

Florida Power and Light Company

Martin Power Plant

Facility ID No. 0850001
Martin County

Title V Air Operation Permit Renewal

Permit No. 0850001-033-AV

(Renewal of Title V Air Operation Permit No. 0850001-018-AV)



Permitting Authority:

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Title V Air Operation Permit Renewal
Permit No. 0850001-033-AV

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Permit No. 0850001-033-AV
Martin Power Plant
Facility ID No. 0850001
Title V Air Operation Permit Revision

The purpose of this permit is to renew the Title V Air Operation Permit for the above referenced facility. The existing Martin Power Plant is located in Martin County at 21900 Southwest Warfield Boulevard in Indiantown, Florida. UTM coordinates are: Zone 17, 542.68 kilometers (km) East and 2992.65 km North. The Latitude is: 27° 03' 25" North; and Longitude is: 80° 33' 55" West.

The Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, 62-213 and 62-214. The above named permittee is hereby authorized to operate the facility shown on the application and approved drawings, plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Effective Date: January 1, 2014
Renewal Application Due Date: May 20, 2018
Expiration Date: December 31, 2018

Executed in Tallahassee, Florida

(DRAFT/PROPOSED)

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

JFK/jh/yha

SECTION I. FACILITY INFORMATION.

Subsection A. Facility Description.

FPL operates the existing Martin Power Plant, which is an electric utility. This existing facility consists of two oil and natural gas fired conventional fossil fuel steam electric generating stations (Units 1 and 2), two oil and natural gas fired (Units 3 and 4) combined cycle combustion turbine (CT) systems, four oil and natural gas fired combined cycle CT's (Unit 8), and associated support equipment.

Emissions Units 001 and 002: Two oil and natural gas fired conventional fossil fuel steam electric generating stations (Units 1 and 2); the maximum capacity of each steam turbine driven electrical generator is 863.3 megawatts (MW).

Emissions Units 003 - 006: Two oil and natural gas fired combined cycle combustion turbine systems (two "2-on-1" sets) (Units 3 and 4), each gas turbine is nominally rated at 170 MW, with a matched unfired heat recovery steam generator (HRSG). Each pair of the gas turbines (3A/3B and 4A/4B) shares a common steam turbine driven electrical generator rated at 160 MW each. The total generating capacity of each 2-on-1 turbine system is approximately 500 MW.

Emissions Units 011, 012, 017 and 018: Collectively regulated as Unit 8, this unit is a "4-on-1" combined cycle system which consists of four oil and natural gas fired combustion turbine/HRSG systems with a single steam turbine electrical generator. Each of the four gas combustion turbines (8A, 8B, 8C and 8D) is nominally rated at 170 MW, with a matched 495 million British thermal units per hour (MMBtu/hr) gas-fired HRSG, and a single 470 MW steam turbine driven electrical generator that serves all four CT/HRSG systems, and associated support equipment. Nitrogen oxides (NO_x) emissions are controlled by using Dry Low NO_x (DLN) combustors for natural gas and steam injection for fuel oil firing. A selective catalytic reduction (SCR) system, in combination with the other NO_x controls, further reduces NO_x emissions during combined cycle operation. The total generating capacity of this combined cycle combustion turbine system is approximately 1,150 MW. There is also a solar thermal facility on-site that produces steam, which is used to augment the steam produced by the Unit 8 HRSGs, thus reducing fossil fuel use in the duct burners when adequate sunlight is available.

This facility also includes one auxiliary boiler, emergency generators, four hurricane emergency shelter stationary spark ignition engine driven generators, two storage oil tanks, a mechanical cooling tower, and four electrical fuel line heaters (to heat up the natural gas fuel prior to introduction into the CT, when needed). Also included in this permit are additional unregulated emissions units identified as facility-wide particulate matter (PM) and volatile organic compounds (VOC) emissions.

SECTION I. FACILITY INFORMATION.

The FPL Martin Power plant is comprised of the following emission units (EU) with the following identification (ID) numbers:

Subsection B. Summary of Emissions Units.

EU ID No.	Brief Description
<i>Regulated Emissions Units</i>	
001	Fossil Fuel Fired Steam Generator No. 1
002	Fossil Fuel Fired Steam Generator No. 2
003	Combustion Turbine with Heat Recovery Steam Generator (CT 3A)
004	Combustion Turbine with Heat Recovery Steam Generator (CT 3B)
005	Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
006	Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
007	Auxiliary Boiler (for Emissions Units 003 to 006)
011	Combustion Turbine with Heat Recovery Steam Generator (CT 8A)
012	Combustion Turbine with Heat Recovery Steam Generator (CT 8B)
014	Two Distillate Oil Storage Tanks for Unit 8 Gas Turbines
017	Combustion Turbine with Heat Recovery Steam Generator (CT 8C)
018	Combustion Turbine with Heat Recovery Steam Generator (CT 8D)
019	Mechanical Draft Cooling Tower for Unit 8
022	One Diesel Engine-driven Emergency Fire Pump
023	Four Hurricane Emergency Shelter Stationary Spark Ignition Engines
024	One Spark Ignition Engine-driven Emergency Generator
<i>Unregulated Emissions Units and Activities</i>	
009	One Diesel Engine-driven Emergency Generator (for Emissions Units 003 to 006)
015	Two Diesel Engines-driven Emergency Generators to aid Units No. 1 and 2
016	Facility-wide Fugitive Emissions for PM and VOC
025	Two Diesel Engines-driven Emergency Generators to aid Unit 8, EU's 011, 012, 017 and 018

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

SECTION I. FACILITY INFORMATION.

Subsection C. Applicable Regulations.

Based on the Title V Air Operation Renewal application received May 14, 2013, this facility is a major source of hazardous air pollutants (HAP). This facility is classified as a PSD major facility. A summary of applicable regulations by emission unit is shown in the following table.

Applicable Regulations	EU ID Nos.
<i>Federal Rule Citations</i>	
40 CFR 60, Subpart A, NSPS General Provisions	001, 002, 003, 004, 005, 006, 007, 011, 012, 017, 018
40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971	001, 002
40 CFR, Subpart Da, Standards of Performance for Electric Utility Generating Units for Which Construction is Commenced After September 18, 1978	011, 012, 017, 018
40 CFR, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units	007
40 CFR Part 63 Subpart DDDDD, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters (dated January 31, 2013)	007
40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines	003, 004, 005, 006
40 CFR 60, Subpart JJJJ, New Source Performance for Stationary Internal Combustion Engines	023, 024
40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines	009, 022, 023, 024??
40 CFR 63, Subpart UUUUU, National Emission Standards for Hazardous Air Pollutants: Coal- and Oil-Fired Electric Utility Steam Generating Units	001, 002
40 CFR 75 Acid Rain Monitoring Provisions	001, 002, 003, 004, 005, 006, 011, 012, 017, 018
<i>State Rule Citations</i>	
Rule 62-4, Florida Administrative Code (F.A.C.) (Permitting Requirements)	001, 002, 003, 004, 005, 006, 007, 009, 011, 012, 017, 018, 019
Rule 62-204, F.A.C. (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference)	
Rule 62-210, F.A.C. (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms)	
Rule 62-212, F.A.C. (Preconstruction Review, PSD Review and Best Available Control Technology (BACT))	
Rule 62-213, F.A.C. (Title V Air Operation Permits for Major Sources of Air Pollution)	
Rule 62-214, F.A.C. (Requirements For Sources Subject To The Federal Acid Rain Program)	001, 002, 003, 004, 005, 006, 011, 012, 017, 018
Rule 62-296, F.A.C. (Emission Limiting Standards)	001, 002, 003, 004, 005, 006, 007, 009, 011, 012, 017, 018, 019
Rule 62-297, F.A.C. (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures)	
Rule 62-296.470, F.A.C., Clean Air Interstate Rule (CAIR)	001, 002, 003, 004, 005, 006, 011, 012, 017, 018

SECTION II. FACILITY-WIDE CONDITIONS.

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

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

Emissions and Controls

FW2. Not federally Enforceable. Objectionable Odor Prohibited. No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An “objectionable odor” means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rule 62-296.320(2) and 62-210.200(Definitions), F.A.C.]

FW3. General 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)(a), F.A.C.] *{Permitting Note: Nothing is deemed necessary and ordered at this time.}*

FW4. General Visible Emissions. No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20% opacity. 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. [Rule 62-296.320(4)(b), F.A.C.]

FW5. Unconfined Particulate Matter Unconfined 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. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- a. In order to perform sandblasting on fixed plant equipment, sandblasting enclosures shall be constructed and operated as necessary. Thick poly flaps shall be used over doorways to prevent sandblasting material from leaving the facility.
- b. Maintenance of paved areas and roads shall be performed as needed.
- c. Mowing of grass and care of vegetation shall be done on a regular basis.
- d. Access to plant property by unnecessary vehicles shall be controlled and limited. Vehicles shall be restricted to slow speeds at the plant site.
- e. Bagged chemical products (e.g., soda ash, di-, tri-, and monosodium phosphate, and other chemicals as needed) shall be stored in weather tight buildings until they are used.
- f. Spills of powdered chemical products shall be cleaned up as soon as practical.

[Rule 62-296.320(4)(c), F.A.C.; and provided by the applicant in Title V air operation permit renewal application received May 14, 2013.]

Annual Reports and Fees

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

FW6. Annual Operating Report. The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by April 1st of each year. [Rule 62-210.370(3), F.A.C.]

{Permitting Note: If the applicant chooses to use the Electronic Annual Operating Report software, instructions provided with the system should be followed.}

SECTION II. FACILITY-WIDE CONDITIONS.

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by April 1st of each year. The completed form and calculated fee shall be submitted to: Major Air Pollution Source Annual Emissions Fee, P.O. Box 3070, Tallahassee, Florida 32315-3070. The forms are available for download 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/permitting/tvfee.htm>. [Rule 62-213.205, F.A.C. and §403.0872(11), Florida Statutes (2013)]

{Permitting Note: In addition to the change in the Title V fee submission from March 1st to April 1st, Chapter 403.0872(11)(a) has been revised to require that the annual fee be calculated based upon actual emissions rather than allowable emissions, as in the past. The Department will be exploring the development of a revision to the electronic annual operating report (EAOR) application to automatically calculate the amount of the fee based upon actual emission information provided with the annual operating report. When completed, the procedures for submitting the fee and/or the submission address may change. Until further notice, the fees shall continue to be submitted to the address shown in Specific Condition FW7 and according to instructions posted on the Department's fee information web page. Be sure to check the Title V Annual Emissions Fee On-line Information Center (see above web site address) periodically for updates, especially before submitting future Title V fee payments.}

FW8. 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 permit was effective. [Rules 62-213.440(3)(a)2. & 3. and (b), F.A.C.]

{Permitting Note: As specified in Specific Condition RR7 of Appendix RR, the applicant shall use DEP Form No. 62-213.900(7) to comply with this requirement.}

FW9. Prevention of Accidental Releases (Section 112(r) of CAA).

- a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. (See paragraph e., below.)
- b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Division of Emergency Management, as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
- c. The owner or operator shall submit the required annual registration fee to the Division of Emergency Management on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.
- d. Any required written reports, notifications, certifications, and data required to be sent to the Division of Emergency Management, should be sent to: Division of Emergency Management, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2100, Telephone: (850) 413-9970, Fax: (850) 488-1739.
- e. 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.
- f. Any required reports to be sent to the National Response Center, should be sent to: National Response Center, EPA Office of Solid Waste and Emergency Response, USEPA (5305 W), 401 M Street SW, Washington, D.C. 20460, Telephone: (800) 424-8802.
- g. Send the required annual registration fee using approved forms made payable to: Cashier, Division of Emergency Management, State Emergency Response Commission, 2555 Shumard Oak Boulevard, Tallahassee, FL 32399-2149.

[Part IV, Chapter 252, F.S.; and, Rule 9G-21, F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001 and 002

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

E.U. ID No.	Emissions Unit Description
001	Fossil Fuel Fired Steam Generator No. 1
002	Fossil Fuel Fired Steam Generator No. 2

Each fossil fuel fired steam generator emissions unit is identical in configuration. Each steam generator has a capacity of 863.3 MW and are equipped with low NO_x dual fuel firing burners to reduce emissions of NO_x; and multicyclones (mechanical dust collectors), with fly ash reinjection, to control PM emissions. In addition, the units have a continuous emission monitoring system (CEMS) for measuring NO_x and SO₂ and a continuous opacity monitoring system (COMS) for measuring opacity. Steam Generator No. 1 commenced commercial operation in December 1980. Steam Generator No. 2 commenced commercial operation in June 1981. The stack parameters for both steam generators are: 499 feet in height; 36 feet in diameter; a flow rate of 2,634,519 actual cubic feet per minute (acfm) at a temperature of 338 degrees Fahrenheit (°F); and exit velocity is 43.1 feet per second (fps).

The mechanical dust collectors are excluded from compliance assurance monitoring (CAM), because they are:

- a. Inherent process equipment contained entirely within the flue ductwork;
- b. Use a passive method of particulate matter separation from the flue gas stream;
- c. Recover unburned carbon and ash from the flue gas system; and
- d. Have no moving parts, no control inputs, nor any controllable parameters.

{Permitting Note: The emissions units are regulated under Acid Rain, Phase II and NSPS - 40 CFR 60, Subpart D, Standards of Performance for Fossil-Fuel-Fired Steam Generators; adopted and incorporated by reference in Rule 62-204.800., F.A.C. Units 1 and 2 are also subject to regulation pursuant to 40 CFR 63, Subpart UUUUU - National Emission Standards for Hazardous Air Pollutants (NESHAP) for Coal- and Oil-Fired Electric Utility Steam Generating Units, and must comply with the applicable requirements no later than April 16, 2015. Construction permit No. 0850001-029-AC was issued on December 10, 2012 to authorize the installation of electrostatic precipitators (ESP) on these units in order to comply with Subpart UUUUU. Construction has not yet commenced on the new ESP. The requirements from Subpart UUUUU specifically applicable to these units will be clearly listed in the permit at the time the Title V permit is revised to incorporate the conditions from permit No. 0850001-029-AC. Until that time, 40 CFR 63, Subpart UUUUU is attached to this permit in its entirety as an applicable requirement.}

Essential Potential to Emit (PTE) Parameters

- A.1. Permitted Capacity.** Each boiler's maximum heat input is 8,650 MMBtu/hr on oil and 9,040 MMBtu/hr on natural gas. When a blend of fuel oil and natural gas is burned, the heat input is prorated based on the percent heat input of each fuel. [Rules 62-4.160(2) & 62-210.200(PTE), F.A.C.; and, Permit Nos. AC43-4037 & AC43-4038, as amended 2/16/93.]
- A.2. Emissions Unit Operating Rate Limitation After Testing.** Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; 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. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. (See also the related testing provisions in Appendix TR, Facility-wide Testing Requirements.) [Rule 62-297.310(2), F.A.C.]
- A.3. Methods of Operation.**
- a. *Fuels.* The only fuels allowed to be burned are low sulfur fuel oil containing a maximum of 0.7 percent (%) sulfur content, by weight; natural gas; or, a mixture of low sulfur fuel oil containing a maximum of

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001 and 002

1.0% sulfur content, by weight, and natural gas in a ratio that shall not exceed the SO₂ emission limiting standard of 0.80 pounds per MMBtu (lb/MMBtu) heat input.

- b. *Additives.* Boiler conditioning additives, such as magnesium hydroxide (MgOH) may be added to the boilers as needed when firing residual oil.
 - c. *Evaporation of Spent Boiler Cleaning Chemicals.* Spent non-hazardous boiler chemical cleaning solution and rinses are allowed to be disposed of by evaporation in the boilers.
- [Rule 62-213.410, F.A.C.; and Permit Nos. AC43-4037 & AC43-4038, as amended 2/16/93.]

A.4. Hours of Operation. These emissions units may operate continuously (8,760 hours/year). [Rule 62-210.200(PTE), F.A.C.]

Applicable Standards and Regulations

A.5. NSPS Requirements. These emissions units are subject to the performance and monitoring requirements of the New Source Performance Standards for Subpart D in 40 CFR 60. For completeness, the applicable requirements of Subpart D are included in the Appendices of this permit. [Rule 62-204.800, F.A.C. and 40 CFR 60, Subpart D]

A.6. NESHAP Requirements. These emissions units are subject to the performance and monitoring requirements of the National Emissions Standards for Hazardous Air Pollutants from Coal- and Oil-Fired Electric Utility Steam Generating Units. These emissions units must be in compliance with all of the applicable requirements of Subpart UUUU no later than April 16, 2015. For completeness, the applicable requirements of Subpart UUUUU are included in the Appendices of this permit. [40 CFR 63, Subpart UUUUU]

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.7.-A.12.** are based on the specified averaging time of the applicable test method.

- A.7. PM Emissions.** As determined by stack tests, the maximum emission limit for particulate matter contained in the gases discharged to the atmosphere from each of these emissions units shall not exceed:
- a. Contain particulate matter in excess of 43 nanograms per joule heat input (0.10 lb/MMBtu) derived from fossil fuel.
 - b. In addition, emissions shall not exceed 865 pounds per hour (lb/hr) when firing 100% oil.
- [40 CFR 60.42(a)(1); and, Permit Nos. AC43-4031 & AC43-4038, as amended 2/16/93]
- A.8. 40 CFR 60 Opacity Standard.** The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- A.9. Other Opacity Standard.** As determined by the continuous opacity monitoring system (COMS), the maximum emission limit for opacity exhibited by the gases discharged into the atmosphere from each of these emissions units any gases which exhibit greater than 20% opacity except for one six-minute period per hour of not more than 27% opacity. [40 CFR 60.42(a)(2); and, Permit Nos. AC43-4031 & AC43-4038, as amended 2/16/93]
- A.10. SO₂ Emissions.** As determined by CEMS or fuel sampling and analysis, the maximum emission limit for sulfur dioxide contained in the gases discharged to the atmosphere from each of these emissions units shall not exceed:
- a. 340 nanograms per joule heat input (0.80 lb/MMBtu) derived from liquid fossil fuel.
 - b. In addition, emissions shall not exceed 6,920 lb/hr when firing 100% oil.
- Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels. [40 CFR 60.43(a)(1) & (c), ; and, Permit Nos. AC43-4031 & AC43-4038, as amended 2/16/93]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection A. Emissions Units 001 and 002

- A.11. NO_x Emissions.** As determined by the CEMS, the maximum emission limit for nitrogen oxides contained in the gases discharged to the atmosphere from each of these emissions units shall not exceed:
- a. 86 nanograms per joule heat input (0.20 lb/MMBtu) derived from gaseous fossil fuel. In addition, emissions shall not exceed 1,808 lb/hr.
 - b. 129 nanograms per joule heat input (0.30 lb/MMBtu) derived from liquid fossil fuel. In addition, emissions shall not exceed 2,595 lb/hr.

