. Emissions Units 043, 044, 057, 064, and 065

- a. *Engine*. Engine manufacturer documentation and certification indicating compliance with the standards.
- b. *Manufacturer's Instructions*. A copy of the manufacturer's written instructions for operation and maintenance of the certified engine.
- c. *Maintenance Log*. A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions.

[Rule 62-213.440(1), F.A.C.]

- **O.15.** Testing Notification. At such time that the requirements of Condition **O.11** become applicable, the permittee shall notify the Compliance Authority at least 30 days prior notice of any performance test to afford the Department the opportunity to have an observer present. If after 30 days' notice for an initially scheduled performance test, the permittee shall provide at least seven days prior notice of the rescheduled date of the performance test, or by arranging a rescheduled date with the Compliance Authority by mutual agreement. [Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.8(d)]
- **O.16.** Electronic Reporting. Beginning on February 26, 2025, within 60 days after the date of completing each performance test required by 40 CFR 60, Subpart IIII, the permittee shall submit the results of the performance test required under 40 CFR 60, Subpart IIII following the procedures specified in paragraphs **a** and **b** of this condition.
 - a. Data collected using test methods supported by the EPA's Electronic Reporting Tool (ERT) as listed on the EPA's ERT website (https://www.epa.gov/electronic-reporting-air-emissions/electronic-reporting-tool-ert) at the time of the test. Submit the results of the performance test to the EPA via the Compliance and Emissions Data Reporting Interface (CEDRI), according to 40 CFR 60.4214(g) of NSPS Subpart IIII. The data must be submitted in a file format generated using the EPA's ERT. Alternatively, the permittee may submit an electronic file consistent with the extensible markup language (XML) schema listed on the EPA's ERT website.
 - b. Data collected using test methods that are not supported by the EPA's ERT as listed on the EPA's ERT website at the time of the test. The results of the performance test must be included as an attachment in the ERT or an alternate electronic file consistent with the XML schema listed on the EPA's ERT website. Submit the ERT generated package or alternative file to the EPA via CEDRI according to 40 CFR 60.4214(g) of 40 CFR 60, Subpart IIII.

[Rule 62-204.800(8)(b), F.A.C.; and 40 CFR 60.4214(f)]

O.17. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

Other Requirements

O.18. 40 CFR 60, Subpart A, General Provisions. The permittee shall comply with the applicable requirements of 40 CFR 60 Subpart A, General Provisions, as specified below

General Provisions Citation	Subject of citation	Explanation
§ 60.1	General applicability of the General Provisions	
§ 60.2	Definitions	Additional terms defined in § 60.4219.
§ 60.3	Units and abbreviations	
§ 60.4	Address	
§ 60.5	Determination of construction or modification	
§ 60.6	Review of plans	
§ 60.7	Notification and Recordkeeping	Only applies as specified in § 60.4214(a).
§ 60.9	Availability of information	
§ 60.10 State Authority		
§ 60.11	Compliance with standards and maintenance requirements	Requirements are specified in subpart IIII.
§ 60.12	Circumvention	
§ 60.14	Modification	

Subsection O. Emissions Units 043, 044, 057, 064, and 065

General Provisions Citation	Subject of citation	Explanation
§ 60.15	Reconstruction	
§ 60.16	Priority list	
§ 60.17	Incorporations by reference	
§ 60.19	General notification and reporting requirements	

[40 CFR 60.4218 & Table 8 to Subpart IIII of Part 60]



Subsection P. Emissions Units 051 & 063

The Conditions in this section apply to the following emissions unit:

E	U No.	Brief Description
	051	Process Heater No. 1
	063	Process Heater No. 2

Each process heater has a maximum heat input rate of 6 MMBtu/hour and fires only natural gas. Each process heater is equipped with a gas flow meter to monitor the actual natural gas heat input rate to each process heater.

