Tampa Electric Company

Polk Power Station

Facility ID No. 1050233
Polk County

Title V Air Operation Permit Renewal

Permit No. 1050233-039-AV
(Renewal of Title V Air Operation Permit No. 1050233-026-AV)

Permitting Authority

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Division of Air Resource Management
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Title V Air Operation Permit Renewal

Permit No. 1050233-039-AV

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Permit No. 1050233-039-AV
Facility ID No. 1050233
Polk Power Station
Title V Air Operation Permit Renewal

The purpose of this permit is to renew the Title V air operation permit for the Polk Power Station that is operated by TEC. This existing facility is located at 9995 State Route 37 South, Mulberry, Polk County; UTM Coordinates: Zone 17, 402.45 kilometers (km) East and 3067.35 km North; Latitude: 27° 43' 43" North and Longitude: 81° 59' 23" West.

This Title V air operation permit Renewal 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 perform the work or operate the facility in accordance with the terms and conditions of this permit.

Effective Date: January 1, 2015
Renewal Application Due Date: May 20, 2019
Expiration Date: December 31, 2019

Executed in Tallahassee, Florida

Jonathan Holtom
Digitally signed by Jonathan Holtom
Date: 2014.11.07 14:30:00 -05'00'

for Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

JFK/jh

Subsection A. Facility Description.

Unit 1 consists of a nominal 260 megawatt (MW) solid fuel-based integrated gasification and combined cycle (IGCC) plant including: a nominal 192 MW (gross) syngas and natural gas (used for startup, backup and augmentation) fired General Electric (GE) 7FA combined cycle combustion turbine (CCCT) designated as Emission Unit (EU) 001; a heat recovery steam generator (HRSG); a nominal 133 MW (gross) steam turbine-electrical generator (STEG); a solid fuel handling system designated as EU 005; an entrained flow solid fuel gasification system designated as EU 006; an oxygen plant; a synthesis gas (syngas) cleanup and sulfur recovery system; and a sulfuric acid plant (SAP) designated as EU 004. There is also a 120 million British thermal units per hour (MMBtu/hr) auxiliary boiler designated as EU 003. Approximately 65 MW are consumed by the oxygen plant and process auxiliary equipment which is the difference between net and gross power production. The startup fuel for the SAP and solid fuel gasifier is natural gas. Natural gas is used as the startup, augmentation and backup fuel for the CCCT, while it is the only operational fuel used in the auxiliary boiler.

Units 2 and 3 (EU 009 and 010) at the facility are two 165 MW natural gas/fuel oil-fired GE 7FA simple cycle combustion turbines (SCCT), while Units 4 and 5 (EU 013 and 014) are two 165 MW natural gas-fired GE 7FA SCCT.

The facility also operates two emergency generator engines and two emergency fire pump engines, collectively regulated as EU 007.

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Subsection B. Summary of Emissions Units.

E.U. ID No.	Brief Description
	Regulated Emissions Units
001	260 MW Combined Cycle Gas Turbine No. 1
003	120 Million Btu per Hour Auxiliary Boiler
004	Sulfuric Acid Plant
	Solid Fuel Handling and Gasification Systems
005	Solid Fuel Handling System
006	Solid Fuel Gasification System
007	Emergency Equipment
	Simple Cycle Turbines
009	Nominal 165 MW Simple Cycle Turbine No. 2
010	Nominal 165 MW Simple Cycle Turbine No. 3
013	Nominal 165 MW Simple Cycle Turbine No. 4
014	Nominal 165 MW Simple Cycle Turbine No. 5

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Subsection C. Applicable Requirements.

A summary of important applicable requirements is shown in the following table.

Applicable Requirement	E.U. ID No(s).
Rule 62-296.470, F.A.C., Clean Air Interstate Rule	001, 009, 010, 013 & 014
Acid Rain, Phase II SO_2	001, 009, 010, 013 & 014
Rule 62-212.400, F.A.C., Prevention of Significant Deterioration	001, 003, 005, 006, 009, 010, 013 & 014
40 CFR 60, Subpart A, New Stationary Source Performance Standards (NSPS) General Provisions	001, 003, 005, 006, 009, 010, 013 & 014
40 CFR 60, Subpart Db, NSPS for Industrial-Commercial-Institutional Steam Generating Units	003
40 CFR 60, Subpart Y, NSPS for Coal Preparation Plants	005
40 CFR 60, Subpart GG, NSPS for Stationary Gas Turbines	001, 009, 010, 013 & 014
Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units	003
Rule 62-296.402(2), F.A.C., Sulfuric Acid Plants – New Plants	004
NESHAP – 40 CFR 63, Subpart A, National Emissions Standards for Hazardous Air Pollutants (NESHAP) General Provisions	007
40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines	007
40 CFR 63, Subpart UUUUU, National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units	001

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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 VI., 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 Volatile Organic Compounds (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, volatile organic compounds or organic solvents 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 was 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. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C. This regulation does not impose a specific testing requirement. [Rules 62-296.320(4)(b)1. & 62-297.310(7)(a)10., F.A.C.]

FW5. Unconfined Emissions of Particulate Matter. No person shall cause, let, permit, suffer or allow the emissions of unconfined particulate matter 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. Any permit issued to a facility with emissions of unconfined particulate matter shall specify the reasonable precautions to be taken by that facility to control the emissions of unconfined particulate matter. General reasonable precautions include the following, as applicable:

a. Paving and maintenance of roads, parking areas and yards;
b. Application of water or chemicals to control emissions from such activities as demolition of buildings, grading roads, construction, and land clearing;
c. Application of asphalt, water, oil, chemicals or other dust suppressants to unpaved roads, yards, open stock piles and similar activities;
d. Removal of particulate matter from roads and other paved areas under the control of the owner or operator of the facility to prevent re-entrainment, and from buildings or work areas to prevent particulate from becoming airborne;
e. Landscaping or planting of vegetation;
f. Use of hoods, fans, filters, and similar equipment to contain, capture and/or vent particulate matter;
g. Confining abrasive blasting where possible; and
h. Enclosure or covering of conveyor systems.

Additional reasonable precautions, as needed, applicable to this facility are:

i. All materials except tires, slag, coal and petroleum coke, at the plant shall be stored under roof on compacted clay or concrete, or in enclosed vessels. The slag pile shall be stored on a double – lined High Density Polyethylene (HDPE) liner.
j. Water supply lines, hoses and sprinklers shall be located near all materials, coal and petroleum coke stockpiles.

k. All plant operators shall be trained in basic environmental compliance and shall perform visual inspections of materials, coal and petroleum coke regularly and before handling. If the visual inspections indicate a lack of surface moisture, the materials, coal and petroleum coke shall be wetted with sprinklers. Such wetting shall continue until the potential for unconfined particulate matter emissions are minimized.
l. Water spray shall be used to wet the materials and fuel if inherent moisture and moisture from wetting the storage piles are not sufficient to prevent unconfined particulate matter emissions.
m. The manufacturing area and the access roadways for the facility shall be paved with asphalt or concrete.
n. Vacuum Sweeper shall be used on paved roads.

[Rule 62-296.320(4)(c), F.A.C.; and, Permit Nos. 1050233-029-AC/PSD-FL-194J & 1050233-035-AC/ PSD-FL-194K]

Annual Reports and Fees

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

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 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, P.O. 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: http://www.dep.state.fl.us/air/emission/tvfee.htm. [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 you complete your AOR are available on the electronic AOR (EAOR) website at: http://www.dep.state.fl.us/air/emission/eaor. If you 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 within 60 days after the end of each calendar year during which the Title V air operation permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

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: http://www.epa.gov/osweroe1/content/rmp/index.htm. 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]

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The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
001	260 MW Combined Cycle Gas Turbine No. 1

This integrated solid fuel gasification combined cycle combustion turbine (CCCT) is a General Electric Model Number 7FA, 260 megawatt (electric) unit capable of firing synthesis gas (syngas) and pipeline quality natural gas. The pipe line quality natural gas will be used as a startup, backup and augmentation fuel in the CCCT. The permitted heat input rate to the CCCT at 59 degrees ºF, fuel temperature of 619 ºF, diluent temperature of 616 ºF, no air extraction, is 1,642 million Btu per hour on a lower heating value (LHV) basis when firing syngas, syngas augmented by natural gas or natural gas alone. Manufacturer's curves approved by the Department shall be used to correct the heat input rate to other temperatures/conditions when necessary. Flow meters will be used to determine fuel flow to the CCCT and the heat input rate will be calculated as the product of the LHV of the fuel and the measured fuel flow.

The combustion turbine uses nitrogen diluent injection and syngas moisture saturation when firing syngas or syngas augmented by natural gas. Steam injection is utilized when the combustion turbine is running on natural gas only. The air separation unit produces nitrogen for use in the CCCT, and oxygen for use in the solid fuel gasification system. The nitrogen diluent injection system and syngas moisture saturation controls NO_X emissions by reducing the flame temperature in the CCCT. It also serves a secondary purpose of increasing the fuel mass flow of the relatively low heat content syngas in order to increase the power output of the CCCT. The combined cycle combustion turbine began operation on April 10, 1996. The stack parameters are: height, 150 feet; diameter, 19 feet; exit temperature, 340 degrees ºF; exit velocity, 75.8 feet/sec; and, actual stack gas flow rate, 1,290,000 acfm.

{Permitting notes: This emissions unit is regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart A, General Provisions and Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-194J, as amended]; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated February 24, 1994; and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).}

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Essential Potential to Emit (PTE) Parameters

A.1. Design Capacity. For rule applicability purposes, based on a compressor inlet temperature of 59 ºF, fuel temperature of 619 ºF, diluent temperature of 616 ºF, no air extraction, and based on the lower heating value (LHV) of each fuel, the design heat input rate to the CCCT is 1,642 MMBtu/hr when firing syngas, syngas augmented by natural gas, or natural gas alone. Heat input rates may vary depending on site-specific ambient conditions and CCCT characteristics. Manufacturer's curves approved by the Department shall be used to correct the heat input rate to other temperatures/conditions when necessary. [Permit No. 1050233-029-AC/PSD-FL-194J]

A.2. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Permit No. 1050233-029-AC/PSD-FL-194J]

A.3. Methods of Operation - Fuels.

a. *Syngas*. This emissions unit fires syngas as the primary fuel.

b. *Natural Gas*. This emissions unit fires pipeline quality natural gas as backup and startup fuel. The firing of natural gas only is limited to a 10 percent annual capacity factor to be determined as follows: [Load (%)] / 100% * hours of operation $\leq$ 876 hours. Where the percent load is based on the CT rated load of 192 MW.

c. *Syngas/Natural Gas Blend*. The permittee has the option to fire syngas augmented with natural gas as needed in this emissions unit.

[Rules 62-4.160(2), 62-210.200 (Definitions - PTE), 62-213.410, 62-213.440(1), F.A.C. & 62- 297.310(5)(b); and, Permit No. 1050233-029-AC/PSD-FL-194J]

Control Technology

A.4. Nitrogen Diluent Injection. The CCCT is equipped with a nitrogen diluent injection system and syngas moisture saturation to control nitrogen oxide (NO_X) emissions when firing syngas. The nitrogen diluent injection system and syngas moisture saturation control NO_X emissions by reducing the flame temperature in the combustion turbine. It also serves a secondary purpose of increasing the fuel mass flow of the relatively low heat content syngas in order to increase the power output of the CCCT. [Permit No. 1050233-029-AC/PSD-FL-194J]

A.5. Steam Injection. The CCCT is equipped with a steam injection system to control emissions of NO_X when firing natural gas as the startup, backup and augmentation fuel. [Permit No. 1050233-029-AC/PSD-FL-194J]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging times for Specific Conditions **A.6. – A.8.** are based on the specified averaging time of the applicable test method.

A.6. The maximum allowable emissions shall not exceed the following:

POLLUTANT [a]	FUEL	BASIS [b]	LB/HR [c]	TPY [d]
NO_X	Natural Gas Only	25 ppmvd	185	N/A
	Syngas or syngas with natural gas augmentation	15 ppmvd	132	657/601
VOC [e]	Syngas, natural gas or syngas with natural gas augmentation	0.0017 lb/MMBtu	3	N/A
CO	Syngas, natural gas or syngas with natural gas augmentation	25 ppmvd	98	430.1
PM/PM_{10} [f]	Syngas, natural gas or syngas with natural gas augmentation	0.013 lb/MMBtu	17	74.5
SO_2	Syngas, natural gas or syngas with natural gas augmentation	0.17 lb/MMBtu	357	1,563.7
Sulfuric Acid Mist [g]	Syngas		55	241

Table Notes:

a. Pollutant: PM = particulate matter; PM_{10} = PM with a mean diameter of 10 microns or less; SO_2 = sulfur dioxide; NO_X = nitrogen oxide; CO = carbon monoxide; VOC = volatile organic compounds; SAM = sulfuric acid mist; and VE = visible emissions.

b. Syngas lb/MMBtu values are based on heat input (HHV) to the solid fuel gasifier. The emission rates for lb/MMBtu and TPY includes emissions from the sulfuric acid plant. Pollutant concentrations in ppmvd are corrected to 15 percent oxygen. *{Permitting Note: For reference purposes only, based on a compressor inlet temperature of 59 ºF based and the higher heating value (HHV) of each fuel, the design*

heat input rates to the CCCT are: 1,755 MMBtu/hr when firing syngas and syngas augmented by natural gas; and 1,765 MMBtu/hr when firing natural gas.}

c. Emission limitations in lbs/hr are 30-day rolling averages, except for NO_X while firing syngas, which is limited in ppmvd at 15% oxygen and complied with on a 30-day rolling average via CEMS. Pollutant emission rates may vary depending on ambient conditions and the combustion turbine (CT) characteristics. Manufacturer's curves for the emission rate correction to other temperatures at different loads shall be provided to the Department. Subject to approval by the Department, the manufacturer's curves may be used to establish pollutant emission rates over a range of temperatures for the purposes of compliance determination.
d. Annual emission limits (TPY) are based on 10 percent annual capacity factor firing natural gas. The SO_2 TPY limit also includes the sulfuric acid plant. NO_X emissions are for 10% natural gas firing.
e. Exclusive of background concentrations. Initial stack test firing syngas was conducted. Stack tests on natural gas are not required.
f. Excluding sulfuric acid mist.
g. Annual stack tests for SAM conducted while firing syngas only.