When different fossil fuels are burned simultaneously in any combination, the applicable standard (in lb/MMBtu) is determined by proration using the following formula:

$$PSNO_x = [x (.20)+y (.30)] / (x + y)$$

where:

PSNO_x = is the prorated standard for nitrogen oxides when burning different fuels simultaneously, in lb/MMBtu heat input derived from all fossil fuels fired;

x = is the percentage of total heat input derived from gaseous fossil fuel;

y = is the percentage of total heat input derived from liquid fossil fuel.

[40 CFR 60.44(a)(1)& (2); 40 CFR 60.44(b); and, Permit Nos. AC43-4031 & AC43-4038, as amended 2/16/93]

- A.12. Used Oil.** Burning of on-specification used oil is allowed in this emissions unit in accordance with all other conditions of this permit and the following conditions:
- a. *On-specification Used Oil Emissions Limitations.* This emissions unit is permitted to burn on specifications used oil, which contains a PCB concentration of less than 50 ppm. On-specification used oil is defined as used oil that meets the specifications of 40 CFR 279 - Standards for the Management of Used Oil, listed below. “Off-specification” used oil shall not be burned. Used oil which fails to comply with any of these specification levels is considered “off-specification” used oil.

CONSTITUENT/PROPERTY	ALLOWABLE LEVEL
Arsenic	5 ppm maximum
Cadmium	2 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash point	100 degrees F minimum

- b. *Quantity Limitation.* This emissions unit is permitted to burn “on-specification” used oil that is generated by the City of, not to exceed 10,000 gallons during any calendar year.
- c. *PCB Limitation.* Used oil containing a PCB concentration of 50 or more ppm shall not be burned at this facility. Used oil shall not be blended to meet this requirement.
- d. *Operational Requirements.* On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall be burned only at normal source operating temperatures. On-specification used oil with a PCB concentration of 2 to less than 50 ppm shall not be burned during periods of startup or shutdown.
- e. *Testing Requirements.* For each batch of used oil to be burned, the owner or operator must be able to demonstrate that the used oil qualifies as on-specification used oil and that the PCB content is less than 50 ppm. The requirements of this demonstration are governed by the following federal regulations:
 - (1) Analysis of used oil fuel. A generator, transporter, processor/re-refiner, or burner may determine that used oil that is to be burned for energy recovery meets the fuel specifications of Sec. 279.11 by performing analyses or obtaining copies of analyses or other information documenting that the used oil fuel meets the specifications. [40 CFR 279.72(a)]
 - (2) Testing of used oil fuel. Used oil to be burned for energy recovery is presumed to contain quantifiable levels (2 ppm) of PCB unless the marketer obtains analyses (testing) or other information that the used oil fuel does not contain quantifiable levels of PCBs.

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- (a) The person who first claims that a used oil fuel does not contain quantifiable level (2 ppm) PCB must obtain analyses or other information to support that claim.
- (b) Testing to determine the PCB concentration in used oil may be conducted on individual samples, or in accordance with the testing procedures described in Sec. 761.60(g)(2). However, for purposes of this part, if any PCBs at a concentration of 50 ppm or greater have been added to the container or equipment, then the total container contents must be considered as having a PCB concentration of 50 ppm or greater for purposes of complying with the disposal requirements of this part.
- (c) Other information documenting that the used oil fuel does not contain quantifiable levels (2 ppm) of PCBs may consist of either personal, special knowledge of the source and composition of the used oil, or a certification from the person generating the used oil claiming that the oil contains no detectable PCBs.
[40 CFR 761.20(e)(2)]
- (3) Testing Requirements. When testing is required, the owner or operator shall sample and analyze each batch of used oil to be burned for the following parameters: Arsenic, cadmium, chromium, lead, total halogens, flash point and PCBs.
Testing (sampling, extraction and analysis) shall be performed using approved methods specified in EPA Publication SW-846 (Test Methods for Evaluating Solid Waste, Physical/Chemical Methods).
- (4) In addition to the above requirements, the owner or operator shall sample and analyze each batch of used oil to be burned for the sulfur content (by weight), density and heat content in accordance with approved test methods.
- f. *Record Keeping Requirements.* The owner or operator shall obtain, make, and keep the following records related to the use of used oil in a form suitable for inspection at the facility by the Department:
 - (1) The gallons of on-specification used oil placed into inventory to be burned and the gallons of on-specification used oil burned each month.
 - (2) Results of the analyses of each deposit of used oil, as required by the above conditions.
 - (3) Other information, besides testing, used to make a claim that the used oil meets the requirements of on-specification used oil or that the used oil contains less than 50 ppm of PCBs.
[40 CFR 279.72(b), 40 CFR 279.74(b) and 40 CFR 761.20(e)]
- g. *Reporting Requirements.* The owner or operator shall submit, with the Annual Operation Report form, the analytical results required above and the total amount of on-specification used oil placed into inventory to be burned and the total amount of on-specification used oil burned during the previous calendar year.
[Rules 62-4.070(3) & 62-213.440, F.A.C., 40 CFR 279 & 40 CFR 761, and, Permit Nos. AO43-170568 & AO43-170567, unless otherwise noted.]

Excess Emissions

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

- A.13. NSPS Excess Emissions Requirements.** At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]
- A.14. Startup, Shutdown or Malfunction.** In order to minimize excess emissions during startup/shutdown/malfunction the following general procedures shall be followed:
Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing:

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- a. best operational practices to minimize emissions are adhered to, and
 - b. 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) & (2), F.A.C.; AO43-170568, Specific Condition 9.; and AO43-170567, Specific Condition 9.]

Continuous Monitoring Requirements

- A.15. COMS for Periodic Monitoring.** The owner or operator is required to maintain and operate continuous opacity monitoring systems (COMS) pursuant to 40 CFR Part 75. The owner or operator shall maintain and operate COMS and shall make and maintain records of opacity measured by the COMS, for purposes of periodic monitoring. [Rule 62-213.440, F.A.C.; and applicant agreement with EPA on March 3, 1998.]
- A.16. CEMS.** The permittee has installed and shall continue to calibrate, maintain, and operate CEMS for measuring the opacity of emissions, sulfur dioxide emissions, nitrogen oxides emissions, and carbon dioxide emissions. **Because these units do not use a flue gas desulfurization device, a CEMS for measuring SO₂ emissions is not required if the owner or operator monitors SO₂ emission by fuel sampling and analysis.** [40 CFR 60.45(a) & (b)(2)]
- A.17. Performance Specifications.** For the purposes of 40 CFR 60.13, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, or 40 CFR 75, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987. [40 CFR 60.13(a)]
- A.18. Performance Evaluation.** If the owner or operator of an affected facility elects to COMS data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or CEMS during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act. [40 CFR 60.13(c)]
- A.19. COMS Data for Compliance.** The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes COMS data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance. [40 CFR 60.11(e)(5)]
- A.20. CEMS Procedures.**

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- a. Owners and operators of all CEMS installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20% of span value) and span (50 to 100% of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4% opacity.
- b. Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.
[40 CFR 60.13(d)(1) and (2)]

A.21. Frequency of Operation. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

- a. All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- b. All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
[40 CFR 60.13(e)(1) and (2)]

A.22. Representative Measurements. All CMS or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of CMS contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used. [40 CFR 60.13(f)]

A.23. Multiple Systems. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable CMS on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable CMS on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each CMS. [40 CFR 60.13(g)]

A.24. Data Reduction. Owners or operators of all CMS for measurement of opacity shall reduce all data to 6-minute averages and for CMS other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For CMS other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of CMS breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant). All excess emissions

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shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]

A.25. Performance Evaluations and Calibration Checks. For performance evaluations under 40 CFR 60.13(c) and calibration checks under 40 CFR 60.13(d), the following procedures shall be used:

- a. Methods 6, 7, and 3B, as applicable, shall be used for the performance evaluations of sulfur dioxide and nitrogen oxides continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B are given in 40 CFR 60.46(d).
- b. SO₂ or NO_x, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of Appendix B to 40 CFR 60.
- c. For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100% and for a continuous monitoring system measuring sulfur oxides or nitrogen oxides the span value shall be determined using one of the following procedures:
 - (1) Except as provided under paragraph c.(2), SO₂ and NO_x span value shall be determined as follows:

Fossil fuel	Span value for sulfur dioxide (ppm)	Span value for nitrogen oxides (ppm)
Gas	Not applicable	500
Liquid	1,000	500
Combinations	1,000y	500(x + y)

where:

- x = the fraction of total heat input derived from gaseous fossil fuel, and
- y = the fraction of total heat input derived from liquid fossil fuel.

- (2) As an acceptable alternative, the owner or operator of an affected facility may elect to use the SO₂ and NO_x span values determined according to sections 2.1.1 and 2.1.2 in appendix A to part 75 of this chapter. Span values shall be rounded off according to the applicable procedures in section 2 of appendix A to part 75.

- d. All span values computed under 40 CFR 60.45(c)(3) for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm.
- e. For a fossil fuel-fired steam generator that simultaneously burns fossil fuel and nonfossil fuel, the span value of all continuous monitoring systems shall be subject to the Administrator's approval.

[40 CFR 60.45(c)]

A.26. Conversion Procedures. For any continuous monitoring system installed under 40 CFR 60.45(a), the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/MMBtu):

- a. When a continuous monitoring system for measuring oxygen is selected, the measurement of the pollutant concentration and oxygen concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry basis, the following conversion procedure shall be used:

$$E = CF[20.9/(20.9\text{-percent O}_2)]$$

where:

E, C, F, and % O₂ are determined under 40 CFR 60.45(f).

- b. When a continuous monitoring system for measuring carbon dioxide is selected, the measurement of the pollutant concentration and carbon dioxide concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure shall be used:

$$E = CF_C [100/\text{percent CO}_2]$$

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where:

E, C, F_C and %CO₂ are determined under 40 CFR 60.45(f).

[40 CFR 60.45(e)]

A.27. Equation Values. The values used in the equations under 40 CFR 60.45(e) (1) and (2) are derived as follows:

- a. E = pollutant emissions, ng/J (lb/MMBtu).
- b. C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^4 M ng/dscm per ppm (2.59×10^{-9} M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for sulfur dioxide and 46.01 for nitrogen oxides.
- c. % O₂, % CO₂ = oxygen or carbon dioxide volume (expressed as percent), determined with equipment specified under 40 CFR 60.45(a).
- d. F, F_C = a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of carbon dioxide generated to the calorific value of the fuel combusted (F_C), respectively. Values of F and F_C are given as follows:
 - (1) For liquid fossil fuels including crude, residual, and distillate oils, $F = 2.476 \times 10^{-7}$ dscm/J (9,220 dscf/MMBtu) and $F_C = 0.384 \times 10^{-7}$ scm CO₂ /J (1,430 scf CO₂ /MMBtu).
 - (2) For gaseous fossil fuels, $F = 2.347 \times 10^{-7}$ dscm/J (8,740 dscf/MMBtu). For natural gas, propane, and butane fuels, $F_C = 0.279 \times 10^{-7}$ scm CO₂ /J (1,040 scf CO₂ /MMBtu) for natural gas, 0.322×10^{-7} scm CO₂ /J (1,200 scf CO₂ /million Btu) for propane, and 0.338×10^{-7} scm CO₂ /J (1,260 scf CO₂ /MMBtu) for butane.
- e. The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/MMBtu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or F_C factor (scm CO₂ /J, or scf CO₂ /MMBtu) on either basis in lieu of the F or F_C factors specified in 40 CFR 60.45(f)(4):
SI Units:

$$F = 10^{-6} \frac{[227.2 (\text{pct. H}) + 95.5 (\text{pct. C}) + 35.6 (\text{pct. S}) + 8.7 (\text{pct. N}) - 28.7 (\text{pct. O})]}{\text{GCV}}$$

$$F_C = \frac{2.0 \times 10^{-5} (\text{pct. C})}{\text{GCV}}$$

English Units:

$$F = 10^6 \frac{3.64(\%H) + 1.53(\%C) + 0.57(\%S) + 0.14(\%N) - 0.46(\%O)}{\text{GCV}}$$

SI Units:

$$F_C = \frac{20.0(\%C)}{\text{GCV}}$$

English Units:

$$F_C = \frac{321 \times 10^3 (\%C)}{\text{GCV}}$$

- (1) H, C, S, N, and O are content by weight of hydrogen, carbon, sulfur, nitrogen, and oxygen (expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, or computed from results using ASTM method D1137-53(75), D1945-64(76), or D1946-77 (gaseous fuels) as applicable. (These three methods are incorporated by reference-see 40 CFR 60.17.)

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- (2) GCV is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test method D1826-77 for gaseous fuels as applicable. (This method is incorporated by reference-see 40 CFR 60.17.)
- (3) For affected facilities which fire both fossil fuels and non fossil fuels, the F or F_c value shall be subject to the Administrator's approval.
- f. For affected facilities firing combinations of fossil fuels, the F or F_c factors determined by paragraphs 40 CFR 60.45(f)(4) or (f)(5) shall be prorated in accordance with the applicable formula as follows:

$$F = \sum_{i=1}^n X_i F_i \quad \text{or} \quad F_c = \sum_{i=1}^n X_i (F_c)_i$$

where:

X_i = the fraction of total heat input derived from each type of fuel (e.g. natural gas, etc.)

F_i or (F_c)_i = the applicable F or F_c factor for each fuel type determined in accordance with paragraphs (f)(4) and (f)(5) of this section.

n = the number of fuels being burned in combination.

[40 CFR 60.45(f)]

A.28. CEMS Reports. Operation and maintenance of CEMS shall be carried out according to the requirements of 40 CFR 60; reports thereof shall be submitted to the Department's Southeast District Office within thirty (30) days following each calendar quarter and will include information required under 40 CFR 60.7(c). The Department reserves the right to modify the format of the reports. For any periods of excess emissions, as defined in 40 CFR 60.45(g), the reports shall specify the cause and corrective actions taken as well as the specific operational conditions existing (i.e., steady-state output, load charging rate; soot blowing, limiting, or air preheated steam cleaning sequences), during the period of excess emissions. [AO43-170568, Specific Condition No. 4; and AO43-170567, Specific Condition No. 4]

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.29. Test Methods. Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
3, 3A, 3B	Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources
5, 5B, 17	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM ₁₀ .)
6, 6A, 6B, 6C	Determination of Sulfur Dioxide Emissions from Stationary Sources
7, 7A, 7C, 7D, 7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
19	Determination of Sulfur Dioxide Removal Efficiency and Particulate Matter, Sulfur Dioxide, and Nitrogen Oxides Emission Rates (Optional F-factor method may be used to determine flow rate and gas analysis to calculate mass emissions in lieu of Methods 1-4.)

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Method	Description of Method and Comments
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [40 CFR 60, Appendix A; and Rules 62-297.400 and 62-297.620, F.A.C.]

- A.30. Annual Compliance Tests.** During each federal fiscal year (October 1st to September 30th), each EU shall be tested to demonstrate compliance with the emissions standards for PM, VE (except as provided in Specific Condition A.19.) and SO₂ (except as provided in Specific Condition A.32.). Annual compliance tests for this pollutant shall be performed on each unit that burns oil for 400 hours or more during the federal fiscal year. Unless specifically requested by the Compliance Authority pursuant to Rule 62-297.310(7)(b), F.A.C., periodic opacity tests are not required when firing natural gas. [Rule 62-297.310(7)(a)4. & 5., F.A.C.]
- A.31. Compliance Tests Prior To Renewal.** Prior to permit renewal, compliance tests shall be performed for the following pollutants: VE (except as provided in Specific Condition A.19.), PM, NO_x and SO₂ (except as provided in Specific Condition A.32.). [Rule 62-297.310(7)(a)3., F.A.C.]
- A.32. Alternate Compliance for NO_x and SO₂.**
- a. NO_x. No stack tests are required if CEMS show compliance with NO_x emissions limits.
 - b. SO₂. Annual and renewal stack tests are not required as long as results of fuel sampling and analysis demonstrate compliance with SO₂ emissions limits.
- The Department will retain the authority to require EPA test methods, referenced above if it has reason to believe that exceedences of the NO_x and SO₂ emissions limiting standard are occurring. Results of an approved fuel sampling and analysis program shall have the same effect as EPA Method 6 test results for purposes of demonstrating compliance or noncompliance with SO₂ standards. [Rules 62-213.440 & 62-297.401, F.A.C.; and, Permit No. 0850001-032-AC]
- A.33. 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(7), F.A.C.]
- A.34. Opacity Observation.** Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). [40 CFR 60.11(b)]
- A.35. Opacity Compliance.** Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]
- A.36. Performance Tests.** Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard. [40 CFR 60.8(c)]

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A.37. Compliance.

- a. The owner or operator shall determine compliance with the particulate matter, SO₂, and NO_x standards in 40 CFR 60.42, 60.43, and 60.44 as follows:
 - (1) The emission rate (E) of particulate matter, SO₂, or NO_x shall be computed for each run using the following equation:
$$E = C F_d (20.9)/(20.9 - \% O_2)$$
Where:
 - E = emission rate of pollutant, ng/J (1b/million Btu).
 - C = concentration of pollutant, ng/dscm (1b/dscf).
 - % O₂ = oxygen concentration, percent dry basis.
 - F_d = factor as determined from Method 19.
 - (2) Method 5 shall be used to determine the particulate matter concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems and Method 5B shall be used to determine the particulate matter concentration (C) after FGD systems.
 - (a) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train may be set to provide a gas temperature no greater than 160 ± 14 °C (320 ± 25 °F).
 - (b) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The O₂ sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O₂ concentration for the run shall be the arithmetic mean of all the individual O₂ sample concentrations at each traverse point.
 - (c) If the particulate run has more than 12 traverse points, the O₂ traverse points may be reduced to 12 provided that Method 1 is used to locate the 12 O₂ traverse points.
 - (3) Method 9 and the procedures in 40 CFR 60.11 shall be used to determine opacity.
 - (4) Method 6 shall be used to determine the SO₂ concentration.
 - (a) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.
 - (b) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The O₂ sample shall be taken simultaneously with, and at the same point as, the SO₂ sample. The SO₂ emission rate shall be computed for each pair of SO₂ and O₂ samples. The SO₂ emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.
 - (5) Method 7 shall be used to determine the NO_x concentration.
 - (a) The sampling site and location shall be the same as for the SO₂ sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
 - (b) For each NO_x sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B shall be used to determine the O₂ concentration (%O₂). The sample shall be taken simultaneously with, and at the same point as, the NO_x sample.
 - (c) The NO_x emission rate shall be computed for each pair of NO_x and O₂ samples. The NO_x emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.
- b. When combinations of fossil fuels are fired, the owner or operator (in order to compute the prorated standard as shown in 40 CFR 60.43(b) and 60.44(b)) shall determine the percentage (x or y) of the total heat input derived from each type of fuel as follows:
 - (1) The heat input rate of each fuel shall be determined by multiplying the gross calorific value of each fuel fired by the rate of each fuel burned.