{Permitting Note: The process heaters are subject to NESHAP Subpart A, General Provisions, and NESHAP Subpart DDDDD, Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, as a Gas 1 fuel, of 40 CFR 63, adopted and incorporated by reference in Rule 62-204.800(11)(b) and (d), F.A.C.}

Essential PTE Parameters

P.1. Permitted Capacity. The maximum allowable heat input rate is as follows:

	Heat Input	
EU Nos.	MMBtu/Hour	<u>Description</u>
051 & 063	6	Each process heater.
004, 051 & 063	12,000	SGU No. 4 and Process Heater Nos. 1 & 2, combined, due to the existing
		natural gas distribution system capacity.

[Rule 62-210.200(PTE), F.A.C.; and Permit No. 0570039-091-AC]

- **P.2.** <u>Authorized Fuel</u>. The process heaters shall fire only natural gas delivered through a federally regulated pipeline. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0570039-091-AC]
- **P.3.** Hours of Operation. These emissions units may operate continuously without restriction. [Rule 62-210.200(PTE), F.A.C.]

Emissions Limitations and Standards

- **P.4.** PM Emissions. The emissions of PM shall be minimized by firing exclusively natural gas delivered through a federally regulated pipeline. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0570039-091-AC]
- **P.5.** <u>SO2 Emissions</u>. The emissions of SO₂ shall be minimized by firing exclusively natural gas delivered through a federally regulated pipeline. [Rule 62-210.200(PTE), F.A.C.; and Permit No. 0570039-091-AC]

Test Methods and Procedures

- **P.6.** Work Practice Standards NESHAP Subpart DDDDD.
 - a. *Biennial Tune-Up*. The permittee shall conduct a biennial tune-up of each process heater as specified in Condition **P.6.** to demonstrate continuous compliance. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.
 - b. *Tune-Up Procedures*. The permittee shall conduct a biennial tune-up test using the following procedures:
 - (1) *Burner*. Inspect the burner, and clean or replace any components of the burner as necessary (the permittee may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment.
 - (2) *Flame Pattern*. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available.
 - (3) Air-to-Fuel Ratio. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (the permittee may delay the inspection until the next scheduled unit shutdown).

Subsection P. Emissions Units 051 & 063

(4) *Tune-Up Records*. Maintain on-site and submit, if requested by the Department, a report containing the information in Condition **P.7.**

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.7540(a)(10)(i)-(iii)&(vi),(11)&(13) & Table 3]

Recordkeeping and Reporting Requirements

- **P.7.** <u>Tune-Up Records NESHAP Subpart DDDDD.</u> Maintain on-site and submit, if requested by the Department, a report containing the following information:
 - a. A description of any corrective actions taken as a part of the tune-up.
 - b. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.7540(a)(10)(vi)]

- **P.8.** Recordkeeping Requirements NESHAP Subpart DDDDD. The permittee shall maintain and keep records according to the following requirements:
 - a. *Records*. Records must be in a form suitable and readily available for expeditious review, according to 40 CFR 63.10(b)(1).
 - b. *Record Retention*. As specified in 40 CFR 63.10(b)(1), the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
 - c. Records Retained. The permittee shall keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least two years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40 CFR 63.10(b)(1). The permittee may keep the records off site for the remaining 3 years.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.7560]

P.9. Operational Records. To demonstrate compliance with the operational restrictions in Condition **P.1.** the permittee shall calculate and maintain the following records when natural gas is fired in the process heaters using the following:

Total Heat Input = $6 \text{ MMBtu/hour} \times 2 \text{ units} \times \text{facility operating gas hours}$ [Rule 62-4.070(3), F.A.C.; and Permit No. 0570039-156-AC]

P.10. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Conditions
Tune-Up Compliance Report – NESHAP Subpart DDDDD	Biennial/Semiannual	P.11.

[Rule 62-213.440(1)(b), F.A.C.]