[Permit No. 1050233-029-AC/PSD-FL-194J]

A.7. Sulfur Dioxide (SO_2) - Sulfur Content. The CCCT shall fire pipeline quality natural gas which shall contain no more than 2.0 grains of sulfur per 100 standard cubic feet (gr/100 SCF). Compliance with this limit is shown by meeting the SO_2 emission limit given in Specific Condition **A.6.** of this subsection with compliance shown by a continuous emission monitoring system (CEMS). [Permit No. 1050233-029-AC/PSD-FL-194J]

A.8. Visible Emissions (VE). VE shall not exceed 10 percent opacity when firing syngas with or without natural gas augmentation or natural gas only. [Permit No. 1050233-029-AC/PSD-FL-194J]

40 CFR 63, Subpart UUUUU - National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units

A.9. Subpart UUUUU Requirements. In addition to the emissions limits shown above, the permittee shall also comply with the following emissions limits no later than April 16, 2015:

a. *Particulate Matter (PM).* Emissions of PM shall not exceed either 0.04 pound/million British thermal unit (lb/MMBtu) or 0.4 pound per megawatt-hour (lb/MWh).
b. *Hydrogen Chloride (HCL).* Emissions of HCL shall not exceed either 0.0005 lb/MMBtu or 0.005 lb/MWh.
c. *Mercury (HG).* Emissions of HG shall not exceed either 2.5 pounds per trillion British thermal unit (lb/TBtu) or 0.003 pound per billion watt-hr) (lb/GWh).

Compliance with the above emissions limits shall be demonstrated pursuant to one of the available options specified in 40 CFR 63, Subpart UUUUU (see attached Appendix 40 CFR 63, Subpart UUUUU, National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units). The permittee shall also comply with the recordkeeping and reporting requirements specified Subpart UUUUU, as applicable. [40 CFR 63.9991 and Table 2 to Subpart UUUUU]

{Permitting Note: TEC intends to comply with 40 CFR 63, Subpart UUUUU as a low emitting electric generating unit (EGU) (LEE) (which requires emissions of less than 50% of the above standards for PM and HCL, and for mercury, less than 10% of the above emissions limit or less than 29 pounds per year and compliance with one of the above limits) in order to lessen some of the continuous monitoring requirements. After such time that the LEE status has been fully demonstrated and TEC determines which of the available compliance options provided in Subpart UUUUU will be utilized, the Title V permit will be revised at the first opportunity to specifically impose the emissions and compliance requirements applicable to this EGU.}

Excess Emissions

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

A.10. Excess Emissions Allowed - Startup, Shutdown or Malfunction. Excess emissions resulting from startup, shutdown or malfunction shall be permitted providing (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. Best operational practices shall be documented in writing and submitted to the Department. The documentation shall include limitations on excess emissions caused by turbine startup and shall be updated within thirty (30) days of implementation of any changes. [Rule 62-210.700(1), F.A.C.; and, Permit No. 1050233-029-AC/PSD-FL-194J.]

A.11. Excess Emissions Allowed – Fuel Switching. Excess emissions of NO_X from the combined cycle combustion turbine resulting from fuel switching (either syngas-to-natural gas or natural gas-to-syngas) shall be permitted providing (1) the manufacturer's operational instructions for performing a fuel switch are followed and (2) the duration of excess emissions from each fuel switch shall be minimized but in no case exceed one hour in duration. [Rule 62-210.700(5), F.A.C. and Permit No. 1050233-040-AC/PSD-FL-194L, Specific Condition 1.]

A.12. Best Operational Practices to Minimize Excess Emissions. The permittee shall follow the best operational practices to minimize excess emissions during startup and shutdown as described in **Appendix BOP, Best Operational Practices for Startup and Shutdown**. [Permit No. 1050233-029-AC/PSD-FL-194J; and, Proposed by the Applicant in the Renewal Application.]

A.13. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Continuous Emissions Monitoring Systems (CEMS)

{Permitting Note: The following continuous monitors are installed on these units: SO_2, NO_X, carbon dioxide (CO_2) and stack gas flow.}

A.14. CEMS for NO_X and SO_2. Emissions of NO_X and SO_2 shall be determined continuously with data from the existing continuous emissions monitoring systems (CEMS). The CEMS shall be calibrated, maintained, and operated in a manner sufficient to demonstrate compliance with the emission limits given in Specific Condition **A.6.** Emission limitations in lbs/hr are 30-day rolling averages, except for NO_X while firing syngas, which is also limited in ppmvd at 15% O_2 and complied with on a 30-day rolling average via CEMS. The NO_X and SO_2 CEMS shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75. Record keeping and reporting shall be conducted pursuant to Subparts F and G in 40 CFR 75. [Permit No. 1050233-029-AC/PSD-FL-194J]

{Permitting Note: In addition to the NO_X and SO_2 CEMS, CEMS for carbon dioxide (CO_2) and stack gas flow are installed on the CCCT stack for purposes of the Acid Rain program.

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

A.15. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 5, 5B or 17	Methods for Determining PM Emissions
EPA Methods 6, 6A, 6B or 6C	Methods for Determining SO_2 Emissions
EPA Method 7, 7A, 7C, 7D or 7E	Determination of NO_X Emissions
EPA Method 8, 8A, 8Bor 320	Determination of SAM Emissions
EPA Method 9	Visual Determination of the Opacity of Emissions (VE)
EPA Method 10	Determination of CO Emissions
EPA Method 18	Measurement of Gaseous Organic Compound Emissions (VOC)

The above methods are described in Chapter 62-297, F.A.C. and/or 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. [Chapter 62-297, F.A.C. and Permit No. 1050233-029-AC/PSD-FL-194J]

A.16. 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.]

A.17. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), this emission unit shall be stack tested to demonstrate compliance with the emission limitations and standards for CO, VE, SAM and PM/PM_{10}. Tests shall be conducted with the CCCT at its nominal heat input or up to 10% greater. [Rule 62-212.400 (BACT), F.A.C; Federal Acid Rain Program; and, Permit No. 1050233-029-AC/PSD-FL-194J]

A.18. Compliance Test Prior To Renewal. Prior to permit renewal, this emission unit shall be tested to demonstrate compliance with the emission limitations and standards for VE, CO, SAM, NO_X, SO_2 and PM/PM_{10}. [Rule 62-297.310(7)(a)3., F.A.C. ; and, Permit No. 1050233-029-AC/PSD-FL-194J]

A.19. VE Testing Not Required. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit. See Specific Condition **TR7.**a.(8). [Rule 62-297.310(7)(a)8., F.A.C.]

A.20. Testing Requirements. Emissions testing shall be conducted while gasifying and firing a blend of coal/petroleum coke within 10% of 4.7% sulfur by weight and within fuel consumption constraints specified in this permit. Annual tests shall be conducted at 90% or greater of the design heat input rate provided in Specific Condition **A.1.** and corrected as described therein. If it is impracticable to test within the described range, the unit may be tested at less than the described range; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.; 40 CFR 60.8J; and, Permit No. 1050233-029-AC/PSD-FL-194J]

{Permitting Note: As determined from previous test results, all testing shall be performed using the fuel, or fuel blend, necessary to achieve 90% or greater of design capacity and that results in the highest level of actual emissions.}

Recordkeeping and Reporting Requirements

A.21. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	**A.21.**

[40 CFR 60, Subpart A.]

NSPS 40 CFR 60 Requirements

A.22. NSPS Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:

40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting Requirements,

which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. This emissions unit shall comply with **Appendix 40 CFR 60 Subpart A** included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

A.23. NSPS Requirements - Subpart GG. Except as otherwise provided in this permit, the combustion turbine shall comply with all applicable provisions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(8)(b), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.334(b)(2) and 40 CFR 60.335(f)(1). The Subpart GG requirement to correct test data to ISO conditions applies, but such correction is not required to demonstrate compliance with the non-NSPS permit standard(s). This emissions unit shall comply with **Appendix 40 CFR 60 Subpart GG** attached to this permit. [Rule 62-204.800(8)(b)39., F.A.C.]

A.24. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

A.25. Records of Fuels and Heat Input. The owner or operator shall make and maintain records of heat input to the CCCT on a block-hour basis, starting at the beginning of each hour, by multiplying the hourly average fuel firing rate by the heating value representative of that fuel (syngas, fuel oil and natural gas). [Permit No. 1050233-029-AC/PSD-FL-194J]

A.26. Records of Startup, Shutdown, Fuel Switching and Malfunction. The owner or operator shall make and maintain records of periods of startup, shutdown, fuel switching and malfunction. These records shall show the dates, times and duration of these episodes and shall document suspected cause of each episode, corrective actions taken by the owner or operator and actions taken to reduce excess emissions. [Permit Nos. 1050233-029-AC/PSD-FL-194J and 1050233-040-AC/PSD-FL-194L, Specific Condition 2.]

Other Requirements

A.27. Common Conditions. This emissions unit is also subject to Specific Conditions **I.1.** and **I.2.** contained in **Subsection I. Common Conditions**. [Permit Nos. 1050233-029-AC/PSD-FL-194J & 1050233-037-AC]

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The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
003	120 Million Btu per Hour Auxiliary Boiler

The auxiliary boiler only operates during startup and shutdown of the CCCT, or when steam from the HRSG is unavailable. The auxiliary boiler produces steam for in-plant use and has a maximum heat input of 120 million Btu per hour. The boiler is fired with only pipeline quality natural gas and has a capacity factor of less than or equal to 35%. The boiler can be continuously fired in a standby mode with full operation limited to a maximum of 3,000 hours per year. No add-on air pollutant emission control devices are employed by this emissions unit. This emissions unit has exhaust gas recirculation (EGR) for the control of NO_X emissions. The auxiliary boiler began operation on April 10, 1996. The stack parameters are: height, 75 feet; diameter, 3.7 feet; exit temperature, 375 ºF; and, stack gas flow rate, 32,240 acfm.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rule 62-204.800(8)(b)3., F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-194J]; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated February 24, 1994; and, Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with less than 250 Million Btu per Hour Heat Input, New and Existing Emissions Units. This emissions unit is not subject to the area source boiler MACT requirements contained in 40 CFR 63, Subpart JJJJJJ - National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources, because the boiler is fired exclusively on natural gas.}

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Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum process/operation rate heat input (higher heating value) is 120 million Btu per hour. [Rule 62-296.406, F.A.C. and Permit No. 1050233-029-AC/PSD-FL-194J.]

B.2. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

B.3. Methods of Operation - Fuels. This emissions unit shall fire only pipeline quality natural gas. [Permit No. 1050233-029-AC/PSD-FL-194J]

B.4. Hours of Operation.
a. *Standby Mode*. This emissions unit may operate in a standby mode continuously, i.e., 8,760 hours/year.
b. *Non-Standby Modes*. The hours of operation for this emissions unit shall not exceed 3,000 hours/year.
[Permit No. 1050233-029-AC/PSD-FL-194J.]

Control Technology

B.5. Exhaust Gas Recirculation (EGR). The auxiliary boiler is equipped with an exhaust gas recirculation (EGR) system to control NO_X emissions. The EGR system controls NO_X emissions by reducing the flame temperature and excess air (O_2) in the boiler box thereby reducing the formation of thermal NO_X. This system shall be operated as necessary to meet the NO_X emission limit specified in Specific Condition **B.6.** [Permit No. 1050233-029-AC/PSD-FL-194J]

Emission Limitations and Standards

{Permitting Note: The attached Table 1, Summary of Air Pollutant Standards, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

Unless otherwise specified, the averaging time(s) for Specific Condition(s) **B.6 & B.7.** are based on the specified averaging time of the applicable test method.

B.6. SO_2 - Sulfur Content. The boiler shall fire pipeline quality natural gas which shall contain no more than 2.0 grains of sulfur per 100 standard cubic feet (gr/100 SCF). [Rule 62-296.406(3) (BACT), F.A.C.; 40 CFR 60, Subpart Db; and, Permit No. 1050233-029-AC/PSD-FL-194J.]

B.7. Nitrogen Oxides (NO_X) Emissions. As determined by CEMS on a 30-day rolling average, emissions of nitrogen oxides (expressed as NO_2) shall not exceed 0.10 pound per million Btu heat input. [40 CFR 60.44b(a), 44b(i) & 48b(b); and, Permit No. 1050233-029-AC/PSD-FL-194J.]

Excess Emissions

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

B.8. Excess Emissions Allowed - Startup, Shutdown or Malfunction. Excess emissions resulting from startup, shutdown or malfunction shall be permitted providing (1) best operational practices to minimize emissions are adhered to (see **Appendix BOP, Best Operational Practices for Startup and Shutdown**.) 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. [Rules 62-210.700(1) & 62-213.440(1), F.A.C.]