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- (2) ASTM Methods D 240-76 (liquid fuels), or D 1826-77 (gaseous fuels) (incorporated by reference-see 40 CFR 60.17) shall be used to determine the gross calorific values of the fuels.
- (3) Suitable methods shall be used to determine the rate of each fuel burned during each test period, and a material balance over the steam generating system shall be used to confirm the rate.
- c. The owner or operator may use the following as alternatives to the reference methods and procedures in 40 CFR 60.46 or in other sections as specified:
 - (1) The emission rate (E) of particulate matter, SO₂ and NO_x may be determined by using the F_c factor, provided that the following procedure is used:
 - (a) The emission rate (E) shall be computed using the following equation:
$$E = C F_c (100 / \%CO_2)$$
where:
 - E = emission rate of pollutant, ng/J (lb/million Btu).
 - C = concentration of pollutant, ng/dscm (lb/dscf).
 - %CO₂ = carbon dioxide concentration, percent dry basis.
 - F_c = factor as determined in appropriate sections of Method 19.
 - (b) If and only if the average F_c factor in Method 19 is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B shall be used to determine the O₂ and CO₂ concentration according to the procedures in 40 CFR 60.46(b) (2)(ii), (4)(ii), or (5)(ii). Then if F_o (average of three runs), as calculated from the equation in Method 3B, is more than ± 3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19, i.e., F_{oa} = 0.209 (F_{da} / F_{ca}), then the following procedure shall be followed:
 - i. When F_o is less than 0.97 F_{oa}, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.
 - ii. When F_o is less than 0.97 F_{oa} and when the average difference (\bar{d}) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa}, e.g., if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
 - iii. When F_o is greater than 1.03 F_{oa} and when \bar{d} is positive, then E shall be decreased by that proportion over 1.03 F_{oa}, e.g., if F_o is 1.05 F_{oa}, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
 - (2) For Method 5 or 5B, Method 17 may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 160 °C (320 °F). The procedures of sections 2.1 and 2.3 of Method 5B may be used with Method 17 only if it is used after wet FGD systems. Method 17 shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.
 - (3) Particulate matter and SO₂ may be determined simultaneously with the Method 5 train provided that the following changes are made:
 - (a) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 is used in place of the condenser (section 2.1.7) of Method 5.
 - (b) All applicable procedures in method 8 for the determination of SO₂ including moisture) are used.
 - (4) For Method 6, Method 6C may be used. Method 6A may also be used whenever Methods 6 and 3B data are specified to determine the SO₂ emission rate, under the conditions in 40 CFR 60.46(d)(1).
 - (5) For Method 7, Method 7A, 7C, 7D, or 7E may be used. If Method 7C, 7D, or 7E is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O₂ concentration (%O₂) for the emission rate correction factor.
 - (6) For Method 3, Method 3A or 3B may be used.

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(7) For Method 3B, Method 3A may be used.

[40 CFR 60.46(b), (c) and (d)]

A.38. Test Methodology. All compliance tests shall be performed using reference test methods as given in 40 CFR 60, Appendix A, as adopted by reference in Rule 62-297.400, F.A.C. Any deviations from the test methodology in order to facilitate “representative” testing shall be approved by the Department pursuant to Rule 62-297.620, F.A.C., prior to conducting the tests. [40 CFR 60, Appendix A; Rules 62-297.400 & 62-297.620, F.A.C.; and, Permit Nos. AO43-170568, Specific Condition 3. & AO43-170567, Specific Condition 3.]

A.39. Samples. Compliance with the “on-specification” used oil requirements will be determined from a sample collected from each batch delivered for firing. [Rules 62-4.070 and 62-213.440, F.A.C.; and 40 CFR 279.]

A.40. Testing While Injecting Additives. The owner or operator shall conduct emission tests while injecting additives consistent with normal operating practices. [Rule 62-213.440, F.A.C.; and applicant agreement with EPA on March 3, 1998.]

Recordkeeping and Reporting Requirements

A.41. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Notice of Operational Changes	60 days prior to change.	A.43.
NSPS Excess Emissions Reports	Semi-annually	A.45.
NSPS 40 CFR 60 Subpart D Reports	Quarterly.	A.52.

A.42. Reporting Schedule. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]

A.43. Facility Changes. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows: A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]

A.44. NSPS Records. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]

A.45. NSPS Excess Emissions Reports. The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d) and Specific Condition **A.46.**] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

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- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
- b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.

[40 CFR 60.7(c)(1), (2), (3) and (4)]

A.46. Summary Report. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

- a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
- b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}

[40 CFR 60.7(d)(1) and (2)]

A.47. Reporting Options.

- a. Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
 - (1) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
 - (2) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
 - (3) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- b. The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or

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operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

- c. As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)(1)]

- A.48. Files.** The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records. [40 CFR 60.7(f); and Rule 62-213.440(1)(b)2.b., F.A.C.]
- A.49. Used Oil Records.** Records shall be kept of each delivery of “on-specification” used oil with a statement of the origin of the used oil and the quantity delivered/stored for firing. In addition, monthly records shall be kept of the quantity of “on-specification” used oil fired in these emissions units. The above records shall be maintained in a form suitable for inspection, retained for a minimum of five years, and be made available upon request. [Rule 62-213.440(1)(b)2.b., F.A.C.; and 40 CFR 279.61 and 761.20(e)]
- A.50. Summary of Used Oil Analysis.** The permittee shall include in the “Annual Operating Report for Air Pollutant Emitting Facility” a summary of the “on-specification” used oil analyses for the calendar year and a statement of the total quantity of “on-specification” used oil fired in Fossil Fuel Fired Steam Generators Nos. 1 and 2 during the calendar year. [Rule 62-213.440(1)(b)2.b., F.A.C.]
- A.51. Fuel Sampling and Analysis Program.** Until such time when the Environmental Protection Agency (EPA) promulgates final rules regarding fuel sampling and test methods, the Department will accept the current fuel sampling and analysis program, provided that daily as fired fuel oil samples are composited and analyzed for sulfur content on a monthly basis to demonstrate compliance with fuel oil sulfur content limits. Quarterly reports containing the results of the monthly fuel oil sampling and analysis shall be submitted to the Department no later than thirty (30) days after the end of each quarter. The permittee shall be allowed 90 days after promulgation of fuel sampling and analysis methods to implement an EPA approved method of monitoring sulfur dioxide emissions either by fuel sampling and analysis methods or continuous in-stack monitoring or other methods as approved under the provisions of 40 CFR 60.45. [AO43-170568, Specific Condition No. 5; and AO43-170567, Specific Condition No. 5.]
- A.52. NSPS Subpart D Requirements.** Excess emission and monitoring system performance (MSP) reports shall be submitted to the Administrator for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter. Each excess emission and MSP report shall include the information required in 40 CFR 60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
- a. *Opacity.* Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
 - b. *Sulfur Dioxide.* Excess emissions for affected facilities are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of sulfur dioxide as measured by a continuous monitoring system exceed the applicable standard under 40 CFR 60.43.

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Subsection A. Emissions Units 001 and 002

- c. *Nitrogen Oxides.* Excess emissions for affected facilities using a continuous monitoring system for measuring nitrogen oxides are defined as any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under 40 CFR 60.44.

[40 CFR 60.45(g)(1), (2), & (3)]

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SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Units 003, 004, 005, 006

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

E.U. ID No.	Emissions Unit Description
003	Combustion Turbine with HRSG (CT 3A)
004	Combustion Turbine with HRSG (CT 3B)
005	Combustion Turbine with HRSG (CT 4A)
006	Combustion Turbine with HRSG (CT 4B)

All four combined cycle CT units are identical in configuration. NO_x emissions are controlled by using dry low NO_x (DLN) combustors for natural gas with steam injection for fuel oil firing. Steam injection is also used for power augmentation. Inlet foggers installed at the compressor inlet to each of the four CT units reduce the turbine inlet air temperature. The temperature reduction improves the heat rate and increases power due to the cooler/denser inlet air. Duct modules suitable for future installation of selective catalytic reduction (SCR) equipment have been installed on each combined cycle generating unit. CT 3A and CT 3B commenced commercial operation in February 1994. CT 4A and CT 4B commenced commercial operation in April 1994. For all CT, the stack parameters are: stack heights 213 feet; stack diameter 20 feet; flow rate 2,420,307 acfm at 280 °F; and exit velocity 128.4 fps.

CAM is not applicable to these CT's since DLN combustors when firing natural gas are not considered a pollution control device under 40 CFR 64. When firing distillate fuel oil, compliance with the emissions limits are determined using CEMS data, and therefore the requirements of CAM are not required.

{Permitting Note: The emissions units are regulated under Acid Rain, Phase II and NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines; adopted and incorporated by reference in Rule 62-204.800, F.A.C.; PSD-FL-146, Prevention of Significant Deterioration (PSD), in Rule 62-212.400, F.A.C.; Best Available Control Technology (BACT), in Rule 62-212.410, F.A.C.; and PA89-27.}

{Permitting Note: The following emissions, determined by BACT, are tabulated for informational purposes only (i.e., PSD and inventory use) in permit No. PSD-FL-146, Specific Condition No. 5};

Pollutant	Fuel	Maximum Allowable Emissions @40 °F	
		lb/hr/CT	TPY/CT ^a
Sulfuric Acid Mist (H ₂ SO ₄) ^b	Gas	11.2	70 (combined gas and oil total)
	Oil	113	
Mercury	Gas	0.021	0.34 (combined gas and oil total)
	Oil	0.0052	
Fluoride	Oil	0.055	0.055
Beryllium	Oil	0.004	0.004
<p>a. Tons per year (TPY) emission limits for natural gas and oil combined apply as an emissions cap based on limiting oil firing to an annual aggregate of 2,000 hours for the 4 CT units, with compliance to be demonstrated in annual operation reports.</p> <p>b. Sulfuric acid mist emissions assume a maximum of 0.5% sulfur content, by weight, in fuel oil for hourly emissions and an average sulfur content of 0.3%, by weight, for annual emissions.</p>			

{Permitting Note: These units were originally permitted under PSD-FL-146 to fire both natural gas and oil. The equipment necessary to burn fuel oil was not installed prior to the construction expiration date of the PSD permit. If it is ever desired to fire oil in these units, a new source review applicability determination and related construction permit will be required to provide the authority to modify the units and to evaluate current

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection B. Emissions Units 003, 004, 005, 006

applicable regulations at the time of the request. Conditions within this subsection that pertain to the firing of oil have been retained due to their establishment in the underlying PSD permit; however, they shall not apply unless or until a construction permit is issued that provides the authority to modify the units to accommodate oil firing.

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum heat input to each CT shall neither exceed 1,966 MMBtu/hr while firing natural gas, nor 1,846 MMBtu/hr while firing fuel oil at 40 degrees Fahrenheit (°F). These heat input limitations are subject to change. Any changes shall be provided at least 90 days before commercial operation for each fuel available to the site which a unit is capable of firing, at which time this condition may be modified to reflect those parameters. Each combined cycle's fuel consumption shall be continuously determined and recorded. [Rules 62-4.160(2), 62-297.310(2) & 62-210.200(PTE), F.A.C.; and, Permit Nos. PSD-FL-146, PSD-FL-146A (0850001-002-AC & 0850001-003-AC issued 9/6/96 & 0850001-016-AC (PSD-FL-327B and PSD-FL-146C)]

B.2. Operation During Testing. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. Permitted capacity and operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.

If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; 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.

If tested at less than capacity, the entire heat input versus inlet temperature curves will be adjusted by the increment equal to the difference between the design heat input value and 110 percent of the value reached during the test. Data, curves, and calculations necessary to demonstrate the heat input rate correction at both design and test conditions shall be submitted to the Department with the compliance test report. (See the related testing provisions in Appendix TR, Facility-wide Testing Requirements.)

[Rules 62-297.310(2) & 62-210.200(PTE), F.A.C.; and, Permit Nos. PSD-FL-146, PSD-FL-146A (0850001-002-AC & 0850001-003-AC issued 9/6/96) & 0850001-016-AC (PSD-FL-327B and PSD-FL-146C)]

B.3. Methods of Operation.

- a. *Fuels.* Only natural gas or No. 2 fuel oil shall be fired in the CT units.
- b. *Inlet Foggers.* Operation of the foggers on each unit may not exceed the following limits: 181,661 degree F-hours in aggregate firing natural gas fuel if no distillate fuel is fired. If distillate oil is fired in any of the CT units during a calendar year, the allowable degree F-hours for natural gas shall be decreased by 2.77 degree F-hours for every hour operated on distillate oil fuel. No CT may exceed 4,000 degree F-hours per year firing distillate oil fuel.
- c. *Power Augmentation.* The CTs may also be operated in power augmentation mode, which involves the introduction of steam into the combustion chamber turbine to generate additional direct, shaft-driven electrical power to respond to peak demands

[Permit Nos. PSD-FL-146, Specific Condition No. 3, PSD-FL-146(G), 0850001-005-AC & 0850001-016-AC (PSD-FL-327B and PSD-FL-146C)]

B.4. Hours of Operation. The emissions units may operate continuously, i.e., 8,760 hours/year/CT. [Rule 62-210.200(PTE), F.A.C.]

Applicable Standards and Regulations

B.5. 40 CFR 60 Subpart A, General Provisions. The owner or operator shall comply with the applicable requirements of 40 CFR 60 Subpart A, General Provisions. [Rule 62-204.800, F.A.C.]

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Subsection B. Emissions Units 003, 004, 005, 006

B.6. NSPS Subpart GG Requirements. The Department determined that compliance with the BACT emissions performance and monitoring requirements also assures compliance with the New Source Performance Standards for Gas Turbines in 40 CFR 60, Subpart GG. For completeness, the applicable Subpart GG requirements are included in Appendix NSPS Subpart GG of this permit. [Rule 62-204.800, F.A.C.]

Control Devices

B.7. NO_x. NO_x emissions from each CT/HRSG unit shall be controlled by using DLN combustors for natural gas with steam injection for fuel oil firing. The permittee has installed duct modules suitable for future installation of SCR equipment on each combined cycle generating unit. [PSD-FL-146, Specific Condition No. 9.]

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 **B.8.-B.11.** are based on the specified averaging time of the applicable test method.

B.8. The maximum allowable emissions from each CT, in accordance with the BACT determination, shall not exceed the following, at 40 degrees F, except during periods of startup and shutdown:

Pollutant	Fuel	Emission Limitations ^a		
		Concentration	lb/hr/CT	TPY/CT ^b
NO _x	Gas	25 ppmvd @ 15% O ₂	177	3,108 (combined gas and oil total)
	Oil	65 ppmvd @ 15% O ₂	461	
VOC ^c	Gas	1.6 ppmvd	3	57 (combined gas and oil total)
	Oil	6 ppmvd	11.0	
CO	Gas	30 ppmvd	94.3	871 (combined gas and oil total)
	Oil	33 ppmvd	105.8	
PM/PM ₁₀	Gas		18	100 (combined gas and oil total)
	Oil		60.6	
Pb	Gas		negligible	0.015 (combined gas and oil total)
	Oil		0.015	
SO ₂	Gas		91.5	568 (combined gas and oil total)
	Oil ^d		920	

- a. These limitations for Units 5 and 6 shall not be binding for subsequent BACT determinations.
- b. Tons per year (TPY) emission limits listed for natural gas and oil combined apply as an emissions cap based on limiting oil firing to an annual aggregate of 2,000 hours for the 4 CT units, with compliance to be demonstrated in annual operation reports.
- c. Exclusive of background concentrations.
- d. Sulfur dioxide emissions based on a maximum of 0.5 percent sulfur content, by weight, in oil for hourly emissions and an average sulfur content of 0.3 percent, by weight, for annual emissions.

[PSD-FL-146, Specific Condition No. 4.]

B.9. Opacity.

- a. *Visible Emissions.* Visible emissions shall neither exceed 10% opacity while burning natural gas, nor 20% opacity while burning distillate oil. [PSD-FL-146, Specific Condition No. 8.]
- b. *Compliance.* Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard. [40 CFR 60.11(a)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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- c. *Startup, Shutdown and Malfunction.* The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]

Excess Emissions

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

B.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. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Rule 62-210.700(4), F.A.C.]

B.11. Excess Emissions Allowed. As specified in this condition, excess emissions resulting from startup, shutdown, fuel switches, and documented malfunctions are allowed provided that operators employ the best operational practices to minimize the amount and duration of emissions during such incidents. For each gas turbine/HRSG system, excess emissions of NO_x from startup, shutdown, or malfunction shall be excluded from the CEMS data in any 24-hour period for the following conditions (these conditions are considered separate events and each event may occur independently within any 24-hour period):

- a. *Steam Turbine Cold Startup.* For cold startup of the steam turbine system, excluded emissions from both gas turbine/HRSG systems in the 2-on-1 combined cycle system, combined, shall not exceed eight hours in any 24-hour period. A cold "startup of the steam turbine" is defined as startup of the 2-on-1 combined cycle system following a shutdown of the steam turbine lasting at least 48 hours.