- **P.11.** Tune-Up Compliance Report–NESHAP Subpart DDDDD.
 - a. *Submittal Date*. The permittee may submit only a biennial compliance report, as applicable, as specified in paragraphs **a.(1)** and **(2)** of this condition, instead of a semi-annual compliance report.
 - (1) Biennial compliance reports must cover the applicable 2-year period from January 1 to December 31.
 - (2) Biennial compliance reports must be postmarked or submitted no later than January 31.
 - (3) If the Department has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), the permittee may submit the compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in paragraphs **a.(1)** and **(2)** of this condition.
 - b. Report Information. The permittee shall submit biennial tune-up reports with the following information:
 - (1) Company and Facility name and address.
 - (2) Process unit information, emissions limitations, and operating parameter limitations.
 - (3) Date of report and beginning and ending dates of the reporting period.
 - (4) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct a biennial tune-up according to Condition **P.6.** Include the date of the most recent burner inspection if it was not biennially and was delayed until the next scheduled or unscheduled unit shutdown.

Subsection P. Emissions Units 051 & 063

- (5) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- (6) The permittee shall submit a compliance report that covers two-year periods from January 1 to December 31, and must be post marked or submitted no later than January 31.
- c. Submittal Process. The permittee shall submit the report electronically to the EPA via the CEDRI. (CEDRI can be accessed through the EPA's CDX.) The permittee shall use the appropriate electronic report in CEDRI for 40 CFR 63, Subpart DDDDD. Instead of using the electronic report in CEDRI for this subpart, the permittee may submit an alternate electronic file consistent with the XML schema listed on the CEDRI Web site (http://www.epa.gov/ttn/chief/cedri/index.html), once the XML schema is available. If the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the permittee shall submit the report to the Department at the appropriate address listed in 40 CFR 63.13. The permittee shall begin submitting reports via CEDRI no later than 90 days after the form becomes available in CEDRI.

[Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63.7550(b)(3)-(5), (c)(1)&(5)(i)-(iii),(xiv)&(xvii),&(h)(3)]

P.12. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

Other Requirements

P.13. NESHAP Provisions. The process heaters are subject to the appliable requirements of NESHAP Subpart A, General Provisions, and Subpart DDDDD, NESHAP for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters, of 40 CFR 63, adopted and incorporated by reference 62-204.800(11)(b) and (d), F.A.C. [Rule 62-204.800(11)(b), F.A.C.; and 40 CFR 63 Subparts A & DDDDD]



SECTION IV. ACID RAIN PART.

Federal Acid Rain Provisions

Operated by: Tampa Electric Company

ORIS Code: 0645

The emissions units listed below are regulated under Acid Rain, Phase II.

EU No.	Brief Description
004	Unit No. 4 Steam Generator (BB04)
041	SCCT 4A
042	SCCT 4B
058 & 060	Simple and Combined Cycle CT No. 5 (BB05)
059 & 061	Simple and Combined Cycle CT No. 6 (BB06)

- **A.1.** The Phase II Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the applications listed below:
 - a. DEP Form No. 62-210.900(1)(a), dated 05/14/2024, received 09/13/2024. [Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]
- **A.2.** NO_X requirements for each Acid Rain Phase II unit are as follows:

EU No.	EPA ID	NO _x Limit			
004	BB04	ne Florida Department of Environmental Protection approves a NOx			
		ompliance plan for this unit. The compliance plan is effective for calendar			
		rear 2024 through calendar year 2028.			
		This unit's applicable emission limitation for each year of the plan, is 0.40 lb/MMBtu from 40 CFR 76.7(a)(1) for tangentially fired boilers.			
		In addition to the described NO _x compliance plan, this unit shall comply with			
		all other applicable requirements of 40 CFR part 76, including the duty to			
		reapply for a NO _x compliance plan and the requirements covering excess			
		emissions.			

- **A.3.** SO₂ Emission Allowances. SO₂ emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
 - a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400, F.A.C.
 - b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
 - c. Allowances shall be accounted for under the Federal Acid Rain Program. [Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]
- **A.4.** Comments, Notes, and Justifications. Emissions units 041 and 042 are subject to the continuous monitoring provisions of 40 CFR 75. The CEMS will be used to comply with the Acid Rain Program provision of 40 CFR 75 for NO_x.