B.9. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

B.10. NO_X. The nitrogen oxide standards apply at all times, including periods of startup, shutdown, or malfunction. [40 CFR 60.44b(4) and, Permit No. 1050233-029-AC/PSD-FL-194J.]

Monitoring of Operations

B.11. Sulfur Content of Natural Gas. The boiler shall fire pipeline quality natural gas which shall contain no more than 2.0 grains of sulfur per 100 standard cubic feet (gr/100 SCF). 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 or other methods approved by the Department. [Permit No. 1050233-029-AC/PSD-FL-194J.]

Continuous Emissions Monitoring Requirements

B.12. NO_X. Continuous compliance with the NO_X limit is demonstrated through the use of a NO_X CEMS installed and operated pursuant to 40 CFR 60, Subpart Db. [Permit No. 1050233-029-AC/PSD-FL-194J.]

Test Methods and Procedures

{Permitting Note: The attached Table 2, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.13. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
Method 7, 7A, 7C, 7D or 7E	Determination of NO_X Emissions

The above methods are described in Chapter 62-297, F.A.C. and/or 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. [Chapter 62-297, F.A.C. and Permit No. 1050233-029-AC/PSD-FL-194J.]

B.14. 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.]

B.15. Sulfur Dioxide Emissions. The owner or operator shall demonstrate compliance per Specific Condition **B.11.** [Permit No. 1050233-029-AC/PSD-FL-194J.]

Recordkeeping and Reporting Requirements

B.16. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	**B.20.**

[40 CFR 60, Subpart A.]

B.17. Records of Hours. Records of the hours of non-standby operation of the auxiliary boiler will be kept for purposes of periodic monitoring. [Rule 62-213.440(1)(b)1.b. (Periodic Monitoring), F.A.C. {Resolution of objection from USEPA dated 01/22/1999.}.]

B.18. Records of Fuels and Heat Input: The owner or operator shall make and maintain records of heat input to the auxiliary boiler on a block-hour basis, starting at the beginning of each hour, by multiplying the hourly average fuel firing rate by the heating value representative of that fuel (fuel oil or natural gas). [Permit No. 1050233-029-AC/PSD-FL-194J.]

B.19. Records of Startup, Shutdown and Malfunction: The owner or operator shall make and maintain records of periods of startup, shutdown and malfunction. These records shall show the dates, times and duration of these episodes and shall document suspected cause of each episode, corrective actions taken by the owner or operator and actions taken to reduce excess emissions. [Permit No. 1050233-029-AC/PSD-FL-194J.]

B.20. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

NSPS 40 CFR 60 Requirements

B.21. NSPS Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:

40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting Requirements,

which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. This emissions unit shall comply with **Appendix 40 CFR 60 Subpart A** included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

B.20. NSPS Requirements - Subpart Db. Except as otherwise provided in this permit, this emissions unit shall comply with all applicable provisions of 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted by reference in Rule 62-204.800(8)(b)3., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.44b(f) and (g) and 40 CFR

60.49b(a)(4). This emissions unit shall comply with **Appendix 40 CFR 60 Subpart Db** included with this permit. [Rule 62-204.800(8)(b)3., F.A.C.]

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The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
004	Sulfuric Acid Plant

The sulfuric acid plant (SAP) removes sulfur from the syngas stream before it is combusted in the CCCT. The SAP takes a sulfur gas stream from the solid fuel gasification plant's hot gas cleanup or cold gas cleanup systems and converts it to sulfuric acid using the double contact process. The SAP has a 15 million Btu per hour, pipeline quality natural gas fired, hydrogen sulfide (H_2S) to SO_2 conversion furnace which vents to the atmosphere only during warm-up; and a 9 million Btu per hour, pipeline quality natural gas fired, non-contact SO_2 to sulfur trioxide (SO_3) converter preheater which is vented to the atmosphere. This SAP is a double contact absorption plant with a maximum production rate of 299 tons per day (TPD) and 109,135 tons per year of 100% H_2SO_4 (sulfuric acid). The SAP uses vanadium pentoxide catalyst in the converters. The SAP uses mist eliminators for the control of sulfuric acid mist emissions. The stack parameters are: height, 199 feet; diameter, 2.5 feet; exit temperature, 180 F; and, stack gas flow rate, 17,660 acfm. This SAP began operation on April 10, 1996.

{Permitting note: This emissions unit is regulated under Rule 62-296.402(2), F.A.C., Sulfuric Acid Plants - New Plants and Permit No. 1050233-029-AC/PSD-FL-194J.}

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Essential Potential to Emit (PTE) Parameters

C.1. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Permit No. 1050233-029-AC/PSD-FL-194J.]

C.2. Permitted Capacity. The SAP production shall not exceed 299 tons per day (TPD) of 100% sulfuric acid. [Permit No. 1050233-029-AC/PSD-FL-194J.]

{Permitting Note: The corresponding equivalent production rates are 12.46 tons per hour and 109,135 tons per year of 100% H_2SO_4.}

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

C.4. Methods of Operation - Fuels. The conversion furnace and converter preheater shall fire only pipeline quality natural gas, which shall contain no more than 2.0 grains of sulfur per 100 standard cubic feet (gr/100 SCF). [Permit No. 1050233-029-AC/PSD-FL-194J.]

Control Technology

C.5. Mist Eliminators. The SAP uses mist eliminators for the control of sulfuric acid mist emissions. [Permit No. 1050233-029-AC/PSD-FL-194J.]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Condition(s) **C.6. - C.8.** are based on the specified averaging time of the applicable test method.

C.6. Visible Emissions (VE). VE shall not exceed 10% opacity. VE testing shall be accomplished quarterly as stated in Specific Condition **C.14**. below in order to meet the EPA requirement to remove the daily VE monitoring. [Rule 62-296.402(2)(a), F.A.C. and Permit No. 1050233-029-AC/PSD-FL-194J.]

C.7. Sulfur Dioxide (SO_2). SO_2 emissions shall not exceed 4 pounds per ton of 100% H_2SO_4 produced. [Rule 62-296.402(2)(b), F.A.C. and Permit No. 1050233-029-AC/PSD-FL-194J.]

C.8. Sulfuric Acid Mist (SAM). SAM emissions shall not exceed 0.15 pound per ton of 100% H_2SO_4 produced. [Rule 62-296.402(2)(c), F.A.C. and Permit No. 1050233-029-AC/PSD-FL-194J.]

Excess Emissions

C.9. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (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. [Rule 62-210.700(1), F.A.C.]

C.10. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

C.11. Monitoring - Production. Compliance with the TPD production limit shall be demonstrated through the use of a continuous flow and composition (purity) monitor located between the sulfuric acid plant and the sulfuric acid storage tank. [Permit No. 1050233-029-AC/PSD-FL-194J.]

C.12. Monitoring - Daily Production. Record, in tons, the daily production of 100% sulfuric acid for purposes of periodic monitoring. [Rule 62-213.440(1)(b)1.b. (Periodic Monitoring), F.A.C. {Resolution of objection from USEPA dated 01/22/1999.}; and, Permit No. 1050233-029-AC/PSD-FL-194J.]

Test Methods and Procedures

C.13. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content *{Notes: Methods shall be performed as necessary to support other methods.}*
EPA Method 6C	Methods for Determining SO_2 Emissions
EPA Method 8, 8A, 8B or 320	Determination of SAM and SO_2 Emissions from Stationary Sources
EPA Method 9	Visual Determination of the Opacity of Emissions (VE)

The above methods are described in Chapter 62-297, F.A.C. and/or 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. [Chapter 62-297, F.A.C.; and, Permit No. 1050233-029-AC/PSD-FL-194J.]

C.14. Annual Compliance Tests. VE testing shall be conducted quarterly for a period of 8 consecutive quarters, utilizing EPA test method 9 to demonstrate compliance with the emission standard for VE given in Specific Condition **C.6.** If the VE test results for the eight consecutive quarters show no VE above 5% opacity, the permittee may discontinue these quarterly tests with only annual VE testing subsequently required during each federal fiscal year (October 1st to September 30th). Emission testing for SO_2 shall continue to be accomplished during each federal fiscal year to demonstrate compliance with the emission limitation~~s~~ and standard~~s~~ for SO_2. [Rule 62-297.310(7), F.A.C.; and, Permit No. 1050233-029-AC/PSD-FL-194J.]

C.15. Compliance Tests Prior To Renewal. Prior to permit renewal, this emissions unit shall be tested to demonstrate compliance with the emission limitations and standards for VE, SO_2 and SAM. [Rule 62-297.310(7)(a)3., F.A.C.; and, Permit No. 1050233-029-AC/PSD-FL-194J.]

C.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.]

C.11. Visible Emissions. The test method for visible emissions shall be DEP Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C. [Rule 62-296.402(3)(a), F.A.C. and Permit No. 1050233-029-AC/PSD-FL-194J.]

C.12. Sulfuric Acid Mist/Sulfur Dioxide. The test method for acid mist shall be EPA Method 8, 8A, 8B or 320 incorporated and adopted by reference in Chapter 62-297, F.A.C., or an alternative method approved by the Department. The minimum sample volume for the EPA Method 8 test shall be 40 dry standard cubic feet. The test method for sulfur dioxide shall be EPA Method 6C, incorporated and adopted by reference in Chapter 62-297, F.A.C., or an alternative method approved by the Department. [Rule 62-296.402(3)(b), F.A.C.; and, Permit No. 1050233-029-AC/PSD-FL-194J.]

C.13. Feedstock During Testing. Emissions testing shall be conducted while gasifying and firing a coal/petroleum coke blend containing within 10% of the representative blended fuel sulfur content of 4.7% by weight and the permitted fuel consumption restraints. [Permit No. 1050233-029-AC/PSD-FL-194J.]

Recordkeeping and Reporting Requirements

C.14. 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

C.15. This emissions unit is also subject to Specific Conditions **I.1.** and **I.2.** contained in **Subsection I. Common Conditions**

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The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
005	Solid Fuel Handling System

The solid fuel handling system consists of a bottom unloading station where water/surfactant spray is applied to the incoming fuel as needed for dust control. The system also includes enclosed or covered conveying systems, rubber skirted drop points from bins, two fuel silos (Silo Nos. 1 and 2) each with an associated dust suppression system, a silo feed to belt conveyor dust suppression system, a fuel surge bin with an associated dust suppression system, and two rod mill crushers for slurry production.

Solid fuel is received by truck and is unloaded to the fuel unloading bin. Fugitive particulate matter emissions are controlled by a dust suppression system as needed. Fuel is conveyed via enclosed or covered conveyor from the unloading bin to the fuel storage silos. The transfer points from the bin to the belts are rubber skirted. When needed, fugitive particulate matter emissions from the fuel silos are each controlled by an associated dust suppression system. Fuel is then reclaimed from the silos via enclosed or covered conveyors to the surge bin inside the slurry preparation building. When needed, fugitive particulate matter emissions from the surge bin are controlled by an associated dust suppression system. Fuel and water are then mixed in the rod mill crushers to produce a coal slurry.

{Permitting notes: This emissions unit is regulated under NSPS - 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants, adopted and incorporated by reference in Rule 62-204.800(8)(b)31., F.A.C.; and, Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [Permit No. 1050233-035-AC/PSD-FL-194K*].}*

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Essential Potential to Emit (PTE) Parameters

D.1. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Permit No. 1050233-035-AC/PSD-FL-194K, Specific Condition 5.]

Air Pollution Control Technologies and Measures

D.2. Dust Suppression Systems. PM emissions from the two fuel silos (Silo Nos. 1 and 2), the silo feed to belt conveyor and the fuel surge bin are controlled by dust suppression systems. [Permit No. 1050233-035-AC/PSD-FL-194K, Specific Condition 1.]

D.3. Best Management Practices. PM emissions from the handling of solid fuels shall be controlled by enclosing or covering all solid fuel storage, conveyors and conveyor transfer points. Water sprays or chemical wetting agents and stabilizers shall be applied to uncovered storage piles, roads, handling equipment, etc. during dry periods, as necessary, to all facilities to minimize fugitive dust emissions. [Permit No. 1050233-035-AC/PSD-FL-194K, Specific Condition 2.]

Recordkeeping and Reporting Requirements

D.4. Reports. The permittee shall prepare and submit reports in accordance with the requirements of 40 CFR 60.258, "Reporting and Recordkeeping" per 40 CFR 60, NSPS Subpart Y for Coal Preparation Plants. [NSPS 40 CFR 60, Subpart Y and Permit No. 1050233-035-AC/PSD-FL-194K, Specific Condition 6.]

D.5. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

NSPS 40 CFR 60 Requirements

D.6. NSPS Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:
40 CFR 60.7, Notification and Recordkeeping

40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting Requirements,

which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. This emissions unit shall comply with **Appendix 40 CFR 60 Subpart A** included with this permit. [Rule 62-204.800(8)(d), F.A.C. and Permit No. 1050233-035-AC/PSD-FL-194K, Specific Condition 4.]

D.7. NSPS Requirements - Subpart Y. Except as otherwise provided in this permit, this emissions unit shall comply with all applicable provisions of 40 CFR 60, Subpart Y, Standards of Performance for Coal Preparation Plants, adopted and incorporated by reference in Rule 62-204.800(8)(b)31., F.A.C. This emissions unit shall comply with **Appendix 40 CFR 60 Subpart Y** included with this permit. [Rule 62-204.800(8)(b)2., F.A.C. and Permit No. 1050233-035-AC/PSD-FL-194K, Specific Condition 3.]