{Permitting Note: During a cold startup of the steam turbine, each gas turbine/HRSG system in the 2-on-1 combined cycle system is sequentially brought on line at low load to gradually increase the temperature within the steam-electrical turbine in order to prevent thermal metal fatigue. Note that shutdowns and documented malfunctions are separately regulated in accordance with the requirements of this condition.}

- b. *Gas Turbine/HRSG System Cold Startup.* For cold startup of an individual gas turbine/HRSG system, excluded emissions shall not exceed four hours in any 24-hour period. "Cold startup of a gas turbine/HRSG system" is defined as a startup after the pressure in the high-pressure (HP) steam drum falls below 450 pounds per square inch gauge (psig) for at least a one-hour period.
- c. *Gas Turbine/HRSG System Warm Startup.* For warm startup of an individual gas turbine/HRSG system, excluded emissions shall not exceed two hours in any 24-hour (with the additional provision of a limit of 2 warm startup periods per 24 hours per gas turbine/HRSG system, in which case excluded emissions shall not exceed four hours total for the 2-on-1 combined cycle system). "Warm startup of a gas turbine/HRSG system" is defined as a startup after the pressure in the high-pressure (HP) steam drum is above 450 psig.
- d. *Gas Turbine/HRSG System Shutdown.* For shutdown of the gas turbine/HRSG operation, excluded emissions from any individual gas turbine/HRSG system shall not exceed two hours in any 24-hour period.
- e. *Shutdown Combined Cycle Operation.* For shutdown of the entire 2-on-1 combined cycle operation, excluded emissions from both gas turbine/HRSG systems, combined, shall not exceed three hours in any 24-hour period.
- f. *Fuel Switching.* For fuel switching, excluded emissions shall not exceed two hours in any 24-hour period for each fuel switch and no more than four hours in any 24-hour period for any gas turbine/HRSG system.
- g. *Documented Malfunction.* For each gas turbine/HRSG system, excess emissions of NO_x resulting from documented malfunctions shall not exceed two hours in any 24-hour period. A "documented malfunction" means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic mail.

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Subsection B. Emissions Units 003, 004, 005, 006

As authorized by Rule 62-210.700(5), F.A.C., the above conditions allow excess emissions only for specifically defined periods of startup, shutdown, and documented malfunction of the gas turbines. [Rules 62-212.400(BACT Determination) & 62-210.700, F.A.C.: and Permit No. 0850001-032-AC (PSD-FL-146H / PSD-FL-327F)]

- B.12. DLN Tuning / FSNL Testing.** CEMS data collected during initial or other major DLN tuning sessions and during manufacturer required Full Speed No Load (FSNL) trip tests shall be excluded from the CEMS compliance demonstration provided the tuning session is performed in accordance with the manufacturer's specifications. A "major tuning session" would occur after a combustor change-out, a major repair or maintenance to a combustor, or other similar circumstances. Prior to performing any major tuning session, the permittee shall provide the Compliance Authority with an advance notice of at least one working (business) day that details the activity and proposed tuning schedule. The notice may be by telephone, facsimile transmittal, or electronic mail. [Rules 62-4.160(2), 62-4.070(1) & (3), F.A.C.; and, Permit No. 0850001-032-AC (PSD-FL-146H / PSD-FL-327F)]

Monitoring of Operations

- B.13. Equipment Practices.** At all times, including periods of startup, shutdown and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]
- B.14. Continuous Monitoring System.** The owner or operator of these emissions units are subject to the continuous monitoring requirements of 40 CFR 60, Subpart GG. See Appendix NSPS Subpart GG. [40 CFR 60.334]
- B.15. Custom Fuel Monitoring Schedule for Natural Gas (NG).** The Martin Power Plant facility requested approval for and was granted approval to utilize a customized fuel monitoring schedule for natural gas firing, pursuant to 40 CFR 60.334. The schedule is as follows:
- a. *Nitrogen Content.* Monitoring of fuel nitrogen content shall not be required if NG is the only fuel being fired in the gas turbines.
 - b. *Sulfur Monitoring.*
 - (1) Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. The reference methods are ASTM D1072-80, ASTM D3031-81, ASTM D3246-81, and ASTM D4084-82, as referenced in 40 CFR 60.335(b)(2), or the latest edition(s).
 - (2) This custom fuel monitoring schedule shall become effective on the date this permit becomes valid. Effective the date of this custom schedule, sulfur monitoring shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then sulfur monitoring shall be conducted once per quarter for six quarters. If monitoring data is provided by the applicant which demonstrates consistent compliance with the requirements herein the applicant may begin monitoring as per the requirements of 2(c).
 - (3) If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.
 - (4) Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333, the owner or operator shall notify the Department of such excess emissions and the custom schedule shall be re-examined by the Environmental Protection Agency. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

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- c. *Change in Fuel Supply.* If there is a change in fuel supply, the owner or operator must notify the Department of such change for re-examination of this custom schedule. A substantial change in fuel quality shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.
- d. *Fuel Records.* Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of five years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

[Permit No. PSD-FL-146; and, NSPS Custom Fuel Monitoring Schedule dated 10/14/97.]

- B.16. Temperature Monitoring System Calibration.** The temperature monitoring system shall be calibrated annually from 10% below to 10% above its normal operation range by the procedures recommended by the manufacturer. The temperature monitoring system generally consists of a thermocouple, a temperature indicator, and a recorder. The purpose of the calibration is to provide reasonable assurance that the temperature being recorded by the monitoring system is the actual temperature of the inlet air.

If the manufacturer has provided recommended calibration procedures, those procedures should be followed. If the manufacturer has not provided recommended calibration procedures, the following general calibration procedures should be used:

- a. *Thermocouple.* The calibration points should bracket the temperature range over which the thermocouple is to be used. The thermocouple should be calibrated against a NIST (National Institute of Standards and Technology) traceable reference thermocouple. The thermocouple may be calibrated using ASTM E 220, Method B. Alternatively, the thermocouple can be replaced each year with a new thermocouple certified by the manufacturer to be accurate to within 0.9% of the temperatures being measured. A certificate of conformance from the manufacturer (certifying that the new thermocouple conforms to published specifications) will satisfy the annual calibration requirements.
- b. *Temperature Indicator.* The instrument, which converts voltage output from the thermocouple to a temperature reading, can be calibrated by applying known voltages (mv), and reading the reported temperatures. The voltage values should correspond to the voltages generated by the thermocouple for temperatures over a range from 10% below to 10% above the inlet air temperatures to be used. The reference voltage supply should be accurate to within 0.1% of the reading.
- c. *Recorder.* The strip chart recorder or digital data acquisition system should be connected to the temperature indicator during its calibration and can be calibrated at the same time. The recorder should be adjusted to reproduce the readings of the temperature indicator.

The temperature monitoring system calibration error should not exceed 1% of the temperature reading.

[Rule 62-297.310(5)(b); and, Permit Nos. PSD-FL-146(G) & 0850001-005-AC]

- B.17. Monitoring of Inlet Foggers.** The permittee shall monitor both the hours of operation for the inlet foggers and the degrees of cooling afforded by the inlet foggers. Computation of the degree-hour will be performed as follows:

Degree F-hours = # hours inlet fogger operating time X degrees F of cooling

Degrees of Cooling shall be calculated by subtracting the fogged compressor inlet air temperature from the unfogged compressor inlet temperature (upstream of the fogger). The above calculation shall be performed for each hour of fogger operation. Calculation records shall be maintained on the plant site and made available for inspection upon request.

The temperature drop across the inlet foggers shall be monitored whenever water is injected at the foggers and hourly average temperature drops shall be calculated and recorded along with hours of operation automatically using a computer system. The product of each hour of fogger operation and the average temperature depression for that hour (degree F-hours) shall be summed for each calendar year and shall be submitted to the Department's Southeast District Office with the Annual Operating Report. The temperature monitoring system shall be calibrated annually. [Rule 62-213.440, F.A.C. and Permit No. PSD-FL-146(G) & 0850001-005-AC]

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Continuous Monitoring Requirements

- B.18. System Requirements.** A continuous emissions monitoring system has been installed and shall be operated and maintained in accordance with 40 CFR 75 for each combined cycle unit to monitor nitrogen oxides.
- Each continuous emissions monitoring system (CEMS) shall meet performance specifications of 40 CFR 75, Appendices A, B, and F.
 - CEMS data shall be recorded and reported in accordance with 40 CFR 75 and 40 CFR 60.7. The excess emissions report shall include periods of startup, shutdown, and malfunction and shall be based on NO_x data corrected to 15 % O₂ and 40 degrees F.
 - A malfunction means any sudden and unavoidable failure of air pollution equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.
 - For purposes of reports required under this permit, excess emissions are defined as any calculated average emission concentration which exceeds the applicable emission limits in Specific Condition **B.8**.
[Permit No. PSD-FL-146, Specific Condition No. 13]
- B.19. Performance Specifications.** For the purposes of 40 CFR 60.13, all continuous monitoring systems required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, 40 CFR Part 75, or as specified by the Administrator. [40 CFR 60.13 and 40 CFR 60.334]
- B.20. COMS Requirements.** If the owner or operator of an affected facility elects to submit COMS data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or CEMS during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act. [40 CFR 60.13(c)]
- B.21. COMS Data.** The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, COMS data results produced during any performance test required under 40 CFR 60.8 in lieu of Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which Method 9 data indicates noncompliance, the Method 9 data will be used to determine opacity compliance. [40 CFR 60.11(e)(5)]

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B.22. CEMS Calibration.

- a. Should the owner and/or operator elect not to follow 40 CFR Part 75 calibration procedures as permitted in Specific Conditions **B.18.** and **B.19.**, owners and operators of all CEMS installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100% of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.
- b. Unless otherwise approved by the Administrator, the following procedures shall be followed for COMS measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

[40 CFR 60.13(d)(1) and (2)]

B.23. Frequency of Operation. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

- a. All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.
- b. All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(1) and (2)]

B.24. Representative Measurements. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used. [40 CFR 60.13(f)]

B.25. Multiple Systems. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system. [40 CFR 60.13(g)]

B.26. Data Reduction. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour

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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 averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non-reduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity). [40 CFR 60.13(h)]

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.27. Test Methods. Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
1-4	Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content
3	Determination of Oxygen and Carbon Dioxide Concentrations in Emissions from Stationary Sources
5 or 17	Method for Determining Particulate Matter Emissions (All PM is assumed to be PM ₁₀ .)
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Note: The method shall be based on a continuous sampling train. }
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines

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

The stack test for each turbine shall be performed within 10% of the maximum heat rate input for the tested operating temperature. See Specific Condition **B.2** for utilization of ambient temperature versus heat input curves during compliance testing.

Annual compliance tests shall be conducted for each CT to demonstrate compliance with the permitted emissions standards for normal gas firing, gas firing with power augmentation, and backup distillate oil firing. CO and NO_x performance tests shall be conducted concurrently. If conducted at permitted capacity, NO_x emissions data collected during the annual NO_x continuous monitor Relative Accuracy Test Assessments (RATA) required pursuant to 40 CFR 75 may be substituted for the required annual performance test. Tests required on an annual basis shall be conducted at least once during each federal fiscal year (October 1st to September 30th).

For each CT that fires distillate oil for less than 400 hours during the previous federal fiscal year, the annual performance tests when firing distillate oil for the current federal fiscal year of operation are not required. CT's firing more than 400 hours on oil will also be required to demonstrate compliance with PM standards.

For each CT that operates with power augmentation for less than 400 hours during the previous federal fiscal year, the annual performance tests when operating with power augmentation for the current federal fiscal year of operation are not required. During power augmentation each unit shall comply with the emissions limits stated in Specific Condition **B.8**.

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[Rules 62-204.800 & 62-297.310(7)(a)4., F.A.C.; 40 CFR 60, Appendix A; and, Permit Nos. PSD-FL-146, Specific Condition No. 10 & 0850001-016-AC (PSD-FL-327B and PSD-FL-146C)]

- B.28. Annual Tests Required.** During each federal fiscal year (October 1st to September 30th), each CT shall be tested to demonstrate compliance with the emissions standards for VE, CO, NO_x and PM (for oil only) with the fuel(s) used for more than 400 hours in the preceding 12-month period. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. VOC testing is only required if the annual CO test indicates an exceedance of the CO standard. [Rules 62-212.400(BACT) & 62-297.310(7), F.A.C., and, Permit Nos. PSD-FL-146, Specific Condition 10 & 0850001-032-AC (PSD-FL-146H / PSD-FL-327F)]
- B.29. Compliance Tests Prior To Renewal.** Prior to permit renewal, compliance tests shall be performed for the following pollutants: VE, CO, VOC (if the annual CO test indicates an exceedance of the CO standard), NO_x and PM (if oil is fired). [Rule 62-297.310(7)(a)3., F.A.C.; and, 0850001-032-AC (PSD-FL-146H / PSD-FL-327F)]
- B.30. 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(7), F.A.C.]
- B.31. NSPS NO_x Test Methods and Procedures.** The owner or operator shall follow all provisions of 40 CFR 60.335, as described in Appendix NSPS Subpart GG. [40 CFR 60.335]
- B.32. NO_x and SO₂.** The owner or operator shall comply with all the nitrogen oxides and sulfur dioxide standards of 40 CFR 60.332 by utilizing the procedures of 40 CFR 60.335. See Appendix NSPS Subpart GG. [40 CFR 60.335]
- B.33. Sulfur Content.** The owner or operator shall determine compliance with the sulfur content standard of 0.5 percent, by weight, by following all requirements of 40 CFR 60.335. See Appendix NSPS Subpart GG. [40 CFR 60.335]
- B.34. Fuel Analysis.** To meet the requirements of 40 CFR 60.334, the owner or operator shall use the methods specified in 40 CFR 60.335 to determine the nitrogen and sulfur contents of the fuel being burned. The 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. See Specific Condition **B.15.** that describes the approved Custom Fuel Monitoring Schedule for Natural Gas for this facility. [40 CFR 60.335]
- B.35. Sulfur Content.** The average sulfur content of the light distillate oil shall not exceed 0.3%, by weight, during any consecutive 12-month period. The maximum sulfur content of the light distillate fuel oil shall not exceed 0.5%, by weight. The 12-month average sulfur content shall be calculated as a weighted average based upon the sulfur content of the oil and the amount burned on a daily basis. Compliance shall be demonstrated in accordance with the requirements of 40 CFR 60.334 by testing for sulfur content, for nitrogen content, and for heating value of oil storage tanks once per day when firing oil using ASTM D 2880-96. [Rule 62-213.440, F.A.C.; applicant agreement with EPA on March 3, 1998; and PSD-FL-146, Specific Condition No. 11]
- B.36. Opacity.** Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5). [40 CFR 60.11(b)]

Recordkeeping and Reporting Requirements

- B.37. Reporting Schedule.** The following reports and notifications shall be submitted to the Compliance Authority:

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Report	Reporting Deadline	Related Condition(s)
NSPS 40 CFR 60 Subpart GG Reports	Quarterly.	B.41.
Notice of Operational Changes	60 days prior to change.	B.43.
Performance Reports	Semi-annually	B.45.

- B.38. Reporting.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440, F.A.C.]
- B.39. Fuel Oil Usage.** To determine compliance with the oil firing heat input limitation, the permittee shall maintain daily records of fuel oil consumption and hourly usage for each turbine and heating value for each fuel. All records shall be maintained for a minimum of five (5) years after the date of each record and shall be made available to representatives of the Department upon request. [PSD-FL-146, Specific Condition No. 14]
- B.40. Annual Testing.** Fifteen days notice before subsequent annual testing shall be provided to the Southeast District Office. Written reports of the tests shall be submitted to the Southeast District Office within 45 days of test completion. [PSD-FL-146, Specific Condition No. 17]
- B.41. Quarterly Reports.** Quarterly excess emission reports, in accordance with 40 CFR 60.7 and 60.334, shall be submitted to the Department's Southeast District Office. Annual reports shall be submitted to the District office in accordance with Rule 62-2.700(7), F.A.C. [PSD-FL-146, Specific Condition No. 19]
- B.42. Excess Emissions.** For the purpose of reports required under 40 CFR 60.7, periods of excess emissions that shall be reported are defined in 40 CFR 60.334. See Appendix NSPS Subpart GG. [Rule 62-296.800, F.A.C.; and 40 CFR 60.334]
- B.43. Notification of Changes.** The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator a written notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice. [40 CFR 60.7(a)(4)]
- B.44. Records.** The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative. [40 CFR 60.7(b)]
- B.45. Performance Reports.** The owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report and/or a summary report form [see 40 CFR 60.7(d) and Specific Condition **B.46.**] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:
- a. The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.

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- b. Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
- c. The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
- d. When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
[40 CFR 60.7(c)(1), (2), (3), and (4)]

B.46. Summary Reports. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

- a. If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7 need not be submitted unless requested by the Administrator.
- b. If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7 shall both be submitted.

{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}

[40 CFR 60.7]

B.47. Reporting Frequency Reduction.

- a. Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:
 - (1) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
 - (2) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
 - (3) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).
- b. The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
- c. As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall

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revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the non complying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7]

- B.48. Files.** The owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records. [40 CFR 60.7(f); and Rule 62-213.440, F.A.C.]

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Subsection C. Emissions Unit 007

The specific conditions in this section apply to the following emissions unit.

E.U. ID No.	Emissions Unit Description
007	Auxiliary Boiler

The auxiliary boiler is used to produce steam to actuate the steam seals on the steam turbine components of the combined-cycle units (Emissions Units 003, 004, 005, and 006) during cold starts when steam is not otherwise available for this purpose. Initial startup of the auxiliary boiler was on July 15, 1993. Stack parameters are: height 60 feet; diameter 3.6 feet; flow rate 30,536 acfm; and exit velocity 50 fps at 490 °F.

Because the unit has no installed pollution control devices, the unit is not subject to compliance assurance monitoring (CAM).

{Permitting Note: The emissions unit is regulated under NSPS - 40 CFR 60.40c, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units; adopted and incorporated by reference in Rule 62-204.800(8), F.A.C. (Although subject to regulation pursuant to Subpart Dc, no emissions limiting standards apply due to the firing of only natural gas and to being less than 30 MMBtu/hr in size) ; Rule 212.400, F.A.C.; Prevention of Significant Deterioration (PSD), Best Available Control Technology (BACT); Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less Than 250 Million Btu Per Hour Heat Input, Air Construction Permit No. PSD-FL-146; and, 40 CFR Part 63 Subpart DDDDD, NESHAP for Industrial, Commercial, and Institutional Boilers and Process Heaters}.

Essential Potential to Emit (PTE) Parameters

- C.1. Design Capacity.** The design heat input to the Auxiliary Boiler is 16.3 MMBtu/hour HI rate. This capacity is reflective of both the auxiliary boiler (14.8 MMBtu/hr) and the super heater (1.5 MMBtu/hr) while firing natural gas, both of which are operated when more steam is required for unit operation. [Rule 62-210.200(PTE), F.A.C.; Application No. 0850001-033-AV]
- C.2. Hours of Operation.** The auxiliary boiler shall operate only during startup and shutdown of the combined-cycle units, and for periodic maintenance testing. [Rule 62-210.200(PTE), F.A.C.; and, Permit Nos. PSD-FL-146, revised 7/19/93 & 0850001-032-AC (PSD-FL-146H/PSD-FL-327F)]
- C.3. Fuels.** The auxiliary steam boiler shall only be fired with natural gas. [Permit No. 0850001-032-AC (PSD-FL-146H/PSD-FL-327F), Specific Condition 3.]

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 **C.4.-C.6.** are based on the specified averaging time of the applicable test method.