Acid Rain Part Application

For more information, see instructions and refer to 40 CFR 72.30, 72.31, and 74; and Chapter 62-214, F.A.C.

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STEP 1

Identify the source by plant name, state, and ORIS or plant code.

Plant name	Big Bend Power Station	State	Florida	ORIS Plant Code	645	

STEP 2 Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a."

If unit a SO₂ Opt-in unit, enter "yes" in column "b".

For new units or SO₂ Opt-in units, enter the requested information in columns "d" and "e."

	a	b	С	d	e
	Unit ID#	SO₂ Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO₂ Opt-in Units Commence Operation Date	New or SO ₂ Opt-in Units Monitor Certification Deadline
	BB04	No	Yes	N/A	N/A
	BB05	No	Yes	9/28/2021	3/27/2022
ا ا	BB06	No	Yes	9/21/2021	3/20/2022
	CT4A	No	Yes	N/A	N/A
	CT4B	No	Yes	N/A	N/A
			Yes		

DEP Form No. 62-210.900(1)(a) - Form

Effective: 3/16/08

STEP 3

Plant Name (from STEP 1)

Big Bend Power Station

Read the standard requirements.

Acid Rain Part Requirements

- (1) The designated representative of each Acid Rain source and each Acid Rain unit at the source shall:
 - (i) Submit a complete Acid Rain Part application (including a compliance plan) under 40 CFR Part 72 and Rules 62-214.320 and 330, F.A.C., in accordance with the deadlines specified in Rule 62-214.320, F.A.C.; and
 - (II) Submit in a timely manner any supplemental information that the DEP determines is necessary in order to review an Acid Rain
- Part application and issue or deny an Acid Rain Part;

 (2) The owners and operators of each Acid Rain source and each Acid Rain unit at the source shall
 - (I) Operate the unit in compilance with a complete Acid Rain Part application or a superseding Acid Rain Part issued by the DEP; and (II) Have an Acid Rain Part.

Monitoring Requirements

- (1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C.
- (2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
- (3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants of other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
- pursuant to 40 CFR 74.14(a). For renewal applications for SO₂ Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
- (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
 (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows
 - (I) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.5(a)(2); or (II) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CER 72 6(a)(3)
- (4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid
- Rain Program.
 (5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements. prior to the calendar year for which the allowance was allocated.
 (6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in
- accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization
- (7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right

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

Excess Emissions Requirements.

- (1) The designated representative of an Acid Rain unit that has excess emissions in any calendar year shall submit a proposed offset plan, as required under 40 CFR Part 77.
- (2) The owners and operators of an Acid Rain unit that has excess emissions in any calendar year shall:
 - (i) Pay without demand the penalty required, and pay upon demand the interest on that penalty, as required by 40 CFR Part 77; and (ii) Comply with the terms of an approved offset plan, as required by 40 CFR Part 77.

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the (1) offies otherwise provided, are owners and operators of the source and each Acid Nam unit at the source shall keep of side at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the DEP:

 (i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350,
 - F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the desk (III) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
 (III) Copies of all reports, compilance certifications, and other submissions and all records made or required under the Acid Rain
 - Program; and,
 - (iv) Copies of all documents used to complete an Acid Rain Part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

DEP Form No. 62-210.900(1)(a) - Form

Effective: 3/16/08

Plant Name (from STEP 1) Big Bend Power Station

Recordkeeping and Reporting Requirements (cont)

(2) The designated representative of an Acid Rain source and each Acid Rain unit at the source shall submit the reports and compliance certifications required under the Acid Rain Program, including those under 40 CFR Part 72, Subpart I, and 40 CFR Part 75.

Liability.

- (1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.

 (2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall
- be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.

 (3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the
- revision takes effect.
- (4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
- (5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the
- source.