Other Requirements

D.8. This emissions unit is also subject to Specific Conditions **I.1.** and **I.2.** contained in **Subsection I. Common Conditions.**

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The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
006	Solid Fuel Gasification System

The solid fuel gasification system converts solid fuel (coal or blends of up to 85% petroleum coke (pet coke) and 15% bituminous coal) into synthesis gas (syngas) fuel for combustion in the CCCT for the purpose of electric generation. As an emergency safety device, a flare is used to burn gas from the process during startup, shutdown and emergencies. The flare is the only control device associated with the gasification system. The flare's stack height is 150 feet and the exit temperature of the exhaust gas is 1,830 ºF. Emissions from the flare's pilot flame are negligible. The solid fuel gasifier preheater combusts pipeline quality natural gas.

{Permitting note(s): This emissions unit is regulated under Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [Permit No. 1050233-029-AC/PSD-FL-194J].}

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Essential Potential to Emit (PTE) Parameters

E.1. Permitted Composition. Solid fuels input to the solid fuel gasification plant shall consist of coal or coal/petroleum coke blends containing a maximum of 85% petroleum coke by weight. [Rules 62-4.160(2) and 62-210.200 (Definitions - PTE), F.A.C.; and Permit No. 1050233-029-AC/PSD-FL-194J.]

{Permitting Note: The design feed rate of solid fuel to the gasification system is 2,325 TPD on a dry weight basis.}

E.2. Methods of Operation – Fuel. The startup burners shall fire only natural gas, which shall contain no more than 2.0 grains of sulfur per 100 standard cubic feet (gr/100 SCF). [Permit No. 1050233-029-AC/PSD-FL-194J.]

E.3. Hours of Operation. This emissions unit may operate continuously (8,760 hours/year). [Permit No. 1050233-029-AC/PSD-FL-194J.]

Control Technology

E.4. Emergency Flare. A flare is used to combust syngas during the startup and shut down of the solid fuel gasification system or as needed. In addition the flare is used to combust syngas during emergencies such as the malfunction of the CCCT. [Permit No. 1050233-029-AC/PSD-FL-194J.]

E.5. Flare Operation. The flare shall only be operated during startup, shutdown or emergencies. [Permit No. 1050233-029-AC/PSD-FL-194J.]

Emission Limitations and Standards

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

E.6. Visible Emissions (VE). Visible emissions shall not be equal to or greater than 20% opacity. [Rule 62-296.320(4)(b)1., F.A.C. and Permit No. 1050233-029-AC/PSD-FL-194J.]

E.7. SO_2 - Sulfur Content. The maximum sulfur content of the blended fuel shall not exceed 4.7% by weight. [Permit No. 1050233-029-AC/PSD-FL-194J]

{Permitting note: The sulfur content limitation in effect limits SO_2 emissions from the CCCT.}

Excess Emissions

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

E.8. Excess Emissions Allowed. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (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. [Rule 62-210.700(1), F.A.C.]

E.9. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

E.10. Fuel Composition. The composition of coal, petroleum coke, and blended fuels gasified (including sulfur contents) shall be determined by proximate and ultimate analyses sampling of each unique fuel blend prior to gasification by either the owner/operator or the vendor. [Permit No. 1050233-029-AC/PSD-FL-194J.]

E.11. Monitoring - Solid Fuel Sulfur Content. Compliance with the solid fuel sulfur content standard of 4.7%, by weight, will be determined by sampling each unique fuel blend prior to gasification by the owner/operator or the vendor as follows: using appropriate ASTM methods such as, ASTM D2013-72, ASTM D3177-75, and ASTM D4239-85, or latest ASTM edition methods. [Permit No. 1050233-029-AC/PSD-FL-194J.]

E.12. Monitoring - Solid Fuel Input. The permittee shall record daily the actual solid fuel input to this emissions unit, in tons per day. [Permit No. 1050233-029-AC/PSD-FL-194J.]

Test Methods and Procedures

E.13. Test Methods. Required tests shall be performed in accordance with the following reference method(s):

Method(s)	Description of Method(s) and Comment(s)
EPA Method 9	Visual Determination of the Opacity of Emissions (VE)

The above methods are described in Chapter 62-297, F.A.C. and/or 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. [Chapter 62-297, F.A.C. and Permit No. 1050233-029-AC/PSD-FL-194J.]

E.14. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th) in which the flare operates for 400 hours or more, the flare shall be tested to demonstrate compliance with the emission limitations and standards for VE. [Permit No. 1050233-029-AC/PSD-FL-194J.]

E.15. 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.]

Recordkeeping and Reporting Requirements

E.16. Recordkeeping. Written or electronic records of the actual total solid fuel input to this emissions unit, in tons per day and the blended fuel sulfur content of 4.7% by weight limit, shall be maintained and submitted to the compliance authority with each annual report. These records shall be generated each time a new shipment of coal/petroleum coke fuel is received or solid fuel is gasified. [Permit No. 1050233-029-AC/PSD-FL-194J.]

E.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

E.18. Common Conditions. This emissions unit is also subject to Specific Conditions **I.1.** and **I.2.** contained in **Subsection I. Common Conditions.**

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The specific conditions in this section apply to the following emissions units:

E.U. ID No.	Brief Description of Engine
007	• Two Caterpillar 430 HP Diesel Engine Driven Emergency Fire Pumps • Two Cummins 750 HP Diesel Engine Driven Emergency Generators

This section is comprised of four compression ignition (CI) reciprocating internal combustion engines (RICE).

Emissions Unit 007 consists of two diesel engine driven emergency fire pumps (430 HP) and two diesel engine driven emergency generators (750 HP). Air pollutant emissions from these engines are uncontrolled.

The following table provides important details for these four RICE engines:

Engines Description	Engine Brake HP	Date of Purchase	Displacement liters	Model No.
Diesel Fire Pump # 1	430 HP (325 kW)	1995	14.6	3406-B
Diesel Fire Pump # 2	430 HP (325 kW)	1995	14.6	3406-B
Diesel Generator # 1	750 HP (560 kW)	1995	18.7	KTTA19G2
Diesel Generator # 2	750 HP (560 kW)	1995	18.7	KTTA19G2

{Permitting Note: These compression ignition reciprocating internal combustion engines (CI RICE) are regulated under 40 CFR 63, Subpart ZZZZ, National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines (RICE) adopted in Rule 62.204.800(11)(b), F.A.C. This permit section addresses "existing" emergency stationary CI RICE that are located at an area source of HAP and that have not been modified or reconstructed after 6/12/2006. If the RICE are modified or reconstructed after 7/11/2005, the NSPS 40 CFR 60, Subpart IIII, will then apply.}

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Essential Potential to Emit (PTE) Parameters

F.1. Hours of Operation.

a. *Emergency Situations*. There is no time limit on the use of emergency stationary RICE in emergency situations. [40 CFR 63.6640(f)(1)]

b. *Other Situations*. You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs b.(1) through (3) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph c. counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(1) Maintenance and Testing. These units are 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, or the insurance company associated with the engine. Maintenance checks and readiness testing of such units is limited to 100 hours per year. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that Federal, State, or local standards require maintenance and testing of emergency RICE beyond 100 hours per year. [40 CFR 63.6640(f)(2)(i)]

(2) Emergency Demand Response. The emergency generators may be operated for purposes of emergency demand response during periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see 40 CFR 63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as

defined in the NERC Reliability Standard EOP-002-3. Link to EOP-002-3 [40 CFR 63.6640(f)(2)(ii)]

(3) Deviation of Voltage. The emergency generators may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency. [40 CFR 63.6640(f)(2)(iii)]

c. *Non-emergency Situations*. These units are authorized to be operated for up to 50 hours per calendar year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing and emergency demand response provided in paragraph b.(2) of this condition. The 50 hours per 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. [40 CFR 63.6640(f)(4)]

Emission Limitations and Operating Requirements

F.2. Work or Management Practice Standards.

a. *Oil*. Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6603(a) & Table 2d.4.a.]

b. *Air Cleaner*. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6603 & Table 2d.4.b.]

c. *Hoses and Belts*. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6603 & Table 2d.4.c.]

d. *Operation and Maintenance*. Operate and maintain the stationary RICE according to the manufacturer's emission-related operation and maintenance instructions or develop and follow your own maintenance plan which must provide, to the extent practicable for the maintenance and operation of the engine in a manner consistent with good air pollution, control practice for minimizing emissions. [40 CFR 63.6625(e), 63.6640(a) & Table 6.9.a.]

e. *Engine Startup*. During periods of startup the owner or operator must minimize the engine's time spent at idle and minimize the engine's startup time to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes. [40 CFR 63.6625(h)]

f. *Oil Analysis*. The owner or operator has the option of using oil analysis to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph a., of this condition. The analysis program must at a minimum analyze the following three parameters: Total Base Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Base Number is less than 30 percent of the Total Base Number of the oil when new; viscosity of the oil has changed by more than 20 percent from the viscosity of the oil when new; or percent water content (by volume) is greater than 0.5. If all of these condemning limits are not exceeded, the engine owner or operator is not required to change the oil. If any of the limits are exceeded, the engine owner or operator must change the oil within 2 days of receiving the results of the analysis; if the engine is not in operation when the results of the analysis are received, the engine owner or operator must change the oil within 2 days or before commencing operation, whichever is later. The owner or operator must keep records of the parameters that are analyzed as part of the program, the results of the analysis, and the oil changes for the engine. The analysis program must be part of the maintenance plan for the engine. [40 CFR 63.6625(i)]

Monitoring of Operations

F.3. Hour Meter. The owner or operator must install a non-resettable hour meter if one is not already installed. [40 CFR 63.6625(f)]

Compliance

F.4. Continuous Compliance. Each unit shall be in compliance with the emission limitations, operating limitations, and other requirements in this section at all times. [40 CFR 63.6605(a)]

F.5. Operation and Maintenance of Equipment. At all times the owner or operator must 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 compliance authority 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. [40 CFR 63.6605(b)]

Reporting Requirements

F.6. Delay of Performing Work Practice Requirements. If an emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the work practice requirements on the schedule required in Specific Condition **F.2.**, or if performing the work practice on the required schedule would otherwise pose an unacceptable risk under federal, state, or local law, the work practice can be delayed until the emergency is over or the unacceptable risk under federal, state, or local law has abated. The work practice should be performed as soon as practicable after the emergency has ended or the unacceptable risk under federal, state, or local law has abated. Sources must report any failure to perform the work practice on the schedule required and the federal, state or local law under which the risk was deemed unacceptable. [40 CFR 63, Subpart ZZZZ, Table 2c, footnote 1]

Recordkeeping Requirements

F.7. Notification, Performance and Compliance Records. The owner or operator must keep:

a. A copy of each notification and report that the owner or operator submitted to comply with this section, including all documentation supporting any Initial Notification or Notification of Compliance Status that the owner or operator submitted. [40 CFR 63.6655(a)(1)]
b. Records of the occurrence and duration of each malfunction of operation. [40 CFR 63.6655(a)(2)]
c. Records of all required maintenance performed on the hour meter. [40 CFR 63.6655(a)(4)]
d. Records of actions taken during periods of malfunction to minimize emissions in accordance with Specific Condition **F.5.**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation. [40 CFR 63.6655(a)(5)]
e. Records of the actions required in specific condition **F.2.d.** to show continuous compliance with each emission limitation or operating requirement. [40 CFR 63.6655(d)]
f. Records of the Work or Management Practice Standards specified in Specific Condition **F.2.** [Rule 62-213.440(1)(b)2.a., F.A.C.]
g. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan. [40 CFR 63.6655(e)]
h. Records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation including what classified the operation as emergency and how many hours are spent for non-emergency operation. If the engines are used for emergency demand response operation or for periods of voltage or frequency deviations, the owner or operator must keep records of the notification of the emergency situation, and the time of engine operation for these purposes. [40 CFR 63.6655(f)]

[Rule 62-213.440, F.A.C. and 40 CFR 63.6655]

F.8. Records Retention.

a. The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
b. The owner or operator must keep each record readily accessible in hard copy or electronic form for at least 5 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record.

[40 CFR 63.6660 and 40 CFR 63.10(b)(1)]

F.9. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

General Provisions

F.10. 40 CFR 63 Subpart A, General Provisions. The owner or operator shall comply with the following applicable requirements of 40 CFR 63 Subpart A, General Provisions, which have been adopted by reference in Rule 62-204.800(11)(d)1., F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 63.5(e), 40 CFR 63.5(f), 40 CFR 63.6(g), 40 CFR 63.6(h)(9), 40 CFR 63.6(j), 40 CFR 63.13, and 40 CFR 63.14. Link to 40 CFR 63, Subpart A - General Provisions

General Provisions Citation	Subject of Citation
§63.1	General applicability of the General Provisions
§63.2	Definitions (Additional terms defined in §63.6675)
§63.3	Units and abbreviations
§63.4	Prohibited activities and circumvention
§63.5	Construction and reconstruction
§63.6(a)	Applicability
§63.6(c)	Compliance dates for existing sources
§63.9(a)	Applicability and State delegation of notification requirements
§63.9(b)(1)–(5)	Initial notifications. Except that §63.9(b)(3) is reserved.
§63.9(i)	Adjustment of submittal deadlines
§63.9(j)	Change in previous information
§63.10(a)	Administrative provisions for recordkeeping/reporting
§63.10(b)(1)	Record retention
§63.10(b)(2)(vi)–(xi)	Records
§63.10(b)(2)(xii)	Record when under waiver
§63.10(b)(2)(xiv)	Records of supporting documentation
§63.10(b)(3)	Records of applicability determination
§63.10(d)(1)	General reporting requirements
§63.10(f)	Waiver for recordkeeping/reporting
§63.12	State authority and delegations
§63.13	Addresses
§63.14	Incorporation by reference
§63.15	Availability of information

[40 CFR 63.6645(a), 63.6665 & Table 8 to Subpart ZZZZ of Part 63]

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The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
009	Nominal 165 MW Simple Cycle Turbine No. 2
010	Nominal 165 MW Simple Cycle Turbine No. 3

These emissions units are two dual-fuel, nominal 165 megawatts (MW) General Electric Model PG7241 FA simple cycle combustion turbines. These units use dry low NO_X combustors when firing natural gas and use water injection when firing No. 2 fuel oil. Pipeline quality natural gas is the primary fuel and No. 2 fuel oil serves as the backup fuel. CT No. 2 began operation on June 29, 2000. The stack parameters for CT No. 2 are: height, 114 feet; diameter, 18 feet; exit temperature, 1,117 ºF; and, actual stack gas flow rate, 12,377,044 acfm. CT No. 3 began operation in April, 2002. The stack parameters for CT No. 3 are: height, 114 feet; diameter, 18 feet; exit temperature, 1,117 ºF; and, actual stack gas flow rate, 12,377,044 acfm.