- C.4. Standard for Visible Emissions.** The owner or operator shall not cause to be discharged into the atmosphere from the affected emissions unit any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. [Rule 62-296.406(1), F.A.C.]
- C.5. NO_x Emissions.** NO_x emissions for the auxiliary steam boiler shall not exceed 0.3 lb/MMBtu for natural gas firing. [PSD-FL-146, Revised 7/19/93]

Excess Emissions

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 007

- C.6. Excess Emissions Allowed.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.7. 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.]

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.}

- C.8. Test Methods.** Required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

The above methods are described in 40 CFR 60, Appendix A, and adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-297.401 & 62-213.440, F.A.C.]

- C.9. 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.10. Compliance Tests Prior To Renewal.** A compliance test shall be performed for VE prior to obtaining a renewed operation permit to demonstrate compliance with the emission limits in Specific Condition **C.4.** [Rules 62-210.300(2)(a) and 62-297.310(7)(a)3., F.A.C.]

Recordkeeping and Reporting Requirements

- C.11. Reporting Schedule.** The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Malfunction	Quarterly	Appendix RR-Condition RR.3
Annual tune- up	Annual	C.15 and C.20.
Test Reports	45 days after tests	Appendix TR-Condition TR.8
Air Operating Report (AOR)	Annual	Appendix RR-Condition RR.5

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

- C.12. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.
- C.13. Work Practice Records.** Records shall be kept on site documenting the annual tune-up required for this natural gas fired boiler as a work practice standard. [NESHAP 40 CFR 63.7555 & 63.7550 and Table 3-Subpart DDDDD]
- C.14. NSPS Requirements.** The Department determines that compliance with the BACT emissions performance and monitoring requirements also assures compliance with the New Source Performance

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection C. Emissions Unit 007

Standards for Subpart Dc in 40 CFR 60. For completeness, the applicable requirements of Subparts Dc are included in the Appendices of this permit. [Rule 62-204.800, F.A.C.]

- C.15. 40 CFR 60, Subpart DDDDD Work Practices.** This unit is required to conduct an annual tune-up of the boiler as well as a one-time energy assessment. The tune-up of this boiler shall be conducted as specified in §63.7540(a)(10). During startup and shutdown, a work practice standard must be met by following the manufacturer's recommended procedures to minimize these periods in lieu of numeric emission limits. [NESHAP 40 CFR 63, Subpart DDDDD] (dated January 31, 2013)] [Link to 40 CFR 63.7540](#)

{Permitting Note: As an "existing" source under Subpart DDDDD, the facility has three (3) years from the date of promulgation in the Federal Register to comply with the aforementioned applicable requirements. Final compliance date for the boiler is January 31, 2016 for the initial tune-up of the boiler and one-time energy assessment.}

Other NSPS and NESHAP Requirements

- C.16. Subpart A - NSPS General Provisions.** This emissions unit is subject to applicable provisions of 40 CFR 60, Subpart A, General Provisions (see Appendix NSPS, Subpart A - General Provisions). [40 CFR 60.7; 60.8; 60.11; 60.12 and 60.13] [Link to 40 CFR 60, Subpart A - General Provisions.](#)
- C.17. Subpart Dc – NSPS Small Industrial-Commercial-Institutional Steam Generating Units.** As used in 40 CFR 60 Subpart Dc, all terms not defined in 40 CFR 60.41c shall have the meaning given them in the Act, and in Subpart A of 40 CFR 60. This unit is subject to all applicable requirements of NSPS, Subpart Dc (see attached Appendix NSPS, Subpart Dc). [40 CFR 60.41c Definitions] [Link to 40 CFR 60, Subpart Dc](#)
- C.18. Subpart DDDDD – NESHAP Small Industrial-Commercial-Institutional Boilers and Process Heaters.** As used in 40 CFR 63 Subpart DDDDD, all terms not defined in 40 CFR 63.7575 shall have the meaning given them in the Act, and in Subpart A of 40 CFR 63. This unit is subject to all applicable requirements of NESHAP, Subpart DDDDD. [40 CFR 63.7575 Definitions] [Link to 40 CFR 63, Subpart DDDDD](#)
- C.19. Subpart A - NESHAP 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](#)

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Unit 8 Combined Cycle - Gas Turbine (EU 011, 012, 017, 018)

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

E.U. ID No.	Emissions Unit Description
011	170 MW Gas Turbine with Gas Fired HRSG (CT 8A)
012	170 MW Gas Turbine with Gas Fired HRSG (CT 8B)
017	170 MW Gas Turbine with Gas Fired HRSG (CT 8C)
018	170 MW Gas Turbine with Gas Fired HRSG (CT 8D)

Each CT (8A, 8B, 8C and 8D) consists of a nominal 170 MW General Electric Model PG7241(FA) gas turbine-electrical generator set, an automated gas turbine control system, an inlet air filtration system, an evaporative inlet air cooling system, and associated support equipment. Each CT is coupled with a HRSG equipped with a 495 MMBtu/hr natural gas fired duct burner. Steam from each HRSG is delivered to the single steam turbine driven electrical generator that serves all four CT/HRSG systems, which has a nominal capacity of 470 MW. The total nominal generating capacity of the (one "4-on-1" set) combined cycle unit is 1,150 MW. The stack parameters for each CT/HRSG are: 120 feet in height; 19 feet in diameter; exhaust flow rates of 1,004,200 acfm for natural gas firing and 1,193,900 acfm for oil firing; and gas exit temperatures of 202 °F (gas) and 295° F (oil). At a compressor inlet air temperature of 59 °F, the heat input rate to each CT based on lower heating value (LHV) is approximately 1,660 MMBtu/hr (gas) and 1,885 MMBtu/hour (oil).

The CT use natural gas as the primary fuel and distillate oil as a restricted alternate fuel. The efficient combustion of natural gas at high temperatures minimizes emissions of CO, PM/PM₁₀, SAM, SO₂, and VOC. NO_x emissions are reduced by Dry Low-NO_x (DLN) combustion technology (simple cycle mode). A selective catalytic reduction (SCR) system combined with DLN combustion technology further reduces NO_x emissions during combined cycle mode. Each CT is equipped with CEMS to measure and record CO and NO_x emissions as well as flue gas O₂ or CO₂ content. CAM does not apply since these emissions units have NO_x CEMS which are used to demonstrate continuous compliance.

Emissions Units 8A and 8B commenced commercial simple cycle operation in November 2001. In a permitting action issued on 2003, these two existing units in addition to two new units conformed the (one "4-on-1" set) combined cycle combustion system (Units 8A, 8B, 8C and 8D) that commenced commercial operation on June 30, 2005.

{Permitting Note: These emissions units are regulated under Acid Rain-Phase II, 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines; 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Generating Units for Which Construction is Commenced After September 18, 1978, and 40 CFR 63, Subpart YYYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines, all adopted by reference in Rules 62-204.800(8) and 62-204.800(11), F.A.C.; Rule 212.400, F.A.C., Prevention of Significant Deterioration (PSD), Best Available Control Technology (BACT); Air Construction Permit PSD-FL-286; and Air Construction Permit PSD-FL-327 (0850001-010-AC) issued 04/16/03 and modified on 7/7/2005. PSD-FL-327 replaced and superseded PSD-FL-286. On March 5, 2004, EPA promulgated 40 CFR 63, Subpart YYYYY, National Emission Standards for Hazardous Air Pollutants for Stationary Combustion Turbines built after January 14, 2003. Unit 8 was under contractual obligations before this date and is therefore an existing unit. Currently, 'existing combustion turbines' are not required to meet the emission limitations, notifications, reporting or any other requirements of 40 CFR 63, Subpart YYYYY. EPA may at a future date promulgate standards for existing units.}

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity - Gas Turbines. The maximum heat input rate to each gas turbine is 1,660 MMBtu/hr when firing natural gas and 1,885 MMBtu per hour when firing distillate oil (based on a compressor inlet air temperature of 59 °F, the LHV of each fuel, and 100% load). Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, alternate methods of operation, and evaporative cooling. The

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Unit 8 Combined Cycle - Gas Turbine (EU 011, 012, 017, 018)

permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing testing, maintenance or tuning sessions. 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 Nos. 0850001-010-AC (PSD-FL-327) & 0850001-026-AC (PSD-FL-327E)]

- D.2. Permitted Capacity - HRSG Duct Burners.** The total maximum heat input rate to the duct burners for each HRSG is 495 MMBtu/hr based on LHV of natural gas. Only natural gas shall be fired in the duct burners. [Permit No. 0850001-010-AC (PSD-FL-327)]
- D.3. Methods of Operation.** Subject to the restrictions and requirements of this permit, the gas turbines may operate under the following methods of operation.
- a. *Hours of Operation.* Subject to the operational restrictions of this permit, the gas turbines may operate throughout the year (8,760 hours per year). Restrictions on individual methods of operation are specified below.
 - b. *Authorized Fuels.* Each gas turbine shall fire natural gas as the primary fuel, which shall contain no more than 2.0 grains of sulfur per 100 standard cubic feet of natural gas. As a restricted alternate fuel, each gas turbine may fire No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. Each gas turbine shall fire no more than 500 hours of distillate oil during any consecutive 12 months.
 - c. *Simple Cycle Operation.* Each gas turbine may operate individually in simple cycle mode to produce only direct, shaft-driven electrical power subject to the following operational restrictions.
 - (1) Each gas turbine shall operate in simple cycle mode for no more than 3390 hours during any consecutive 12 months.
 - (2) After demonstrating initial compliance in combined cycle mode, the combined group of four gas turbines shall operate in simple cycle mode for no more than an average of 1000 hours per gas turbine during any consecutive 12 months.
 - d. *Combined Cycle Operation.* Each gas turbine/HRSG system may operate to produce direct, shaft-driven electrical power and steam-generated electrical power from the steam turbine-electrical generator as a four-on-one combined cycle unit subject to the restrictions of this permit. In accordance with the specifications of the SCR and HRSG manufacturers, the SCR system shall be on line and functioning properly during combined cycle operation or when the HRSG is producing steam.
 - e. *Inlet Fogging.* In accordance with the manufacturer's recommendations and appropriate ambient conditions, the evaporative cooling system may be operated to reduce the compressor inlet air temperature and provide additional direct, shaft-driven electrical power. This method of operation is commonly referred to as "fogging" and may be used in either simple cycle or combined cycle modes.
 - f. *Peaking.* When firing natural gas, each gas turbine may operate in a high-temperature peaking mode to generate additional direct, shaft-driven electrical power to respond to peak demands. During any consecutive 12 months, each gas turbine shall operate while in the peaking mode for no more than 60 hours of simple cycle operation and no more than 400 hours of combined cycle operation.
 - g. *Power Augmentation.* When firing natural gas in either simple cycle or combined cycle modes, steam may be injected into each gas turbine to generate additional direct, shaft-driven electrical power to respond to peak demands. To qualify as "power augmentation", the CT must operate at a load of 95% or greater than that of the manufacturer's maximum base load rate adjusted for the compressor inlet air conditions. Prior to activating and after deactivating the power augmentation mode, the operator shall log the date, time, and new mode of operation. The gas turbines shall not operate simultaneously in peaking and power augmentation modes. Total combined operation of power augmentation and peaking modes shall not exceed 400 hours per unit during any consecutive 12 months.
 - h. *Combined Cycle Operation with HRSG Duct Firing.* When firing natural gas and operating in combined cycle mode, each HRSG system may fire natural gas in the duct burners to provide additional steam-generated electrical power. The total combined heat input rate to the duct burners (all four HRSG units) shall not exceed 5,702,400 MMBtu (LHV) during any consecutive 12 months.
[Permit No. 0850001-010-AC (PSD-FL-327)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Unit 8 Combined Cycle - Gas Turbine (EU 011, 012, 017, 018)

Applicable Standards and Regulations

D.4. NSPS Requirements. The Department determines that compliance with the BACT emissions performance and monitoring requirements also assures compliance with the New Source Performance Standards for Subpart Da (duct burners) and Subpart GG (gas turbines) in 40 CFR 60. For completeness, the applicable requirements of Subparts Da and GG are included in the Appendices of this permit. [Rule 62-204.800, F.A.C.]

Equipment

D.5. Gas Turbines. The permittee is authorized to tune, operate and maintain the four General Electric model PG7241FA CT. Each CT shall include a modern automated gas turbine control system and have dual-fuel capability. Ancillary equipment includes an inlet air filtration system, an evaporative inlet air-cooling system, and a bypass stack for simple cycle operation. The gas turbines utilize DLN combustors. Electric fuel heaters preheat the natural gas during simple cycle operation and during startup to combined cycle operation. For full combined cycle operation, feedwater heat exchangers preheat the natural gas. [Permit No. 0850001-010-AC (PSD-FL-327)]

D.6. Gas Turbine NO_x Controls.

- a. *DLN Combustion.* The permittee shall operate and maintain the General Electric DLN 2.6 combustion system (or better) to control NO_x emissions from each gas turbine when firing natural gas. Prior to the initial emissions performance tests required for each gas turbine, the DLN combustors and automated gas turbine control system shall be tuned to achieve the simple cycle permitted levels for CO and NO_x emissions. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations.
- b. *Water Injection.* The permittee shall install, operate, and maintain a water injection system to reduce NO_x emissions from each gas turbine when firing distillate oil. Prior to the initial emissions performance tests required for each gas turbine, the water injection system shall be tuned to achieve the permitted levels for CO and NO_x emissions. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations. The automated control system shall be programmed to establish a water-to-fuel ratio designed to achieve the NO_x emission standard for simple cycle oil firing on a 1-hour basis.
- c. *SCR System.* The permittee shall install, tune, operate, and maintain a SCR system to control NO_x emissions from each gas turbine during combined cycle operation when firing either natural gas or distillate oil. The SCR system consists of an ammonia injection grid, catalyst, ammonia storage, monitoring and control system, electrical, piping and other ancillary equipment. The SCR system shall be designed, constructed and operated to achieve the permitted levels for NO_x emissions and ammonia slip. *{Note: In accordance with 40 CFR 60.130, the storage of ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.}*

[Permit No. 0850001-010-AC (PSD-FL-327)]

D.7. Heat Recovery Steam Generators (HRSG). The permittee is authorized to operate, and maintain four HRSG with separate HRSG exhaust stacks. Each HRSG shall be designed to recover heat energy from one of the four gas turbines (8A-8D) and deliver steam to the steam turbine electrical generator through a common manifold. Each HRSG may be equipped with supplemental gas-fired duct burners having a maximum heat input rate of 495 MMBtu/hr (LHV). The duct burners shall be designed in accordance with the following specifications: 0.04 lb CO/MMBtu and 0.08 lb NO_x/MMBtu. *{Note: The four HRSG units deliver steam to a single steam turbine-electrical generator with a generating capacity of 470 MW.}* [Permit No. 0850001-010-AC (PSD-FL-327)]

Emissions 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.}

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Subsection D. Unit 8 Combined Cycle - Gas Turbine (EU 011, 012, 017, 018)

Unless otherwise specified, the averaging times for the limitations contained in Specific Condition E.8. are based on the specified averaging time of the applicable test method.

D.8. Emissions Standards. Emissions from each gas turbine shall not exceed the following standards.

Pollutant	Fuel	Method of Operation	Stack Test, 3-Run Average		CEMS Block Average
			ppmvd @ 15% O ₂	lb/hour	ppmvd @ 15% O ₂
CO ^a	Oil	Simple or Combined Cycle	14.4	64.7	15.0, 24-hr
	Gas	Simple Cycle	7.4	27.5	8.0, 24-hr
		Simple Cycle w/PA	12.0	45.0	12.0, 24-hr
		Combined Cycle, Normal	7.4	27.5	10.0, 24-hr
		Combined Cycle, All Modes	NA	NA	
NO _x ^b	Oil	Simple Cycle	42.0	319.2	42.0, 3-hr
		Combined Cycle w/SCR	10.0	76.0	10.0, 24-hr
	Gas	Simple Cycle	9.0	58.7	9.0, 24-hr
		Simple Cycle w/PA	12.0	76.2	12.0, 24-hr
		Simple Cycle w/Peaking	15.0	95.3	15.0, 24-hr
		Combined Cycle w/SCR, Normal	2.5	16.3	2.5, 24-hr
		Combined Cycle w/SCR and DB	2.5	23.6	
		Combined Cycle w/SCR, All Modes	NA	NA	
PM/PM ₁₀ ^c	Oil/Gas	Simple or Combined Cycle	Fuel Specifications		
		Simple or Combined Cycle	Visible emissions shall not exceed 10% opacity for each 6-minute block average.		
SAM/SO ₂ ^d	Oil/Gas	Simple or Combined Cycle	Fuel Specifications		
VOC ^e	Oil	Simple or Combined Cycle	2.5	6.0	NA
	Gas	Simple or Normal Combined Cycle	1.3	2.8	NA
		Combined Cycle, w/DB and/or PA	4.0	10.5	NA
Ammonia ^f	Oil/Gas	Combined Cycle w/SCR	5	NA	NA

- a. Compliance with the CO standards shall be demonstrated based on data collected by the required CEMS. Compliance may also be determined by EPA Method 10. Compliance with the 24-hour CO CEMS standards shall be determined separately for each method of operation based on the hours of operation for each method. *{Note: A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data.}*

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- b. Compliance with the NO_x standards shall be demonstrated based on data collected by the required CEMS. Compliance may also be determined by EPA Method 7E or 20. NO_x mass emission rates are defined as oxides of nitrogen expressed as NO₂. Compliance with the 24-hour NO_x CEMS standards during simple cycle operation shall be determined separately for each method of operation based on the hours of operation for each method. *{Note: A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data.}*
- c. The fuel specifications established in Specific Condition **D.3** of this section, combined with the efficient combustion design and operation of each gas turbine represents the Best Available Control Technology (BACT) determination for PM/PM₁₀ emissions. Compliance with the fuel specifications, CO standards, and visible emissions standards shall serve as indicators of good combustion. Compliance with the fuel specifications shall be demonstrated by keeping records of the fuel sulfur content. Compliance with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9. *{Note: PM₁₀ emissions for gas firing are estimated at 9 lb/hour for simple cycle operation, 11 lb/hour for combined cycle operation, and 17 lb/hour for combined cycle operation with duct burning. PM₁₀ emissions for oil firing are estimated at 17 lb/hour for simple cycle operation and 37 lb/hour for combined cycle operation.}*
- d. The fuel sulfur specifications in Specific Condition **D.3** of this section effectively limit the potential emissions of SAM and SO₂ from the gas turbines and represent the Best Available Control Technology (BACT) determination for these pollutants. Compliance with the fuel sulfur specifications shall be determined by the requirements in Specific Condition **D.26**. *{Note: SO₂ emissions for gas firing are estimated at 9.8 lb/hour for simple and combined cycle operation and 12.8 lb/hour for combined cycle operation with duct burning. SO₂ emissions for oil firing are estimated at 99 lb/hour for simple and combined cycle operation. SAM emissions are estimated to be less than 10% of the SO₂ emissions.}*
- e. Compliance with the VOC standards shall be demonstrated by conducting tests in accordance with EPA Method 25A. Optionally, EPA Method 18 may also be performed to deduct emissions of methane and ethane. The emission standards are based on VOC measured as methane.
- f. Subject to the requirements of Specific Condition **D.20** of this section, each SCR system shall be designed and operated for an ammonia slip target of less than 5 ppmvd corrected to 15% oxygen based on the average of three test runs. Compliance with the ammonia slip standard shall be demonstrated by conducting tests in accordance with EPA Method CTC-027.