 (6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_X averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
- (7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

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

- (1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards of State Implementation Plans; (2) Limiting the number of allowances a unit can hold; provided, that the number of allowances held by the unit shall not affect the
- source's obligation to comply with any other provisions of the Act;
- (3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
 (4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act or.
- (5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4	
For SO ₂ Opt-in units only.	١

In column "f" enter the unit ID# for every SO2 Optin unit identified in column "a" of STEP 2.

For column "g" describe the combustion unit and attach information and diagrams on the combustion unit's configuration.

In column "h" enter the hours.

	f	g	h (not required for renewal application)
-	Unit ID#	Description of the combustion unit	Number of hours unit operated in the six months preceding initial application
3			

DEP Form No. 62-210.900(1)(a) - Form

Effective: 3/16/08

SECTION IV. ACID RAIN PART.

Federal Acid Rain Provisions

	Plant Name (from \$	TEP 1)						
	Big Bend Power Station							
STEP 5								
For SO ₂ Opt-in units only. (Not required for SO ₂ Opt-in renewal	i	j	k	1		m	n	
In column "i" enter the unit ID# for every SO2 Opt- in unit identified in column "a" (and in column "f").	Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20 (mmBtu)	Actual SO ₂ Emissions Rate under 40 CFR 74.22 (lbs/mmBtu)	Allowable SO ₂ Emis Rate un 40 CFR 7 (lbs/mml	sions der 74.23	Current Allowable SO ₂ Emissions Rate under 40 CFR 74.24 (lbs/mmBtu)	Current Promulgated SO₂ Emissions Rate under 40 CFR 74.25 (lbs/mmBtu)	
For columns "j"								
through "n," enter the information								
required under 40 CFR 74.20-74.25								
and attach all supporting								
documentation required by 40								
CFR 74.20-74.25.								
For SO ₂ Opt-in units only. Attach additional requirements, certify and sign.	A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached. B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74. C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14. D. Attach a complete compliance plan for SO ₂ under 40 CFR 72.40. E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b). F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."							
	Signature	Byson T. Bu	urows		Date 0	5/14/2024		
Read the certification statement; provide name, title, owner	Certification (for designated representative or alternate designated representative only) I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, i certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.							
company name, phone, and e-mail address; sign, and	Name Byron	T. Burrows	1	Title Direct	tor, Env	vironmental Service	es	
date.	Owner Company N	lame Tampa Electric	Company					
	Phone (813)	228-1282	E-mail address	BTBurrows@)tecoer	nergy.com		
	Signature				Date			
DEP Form No. 62-210.90 Effective: 3/16/08	DEP Form No. 62-210.900(1)(a) – Form							

Tampa Electric Company Big Bend Station

Florida Department of Environmental Protection

Phase II NO_x Averaging Plan

For more information, refer to 40 CFR 76.11

This	submission	ie.	□ New	Revised
HIIIS	SUDMISSION	18.	III IVEW	LACAISCA

STEP 1

Identify the units participating in this averaging plan by plant name, state, and boiler ID# from NADB. In column (a), fill in each unit's applicable emission limitation from 40 CFR 76.5, 76.6, or 76.7. In column (b), assign an alternative contemporaneous annual emissions limitation in Ib/mmBtu to each unit. In column (c), assign an annual heat input limitation in mmBtu to each unit. Continue to page 3 if necessary.

Submission is.	ACM I	WC VIOCU			
Plant Name	State	ID#	(a) Emission Limitation	(b) Alt. Contemp. Emission Limitation	(c) Annual Heat Input Limit
Big Bend Station	FL	BB04	0.40	N/A	37,930,800

STEP 2

Use the formula to enter the Btu-weighted annual emission rate averaged over the units if they are operated in accordance with the proposed averaging plan and the Btu-weighted annual average emission rate for the same units if they are operated in compliance with 40 CFR 76.5, 76.6, or 76.7. The former must be less than or equal to the latter.

