Florida Power Corporation dba Progress Energy Florida, Inc.
University of Florida Cogeneration Plant
Facility ID No. 0010001
Alachua County

Title V Air Operation Permit Revision

Permit No. 0010001-013-AV
(Revision of Title V Air Operation Permit No. 0010001-009-AV)

Permitting Authority

State of Florida
Department of Environmental Protection
Division of Air Resource Management
Office of Permitting and Compliance
2600 Blair Stone Road
Mail Station #5505
Tallahassee, Florida 32399-2400

Telephone: 850/717-9000
Fax: 850/717-9097

Compliance Authority

State of Florida
Department of Environmental Protection
Northeast District Office
7777 Baymeadows Way West, Suite B-100
Jacksonville, Florida 32256

Telephone: 904/256-1700
Fax: 904/448-4362

Title V Air Operation Permit Revision

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FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

BOB MARTINEZ CENTER
2600 BLAIRSTONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

JENNIFER CARROLL
LT. GOVERNOR

HERSCHEL T. VINYARD
JR.
SECRETARY

PERMITTEE:
Florida Power Corporation
dba Progress Energy Florida, Inc.
1928 Mowry Road, Building 82
University of Florida
Gainesville, Florida 32611-2295

Permit No. 0010001-013-AV
University of Florida Cogeneration Plant
Facility ID No. 0010001
Title V Air Operation Permit Revision

The purpose of this permit is to revise the Title V Air Operation Permit for the above referenced facility by incorporating the permitting conditions established in Air Construction Permit 0010001-011-AC/PSD-FL-181B. The existing University of Florida Cogeneration Plant is located in Alachua County on Mowry Road at Building 82, Gainesville, Florida. UTM Coordinates are: Zone 17, 369.39 km East and 3279.29 km North. Latitude is: 29° 38′ 18" North; and, Longitude is: 82° 21′ 46" West.

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

0010001-009-AV Effective Date: January 1, 2010
0010001-013-AV Revision Effective Date: November 15, 2012
Optional Early renewal Application Due Date: May 20, 2013
Renewal Application Due Date: May 20, 2014
Expiration Date: December 31, 2014

Executed in Tallahassee, Florida.

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

JK/sa/kl

Subsection A. Facility Description.

This facility consists of one nominal 48 MW General Electric (GE) LM6000-PC-ESPRINT Combustion Turbine (CT), one Duct Burner (DB) with a Heat Recovery Steam Generator (HRSG), and two Steam Boilers. The CT utilizes spray intercooling to maximize throughput, thus reducing supplemental firing in the duct burner for meeting steam and power requirements. Emissions from the CT and DB are vented through a common stack. NO_X emissions are controlled with steam injection. The steam boilers, each having a separate exhaust stack, are used only as back-up sources. Compliance is demonstrated with a NO_X CEMS.

Subsection B. Summary of Emissions Units.

EU No.	Brief Description
Regulated Emissions Units	
002	No. 4 Steam Boiler
003	No. 5 Steam Boiler
005	Duct Burner System with HRSG
007	Combustion Turbine

Also, included in this permit are miscellaneous insignificant emissions units and/or activities.

Subsection C. Applicable Regulations.

Based on the Title V Air Operation Renewal application received May 15, 2009, this facility is not a major source of hazardous air pollutants (HAPs). Because this facility operates stationary reciprocating internal combustion engines, it is subject to regulation under 40 CFR 63, Subpart ZZZZ - National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines Appendices 40 CFR 63, Subpart A and 40 CFR 63, Subpart ZZZZ, have been administratively added to the Appendix Section as applicable requirements. Detailed specific conditions will be established (as applicable) within the body of the permit for these regulated emissions units at the time of the next renewal. This facility is classified as a PSD major facility. A summary of applicable regulations is shown in the following table.

Regulation	EU No(s).
40 CFR 60, Subpart A, NSPS General Provisions	005, 007
40 CFR 60, Subpart Db	005
40 CFR 60, Subpart GG	007
40 CFR 75 Acid Rain Monitoring Provisions	007
62-296.406, F.A.C.	002, 003, 005
62-296.470, F.A.C. – Clean Air Interstate Rule (CAIR)	005, 007

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

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

Emissions and Controls

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

FW3. General Volatile Organic Compounds (VOC) Emissions or Organic Solvents (OS) Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed unnecessary and ordered by the Department. Nothing is deemed necessary and ordered at this time. [Rule 62-296.320(1), F.A.C.]