{Notes: "DB" means duct burning. "PA" means power augmentation. "SCR" means selective catalytic reduction. "NA" means not applicable. The mass emission rate standards are based on a turbine inlet condition of 59 °F and may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department. These emissions units have not to date been operated in the high power modes (HPM) of peaking or power augmentation; therefore, a compliance plan is included to cover initial testing requirements for these HPM for emissions of CO and NO_x. See Appendix CP}
[Rule 62-212.400(BACT), F.A.C. and Permit No. 0850001-010-AC (PSD-FL-327)]

D.9. Combined Cycle Operation With Steam Dumped to Condenser. If the steam-electrical turbine generator is off line, the permittee is authorized to operate the gas turbine/HRSG systems by dumping steam to the condenser. When operating in this manner, each unit shall comply with the standards established for combined cycle operation with ammonia injection (SCR). [Permit No. 0850001-010-AC (PSD-FL-327)]

D.10. Duct Burners. The duct burners are also subject to the provisions of Subpart Da of the New Source Performance Standards in 40 CFR 60, which are summarized in Appendix NSPS Subpart Da.

{Note: During duct firing, compliance with the limits of this permit also demonstrates compliance with the standards of NSPS Subpart Da for duct burners.} [40 CFR 60, Subpart Da and Permit No. 0850001-010-AC (PSD-FL-327)]

Excess Emissions

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

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection D. Unit 8 Combined Cycle - Gas Turbine (EU 011, 012, 017, 018)

- D.11. Operating Procedures.** The Best Available Control Technology (BACT) determinations established by this permit rely on “good operating practices” to reduce emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the gas turbines, HRSG units, 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 of minimizing excess emissions. [Permit No. 0850001-010-AC (PSD-FL-327)]
- D.12. Excess Emissions Prohibited.** Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data. [Permit No. 0850001-010-AC (PSD-FL-327)]
- D.13. 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. 0850001-010-AC (PSD-FL-327)]
- D.14. Excess Emissions Allowed.** As specified in this condition, excess emissions resulting from startup, shutdown, fuel switches, and documented malfunctions are allowed provided that operators employ the best operational practices to minimize the amount and duration of emissions during such incidents. For each gas turbine/HRSG System, excess emissions of NO_x and CO resulting from startup, shutdown, fuel switches or malfunction shall be excluded from CEMS data in any 24-hour period for the following conditions (these conditions are considered separate events and each event may occur independently within any 24-hour period):
- Steam Turbine Cold Startup.** For cold startup of the steam turbine system, excluded emissions from any gas turbine/HRSG system shall not exceed eight hours in any 24-hour period. Cold startup of the steam turbine system shall be completed within twelve hours. A cold “startup of the steam turbine” is defined as startup of the 4-on-1 combined cycle system following a shutdown of the steam turbine lasting at least 48 hours. *{Permitting Note: During a cold startup of the steam turbine system, each gas turbine/HRSG system in the 4-on-1 combined cycle system is sequentially brought on line at low load to gradually increase the temperature of the steam-electrical turbine in order to prevent thermal metal fatigue. Note that shutdowns and documented malfunctions are separately regulated in accordance with the requirements of this condition.}*
 - Gas Turbine/HRSG System Cold Startup.** For cold startup of an individual gas turbine/HRSG system, excluded emissions shall not exceed four hours in any 24-hour period. “Cold startup of a gas turbine/HRSG system” is defined as a startup after the pressure in the high-pressure (HP) steam drum falls below 450 pounds per square inch gauge (psig) for at least a one-hour period.
 - Gas Turbine/HRSG System Warm Startup:** For warm startup of a gas turbine/HRSG system, excluded emissions shall not exceed two hours in any 24-hour period (with the additional provision of a limit of 2 warm startup periods per 24 hours per gas turbine/HRSG system, in which case excluded emissions shall not exceed eight hours total for the 4-on-1 combined cycle system). “Warm startup of a gas turbine/HRSG system” is defined as a startup after the pressure in the high-pressure (HP) steam drum is above 450 psig.
 - Gas Turbine/HRSG System Shutdown:** For shutdown of the gas turbine/HRSG system operation, excluded emissions from any individual gas turbine/HRSG system shall not exceed two hours in any 24-hour period.
 - Shutdown Combined Cycle Operation:** For shutdown of the entire 4-on-1 combined cycle system, excluded emissions from any gas turbine/HRSG system shall not exceed three hours in any 24-hour period.
 - Fuel Switching.** For fuel switching, excluded emissions shall not exceed two hours in any 24-hour period for each fuel switch and no more than four hours in any 24-hour period for any gas turbine/HRSG system.
 - Documented Malfunction:** For each gas turbine/HRSG system, excess emissions of NO_x and CO resulting from documented malfunctions shall not exceed two hours in any 24-hour period. A

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

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"documented malfunction" means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic mail. Ammonia injection shall begin as soon as operation of the gas turbine/HRSG system achieves the operating parameters specified by the manufacturer. As authorized by Rule 62-210.700(5), F.A.C., the above conditions allow excess emissions only for specifically defined periods of startup, shutdown, and documented malfunction of the gas turbines. [Rules 62-212.400(BACT) & 62-210.700, F.A.C.; and, Permit Nos. 0850001-010-AC (PSD-FL-327), 0850001-016-AC (PSD-FL-327B), 0850001-020-AC (PSD-FL-327C) & 0850001-032-AC (PSD-FL-146H / PSD-FL-327F)]

- D.15. DLN Tuning / FSNL Testing.** CEMS data collected during initial or other major DLN tuning sessions and during manufacturer required Full Speed No Load (FSNL) trip tests shall be excluded from the CEMS compliance demonstration provided the tuning session is performed in accordance with the manufacturer's specifications. A "major tuning session" would occur after completion of initial construction, a combustor change-out, a major repair or maintenance to a combustor, or other similar circumstances. Prior to performing any major tuning session, the permittee shall provide the Compliance Authority with an advance notice of at least one working (business) day that details the activity and proposed tuning schedule. The notice may be by telephone, facsimile transmittal, or electronic mail. [Permit Nos. 0850001-010 (PSD-FL-327) & 0850001-032-AC (PSD-FL-146H / PSD-FL-327F)]

Monitoring of Operations

- D.16. Ammonia Monitoring Requirements.** In accordance with the manufacturer's specifications, the permittee shall calibrate, operate and maintain an ammonia flow meter to measure and record the ammonia injection rate to the SCR system. The permittee shall document the general range of ammonia flow rates required to meet permitted emissions levels over the range of load conditions allowed by this permit by comparing NO_x emissions recorded by the CEM system with ammonia flow rates recorded using the ammonia flow meter. During NO_x monitor downtimes or malfunctions, the permittee shall operate at the ammonia flow rate that is consistent with the documented flow rate for the CT load condition. [Permit No. 0850001-010-AC (PSD-FL-327)]

Continuous Monitoring Requirements

- D.17. CEM Systems.** The permittee shall calibrate, maintain, and operate CEMS to measure and record the emissions of CO and NO_x from the combined cycle gas turbine in a manner sufficient to demonstrate continuous compliance with the CEMS emission standards of this section. Each monitoring system shall be installed, calibrated, and properly functioning prior to the initial performance tests. Within one working day of discovering emissions in excess of a CO or NO_x standard (and subject to the specified averaging period), the permittee shall notify the Compliance Authority.
- CO Monitors.*** The 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, or Part 75, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The RATA tests required for the CO monitor 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.
 - NO_x Monitors.*** Each NO_x monitor 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. The RATA tests required for the NO_x monitor shall be performed using EPA Method 20 or 7E in Appendix A of 40 CFR 60. In addition to the requirements of Appendix A of 40 CFR 75, the NO_x monitor span values shall be set appropriately considering the allowable methods of operation and corresponding emission standards.
 - Diluent Monitors.*** The oxygen (O₂) or carbon dioxide (CO₂) 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 CO₂ monitor is installed, the oxygen content of the flue gas shall be calculated using F-factors that are

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appropriate for the fuel fired. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

- d. *1-Hour Block Averages.* Hourly average values shall begin at the top of each hour. Each hourly average value 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, an hourly value 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, the hourly average value is not valid. An hour in which any oil is fired is attributed towards compliance with the permit standards for oil firing. The permittee shall use all valid measurements or data points collected during an hour to calculate the hourly average values. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over an hour. If the CEMS measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEMS shall be expressed as ppmvd corrected to 15% O₂. The CEMS shall be used to demonstrate compliance with the CEMS emission standards for CO and NO_x as specified in this permit. For purposes of determining compliance with the CEMS emissions standards of this permit, missing (or excluded) data shall not be substituted. 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.
- e. *3-hour Block Averages.* For oil firing during simple cycle operation, the 3-hour block average shall be calculated from three consecutive hourly average emission rate values. For purposes of determining compliance with the CEMS emission standards of this permit, missing (or excluded) data shall not be substituted. Instead, the 3-hour block average shall be determined using the remaining hourly data in the 3-hour block. [Rule 62-212.400(BACT), F.A.C.]
- f. *24-hour Block Averages.* A 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average emission rate values. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of available valid hourly average emission rate values for the 24-hour block. For purposes of determining compliance with the 24-hour CEMS standards, missing (or excluded) data shall not be substituted. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block. {Permitting Note: There may be more than one 24-hour compliance demonstration required for CO and NO_x emissions depending on the use of alternate methods of operation}. [Rule 62-212.400(BACT), F.A.C.]
- g. *Data Exclusion.* Each CEMS shall monitor and record emissions during all operations including episodes of startup, shutdown, malfunction, fuel switches, and DLN tuning. CEMS emissions data recorded during some of these episodes may be excluded from the corresponding CEMS compliance demonstration subject to the provisions of Specific Conditions **D.14.** and **D.15.** All periods of data excluded shall be consecutive for each such episode. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable. Data recorded during such episodes shall not be excluded if the episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented. Best operational practices shall be used to minimize hourly emissions that occur during such episodes. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.
- h. *Availability.* Monitor availability for the CEMS shall be 95% or greater in any calendar quarter. The quarterly permit excess emissions report shall be used to demonstrate monitor availability. In the event 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

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availability shall be violations of this permit, except as otherwise authorized by the Department's Compliance Authority.

[Rule 62-212.400(BACT), F.A.C.; and, Permit Nos. 0850001-010-AC (PSD-FL-327) & 0850001-032-AC (PSD-FL-146H/PSD-FL-327F)]

{Permitting Note: Compliance with these requirements ensure compliance with the other applicable CEM system requirements such as: NSPS Subparts Da and GG; Rule 62-297.520, F.A.C.; 40 CFR 60.7(a)(5) and 40 CFR 60.13; 40 CFR Part 51, Appendix P; 40 CFR 60, Appendix B - Performance Specifications; and 40 CFR 60, Appendix F - Quality Assurance Procedures.}

D.18. Water Injection Monitoring Requirements. In accordance with the manufacturer's specifications, the permittee shall calibrate, operate and maintain a monitoring system to continuously measure and record the water-to-fuel ratio when firing distillate oil. The permittee shall document the water-to-fuel ratio required to meet permitted emissions levels over the range of load conditions allowed by this permit. The NO_x CEMS is used to demonstrate compliance with the NO_x emissions standards. During NO_x CEMS downtimes or malfunctions, the permittee shall monitor the water-to-fuel ratio and operate at a level that is consistent with the documented flow rate for the gas turbine load condition. *{Note: The actual water-to-fuel ratio will vary depending on operating conditions and load.}* [Rule 62-212.400(BACT), F.A.C. and Permit No. 0850001-010-AC (PSD-FL-327)]

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.}

D.19. Test Methods. Any required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
CTM-027	Procedure for Collection and Analysis of Ammonia in Stationary Source {Notes: This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.}
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Notes: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography {Note: EPA Method 18 may be used (optional) concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions.}
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
25A	Determination of Volatile Organic Concentrations

Method CTM-027 is published on EPA's Technology Transfer Network Web Site at <http://www.epa.gov/ttn/emc/ctm.html>. The other methods are described in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rule 62-204.800, F.A.C.; 40 CFR 60, Appendix A; and, Permit No. 0850001-010-AC (PSD-FL-327)]

D.20. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), each gas turbine shall be tested to demonstrate compliance with the emission standards for visible emissions. Annual testing to determine the ammonia slip shall be conducted while firing the primary fuel. CEMS data collected

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during the required Relative Accuracy Test Assessments (RATA) may be used to demonstrate compliance with the CO and NO_x standards. NO_x emissions recorded by the CEMS shall be reported for each ammonia slip test run. CO emissions recorded by the CEMS shall be reported for the visible emissions observation period. VOC testing is only required if the **CO CEMS** indicates an exceedance of the CO standard. [Rules 62-212.400(BACT) & 62-297.310(7)(a)4, F.A.C.; and, Permit No. 0850001-010-AC (PSD-FL-327)]

- D.21. Compliance Tests Prior To Renewal.** Prior to permit renewal, compliance tests shall be performed for the following pollutants: VE, CO, VOC (**only if the CO CEMS indicates an exceedance of the CO standard**), NO_x and ammonia slip. [Rule 62-297.310(7)(a)3., F.A.C.; and, Permit Nos. 0850001-010-AC (PSD-FL-327) & 0850001-032-AC (PSD-FL-146H / PSD-FL-327F)]
- D.22. 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.]
- D.23. Special Compliance Determinations.** Based on a specific condition of permit No. 0850001-010-AC, 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 SCR catalyst, DLN combustors, etc. Each gas turbine shall be stack tested to demonstrate compliance with the emission standards for CO, NO_x, VOC, visible emissions, and ammonia slip. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated for each unit configuration (i.e., simple cycle and combined cycle operation), but not later than 180 days after startup of each unit configuration. Each unit shall be tested when firing natural gas and distillate oil. CEMS data collected during the required Relative Accuracy Test Assessments (RATA) may be used to demonstrate compliance with the CO and NO_x standards. With appropriate flow measurements (or fuel measurements and approved F-factors), CEMS data may be used to demonstrate compliance with the CO and NO_x mass rate emissions standards. CO and NO_x emissions recorded by the CEMS shall also be reported for each run during tests for visible emissions, VOC and ammonia slip. CO and VOC emissions tests performed during simple cycle operation may be used to satisfy the test requirements for similar operation in combined cycle mode. [Rule 62-297.310(7)(a)1, F.A.C.; 40 CFR 60.8; and, Permit No. 0850001-010-AC, Specific Condition 20]
- D.24. Continuous Compliance.** The permittee shall demonstrate continuous compliance with the CO and NO_x emissions standards based on data collected by the certified CEMS. Within 45 days of conducting any Relative Accuracy Test Assessments (RATA) on a CEMS, the permittee shall submit a report to the Compliance Authority summarizing results of the RATA. Compliance with the CO emission standards also serves as an indicator of efficient fuel combustion, which reduces emissions of particulate matter and volatile organic compounds. [Permit No. 0850001-010-AC (PSD-FL-327)]
- D.25. Additional Ammonia Slip Testing.** If the tested ammonia slip rate for a gas turbine exceeds 5 ppmvd corrected to 15% oxygen when firing natural gas during the annual test, the permittee shall:
- Begin testing and reporting the ammonia slip for each subsequent calendar quarter;
 - Before the ammonia slip exceeds 7 ppmvd corrected to 15% oxygen, take corrective actions that result in lowering the ammonia slip to less than 5 ppmvd corrected to 15% oxygen; and
 - Test and demonstrate that the ammonia slip is no more than 5 ppmvd corrected to 15% oxygen within 15 days after completing the corrective actions.
- Corrective actions may include, but are not limited to, adding catalyst, replacing catalyst, or other SCR system maintenance or repair. After demonstrating that the ammonia slip level is no more than 5 ppmvd corrected to 15% oxygen, testing and reporting shall resume on an annual basis. [Permit No. 0850001-010-AC (PSD-FL-327)]

Recordkeeping and Reporting Requirements

- D.26. Reporting Schedule.** The following reports and notifications shall be submitted to the Compliance Authority:

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Report	Reporting Deadline	Related Condition(s)
Notice of Capacity Monitoring	Daily.	D.27.
Notice of Monthly Operations	Monthly.	D.28.
NSPS Excess Emissions Report	Semiannual.	D.31.
Quarterly Permit Excess Emission Report	Quarterly.	D.32.