Where,

 R_{LI} = Alternative contemporaneous annual emissions limitation for unit i, in lb/mmBtu, as specified in column (b) of Step 1;

R_{II} = Applicable emission limitation for unit i, in lb/mmBtu, as specified in column (a) of Step 1;

HI = Annual heat input for unit i, in mmBtu, as specified in column (c) of Step 1;

N = Number of units in the averaging plan

SECTION IV. ACID RAIN PART.

Federal Acid Rain Provisions

	Big Be Plant Name (from Step 1)	nd Station					
	This plan is effective for cale	ndar year 2024	through calendar year 2029				
STEP 3	unless notification to terminate t	he plan is given.					
Mark one of the two options and enter dates.	☐ Treat this plan as ☐ identical plans, each effective for one calendar year for the following calendar years:,, and unless notification to terminate one or more of these plans is given.						
STEP 4	Special Provisions						
Read the special provisions and certification,	Emission Limitations						
enter the name of the Each affected unit in an approved averaging plan is in compliance with the Acid Rain emis designated representative, and limitation for NO _x under the plan only if the following requirements are met:							
	lb/mmBtu, is less than or e limitation in the averaging (a) For each unit with than the applicable em heat input for the caler averaging plan, (b) For each unit with stringent than the applicannual heat input for the averaging plan, or (ii) If one or more of the urepresentative shall demothe actual Btu-weighted are equal to the Btu-weighted operated, during the same limitations in 40 CFR 76.5 (iii) If there is a successful.	qual to its alternative or plan, and an alternative contempor ission limitation in 40 C dar year does not exce dar alternative contempor cable emission limitation e calendar year is not le nits does not meet the re- nstrate, in accordance noual average emission annual average rate for period of time, in comportation of time, in comportation group showing of com- group showing of com- tre alternative control the alternative control the state of the state of the state of the state of the state the state of the state of the state the state the the state the sta	emission rate for the calendar year, in ontemporaneous annual emission braneous emission limitation less stringent IFR 76.5, 76.6, or 76.7, the actual annual ed the annual heat input limit in the braneous emission limitation more on in 40 CFR 76.5, 76.6, or 76.7 the actual ess than the annual heat input limit in the requirements of (i), the designated with 40 CFR 76.11(d)(1)(ii)(A) and (B), that rate for the units in the plan is less than or the same units had they each been bliance with the applicable emission pliance under 40 CFR 76.11(d)(1)(ii)(A) veraging plan shall be deemed to be in temporaneous emission limitations and				
	Liability						
	any violation of the plan or this	section at that unit or ar	proved averaging plan shall be liable for ny other unit in the plan, including liability napter and sections 113 and 411 of the				
	Termination						
			n to terminate an approved averaging n October 1 of the calendar year for which				
	Certification						
	source or affected units for which have personally examined, and document and all its attachment responsibility for obtaining the in best of my knowledge and belie	th the submission is ma am familiar with, the sta s. Based on my inquirn formation, I certify that f true, accurate, and co	ne owners and operators of the affected de. I certify under penalty of law that I atements and information submitted in this y of those individuals with primary the statements and information are to the mplete. I am aware that there are d information or omitting required fine or imprisonment.				
Name Byron T. Burrows, P.E., BC	CEE - Director of Environmental S	ervices					
Signature Byson 7.	Burrows	Date 05/14/2024					
0							

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Plant Name (from Step 1)	Big Bend Station
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STEP 1 Continue the identification of units from Step 1, page 1, here.

Plant Name	State	ID#	(a) Emission Limitation	(b) Alt. Contemp. Emission Limitation	(c) Annual Heat Input Limit
NA	NA	NA	NA	NA	NA

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Plant Name (from Step 1) Big Bend Station

STEP 1

Continue the identification of units from Step 1, page 1, here.

	,			,	
Plant Name	State	ID#	(a) Emission Limitation	(b) Alt. Contemp. Emission Limitation	(c) Annual Heat Input Limit
NA	NA	NA	NA	NA	NA
	1				

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