{Permitting note(s): These emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-263]; Power Plant Siting Conditions of Certification PA92-32; Permit No. 1050233-032-AC/PSD-FL-263B; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination, dated February 24, 1994; and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).}

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Essential Potential to Emit (PTE) Parameters

G.1. Hours of Operation. The maximum hours of operation for each unit are 4,380 hours per year on natural gas and 750 hours per year on fuel oil. [Rule 62-210.200 (Definitions - Potential to Emit (PTE), F.A.C.; and, PSD-FL-263, Specific Condition 13.]

G.2. Permitted Capacity. The maximum heat input rates, based on the lower heating value (LHV) of each fuel to each unit at ambient conditions of 59 ºF temperature, 60% relative humidity, 100% load, and 14.7 psi pressure shall not exceed 1,600 million Btu per hour (MMBtu/hr) when firing natural gas, nor 1,800 MMBtu/hr when firing No. 2 or superior grade of distillate fuel oil. These maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions provided to the Department shall be utilized for these corrections. [Rules 62-4.160(2), 62-210.200 (Definitions - PTE); and, PSD-FL-263, Specific Condition 8.]

G.3. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements and Specific Condition **G.32.** [Rule 62-297.310(2), F.A.C.]

G.4. Methods of Operation - Fuels. Only pipeline quality natural gas or maximum 0.05 percent sulfur No. 2 fuel oil or superior grade of distillate fuel oil shall be fired in each unit. {Note: The limitation of this specific condition is more stringent than the NSPS 40 CFR 60 Subpart GG sulfur dioxide limitation and thus assures compliance with 40 CFR 60.333 and 60.334.} [Rules 62-4.160(2), 62-210.200 (Definitions - PTE), 62-213.410, 62-213.440(1), F.A.C.; and, PSD-FL-263, Specific Condition 7.]

Air Pollution Control Technologies and Measures

G.5. Dry Low NO_X (DLN) Systems. Dry Low NOx (DLN) combustors shall be maintained and operated on the stationary combustion turbines to comply with the NO_X emissions limits while firing natural gas. [PSD-FL-263, Specific Condition 14.]

G.6. Water Injection. A water injection system shall be operated and maintained when firing No. 2 or superior grade distillate fuel oil for control of NO_X emissions. [PSD-FL-263, Specific Condition 15.]

G.7. Maintenance of Dry Low NO_X (DLN) Systems. The DLN systems shall be maintained to minimize nitrogen oxides (NO_X) emissions and carbon monoxide (CO) emissions, consistent with normal operation and maintenance practices. Operation of the DLN systems in the diffusion-firing mode shall be minimized when firing natural gas. [Rules 62-4.070, and 62-210.650, F.A.C.; and, PSD-FL-263, Specific Condition 17.]

Emission Limitations and Standards

G.8. Nitrogen Oxides (NO_X) - While firing Natural Gas. The emission rate of NO_X in the exhaust gas shall not exceed 10.5 ppm @15% O_2 on a 24-hr block average as measured by the continuous emission monitoring system (CEMS). [Permit No. 1050233-032-AC/PSD-FL-263B]

G.9. Nitrogen Oxides (NO_X) - While firing Fuel Oil. The concentration of NO_X in the exhaust gas shall not exceed 42 ppmvd at 15% O_2 on the basis of a 3-hr average as measured by the continuous emission monitoring system (CEMS). In addition, NO_X emissions calculated as NO_2 shall not exceed 319 lbs/hr (at ISO conditions) and 42 ppmvd @15% O_2 to be demonstrated by stack test. The permittee shall be limited to 750 hours per year when firing on fuel oil. [Permit No. 1050233-032-AC/PSD-FL-263B]

G.10. Sulfur Dioxide (SO_2). SO_2 emissions shall be limited by firing pipeline natural gas (sulfur content less than 2 grains per 100 standard cubic foot) or by firing No. 2 or superior grade distillate fuel oil with a maximum 0.05 percent sulfur for no more than 750 hours per year per unit. Emissions of SO_2 (at ISO conditions) shall not exceed 9.2 lb/hr (natural gas) and 98.1 lb/hr (fuel oil) as measured by applicable compliance methods. [PSD-FL-263, Specific Condition 22.]

G.11. Visible Emissions (VE). VE shall not exceed 10 percent opacity. [PSD-FL-263, Specific Condition 23.]

G.12. Volatile Organic Compounds (VOC). The concentration of VOC in the stack exhaust gas with the combustion turbine operating on natural gas shall exceed neither 1.4 parts per million by volume wet (ppmvw) nor 2.8 lb/hr (ISO conditions) and neither 3.5 ppmvw nor 7 lb/hr (ISO conditions) while operating on oil to be demonstrated by initial stack test using EPA Method 18, 25 or 25A. [PSD-FL-263, Specific Condition 21.]

G.13. Carbon Monoxide (CO). The concentration of CO in the stack exhaust gas shall exceed neither 12 ppmvd nor 38 lb/hr (at ISO conditions) while firing gas and neither 20 ppmvd nor 65 lb/hr (at ISO conditions) while firing oil, based on stack test. The permittee shall demonstrate compliance with these limits by stack test using EPA Method 10. [PSD-FL-263, Specific Condition 20.]

Excess Emissions

G.14. Excess Emissions Allowed - Startup, Shutdown or Malfunction. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period for other reasons unless specifically authorized by DEP for longer duration. Operation below 50% output shall be limited to 2 hours per unit cycle (breaker closed to breaker open). [Rule 62-210.700(1), F.A.C.; and, PSD-FL-263, Specific Condition 24.]

G.15. Allowable NO_X Data Exclusions - Tuning. Provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized, NO_X CEMS data collected during initial or other tuning sessions shall be excluded from the compliance demonstrations provided the tuning session is performed in accordance with the manufacturer's specifications. The permittee shall report any excess emissions in the quarterly NO_X report. [Rule 62-210.700(5), F.A.C. and Permit No. 1050233-040-AC, Specific Condition 3.]

G.16. Best Operational Practices to Minimize Excess Emissions. The permittee shall follow the best operational practices to minimize excess emissions during startup and shutdown as described in **Appendix BOP, Best Operational Practices for Startup and Shutdown**. [Rule 62-210.700(2) and 62-213.440(1)

(Operational Requirements that Assure Compliance), F.A.C. and Proposed by the Applicant in the Renewal Application.]

G.17. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. These emissions shall be included in the 24-hr average for NO_X. [Rule 62-210.700(4), F.A.C.; and, PSD-FL-263, Specific Condition 25.]

Continuous Emissions Monitoring Systems (CEMS)

{Permitting Note: The following continuous monitors are installed on these units: NO_X and CO_2.}

G.18. CEMS - NO_X. The permittee shall install, calibrate, maintain, and operate a CEMS in the stack to measure and record the NO_X emissions from these units. Upon request from EPA or DEP, the CEMS emission rates for NO_X on these units shall be corrected to ISO conditions to demonstrate compliance with the NO_X standard established in 40 CFR 60.332. [PSD-FL-263, Specific Condition 39.]

G.19. CEMS - NO_X. Continuous compliance with the NO_X emission limits shall be demonstrated with the CEMS based on the applicable averaging time of 24-hr block average (DLN). Based on CEMS data, a separate compliance determination is conducted at the end of each operating day and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day. A valid hourly emission rate shall be calculated for each hour in which at least two NO_X concentrations are obtained at least 15 minutes apart. Valid hourly emission rates shall not include periods of startup, shutdown, or malfunction unless prohibited by Rule 62-210.700, F.A.C. [Rules 62-4.070 & 62-210.700, F.A.C.; 40 CFR 75; and, PSD-FL-263, Specific Condition 29.]

G.20. CEMS. All CEMS shall be in continuous operation except for breakdowns, repairs, calibration checks, and zero and span adjustments. These CEMS shall meet minimum frequency of operation requirements: one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data average. [40 CFR 60.13; and, PSD-FL-263, Specific Condition 29.]

G.21. Continuous Monitoring Certification and Quality Assurance Requirements. The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5) or 40 CFR Part 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40 CFR 75. [PSD-FL-263, Specific Condition 42.]

Monitoring Requirements

G.22. NO_X CEMS in lieu of Water to Fuel Ratio. The NO_X CEMS shall be used in lieu of the water/fuel monitoring system for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998 version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335(c)(2) (1998 version) will be replaced by the 40 CFR 75 certification tests of the NO_X CEMS. [PSD-FL-263, Specific Condition 41.]

G.23. Natural Gas Monitoring Schedule. A custom fuel monitoring schedule pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following requirements are met:

a. The permittee shall maintain a monitoring plan, certified by signature of the Designated Representative, that commits to using a primary fuel of pipeline supplied natural gas (sulfur content less than 2.0 gr/100 scf pursuant to 40 CFR 75.11(d)(2)).

b. Each unit shall be monitored for SO_2 emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.

This custom fuel monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO_2 emissions must be accounted for as required pursuant to 40 CFR 75.11(d). Sulfur content monitoring with respect to 40 CFR 60, Subpart GG is not required for gaseous fuels that meet the 40 CFR 60.331(u) definition of "natural gas" in accordance with the procedures specified in 40 CFR 60.334(h)(3). [40 CFR 60.334(h)(3); and, PSD-FL-263, Specific Condition 43.]

G.24. Fuel Oil Monitoring Schedule. Compliance with the maximum sulfur content of the low sulfur fuel oil shall be demonstrated through vendor certification or measured with a composite sampling procedure approved by the Administrator pursuant to 40 CFR 75.66. The fuel contract and bills of lading shall be used to demonstrate compliance for the vendor certification. If used, the monthly composite sample shall be prepared from each fuel oil delivery (lot) to the storage tanks. The sample will be analyzed in the laboratory (on-site or off-site) for density, heat content and sulfur content. The analysis shall also specify the methods by which the analyses were conducted and shall comply with the requirements of 40 CFR 60.335(d). [Permit No. 1050233-032-AC/PSD-FL-263B]

{Permitting Note: The applicant has the choice to demonstrate compliance with the fuel oil sulfur content either through vendor certification or through composite sampling. Provided that the contract and bills of lading demonstrate that the fuel oil received meets the allowable sulfur content, then composite sampling is not required. However, if the contract or bills of lading do not clearly demonstrate compliance with the fuel oil sulfur limit, then composite samples of the blended, as-burned, fuel will be required.}

Test Methods and Procedures

G.25. Test Methods. Required tests shall be performed in accordance with the following reference methods:

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Methods 6, 6A, 6B or 6C	Methods for Determining SO_2 Emissions
EPA Method 7, 7A, 7C, 7D or 7E	Determination of NO_X Emissions
EPA Method 9	Visual Determination of the Opacity of Emissions (VE)
EPA Method 10	Determination of CO Emissions
EPA Method 18	Measurement of Gaseous Organic Compound Emissions (VOC)
EPA Method 20	Determination of NO_X, SO_2 and Diluent Emissions from Stationary Gas Turbines

The above methods are described in Chapter 62-297, F.A.C. and/or 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. [Chapter 62-297, F.A.C. and PSD-FL-263, Specific Condition 28.]

G.26. Annual Compliance Test. Unless otherwise specified by this permit (see Specific Condition **G.28.**), during each federal fiscal year (October 1st to September 30th), Emissions Unit ID Nos. 009 and 010 shall be tested to demonstrate compliance with the emission limitations and standards for VE, CO and NO_X. The NO_X RATA test data may be used to demonstrate compliance with the annual test requirement, provided the testing requirements (notification, procedures and reporting) of Chapter 62-297, F.A.C. are met. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance

test once per each five-year period, coinciding with the term of its air operation permit. [Rule 62-297.310(7), F.A.C.; and, PSD-FL-263, Specific Condition 28.]

G.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.]

G.28. Testing. Initial (I) tests shall be conducted after any modifications (and shake down period not to exceed 100 days after re-starting the CT) of air pollution control equipment, such as change or tuning of combustors, while firing natural gas as well as while firing oil. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 - September 30) pursuant to Rule 62-297.310(7), F.A.C., on each unit as indicated. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. The following reference methods shall be used:

EPA Reference Method 9, VE (I, A);
EPA Reference Method 10, CO (I, A);
EPA Reference Method 20, NO_X and SO_2. Initial test only for compliance with 40 CFR 60 Subpart GG and (I, A) short-term NO_X BACT limits (EPA reference Method 7E, RATA test data may be used to demonstrate compliance for annual test requirements); and,
EPA Reference Method 18, 25 and/or 25A, VOC. Initial tests only.