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

- D.27. Monitoring of Capacity.** The permittee shall monitor and record the operating rate of each gas turbine and HRSG duct burner system on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made using a monitoring component of the CEM system required above, or by monitoring daily rates of consumption and heat content of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D. [Permit No. 0850001-010-AC (PSD-FL-327)]
- D.28. Monthly Operations Summary.** By the fifth calendar day of each month, the permittee shall record the following for each fuel in a written or electronic log for each gas turbine for the previous month of operation: fuel consumption, hours of operation, hours of power augmentation, hours of peaking, hours of duct firing, and the updated 12-month rolling totals for each. 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. 0850001-010-AC (PSD-FL-327)]
- D.29. Fuel Sulfur Records.** The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the following records of the sulfur contents.
- a. Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or more recent versions.
 - b. Compliance with the distillate oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to each Compliance Authority before initial startup. Sampling the fuel oil sulfur content shall be conducted in accordance with ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, and one of the following test methods for sulfur in petroleum products: ASTM D129-91, ASTM D1552-90, ASTM D2622-94, or ASTM D4294-90. More recent versions of these methods may be used. For each subsequent fuel delivery, the permittee shall maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor. At the request of a Compliance Authority, the permittee shall perform additional sampling and analysis for the fuel sulfur content.
- The above methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75 Appendix D. [Permit No. 0850001-010-AC (PSD-FL-327)]
- D.30. Malfunction Notification.** Within one working day of a malfunction that causes emissions in excess of a standard (subject to the specified averaging periods), the permittee shall notify the Compliance Authority. The notification shall include a preliminary report of: the nature, extent, and duration of the emissions; the probable cause of the emissions; and the actions taken to correct the problem. If requested by the Compliance Authority, the permittee shall submit written quarterly reports summarizing the malfunctions. [Permit No. 0850001-010-AC (PSD-FL-327)]
- D.31. Semiannual NSPS Excess Emissions Report.** In accordance with 40 CFR 60.7(d), the permittee shall submit a report to the Compliance Authority summarizing any emissions in excess of the NSPS standards within 30 days following the end of each calendar quarter. For purposes of reporting emissions in excess of NSPS Subpart GG, excess emissions from the gas turbine are defined as: any CEMS hourly average value exceeding the NSPS NO_x emission standard identified in Appendix GG; and any daily period during which the

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sulfur content of the fuel being fired in the gas turbine exceeds the NSPS standard identified in Appendix GG. For purposes of reporting emissions in excess of NSPS Subpart Da, excess emissions from duct firing are defined as: NO_x or PM emissions in excess of the NSPS standards except during periods of startup, shutdown, or malfunction; and SO₂ emissions in excess of the NSPS standards except during startup or shutdown. [40 CFR 60.7 and Permit No. 0850001-010-AC (PSD-FL-327)]

- D.32. Quarterly Permit Excess Emission Report.** Within 30 days following the end of each quarter, the permittee shall submit a report to the Compliance Authority summarizing periods of excess CO and NO_x emissions. Such information shall also be summarized for simple/combined cycle startups, simple/combined cycle shutdowns, malfunctions, and major tuning sessions. In addition, the report shall summarize the CEMS systems monitor availability for the previous quarter. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C.; and 40 CFR 60.7 and Permit No. 0850001-010-AC (PSD-FL-327)]
- D.33. Actual Emissions Reporting.** This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.
- a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C. (see Condition TV31. of Appendix TV, Title V General Conditions, attached to this permit).
 - b. The permittee shall report to the Department within 60 days after the end of each calendar year during the 5-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
 - (1) The name, address and telephone number of the owner or operator of the major stationary source;
 - (2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;
 - (3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
 - (4) Any other information that the owner or operator wishes to include in the report.
 - c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.
 - d. For the turbine upgrade project authorized by permit No. 0850001-026-AC (PSD-FL-327E), the permittee estimated the following baseline actual emissions: 82.75 tons/year of CO; 195.25 tons/year of NO_x; 14.68 tons/year of SO₂; 44.72 tons/year of VOC; 40.33 tons/year of PM/PM₁₀; and 2.25 tons/year of sulfuric acid mist (SAM).
 - e. The Department has identified NO_x and CO as the only PSD-pollutants that could reasonably increase as a result of this modification. The permittee shall use the installed CEMS to determine and report the actual annual emissions of NO_x and CO for the purpose of comparisons with baseline actual emissions. [Rules 62-212.300(1)(e) & 62-210.370, F.A.C. and Permit No. 0850001-026-AC (PSD-FL-327E)]

{Permitting Note: The turbine upgrades authorized by permit No. 0850001-026-AC (PSD-FL-327E) were completed for Units 8A, C & D in December of 2011 and for Unit 8B in November of 2012. To fulfill the remainder of the reporting requirements for the above condition, Actual Emissions Reports shall continue to be submitted through calendar year 2016 for Units 8A, C & D and through calendar year 2017 for Unit 8B.}

- D.34. Other Reporting Requirements.** See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

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Subsection E. Emissions Unit 019

The specific conditions in this section apply to the following emissions unit.

E.U. ID No.	Emissions Unit Description
019	22-Cell Mechanical Draft Cooling Tower

Equipment

E.1. Cooling Tower. The permittee is authorized to operate a 22-cell mechanical draft cooling tower with the following design characteristics: a circulating water flow rate of 310,000 gpm; design hot/cold water temperatures of 104 °F/90 °F; a design air flow rate of 1,386,055 per cell; a liquid-to-gas air flow ratio of 1.4; and drift eliminators with a drift rate of no more than 0.001%. [Permit Nos. 0850001-010-AC (PSD-FL-327) & 0850001-016-AC (PSD-FL-327B and PSD-FL-146C)]

Emissions and Performance Requirements

E.2. Drift Rate. The permittee has submitted certification that the cooling tower was constructed to achieve the specified drift rate of no more than 0.001 percent of the circulating water flow rate. *{Note: This work practice standard is established as BACT for PM/PM₁₀ emissions from the cooling tower. Based on this design criteria, potential emissions are expected to be less than 34 tons of PM per year and less than 10 tons of PM₁₀ per year. Actual emissions are expected to be less than half these rates.}* [Permit No. 0850001-010-AC (PSD-FL-327)]

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Subsection F. Emissions Unit 014

The specific conditions in this section apply to the following emissions unit.

E.U. ID No.	Emissions Unit Description
014	Two distillate oil storage tanks for Unit 8 gas turbines (2.1 million gallons each)

NSPS Applicability

F.1. NSPS Subpart Kb Applicability. The distillate oil tanks are not subject to Subpart Kb, which applies to any storage tank with a capacity greater than or equal to 10,300 gallons (40 cubic meters) that is used to store volatile organic liquids for which construction, reconstruction, or modification is commenced after July 23, 1984. Tanks with a capacity greater than or equal to 40,000 gallons (151 cubic meters) storing a liquid with a maximum true vapor pressure less than 3.5 kPa are exempt from the General Provisions (40 CFR 60, Subpart A) and from the provisions of NSPS Subpart Kb, except for the record keeping requirements listed below. [Rule 62-204.800, F.A.C.; 40 CFR 60.110b(a) & (c); and, Permit Nos. 0850001-016-AC (PSD-FL-327B and PSD-FL-146C)]

Equipment Specifications

F.2. Equipment. The permittee is authorized to operate and maintain two, 2.1 million gallon distillate oil storage tank designed to provide low sulfur distillate oil to the Unit 8 gas turbines. [Permit No. 0850001-010-AC (PSD-FL-327)]

{Permitting Note: One existing 2.1 million gallon distillate oil storage tank was permitted under PSD-FL-286.}

Essential Potential to Emit (PTE) Parameters

F.3. Hours of Operation. The hours of operation are not restricted (8,760 hours per year). [Permit No. 0850001-010-AC (PSD-FL-327)]

Recordkeeping and Reporting Requirements

F.4. Oil Tank Records. The permittee shall keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage tank. Records shall be retained for the life of the facility. The permittee shall also keep records sufficient to determine the annual throughput of distillate oil for each storage tank for use in the Annual Operating Report. [Rule 62-204.800(7)(b)16, F.A.C.; 40 CFR 60.116b(a) & (b); and, Permit No. 0850001-010-AC (PSD-FL-327)]

F.5. {Permitting Note: These new distillate oil storage tanks serve Unit 8. An existing 50,000-barrel distillate oil storage tank was constructed as part of Units 3 and 4. The existing tank was identified for use in Permit No. PSD-FL-268 issued for simple cycle Units 8A and 8B. Unit 8 will utilize both the existing and new distillate oil storage tanks.}

F.6. Fuel Oil Records. The permittee shall keep readily accessible records showing the maximum true vapor pressure of the stored liquid. The maximum true vapor pressure shall be less than 3.5 kPa. Compliance with this condition may be demonstrated by using the information from the respective Material Safety Data Sheets (MSDS) for the low or ultralow sulfur fuel oil stored in the tanks. [Permit No. 0850001-016-AC (PSD-FL-327B and PSD-FL-146C)]

{Permitting Note: An evaluation of several MSDS by the Department demonstrated that the vapor pressure is much less than 3.5 kPa for low sulfur fuel oil and for ultralow sulfur fuel oil.}

F.7. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. {Rule 62-213.440(1)(b), F.A.C.]

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Subsection G. Emissions Unit 022

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

EU No.	Emission Unit Description
022	216 HP Diesel Engine-driven Emergency Fire Pump

Emission Unit No. 022 is Detroit Diesel Emergency fire pump to aid Emissions Units 4 EU Nos. 003, 004, 005 and 006.

The following table provides important details for the engines collectively regulated as EU 022:

Engine Identification	Engine Brake HP	Date of Construction	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
Diesel Fire Pump	216	1993	1992	<10	Detroit	DDEP-04at-7009

{Permitting Note: This compression ignition reciprocating internal combustion engine (CI RICE) is 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 an “existing” emergency stationary CI RICE fire pump engine less than or equal to 500 HP with a displacement of less than 10 liters per cylinder that is located at a major source of HAPs and has commenced construction before 6/12/2006; and, it has not been modified or reconstructed after this date.

Pursuant to Subpart III, NSPS for Stationary Compression Ignition RICE, this is an “existing” emergency engine that commenced construction (ordered) before 7/11/2005 and has not been modified or reconstructed after 7/11/2005. Therefore, it is not subject to Subpart III. As an emergency use engine, this unit is not subject to the VOC and NO_x RACT requirements contained in Rules 62-296.500 & 570, F.A.C.}

Essential Potential to Emit (PTE) Parameters

G.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. *Maintenance and Testing.* This unit is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, 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)]
- c. *Non-emergency Situations.* This unit is authorized to operate up to 50 hours per year in non-emergency situations, but those 50 hours are counted towards the 100 hours per year provided for maintenance and testing. [40 CFR 63.6640(f)(2)(iii)]

Emission Limitations and Operating Requirements

G.2. Work or Management Practice Standards.

- a. *Oil.* Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6602 & Table 2c.1.a.]
- b. *Air Cleaner.* Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first, and replace as necessary. [40 CFR 63.6602 & Table 2c.1.b.]

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- 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 63.6602 & Table 2c.1.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) & Table 6.9.].
- 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)]
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)]

Compliance Requirements

- G.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

- G.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)]
- G.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)]

Recordkeeping Requirements

- G.6. 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.
 - b. Records of the occurrence and duration of each malfunction of operation.
 - c. Records of all required maintenance performed on the hour meter.
 - d. Records of actions taken during periods of malfunction to minimize emissions in accordance with Specific Condition **G.5.**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.

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- e. Records of the actions required in specific condition **G.2.d.** to show continuous compliance with each emission limitation or operating requirement.
- f. Records of the Work or Management Practice Standards specified in Specific Condition **G.2.**
- g. Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan.
- 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]

G.7. Record 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)]

Reporting Requirements

G.8. 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 **G.2.** of this section, 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]

General Provisions

G.9. 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
§63.9(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

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General Provisions Citation	Subject of Citation
§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 63.6665 & Table 8 to Subpart ZZZZ of Part 63]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection H. Emissions Unit 023

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

EU No.	Emission Unit Description
023	Two Hurricane Emergency Shelter Propane Generators (36 HP)
	Two Hurricane Emergency Shelter Propane Generators (50 HP)

Emissions Unit 023 consists of four stationary spark ignition (SI) reciprocating internal combustion engines (RICE) that fire propane. There are two identical emergency generators with a rating of 36 HP at 100% load (approximately 27 kW) that are used to provide emergency power to the hurricane shelters for the staff assigned to EU 001 and EU 002. There are two additional identical emergency generators with a rating of 50 HP at 100% load (approximately 37 kW) that are used to provide emergency power to the hurricane shelters for the staff assigned to EU's 003-006.

The following table provides important details for the engines collectively regulated as EU 023:

Engine Identification	Engine Brake HP	Date of Construction	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
Two Hurricane Emergency Shelter Generators	36 (27 kW)	2005	2005	1.0	Generac	47253
Two Hurricane Emergency Shelter Generator	50 (37 kW)	2005	2005	1.0	Generac	47231

{Permitting Note: These SI RICE are regulated under 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary RICE adopted in Rule 62.204.800(11)(b), F.A.C. These RICE are exempted from regulations under 40 CFR 60, Subpart JJJJ - New Source Performance for Stationary Internal Combustion Engines (ICE) based on the manufacturer date. These are "existing" stationary SI RICE less than or equal to 500 bhp, with a displacement of less than 10 liters per cylinder that are located at a major source of HAP and that have not been modified or reconstructed after 6/12/2006.}

Essential Potential to Emit (PTE) Parameters

H.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 **H.1.b.(1)** through **(3)** for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs **H.1.c.** of this section counts as part of the 100 hours per calendar year allowed by this paragraph **H.1.b.**
 - (1) *Maintenance and Testing.* Each RICE is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, 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.* Each RICE may be operated for emergency demand response for 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

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Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3. [40 CFR 63.6640(f)(2)(ii)]

(3) Voltage or Frequency Deviations. Emergency stationary RICE 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 RICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph b., above. 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)(3)]

H.2. Work or Management Practice Standards.

- a. *Oil.* Change oil and filter every 500 hours of operation or annually, whichever comes first. [40 CFR 63.6602 & Table 2c.6.a.]
- b. *Spark Plugs.* Inspect spark plugs every 1,000 hours of operation or annually, whichever comes first and replace as necessary. [40 CFR 63.6602 & Table 2c.6.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 63.6602 & Table 2c.6.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 during startup 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 an oil analysis program to extend the oil change requirement. The oil analysis must be performed at the same frequency specified for changing the oil in paragraph a., above. The analysis program must at a minimum analyze the following three parameters: Total Acid Number, viscosity, and percent water content. The condemning limits for these parameters are as follows: Total Acid Number increases by more than 3.0 milligrams of potassium hydroxide (KOH) per gram from Total Acid 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 business 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 business 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(j)]

Monitoring of Operations

- H.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

- H.4. Continuous Compliance.** Each unit shall be in compliance with the emission limitations and operating standards in this section at all times. [40 CFR 63.6605(a)]

- H.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

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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)]

Recordkeeping Requirements

- H.6. Notification, Performance and Compliance Records.** The owner or operator must keep:
- 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.
 - Records of the occurrence and duration of each malfunction of operation.
 - Records of all required maintenance performed on the hour meter.
 - Records of actions taken during periods of malfunction to minimize emissions in accordance with Specific Condition **H.5.**, including corrective actions to restore malfunctioning process and monitoring equipment to its normal or usual manner of operation.
 - Records of the actions required in Specific Condition **H.2.d.** to show continuous compliance with each emission limitation or operating requirement.
 - Records of the Work or Management Practice Standards specified in Specific Condition **H.2.**
 - Records of the maintenance conducted in order to demonstrate that the RICE was operated and maintained according to your own maintenance plan.
 - 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]

H.7. Record Retention.

- The owner or operator must keep records in a suitable and readily available form for expeditious reviews.
- 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)]

Reporting Requirements

- H.8. 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 **H.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]

General Provisions

- H.9. 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](#)

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Subsection H. Emissions Unit 023

General Provisions Citation	Subject of Citation
§63.1	General applicability of the General Provisions
§63.2	Definitions (additional terms defined in 43 CFR 63.6675)
§63.3	Units and abbreviations
§63.4	Prohibited activities and circumvention
§63.5	Construction and reconstruction
§63.6(a)	Applicability
§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 63.6665 & Table 8 to Subpart ZZZZ of Part 63]

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Subsection I. Emissions Unit 024

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

EU No.	Emission Unit Description
024	Spark Ignition Engine-driven Emergency Generator

Emissions Unit 024 is an emergency generator/engine set, spark ignition (SI) four-stroke reciprocating internal combustion engine (RICE) that fires natural gas with a maximum engine power of 48 HP at 100% load (approximately 30 kW). The engine has never been reconstructed or modified.

The following table provides important details for the engines collectively regulated as EU 024:

Engine Identification	Engine Brake HP	Date of Construction	Model Year	Displacement liters/cylinder (l/c)	Engine Manufacturer	Model No.
Emergency SI Generator	48 (30 kW)	2013	2013	0.5	Generac	QT030

{Permitting Note: This spark ignition four-stroke internal combustion engine (SI ICE) is regulated under 40 CFR Part 60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines adopted by reference in Rule 62.204.800(8)(b), F.A.C. Pursuant to Subpart JJJJ, this is “new” emergency stationary engines, with an engine power greater than 19 kW (25 HP) and less than 75 kW (100 HP), with a displacement of less than 10 liters per cylinder, and that are located at a major source of HAPs. Construction commenced (ordered) on these engines after January 1, 2009.

Pursuant to Subpart ZZZZ, these are two “new” four-stroke emergency stationary SI RICE engines with a site rating of less than 250 brake HP located at a major source of HAP that commenced construction after December 19, 2002. In accordance with 40 CFR 63.6590(c) (3), these engines meet the requirements of Subpart ZZZZ by meeting the requirements of 40 CFR 60 Subpart JJJJ.