[PSD-FL-263, Specific Condition 28.]

{Permitting Note: Pursuant to Specific Condition 28. of permit No. PSD-FL-263, "Initial" tests for all pollutants limited by this permit are to be repeated following maintenance activities that result in the replacement of control equipment components, replacement of combustors or major tuning activities. For clarification, these tests are required to be performed only with the fuel or fuels for which emissions from the combustion turbines could have been affected by the change or activity. Annual tests are only required for the fuels fired during a given year; however, at least one test shall be performed on each fuel prior to renewing this permit.}

G.29. CO and NO_X Testing. Annual compliance testing for CO may be conducted at less than capacity when compliance testing is conducted concurrent with the annual RATA testing for the NO_X CEMS required pursuant to 40 CFR 75. [PSD-FL-263, Specific Condition 31.]

G.30. Compliance with the SO_2 Emission Limits. The use of pipeline natural gas, is the method for determining compliance for SO_2. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO_2 standard, ASTM methods D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized. However, the applicant is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used when determination of fuel sulfur content is made. Sulfur content monitoring with respect to 40 CFR 60, Subpart GG is not required for gaseous fuels that meet the 40 CFR 60.331(u) definition of "natural gas" in accordance with the procedures specified in 40 CFR 60.334(h)(3). Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e) (1998 version). [40 CFR 60.335(d) and 40 CFR 60.334(h)(3); and, PSD-FL-263, Specific Condition 30.]

G.31. VOC Testing. An initial test was required to demonstrate compliance with the VOC emission limit. Thereafter, the CO emission limit and periodic tuning data shall be employed as a surrogate and no annual testing is required. [PSD-FL-263, Specific Condition 32.]

*{Permitting Note: "Initial" VOC tests shall be repeated as required in Specific Condition **G.28.**}*

G.32. Operating Rate During Testing. Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input

rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 110 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C. [PSD-FL-263, Specific Condition 33.]

Recordkeeping and Reporting Requirements

G.33. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	**G.34.**

[40 CFR 60, Subpart A.]

G.34. NO_X CEMS for Reporting Excess Emissions. Excess Emissions and Monitoring System Performance Reports shall be submitted as specified in 40 CFR 60.7(c). CEM monitor downtime shall be calculated and reported according to the requirements of 40 CFR 60.7(c)(3) and 40 CFR 60.7(d)(2). Periods when NO_X emissions (ppmvd @ 15% oxygen) are above the BACT standards shall be reported to the DEP Southwest District Office within one working day (verbally) followed up by a written explanation no later than three (3) working days (alternatively by facsimile or email within one working day). [PSD-FL-263, Specific Condition 40.]

G.35. Test Notification. The DEP's Southwest District shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance tests. [PSD-FL-263, Specific Condition 34.]

G.36. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

NSPS 40 CFR 60 Requirements

G.37. NSPS Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:

40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting Requirements,

which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) and (3), 40 CFR 60.11(e)(7) and (8), 40 CFR 60.13(g), (i) and (j)(2), and 40 CFR 60.16. These emissions units shall comply with Appendix 40 CFR 60 Subpart A included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

G.38. NSPS Requirements - Subpart GG. Except as otherwise provided in this permit, the combustion turbine shall comply with all applicable provisions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(8)(b), F.A.C., except that the Secretary is

not the Administrator for purposes of 40 CFR 60.334(b)(2) and 40 CFR 60.335(f)(1). The Subpart GG requirement to correct test data to ISO conditions applies, but such correction is not required to demonstrate compliance with the non-NSPS permit standard(s). These emissions units shall comply with **Appendix 40 CFR 60 Subpart GG** attached to this permit. [Rule 62-204.800(8)(b)39., F.A.C.]

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The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
013	Nominal 165 MW Simple Cycle Turbine No. 4
014	Nominal 165 MW Simple Cycle Turbine No. 5

These emissions units are two General Electric PG7241 FA simple cycle gas turbine generators with a nominal output of 165 megawatts (MW) each. Each unit may operate up to 4,380 hours per year. The units are fired exclusively with natural gas, which minimizes sulfur dioxide (SO_2) emissions. The units were designed and constructed with dry low NO_X (DLN) burner technology for the control of nitrogen oxides (NO_X) emissions. The advanced burner design reduces incomplete combustion and minimizes carbon monoxide (CO), particulate matter (PM/PM_{10}), and volatile organic compound (VOC) emissions. CT No. 4 began operation on February 23, 2007. The stack parameters for CT No. 4 are: height, 114 feet; diameter, 18 feet; exit temperature, 1,117 ºF; and, actual stack gas flow rate, 2,393,587 acfm. CT No. 5 began operation on February 23, 2007. The stack parameters for CT No. 5 are: height, 114 feet; diameter, 18 feet; exit temperature, 1,117 ºF; and, actual stack gas flow rate, 2,393,587 acfm.

{Permitting notes: These emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(8)(b), F.A.C.; Rule 62-212.400, F.A.C., Prevention of Significant Deterioration (PSD) [PSD-FL-363]; Permit No. 1050233-032-AC/PSD-FL-363C; Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT) Determination; and, Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR).}

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Equipment

H.1. Gas Turbines. The permittee is authorized to tune, operate, and maintain two General Electric Model PG7241FA gas turbine-electrical generator sets with a nominal generating capacity of 165 MW each. Each gas turbine is equipped with a DLN combustion system and an inlet air filtration system. Each unit includes a Speedtronic™ Mark V automated gas turbine control system (or equivalent). [Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 3.]

H.2. Simple Cycle, Intermittent Operation. Each turbine shall operate only in simple cycle mode not to exceed the permitted hours of operation allowed by this permit. This restriction is based on the permittee's request, which formed the basis of the PSD applicability and BACT determinations and resulted in the emission standards specified in this permit (as established by Permit No. 1050233-018-AC/PSD-FL-363). For any request to convert this unit to combined cycle operation by installing/connecting to heat recovery steam generators, including changes to the fuel quality or quantity related to combined cycle conversion which may cause an increase in short or long-term emissions, the permittee may be required to submit a full PSD permit application complete with a new proposal of the BACT as if the unit had never been built. [Rules 62-212.400(12) and 62-212.400 (BACT), F.A.C.; and Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 8.]

Essential Potential to Emit (PTE) Parameters

H.3. Hours of Operation. Each gas turbine shall operate no more than 4,380 hours during any consecutive 12 months. Restrictions on individual methods of operation are specified in separate conditions. [Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 5.]

H.4. Permitted Capacity. The maximum heat input rate for each gas turbine is 1,834 million British thermal units (MMBtu) per hour when firing natural gas based on a compressor inlet air temperature of 59 ºF, the higher heating value (HHV) of natural gas, and 100% load. Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, alternate methods of operation, and evaporative cooling. The

permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities upon request. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department. [Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 6.]

H.5. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

H.6. Methods of Operation - Fuels. Each gas turbine shall fire only natural gas containing no more than 2.0 grains of sulfur (S) per 100 standard cubic feet (SCF) of natural gas. [Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 7.]

Air Pollution Control Technologies and Measures

H.7. Maintenance of Dry Low NO_X (DLN) Systems. The permittee shall operate and maintain the General Electric DLN 2.6 combustion system (or better) to control NO_X emissions from the gas turbines when firing natural gas. The system shall be maintained and tuned in accordance with the manufacturer's recommendations. [Rules 62-4.070, and 62-210.650, F.A.C.; and, Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 4.]

H.8. Operating Procedures. The BACT determinations established by air construction permit No. 1050233-018-AC/PSD-FL-363 rely on "good operating practices" to reduce emissions. Therefore all operators and supervisors shall be properly trained to operate and ensure maintenance of the gas turbines, and pollution control systems in accordance with the guidelines and procedures established by each manufacturer. The training shall include good operating practices as well as methods for minimizing excess emissions. [Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 17.]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **H.10. - H.11.** are based on the specified averaging time of the applicable test method.

H.9. NSPS Requirements. The BACT emissions standards are as stringent as, or more stringent than, the limits imposed by the applicable NSPS 40 CFR 60 subpart GG provisions. Some separate reporting and monitoring may be required by the individual subparts. These provisions include a requirement to correct test data to International Organization for Standardization (ISO) conditions; however, such correction is not used for compliance determinations with the BACT standards. [Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60, Subparts A and GG; and, Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 2.]

H.10. Emission Standards. Emissions from each gas turbine shall not exceed the following emission standards:

Air Pollutant	Emission Standard [e]	Averaging Time	Compliance Method	Basis
Carbon Monoxide (CO) [a]	99.0 tons (Emissions Cap)	12-month rolling total both units combined	CEMS	Avoid PSD
Nitrogen Oxides (NO_X) [b]	9.0 ppmvd @ 15% O_2	24-hour block, CEMS	CEMS	BACT
VE	10% opacity	6-minute block	EPA Method 9 Test	BACT
PM/PM_{10} [c]	2 grains S/100 SCF of gas	N/A	Recordkeeping	BACT
Sulfur Dioxide (SO_2) [d]	2 grains S/100 SCF of gas	N/A	Recordkeeping	BACT

a. Continuous compliance shall be demonstrated with the CO emissions cap by data collected from the required continuous emissions monitoring systems (CEMS) for both units combined.

b. Continuous compliance shall be demonstrated with the 24-hour block NO_X emissions limit by data collected from the required CEMS.
c. The fuel sulfur specifications combined with the efficient combustion design and operation of the gas turbine represents BACT for particulate matter (PM/PM_{10}) emissions. No stack tests are required. Compliance with the CO and visible emissions standards shall serve as indicators of good combustion. *{Permitting Note: Maximum expected PM/PM_{10} emissions from each gas turbine are approximately 18 lb/hour.}*
d. The fuel sulfur specifications effectively limit the potential emissions of sulfur dioxide (SO_2) from each gas turbine and represent BACT for SO_2 emissions. No stack tests are required. *{Permitting Note: Maximum expected SO_2 emissions from each gas turbine are approximately 9.5 lb/hour.}*
e. The mass emission rate standards are based on a turbine inlet condition of 59 ºF and the higher heating value of natural gas. Mass emission rates may be adjusted from actual test conditions in accordance with the performance curves and/or equations on file with the Department.

[Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 9.]

{Permitting Note: In combination with the annual restriction on hours of operation, the above emissions standards effectively limit annual potential emissions from both gas turbines to: 99 tons/year of CO, 267 tons/year of NO_X, 79 tons/year of PM/PM_{10}, 42 tons/year of SO_2, 5 tons/year of sulfuric acid mist (SAM), and 12 tons/year of VOC.}

H.11. Alternate Visible Emissions Standard. Visible emissions due to startups, shutdowns, and malfunctions shall not exceed 10% opacity except for up to ten, 6-minute averaging periods during a calendar day, which shall not exceed 20% opacity. [Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 20.]

Excess Emissions

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

H.12. Allowable NO_X Data Exclusions. Provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions are minimized, NO_X continuous monitoring data collected during periods of startup, shutdown, malfunction and tuning may be excluded from the 24-hr block 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, and DLN tuning) 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 30 minutes of CEMS data shall be excluded for each gas turbine startup. For startups of less than 30 minutes in duration, only those minutes attributable to startup shall be excluded.
b. *Shutdown.* In accordance with the procedures described in the CEMS Data Requirements of this section, no more than the first 20 minutes of CEMS data shall be excluded for each gas turbine shutdown. For shutdowns less than 20 minutes in duration, only those minutes attributable to shutdown shall be excluded.
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 (1) working day of occurrence, the owner or operator shall notify the Compliance Authority of any malfunction resulting in the exclusion of CEMS data.
d. *Tuning.* CEMS data collected during initial or other tuning sessions shall be excluded from the compliance demonstrations provided the tuning session is performed in accordance with the manufacturer's specifications. The permittee shall report any excess emissions in the quarterly NO_X report.

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 and demonstration of compliance with the CO emissions cap. [Rule 62-210.700(5), F.A.C. and Permit No. 1050233-032-AC/PSD-FL-363C]

H.13. Best Operational Practices to Minimize Excess Emissions. The permittee shall follow the best operational practices to minimize excess emissions during startup and shutdown as described in **Appendix BOP, Best Operational Practices for Startup and Shutdown**. [Rule 62-210.700(2) and 62-213.440(1) (Operational Requirements that Assure Compliance), F.A.C.; and, Proposed by the Applicant in the Renewal Application.]

H.14. Excess Emissions Prohibited. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C.; and, Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 19.]

Continuous Emissions Monitoring Systems (CEMS)

{Permitting Note: The following continuous monitors are installed on these units: NOx, CO and CO_2.}

H.15. CEMS. The permittee shall calibrate, maintain, and operate 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 CEMS emission standards of this section.

a. *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 60, Appendix F. The annual and required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 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.

b. *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 annual and required RATA tests required for the NO_X monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60.

c. *Diluent Monitor*. The oxygen (O_2) or carbon dioxide (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% oxygen. If a CO_2 monitor is installed, the oxygen 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.

[Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 22.]

H.16. CEMS 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 of this section. The CEMS shall express the results in units of ppmvd corrected to 15% oxygen. Upon request by the Department, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332.

a. *Valid Hourly Averages for Compliance.* Each CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over the hour at a minimum of one measurement per minute. All valid measurements collected during an hour (except for the allowable NO_X data exclusions), shall be used to calculate a 1-hour block average that begins at the top of each hour. Each 1-hour block average shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, a 1-hour average shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). If less than two such data points are available, there is insufficient data and the 1-hour block average is not valid. Also, if an allowable exclusion episode should

occur over two separate hourly averages, only those minutes attributed to the specific episode shall be excluded from each hour. *{Permitting Note: For example, a 20-minute startup begins at 2:50 p.m. and ends at 3:10 pm. This means that 10 minutes of startup data would be excluded from the first hourly average and 10 minutes would be excluded from the second hourly average. The first hourly average (2:00 – 3:00 p.m.) is not a valid hourly average because there is insufficient data. The second hourly average (3:00 – 4:00 p.m.) is a valid hourly average consisting of 50 minutes of monitoring data.}*

b. *24-hour Block Averages.* A 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive valid hourly average concentration values. If a unit operates less than 24 hours during the block, or there are less than 24 valid hourly averages available, the 24-hour block average shall be the average of all available valid hourly average concentration values for the 24-hour block. *{Permitting Note: For purposes of determining compliance with the 24-hour CEMS standards, the missing data substitution methodology of 40 CFR Part 75, Subpart D, shall not be utilized. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block and periods of missing CEMS data are to be reported as monitor downtime in the excess emissions and monitoring performance reports. For example, the "24-hr block average" may consist of only 6 valid operating hours for the day.}*

c. *12-Month Rolling Total.* By the end of each month, each CEMS shall determine a 12-month rolling total of CO emissions from each gas turbine and the combined total. The 12-month rolling total shall be based on all valid CO CEMS data collected, including startups, shutdowns, and malfunctions.

d. *Data Exclusion.* Except for monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall monitor and record emissions during all operations including episodes of startups, shutdowns, malfunctions, and tuning. Limited amounts of NOx CEMS emissions data recorded during some of these episodes may be excluded from the corresponding compliance demonstration subject to the provisions of Specific Condition **H.12.** The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.

e. *Monitor Availability*. Monitor availability for each CEMS used to demonstrate compliance shall be 95% or greater in any calendar quarter. Monitor availability shall be calculated consistent with 40 CFR §60.334 and reported in the State Implementation Plan (SIP) and NSPS excess emissions reports required in Condition **H.24.** In the event that 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Compliance Authority.

[Rules 62-4.070(3) and 62-212.400 (BACT), F.A.C.; and Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 23.]

{Permitting Note: This condition does not require the units to be run unnecessarily in order to meet 95% monitor availability and failing to meet 95% is not a violation of this permit condition. However, if 95% monitor availability is not achieved for the hours that the unit actually runs during a calendar quarter, a report identifying the problems and a plan for corrective action are required to be submitted to the Compliance Authority. Failure to submit the report and/or to take corrective action could result in a determination of non-compliance.}

H.17. CEMS - CO and NO_X. Continuous compliance with the NO_X and CO emissions standards shall be demonstrated with data collected from the required continuous emissions monitoring systems (CEMS). [Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 15.]

Test Methods and Procedures

H.18. Test Methods. Required tests shall be performed in accordance with the following reference method(s):

Method(s)	Description of Method(s) and Comment(s)
EPA Methods 1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
EPA Methods 6, 6A, 6B or 6C	Methods for Determining SO_2 Emissions
EPA Method 7, 7A, 7C, 7D or 7E	Determination of NO_X Emissions
EPA Method 9	Visual Determination of the Opacity of Emissions (VE)
EPA Method 10	Determination of CO Emissions
EPA Method 20	Determination of NO_X, SO_2 and Diluent Emissions from Stationary Gas Turbines

The above methods are described in Chapter 62-297, F.A.C. and/or 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. [Chapter 62-297, F.A.C. and Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 11.]

H.19. Annual Compliance Test. During each federal fiscal year (October 1st to September 30th), annual compliance tests for visible emissions shall be conducted on Emissions Unit ID Nos. 013 and 014. For each visible emissions test, emissions of CO and NO_X recorded by the CEMS shall also be reported. [Rule 62-297.310(7), F.A.C.; and, Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 14.]

H.20. 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.]

H.21. Continuous Compliance. Continuous compliance with the CO and NO_X emissions standards shall be demonstrated with data collected from the required continuous emissions monitoring systems (CEMS). [Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 15.]

H.22. Special Compliance Tests. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. The Department may require the permittee to conduct additional tests after major replacement or major repair of any air pollution control equipment, such as the DLN combustors, etc. [Rule 62-297.310(7)(b), F.A.C. and Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 16.]

Recordkeeping and Reporting Requirements

H.23. Reporting Schedule. The following report shall be submitted to the Compliance Authority:

Report	Reporting Deadline(s)	Related Condition(s)
NSPS Excess Emissions and Monitoring System Performance	Every 6 months (semi-annual), except when more frequent reporting is specifically required	**H.24.** & **H.30.**

[40 CFR 60, Subpart A.]

H.24. Excess Emissions Reporting.

a. *Malfunction Notification.* If NO_X data will be excluded due to a malfunction, the permittee shall notify the Compliance Authority within one working day of: the nature, extent, and duration of the excess

emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Compliance Authority may request a written summary report of the incident.

b. *SIP Excess Emissions Report.* Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the Compliance Authority of the following for each gas turbine: a summary of the 24-hour NO_X compliance periods for the quarter; a summary of NO_X data excluded due to malfunctions for the quarter; a summary of the 12-month rolling CO emissions totals for the quarter; a summary of any RATA tests performed during the quarter; and a summary of the CEMS systems monitor availability for the quarter.

(1) If four consecutive quarterly reports demonstrate compliance with the CEMS-based emissions standards, the reporting frequency may be reduced to semiannual reporting. As part of the fourth consecutive satisfactory quarterly report, the permittee shall provide written notification of its intent to reduce the reporting frequency to a semiannual basis. The notification shall include a statement that the units were in full compliance during the four consecutive quarters and that reporting will be reduced to a semiannual basis. Semiannual reports shall include above information required for each quarter in the semiannual period. The permittee shall continue to comply with all other record keeping and monitoring provisions.

(2) If reports are being submitted on a semiannual basis and a unit is not in compliance with the CEMS-based emissions standards, the permittee shall immediately (within one day of detection) notify the Compliance Authority of the compliance status and reestablish quarterly reporting beginning with the current quarter. If compliance is reestablished for four consecutive quarters, semiannual reporting may resume as specified above.

c. *NSPS Excess Emissions Reports.* Within thirty (30) days following each calendar semiannual period, the permittee shall submit a report including any applicable periods of excess emissions and monitoring systems performance as defined in 40 CFR Part 60, Subpart GG that occurred during the previous semi-annual period to the Compliance Authority. *{Permitting Note: If there are no periods of excess emissions as defined in 40 CFR Part 60 Subpart GG, a statement to that effect may be submitted with the SIP Quarterly Report to suffice for the NSPS Semi-Annual Report.}*

[Rule 62-210.700(6), F.A.C.; 40 CFR 60.7 & 60.334; and, Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 29.]

H.25. Monitoring and Recordkeeping of Capacity. The permittee shall monitor and record the operating rate of the gas turbine on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown, malfunction, and tuning). This shall be achieved through monitoring daily rates of consumption and heat content of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D, and recording the data using a monitoring component of the CEMS system required above. [Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 24.]

H.26. Monthly Operations Summary Recordkeeping. By the fifth calendar day of each month, the permittee shall record the following for each fuel in a written or electronic log for the gas turbine for the previous month of operation: hours of operation for the month and for the rolling 12-month total. Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request by the Department. The fuel consumption shall be monitored in accordance with the provisions of 40 CFR 75 Appendix D. [Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 25.]

H.27. Fuel Sulfur Records. 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. Sulfur content monitoring with respect to 40 CFR 60, Subpart GG is not required for gaseous fuels that meet the 40 CFR 60.331(u) definition of "natural gas" in accordance

with the procedures specified in 40 CFR 60.334(h)(3). [40 CFR 60.334(h)(3) and Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 26.]

H.28. CEMS RATA Reports. At least 15 days prior to conducting any Relative Accuracy Test Assessments (RATA) on a CEMS, the permittee shall notify the Compliance Authority of the schedule (letter, email, fax, or phone call). A summary of the RATA reports shall be provided upon written request of the Compliance Authority and in the SIP Excess Emissions Report. [Permit No. 1050233-018-AC/PSD-FL-363, Specific Condition 28.]

H.29. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

NSPS 40 CFR 60 Requirements

H.30. NSPS Requirements - Subpart A. This emissions unit shall comply with all applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:

40 CFR 60.7, Notification and Recordkeeping
40 CFR 60.8, Performance Tests
40 CFR 60.11, Compliance with Standards and Maintenance Requirements
40 CFR 60.12, Circumvention
40 CFR 60.13, Monitoring Requirements
40 CFR 60.19, General Notification and Reporting Requirements,

which have been adopted by reference in Rule 62-204.800(8)(d), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.4, 40 CFR 60.8(b)(2) & (3), 40 CFR 60.11(e)(7) & (8), 40 CFR 60.13(g), (i) & (j)(2), and 40 CFR 60.16. These emissions units shall comply with Appendix 40 CFR 60, Subpart A, included with this permit. [Rule 62-204.800(8)(d), F.A.C.]

H.31. NSPS Requirements - Subpart GG. Except as otherwise provided in this permit, the combustion turbine shall comply with all applicable provisions of 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(8)(b), F.A.C., except that the Secretary is not the Administrator for purposes of 40 CFR 60.334(b)(2) and 40 CFR 60.335(f)(1). The Subpart GG requirement to correct test data to ISO conditions applies, but such correction is not required to demonstrate compliance with the non-NSPS permit standard(s). These emissions units shall comply with **Appendix 40 CFR 60 Subpart GG** attached to this permit. [Rule 62-204.800(8)(b)39., F.A.C.]

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Subsection I. Common Conditions - Emissions Units 001, 004, 005 & 006

The specific conditions in this section apply to the following emissions unit(s):

E.U. ID No.	Brief Description
001	260 MW Combined Cycle Gas Turbine No. 1
004	Sulfuric Acid Plant
005	Solid Fuel Handling System
006	Solid Fuel Gasification System

I.1. Source Obligation - Petcoke Increase Project and Sulfuric Acid Plant Gearbox Compressor Project.

a. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.; and, Permit Nos. 1050233-029-AC/PSD-FL-194J & 1050233-037-AC]

I.2. PSD Applicability Monitoring and Reporting Requirements - Sulfuric Acid Plant Gearbox Compressor Project.

a. The permittee shall monitor the emissions of SO_2 and SAM; 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, beginning with the first full calendar year following the year in which the change occurred (the Sulfuric Acid Plant Gearbox Compressor Project was completed in Spring of 2014, therefore, the 5-year period is effective for calendar year (CY) 2015 emissions through CY 2019 emissions). Emissions shall be computed in accordance with Rule 62-210.370, F.A.C.

b. The permittee shall report to the Department within 60 days after the end of each year during which records must be generated under subparagraph 62-212.300(1)(e)1., F.A.C., 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 as calculated pursuant to subparagraph 62-212.300(1)(e)1., F.A.C.;
   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.

[Rule 62-212.300(1)(e), F.A.C.; and, Permit No. 1050233-037-AC]

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Federal Acid Rain Provisions

Operated by: Tampa Electric Company
Plant Name: Polk Power Station
ORIS Code: 7242

This Section addresses Acid Rain, Phase II SO_2.

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The emissions units listed below are regulated under Phase II SO_2 of the federal Acid Rain Program.

E.U. ID No.	EPA Unit ID#	Brief Description
001	**1	260 MW Combined Cycle Gas Turbine No. 1
009	**2	Nominal 165 MW Simple Cycle Turbine No. 2
010	**3	Nominal 165 MW Simple Cycle Turbine No. 3
013	**4	Nominal 165 MW Simple Cycle Turbine No. 4
014	**5	Nominal 165 MW Simple Cycle Turbine No. 5

IV.1. The Phase II SO_2 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 application(s) listed below:

DEP Form No. 62-210.900(1)(a) - Form, Effective: 3/16/08, received on April 23, 2014, and signed by the Designated Representative on January 13, 2014, which is included at the end of this subsection.

[Chapter 62-213, F.A.C.; and, Rule 62-214.320, F.A.C.]

IV.2. Sulfur dioxide (SO_2) Emission Allowances. SO_2 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(3), 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.]

IV.3. Comments, notes, and justifications: None.

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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.

This submission is: ☐ New ☐ Revised ■ Renewal

STEP 1

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

Plant name	State	ORIS/Plant Code
Polk	**Florida**	**7242**

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

If unit a SO_2 Opt-in unit, enter "yes" in column "b".

For new units or SO_2 Opt-in units, enter the requested information in columns "d" and "e."

a	b	c	d	e
Unit ID#	SO_2 Opt-in Unit? (Yes or No)	Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	New or SO_2 Opt-in Units Commence Operation Date	New or SO_2 Opt-in Units Monitor Certification Deadline
**1	No	Yes	N/A	N/A
**2	No	Yes	N/A	N/A
**3	No	Yes	N/A	N/A
**4	No	Yes	N/A	N/A
**5	No	Yes	N/A	N/A
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		
		Yes		

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Effective: 3/16/08

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Polk
Name (from STEP 1)

STEP 3

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 compliance 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 or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
(4) For applications including a SO_2 Opt-in unit, a monitoring plan for each SO_2 Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO_2 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 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 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 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 designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

Polk Plant Name (from STEP 1)

STEP 3, Continued.

Recordkeeping and Reporting Requirements (cont)

(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.

(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 or 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.

In column "f" enter the unit ID# for every SO_2 Opt-in 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

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Polk
Plant Name (from STEP 1)

STEP 5

For SO_2 Opt-in units only.
(Not required for SO_2 Opt-in renewal applications.)