Essential Potential to Emit (PTE) Parameters

- I.1. Authorized Fuel.** These Stationary Spark Ignition Internal Combustion Engines (SI-ICE) are fueled by Natural Gas. This engine may be fired using propane for a maximum of 100 hours per year as an alternative fuel solely during emergency operations, but must keep records of such use. If propane is used for more than 100 hours per year in an engine that is not certified to the emission standards when using propane, you are required to conduct a performance test to demonstrate compliance with the emission standards of Specific Conditions **I.3.** and **I.4.** [40 CFR 60.4243(e) and Application No. 0850001-33-AV]
- I.2. Restricted Hours of Operation.** You must operate these emergency engines according to the requirements in paragraphs a. through d. In order for these engines to be considered emergency stationary ICE under Subpart JJJJ, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in the paragraphs below, is prohibited. If you do not operate these engines according to the requirements in paragraphs a. through d. below, these engines will not be considered emergency engines and must meet all requirements for non-emergency engines pursuant to 40 CFR 60, Subpart JJJJ. [40 CFR 60.4243(d)]
 - a. *Emergency Situations.* There is no time limit on the use of these engines in emergency situations. [40 CFR 60.4243(d)(1)]
 - b. *Non-Emergency Situations.* You may operate these engines for any combination of the purposes specified in paragraphs (1) through (3) for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs c. and d. below counts as part of the 100 hours per calendar year allowed. [40 CFR 60.4243(d)(2)]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 024

- (1) *Maintenance and Testing.* Each engine is authorized to operate for the purpose of maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. 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 ICE beyond 100 hours per year. [40 CFR 60.4243(d)(2)(i)]
- (2) *Emergency Demand Response.* Each engine may be operated for emergency demand response for 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 60.17), 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. [40 CFR 60.4243(d)(2)(ii)]
- (3) *Voltage or Frequency Deviations.* Each engine 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. 60.4243(d)(2)(iii)]
- c. *Other Non-emergency Situations.* These engines may be operated for up to 50 hours per calendar year in nonemergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph b. above. Except as provided in paragraph d. below, 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 60.4243(d)(3)]
- d. *Limited Non-emergency 50 hours Operation.* The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (1) The engine is dispatched by the local balancing authority or local transmission and distribution system operator.
 - (2) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
 - (3) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
 - (4) The power is provided only to the facility itself or to support the local transmission and distribution system.
 - (5) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.[40 CFR 60.4243(d)(3)(i)]

Emissions Standards

- I.3.** NO_x + HC Emissions. Emissions of NO_x plus hydrocarbons (HC) shall not exceed 10 grams per horse power hour (g/HP-hr). [40 CFR 60.4233(d) and Table 1]
- I.4.** CO Emissions. Carbon monoxide (CO) emissions shall not exceed 387 g/HP-hr. [40 CFR 60.4233(d) and Table 1]
- I.5.** Emissions Standards Timeline. You must operate and maintain these engines to achieve the emission standards specified in **I.3.** and **I.4.** over the entire life of the engine. [40 CFR 60.4234]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 024

Monitoring Requirements

- I.6. Hour Meter.** You must operate and maintain non-resettable hour meters on these engines. [40 CFR 60.4237(c)]

Testing and Compliance Requirements

- I.7. Compliance Requirements.** You must demonstrate compliance with the emission standards specified in Conditions **I.3.** and **I.4.** according to one of the following methods: [40 CFR 60.4243(b)]
- a. *Having Purchased a Certified Engine.* If you purchased an engine certified to meet the emissions standards specified in Conditions **I.3.** and **I.4.**, you may demonstrate compliance according to the methods specified in paragraphs a.(1) and a.(2), below. [40 CFR 60.4243(a)]
 - (1) *Certified Engine Operated According to Manufacturer.* If you operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, you must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If you adjust engine settings according to and consistent with the manufacturer's instructions, your stationary SI internal combustion engine will not be considered out of compliance. [40 CFR 60.4243(a)(1)]
 - (2) *Certified Engine Not Operated According to Manufacturer.* If you do not operate and maintain the certified stationary SI internal combustion engine and control device according to the manufacturer's emission-related written instructions, your engine will be considered a non-certified engine, and you must demonstrate compliance by keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions, but no performance testing is required. [40 CFR 60.4243(a)(2) & (2)(i)]
 - b. *Having Purchased a Non-Certified Engine.* If you purchased a non-certified engine or you do not operate and maintain your certified stationary SI internal combustion engine and control device according to the manufacturer's written emission-related instructions, you must conduct an initial test to demonstrate compliance with the emissions standards specified in Conditions **I.3.** and **I.4.** according to Specific Conditions **I.8.** and **I.9.**, but you are not required to conduct subsequent performance testing unless the stationary engine is rebuilt or undergoes major repair or maintenance. A rebuilt stationary SI ICE means an engine that has been rebuilt as that term is defined in 40 CFR 94.11(a). In addition, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. and [40 CFR 60.4243(b)(2), (b)(2)(i) & (e)]

Testing Requirements

- I.8. Test Procedures:** When required, performance tests must follow the procedures below.
- a. Each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and Specific Condition **I.9.**
 - b. Performance tests during periods of startup, shutdown, or malfunction are not allowed, as specified in 40 CFR 60.8(c). If the engine is non-operational, it is not necessary to startup the engine solely to conduct a performance test; however, the performance test must be conducted immediately upon startup of the engine.
 - c. Three separate test runs must be conducted for each performance test required, as specified in 40 CFR 60.8(f). Each test run must be conducted within 10 percent of 100 percent peak (or the highest achievable) load and last at least 1 hour.
 - d. To determine compliance with the NO_x mass per unit output emission limitation, the concentration of NO_x in the engine exhaust should be converted using Equation 1, below:

$$ER = \frac{C_1 \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 1})$$

Where:

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 024

ER = Emission rate of NO_x in g/HP-hr.

C_d = Measured NO_x concentration in parts per million by volume (ppmv).

1.912×10⁻³ = Conversion constant for ppm NO_x to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

- e. To determine compliance with the **CO** mass per unit output emission limitation, the concentration of CO in the engine exhaust should be converted using Equation 2, below:

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \quad (\text{Eq. 2})$$

Where:

ER = Emission rate of CO in g/HP-hr.

C_d = Measured CO concentration in ppmv.

1.164×10⁻³ = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

[40 CFR 60.4243(b)(2) & 40 CFR 60.4244]

- I.9. Requirements for Performance Tests.** When required to demonstrate compliance with the emissions standards specified in Specific Conditions **I.3.** and **I.4.**, the following requirements must be met:

- a. *NO_x*.

- (1) Select the sampling port location and the number of traverse points using Method 1 or 1A of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005)^a. If using a control device, the sampling site must be located at the outlet of the control device.
- (2) Determine the O₂ concentration of the stationary internal combustion engine exhaust at the sampling port location using Method 3, 3A, or 3B^b of 40 CFR part 60, appendix A or ASTM Method D6522–00(2005)^a. Measurements to determine O₂ concentration must be made at the same time as the measurements for NO_x concentration.
- (3) Determine the exhaust flowrate of the stationary internal combustion engine exhaust using Method 2 or 19 of 40 CFR Part 60.
- (4) If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location using Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see 40 CFR 60.17). Measurements to determine moisture must be made at the same time as the measurement for NO_x concentration.
- (5) Measure NO_x at the exhaust of the stationary internal combustion engine using Method 7E of 40 CFR part 60, appendix A, Method D6522–00(2005)^a, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348–03 (incorporated by reference, see §60.17). Results of this test consist of the average of the three 1-hour or longer runs.

- b. *CO*.

- (1) Select the sampling port location and the number of traverse points using Method 1 or 1A of 40 CFR part 60, Appendix A. If using a control device, the sampling site must be located at the outlet of the control device.
- (2) Determine the O₂ concentration of the stationary internal combustion engine exhaust at the sampling port location using Method 3, 3A, or 3B^b of 40 CFR part 60, Appendix A or ASTM Method D6522–00(2005)^a. Measurements to determine O₂ concentration must be made at the same time as the measurements for CO concentration.
- (3) Determine the exhaust flowrate of the stationary internal combustion engine exhaust using Method 2 or 19 of 40 CFR part 60.

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 024

- (4) If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location using Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63, appendix A, or ASTM D6348-03 (incorporated by reference, see 40 CFR 60.17). Measurements to determine moisture must be made at the same time as the measurement for CO concentration.
- (5) Measure CO at the exhaust of the stationary internal combustion engine using Method 10 of 40 CFR part 60, Appendix A, ASTM Method D6522-00(2005)^a, Method 320 of 40 CFR part 63, Appendix A, or ASTM D 6348-03 (incorporated by reference, see 40 CFR 60.17). Results of this test consist of the average of the three 1-hour or longer runs.

Note a: You may petition the Administrator for approval to use alternative methods for portable analyzer. [40 CFR 60.4243(b)(2)(i), 40 CFR 60.4244, and Table 2]

I.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.]

Notification, Records and Reports

I.11. Hours of Operation Records. The owner or operator must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter and 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. [40 CFR 60.4245(b)]

I.12. Maintenance Records. To demonstrate conformance with the manufacturer's written instructions for maintaining the certified engine and to document when compliance testing was performed pursuant to Specific Conditions **I.9.** and **I.10.** (if tests are applicable), the owner and operator must keep records of the following information:

- a. *Notifications.* All notifications submitted to comply with 40 CFR 60, Subpart JJJJ, as specified in this subsection of the permit, and all documentation supporting any notification.
- b. *Manufacturer Data.* Engine manufacturer data indicating compliance with the standards.
- c. *Manufacturer Instructions.* A copy of the manufacturer's written instructions for operation and maintenance of the certified engine.
- b. *Maintenance Log.* Maintenance conducted on the engine. A written maintenance log detailing the date and type of maintenance performed on the engine, as well as any deviations from the manufacturer's written instructions.
- c. *Manufacturer Certification Documentation.* If the emissions unit is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards and information as required in 40 CFR parts 90, 1048, 1054, and 1060, as applicable.
- d. *Documentation showing Compliance with Standards.* If the SI ICE is not a certified engine or is a certified engine operating in a non-certified manner and subject to Specific Condition **I.7.a.(2)**, documentation that the engine meets the emission standards.

[Rule 62-213.440(1), F.A.C., and 40 CFR 60.4245(a)]

I.13. Performance Test Reports. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test within 60 days after the test has been completed. [40 CFR 60.6245(d)]

I.14. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

SECTION III. EMISSIONS UNITS AND SPECIFIC CONDITIONS.

Subsection I. Emissions Unit 024

General Provisions

I.15. 40 CFR 60 Subpart A, General Provisions. The owner or operator shall comply with the applicable requirements of 40 CFR 60 Subpart A, General Provisions, as specified below.

[Link to Subpart A](#) and [Link to Subpart JJJ](#)

General provisions citation	Subject of citation	Explanation
§ 60.1	General applicability of the General Provisions	
§ 60.2	Definitions	Additional terms defined in § 60.4248.
§ 60.3	Units and abbreviations	
§ 60.4	Address	
§ 60.5	Determination of construction or modification	
§ 60.6	Review of plans	
§ 60.7	Notification and Recordkeeping	Except that § 60.7 only applies as specified in § 60.4245.
§ 60.8	Performance tests	Except that § 60.8 only applies to owners and operators who are subject to performance testing in subpart JJJ.
§ 60.9	Availability of information	
§ 60.10	State Authority	
§ 60.11	Compliance with standards and maintenance requirements	Requirements are specified in subpart JJJ.
§ 60.12	Circumvention	
§ 60.14	Modification	
§ 60.15	Reconstruction	
§ 60.16	Priority list	
§ 60.17	Incorporations by reference	
§ 60.19	General notification and reporting requirements	

[40 CFR 60.4245 (a)]

SECTION IV. ACID RAIN PART.

Phase II Acid Rain

Operated by: Florida Power and Light Company

Plant: Martin Power Plant

ORIS Code: 6043

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

E.U. ID No.	EPA Unit ID#	Brief Description
001	PMR1	Fossil Fuel Fired Steam Generator #1
002	PMR2	Fossil Fuel Fired Steam Generator #2
003	HRSG3A	Combustion Turbine with Heat Recovery Steam Generator (CT 3A)
004	HRSG3B	Combustion Turbine with Heat Recovery Steam Generator (CT 3B)
005	HRSG4A	Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
006	HRSG4B	Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
011	PMR8A	Combustion Turbine with Heat Recovery Steam Generator (CT 8A)
012	PMR8B	Combustion Turbine with Heat Recovery Steam Generator (CT 8B)
017	PMR8C	Combustion Turbine with Heat Recovery Steam Generator (CT 8C)
018	PMR8D	Combustion Turbine with Heat Recovery Steam Generator (CT 8D)

AR.1. Phase II Application. The Phase II Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:

DEP Form No. 62-210.900(1)(a), dated 02/27/13, received 05/14/13.

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

AR.2. Sulfur Dioxide (SO₂) Emission Allowances. SO₂ emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(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.]

AR.3. Comments, Notes, and Justifications: None.

SECTION IV. ACID RAIN PART.

Phase II Acid Rain

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 ; MARTIN	State Florida	006043 ORIS/Plant Code
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STEP 2

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

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

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

a	b	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
PMR1	NO	Yes		
PMR2	NO	Yes		
HRSG3A	NO	Yes		
HRSG3B	NO	Yes		
HRSG4A	NO	Yes		
HRSG4B	NO	Yes		
PMR8A	NO	Yes		
PMR8B	NO	Yes		
PMR8C	NO	Yes		
PMR8D	NO	Yes		

SECTION IV. ACID RAIN PART.

Phase II Acid Rain

Plant Name (from STEP 1) **MARTIN**

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 SO₂ Opt-in unit, a monitoring plan for each SO₂ Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO₂ Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

- (1) The owners and operators of each source and each Acid Rain unit at the source shall:
 - (i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
 - (ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
- (2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
- (3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
 - (i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(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

SECTION IV. ACID RAIN PART.

Phase II Acid Rain

Plant Name (from STEP 1) **MARTIN**

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 72.7 or 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 SO₂ Opt-in
units only.

In column "f" enter
the unit ID# for
every SO₂ 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

SECTION IV. ACID RAIN PART.

Phase II Acid Rain

Plant Name (from STEP 1) MARTIN

STEP 5

For SO₂ Opt-in units only.
(Not required for SO₂ Opt-in renewal applications.)

In column "i" enter the unit ID# for every SO₂ 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 SO₂ 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 SO₂ 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."

STEP 7

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

Signature		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.		
Name Christian Kiernan	Title PGD Technical Services General/Designated Representative	
Owner Company Name Florida Power & Light		
Phone 561-691-2781	E-mail address: christian.kiernan@fpl.com	
Signature 	Date 2/27/2013	

SECTION V. CAIR PART.
Clean Air Interstate Rule Provisions

Clean Air Interstate Rule (CAIR).

Operated by: Florida Power and Light Company

Plant: Martin Power Plant

ORIS Code: 6043

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

E.U. ID No.	EPA Unit ID#	Brief Description
001	PMR1	Fossil Fuel Fired Steam Generator #1
002	PMR2	Fossil Fuel Fired Steam Generator #2
003	HRSG3A	Combustion Turbine with Heat Recovery Steam Generator (CT 3A)
004	HRSG3B	Combustion Turbine with Heat Recovery Steam Generator (CT 3B)
005	HRSG4A	Combustion Turbine with Heat Recovery Steam Generator (CT 4A)
006	HRSG4B	Combustion Turbine with Heat Recovery Steam Generator (CT 4B)
011	PMR8A	Combustion Turbine with Heat Recovery Steam Generator (CT 8A)
012	PMR8B	Combustion Turbine with Heat Recovery Steam Generator (CT 8B)
017	PMR8C	Combustion Turbine with Heat Recovery Steam Generator (CT 8C)
018	PMR8D	Combustion Turbine with Heat Recovery Steam Generator (CT 8D)

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)) dated February 27, 2013, which is attached below. [Chapter 62-213, F.A.C. and Rule 62-210.200, F.A.C.]

SECTION V. CAIR PART.
Clean Air Interstate Rule Provisions

Plant Name (from STEP 1) MARTIN

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.

SECTION V. CAIR PART.
Clean Air Interstate Rule Provisions

Plant Name (from STEP 1) **MARTIN**

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 SO₂ TRADING PROGRAM

CAIR Part Requirements.

- (1) The CAIR designated representative of each CAIR SO₂ source and each CAIR SO₂ 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 SO₂ source and each CAIR SO₂ 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 SO₂ source and each SO₂ 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 SO₂ source with the following CAIR SO₂ Emission Requirements.

SO₂ Emission Requirements.

- (1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR SO₂ source and each CAIR SO₂ unit at the source shall hold, in the source's compliance account, a tonnage equivalent in CAIR SO₂ 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 SO₂ units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHH.
- (2) A CAIR SO₂ 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 SO₂ allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the SO₂ Emission Requirements, for a control period in a calendar year before the year for which the CAIR SO₂ allowance was allocated.
- (4) CAIR SO₂ allowances shall be held in, deducted from, or transferred into or among CAIR SO₂ Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFF and GGG.
- (5) A CAIR SO₂ allowance is a limited authorization to emit sulfur dioxide in accordance with the CAIR SO₂ Trading Program. No provision of the CAIR SO₂ 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 SO₂ 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 SO₂ allowance to or from a CAIR SO₂ unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR SO₂ unit.

Excess Emissions Requirements.

- If a CAIR SO₂ source emits SO₂ during any control period in excess of the CAIR SO₂ emissions limitation, then:
- (1) The owners and operators of the source and each CAIR SO₂ unit at the source shall surrender the CAIR SO₂ 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.

SECTION V. CAIR PART.
Clean Air Interstate Rule Provisions

Plant Name (from STEP 1) **MARTIN**

STEP 3,
Continued

Recordkeeping and Reporting Requirements.

- (1) Unless otherwise provided, the owners and operators of the CAIR SO₂ source and each CAIR SO₂ 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 SO₂ 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 SO₂ Trading Program.
 - (iv) Copies of all documents used to complete a CAIR Part form and any other submission under the CAIR SO₂ Trading Program or to demonstrate compliance with the requirements of the CAIR SO₂ Trading Program.
- (2) The CAIR designated representative of a CAIR SO₂ source and each CAIR SO₂ unit at the source shall submit the reports required under the CAIR SO₂ Trading Program, including those under 40 CFR Part 96, Subpart HHH.

Liability.

- (1) Each CAIR SO₂ source and each CAIR SO₂ unit shall meet the requirements of the CAIR SO₂ Trading Program.
- (2) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ source or the CAIR designated representative of a CAIR SO₂ source shall also apply to the owners and operators of such source and of the CAIR SO₂ units at the source.
- (3) Any provision of the CAIR SO₂ Trading Program that applies to a CAIR SO₂ unit or the CAIR designated representative of a CAIR SO₂ unit shall also apply to the owners and operators of such unit.

Effect on Other Authorities.

No provision of the CAIR SO₂ 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 SO₂ source or CAIR SO₂ 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_x 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.

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- (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.

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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

Certification (for designated representative or alternate designated representative only)

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

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.

Name CHRISTIAN KIERNAN	Title PGD GENERAL MANAGER/DESIGNATED REPRESENTATIVE
Company Owner Name FLORIDA POWER & LIGHT	
Phone 561-691-2781	E-mail Address CHRISTIAN.KIERNAN@FPL.COM
Signature 	Date 2/27/2013

SECTION VI. APPENDICES.

The Following Appendices Are Enforceable As Allowed By Rule Applicability And Are Supporting Documents For The Air Operating Permit:

Appendix A. Citation Formats and Glossary of Common Terms

Appendix CFMS: Custom Fuel Monitoring Schedule

Appendix CP: Compliance Plan

Appendix I: List of Insignificant Emissions Units and/or Activities

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

Appendix NSPS Subpart A: Subpart A - General Provisions for 40 CFR 60

Appendix NSPS Subpart D: Subpart D – Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction is Commenced After August 17, 1971

Appendix NSPS Subpart Da: Subpart Da – Standards of Performance for Electric Utility Steam Generating Units for which construction is commenced after September 18, 1978

Appendix NSPS Subpart Dc: Subpart Dc – Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

Appendix NSPS Subpart GG: Subpart GG – Standards of Performance for Stationary Gas Turbines

Appendix RR: Facility-Wide Reporting Requirements

Appendix TR: Facility-Wide Testing Requirements

Appendix TV: Title V General Conditions

Appendix U. List of Unregulated Emissions Units and/or Activities

Referenced Attachments