In column "i" enter the unit ID# for every SO_2 Opt-in unit identified in column "a" (and in column "f").

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.

i	j	k	l	m	n
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 1985 SO_2 Emissions Rate under 40 CFR 74.23 (lbs/mmBtu)	Current Allowable SO_2 Emissions Rate under 40 CFR 74.24 (lbs/mmBtu)	Current Promulgated SO_2 Emissions Rate under 40 CFR 74.25 (lbs/mmBtu)

STEP 6

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	Date 1/13/14

STEP 7

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

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.

Byron T. Burrows Name	**Manager – Air Programs, EHS** Title
Tampa Electric Company Owner Company Name	
(813) 228-1282 Phone	**btburrows@tecoenergy.com** E-mail address
Signature	Date

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Operated by: Tampa Electric Company
Plant Name: Polk Power Station
ORIS Code: 7242

This Section addresses CAIR.

The emissions units below are regulated under the Clean Air Interstate Rule.

E.U. ID No.	EPA Unit ID#	Brief Description
001	**1	260 MW Combined Cycle Gas Turbine No. 1
009	**2	Nominal 165 MW Simple Cycle Turbine No. 2
010	**3	Nominal 165 MW Simple Cycle Turbine No. 3
013	**4	Nominal 165 MW Simple Cycle Turbine No. 4
014	**5	Nominal 165 MW Simple Cycle Turbine No. 5

V.1. Clean Air Interstate Rule Application. The Clean Air Interstate Rule Part Form submitted for this facility is a part of this permit. The owners and operators of these CAIR units as identified in this form must comply with the standard requirements and special provisions set forth in the CAIR Part Form (DEP Form No. 62-210.900(1)(b) - Form, Effective: 3/16/08), which is attached at the end of this subsection. [Chapter 62-213, F.A.C. and Rule 62-210.200, F.A.C.]

V.2. Comments, notes, and justifications: None.

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Clean Air Interstate Rule (CAIR) Part

For more information, see instructions and refer to 40 CFR 96.121, 96.122, 96.221, 96.222, 96.321 and 96.322; and Rule 62-296.470, F.A.C.

This submission is: ☐ New ☐ Revised ■ Renewal

STEP 1

Identify the source by plant name and ORIS or EIA plant code

Plant Name: **Polk**	State: **Florida**	ORIS or EIA Plant Code: **7242**

STEP 2

In column "a" enter the unit ID# for every CAIR unit at the CAIR source.

In columns "b," "c," and "d," indicate to which CAIR program(s) each unit is subject by placing an "X" in the column(s).

For new units, enter the requested information in columns "e" and "f.

a	b	c	d	e	f
Unit ID#	Unit will hold nitrogen oxides (NO_X) allowances in accordance with 40 CFR 96.106(c)(1)	Unit will hold sulfur dioxide (SO_2) allowances in accordance with 40 CFR 96.206(c)(1)	Unit will hold NO_X Ozone Season allowances in accordance with 40 CFR 96.306(c)(1)	New Units Expected Commence Commercial Operation Date	New Units Expected Monitor Certification Deadline
**1	X	X	X	N/A	N/A
**2	X	X	X	N/A	N/A
**3	X	X	X	N/A	N/A
**4	X	X	X	N/A	N/A
**5	X	X	X	N/A	N/A

DEP Form No. 62-210.900(1)(b) – Form
Effective: 3/16/08

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Polk
Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

CAIR NO_X ANNUAL TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO_X source and each CAIR NO_X unit at the source shall:
(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.122 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
(ii) [Reserved];
(2) The owners and operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CC, and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_X source and each CAIR NO_X unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HH, and Rule 62-296.470, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HH, shall be used to determine compliance by each CAIR NO_X source with the following CAIR NO_X Emissions Requirements.

NO_X Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X source and each CAIR NO_X unit at the source shall hold, in the source's compliance account, CAIR NO_X allowances available for compliance deductions for the control period under 40 CFR 96.154(a) in an amount not less than the tons of total NO_X emissions for the control period from all CAIR NO_X units at the source, as determined in accordance with 40 CFR Part 96, Subpart HH.
(2) A CAIR NO_X unit shall be subject to the requirements under paragraph (1) of the NO_X Requirements starting on the later of January 1, 2009, or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.170(b)(1) or (2) and for each control period thereafter.
(3) A CAIR NO_X allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_X Requirements, for a control period in a calendar year before the year for which the CAIR NO_X allowance was allocated.
(4) CAIR NO_X allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FF and GG.
(5) A CAIR NO_X allowance is a limited authorization to emit one ton of NO_X in accordance with the CAIR NO_X Annual Trading Program. No provision of the CAIR NO_X Annual Trading Program, the CAIR Part, or an exemption under 40 CFR 96.105 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR NO_X allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EE, FF, or GG, every allocation, transfer, or deduction of a CAIR NO_X allowance to or from a CAIR NO_X unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_X unit.

Excess Emissions Requirements.

If a CAIR NO_X source emits NO_X during any control period in excess of the CAIR NO_X emissions limitation, then:
(1) The owners and operators of the source and each CAIR NO_X unit at the source shall surrender the CAIR NO_X allowances required for deduction under 40 CFR 96.154(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_X source and each CAIR NO_X unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
(i) The certificate of representation under 40 CFR 96.113 for the CAIR designated representative for the source and each CAIR NO_X unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Annual Trading Program.
(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_X Annual Trading Program or to demonstrate compliance with the requirements of the CAIR NO_X Annual Trading Program.
(2) The CAIR designated representative of a CAIR NO_X source and each CAIR NO_X unit at the source shall submit the reports required under the CAIR NO_X Annual Trading Program, including those under 40 CFR Part 96, Subpart HH.

Polk
Plant Name (from STEP 1)

STEP 3, Continued

Liability.

(1) Each CAIR NO_X source and each CAIR NO_X unit shall meet the requirements of the CAIR NO_X Annual Trading Program.
(2) Any provision of the CAIR NO_X Annual Trading Program that applies to a CAIR NO_X source or the CAIR designated representative of a CAIR NO_X source shall also apply to the owners and operators of such source and of the CAIR NO_X units at the source.
(3) Any provision of the CAIR NO_X Annual Trading Program that applies to a CAIR NO_X unit or the CAIR designated representative of a CAIR NO_X unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_X Annual Trading Program, a CAIR Part, or an exemption under 40 CFR 96.105 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X source or CAIR NO_X unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR SO_2 TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall:
(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.222 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
(ii) [Reserved];
(2) The owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall have a CAIR Part included in the Title V operating permit issued by the DEP under 40 CFR Part 96, Subpart CCC, for the source and operate the source and each CAIR unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR SO_2 source and each SO_2 CAIR unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96 ,Subpart HHH, and Rule 62-296.470, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHH, shall be used to determine compliance by each CAIR SO_2 source with the following CAIR SO_2 Emission Requirements.

SO_2 Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO_2 source and each CAIR SO_2 unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO_2 allowances available for compliance deductions for the control period, as determined in accordance with 40 CFR 96.254(a) and (b), not less than the tons of total sulfur dioxide emissions for the control period from all CAIR SO_2 units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
(2) A CAIR SO_2 unit shall be subject to the requirements under paragraph (1) of the Sulfur Dioxide Emission Requirements starting on the later of January 1, 2010 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.270(b)(1) or (2) and for each control period thereafter.
(3) A CAIR SO_2 allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO_2 Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO_2 allowance was allocated.
(4) CAIR SO_2 allowances shall be held in, deducted from, or transferred into or among CAIR SO_2 Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
(5) A CAIR SO_2 allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO_2 Trading Program. No provision of the CAIR SO_2 Trading Program, the CAIR Part, or an exemption under 40 CFR 96.205 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR SO_2 allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart FFF or GGG, every allocation, transfer, or deduction of a CAIR SO_2 allowance to or from a CAIR SO_2 unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO_2 unit.

Excess Emissions Requirements.

If a CAIR SO_2 source emits SO_2 during any control period in excess of the CAIR SO_2 emissions limitation, then:
(1) The owners and operators of the source and each CAIR SO_2 unit at the source shall surrender the CAIR SO_2 allowances required for deduction under 40 CFR 96.254(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAA, the Clean Air Act, and applicable state law.

Polk
Plant Name (from STEP 1)

STEP 3, Continued

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR SO_2 source and each CAIR SO_2 unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the Department or the Administrator.

(i) The certificate of representation under 40 CFR 96.213 for the CAIR designated representative for the source and each CAIR SO_2 unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.213 changing the CAIR designated representative.

(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.

(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR SO_2 Trading Program.

(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO_2 Trading Program or to demonstrate compliance with the requirements of the CAIR SO_2 Trading Program.

(2) The CAIR designated representative of a CAIR SO_2 source and each CAIR SO_2 unit at the source shall submit the reports required under the CAIR SO_2 Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

(1) Each CAIR SO_2 source and each CAIR SO_2 unit shall meet the requirements of the CAIR SO_2 Trading Program.

(2) Any provision of the CAIR SO_2 Trading Program that applies to a CAIR SO_2 source or the CAIR designated representative of a CAIR SO_2 source shall also apply to the owners and operators of such source and of the CAIR SO_2 units at the source.

(3) Any provision of the CAIR SO_2 Trading Program that applies to a CAIR SO_2 unit or the CAIR designated representative of a CAIR SO_2 unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR SO_2 Trading Program, a CAIR Part, or an exemption under 40 CFR 96.205 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR SO_2 source or CAIR SO_2 unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall:

(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and

(ii) [Reserved];

(2) The owners and operators of each CAIR NO_X Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO_X Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

(1) The owners and operators, and the CAIR designated representative, of each CAIR NO_X Ozone Season source and each CAIR NO_x Ozone Season unit at the source shall comply with the monitoring, reporting, and recordkeeping requirements of 40 CFR Part 96, Subpart HHHH, and Rule 62-296.470, F.A.C.

(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 96, Subpart HHHH, shall be used to determine compliance by each CAIR NO_X Ozone Season source with the following CAIR NO_X Ozone Season Emissions Requirements.

NO_x Ozone Season Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO_X emissions for the control period from all CAIR NO_X Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.

(2) A CAIR NO_X Ozone Season unit shall be subject to the requirements under paragraph (1) of the NO, Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.

(3) A CAIR NO_X Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_X Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO_X Ozone Season allowance was allocated.

(4) CAIR NO_X Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Ozone Season Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.

(5) A CAIR NO_X Ozone Season allowance is a limited authorization to emit one ton of NO_X in accordance with the CAIR NO_X Ozone Season Trading Program. No provision of the CAIR NO_X Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.

(6) A CAIR NO_X Ozone Season allowance does not constitute a property right.

(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO_X Ozone Season allowance to or from a CAIR NO_X Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_X Ozone Season unit.

Polk Plant Name (from STEP 1)

STEP 3, Continued

Excess Emissions Requirements.

If a CAIR NO_X Ozone Season source emits NO_X during any control period in excess of the CAIR NO_X Ozone Season emissions limitation, then:
(1) The owners and operators of the source and each CAIR NO_X Ozone Season unit at the source shall surrender the CAIR NO_X Ozone Season allowances required for deduction under 40 CFR 96.354(d)(1) and pay any fine, penalty, or assessment or comply with any other remedy imposed, for the same violations, under the Clean Air Act or applicable state law; and
(2) Each ton of such excess emissions and each day of such control period shall constitute a separate violation of 40 CFR Part 96, Subpart AAAA, the Clean Air Act, and applicable state law.

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time before the end of 5 years, in writing by the DEP or the Administrator.
(i) The certificate of representation under 40 CFR 96.313 for the CAIR designated representative for the source and each CAIR NO_X Ozone Season unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation under 40 CFR 96.113 changing the CAIR designated representative.
(ii) All emissions monitoring information, in accordance with 40 CFR Part 96, Subpart HHHH, of this part, provided that to the extent that 40 CFR Part 96, Subpart HHHH, provides for a 3-year period for recordkeeping, the 3-year period shall apply.
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the CAIR NO_X Ozone Season Trading Program.
(iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR NO_X Ozone Season Trading Program or to demonstrate compliance with the requirements of the CAIR NO_X Ozone Season Trading Program.
(2) The CAIR designated representative of a CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall submit the reports required under the CAIR NO_X Ozone Season Trading Program, including those under 40 CFR Part 96, Subpart HHHH.

Liability.

(1) Each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit shall meet the requirements of the CAIR NO_X Ozone Season Trading Program.
(2) Any provision of the CAIR NO_X Ozone Season Trading Program that applies to a CAIR NO_X Ozone Season source or the CAIR designated representative of a CAIR NO_X Ozone Season source shall also apply to the owners and operators of such source and of the CAIR NO_X Ozone Season units at the source.
(3) Any provision of the CAIR NO_X Ozone Season Trading Program that applies to a CAIR NO_X Ozone Season unit or the CAIR designated representative of a CAIR NO_X Ozone Season unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR NO_X Ozone Season Trading Program, a CAIR Part, or an exemption under 40 CFR 96.305 shall be construed as exempting or excluding the owners and operators, and the CAIR designated representative, of a CAIR NO_X Ozone Season source or CAIR NO_X Ozone Season unit from compliance with any other provision of the applicable, approved State Implementation Plan, a federally enforceable permit, or the Clean Air Act.

STEP 4

Read the certification statement; provide name, title, owner company name, phone, and e-mail address; sign, and date.

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 CAIR source or CAIR 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.

Byron T. Burrows Name	**Manager – Air Programs, EHS** Title
Tampa Electric Company Owner Company Name	
(813) 228-4740 Phone	**btburrows@tecoenergy.com** E-mail address
Signature	Date 1/13/14

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