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. 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. Maintenance of paved areas as needed;
b. Regular mowing of grass and care of vegetation;
c. Limiting access to plant property by unnecessary vehicles; and,
d. Additional or alternative activities may be utilized to minimize unconfined particulate emissions.
e. Covering and/or application of water or chemicals to the affected areas, as necessary.

[Rule 62-296.320(4)(c), F.A.C.; proposed by applicant in Title V air operation permit renewal application received May 15, 2009; and, Permit No. 0010001-003-AC.]

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.]

FW7. Annual Emissions Fee Form and Fee. The annual Title V emissions fees are due (postmarked) by March 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/emission/tvfee.htm. [Rule 62-213.205, F.A.C.]

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.]

FW9. Prevention of Accidental Releases (Section 112(r) of CAA). If and when the facility becomes subject to 112(r), the permittee shall:

a. Submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to: RMP Reporting Center, Post Office Box 10162, Fairfax, VA 22038, Telephone: (703) 227-7650.

b. Submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

Other Requirements

FW10. Facility-Wide Annual NO_X Emission Cap. NO_X emissions shall not exceed 185.3 tons per year for any calendar year for all emissions units regulated by this air construction permit (EU 002, 003, 005 and 007). The backup steam boilers may operate individually or in combination provided NO_X emissions from all emissions units regulated by this permit comply with this facility-wide NO_X emissions cap. [PSD avoidance pursuant to 62-212.400(12), F.A.C., and Permit No. 0010001-011-AC/PSD-FL-181B]

FW11. Annual Facility-wide NOx Emissions Report. ***By April 1st of each year***, the permittee shall report the facility-wide annual NOx emissions along with the Annual Operating Report. To demonstrate compliance with the facility-wide annual NOx emissions cap, the permittee shall calculate and record annual emissions as follows:

a. Annual NO_X emissions from the combined cycle combustion turbine and duct burner system shall be determined by data collected from the NOx CEMS.

b. Annual NO_X emissions from the backup steam boilers shall be determined based on the annual fuel consumption rate and either the following NOx emissions factors or more recent stack test data (at the option of the permittee).

(1) No. 4 Steam Boiler: 0.0745 lb NOx/MMBtu (gas) and 0.0815 lb NOx/MMBtu (oil), and

(2) No. 5 Steam Boiler: 0.110 lb NOx/MMBtu (gas) and 0.1070 lb NOx/MMBtu (oil).

c. If the facility-wide annual NO_X emissions exceed the NO_X emissions cap, the permittee shall notify the Compliance Authority within three working days of discovery.

[Permit No. 0010001-011-AC/PSD-FL-181B]

FW12. Modifications. The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 & 62-212, F.A.C.]

FW13. Recordkeeping and Reporting. The permittee shall maintain the required fuel use records and include the total NO_X emission calculation in each annual operating report; and the records shall be retained for a five year period. [Rules 62-212.400(12) & 62-213.440, F.A.C]

FW14. Fuel Consumption Rates Monthly Monitoring. By the 15th calendar day of each month, the permittee shall record the monthly fuel consumption rates of the duct burner and backup steam boilers. The written log shall summarize the fuel consumption for the previous month of operation and the previous 12 months of operation. Information may be recorded and stored as an electronic file. Records shall be available for inspection and printing within at least three days of a request by the Department or Compliance Authority. [Permit No. 0010001-011-AC/PSD-FL-181B]

Subsection A. Emissions Units 002 and 003

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

EU No.	Brief Description
002	No. 4 Steam Boiler
003	No. 5 Steam Boiler

The steam boilers are used only as back-up sources. Each boiler has its own exhaust stack. The maximum heat input rate for the No. 4 steam boiler is 69.6 MMBtu/hr. The maximum heat input is based on permitted firing limits of 68,000 cubic feet (cf) of natural gas per hour and 444 gallons per hour of No. 2 fuel oil. The maximum heat input rate for the No. 5 steam boiler is 168 MMBtu/hr. The maximum heat input is based on permit firing limits of 164,000 cf of natural gas per hour and 1,067 gallons per hour of No. 2 fuel oil. The emission units began commercial service in January 1976. No. 4 steam boiler has a stack height of 82 feet, exit diameter of 5 feet, exit temperature of 350 °F and actual volumetric flow rate of 13,500 acfm. No. 5 steam boiler has a stack height of 82 feet, exit diameter of 6 feet, exit temperature of 400 °F and actual volumetric flow rate of 56,250 acfm. The emissions units are regulated under permit Nos. 0010001-011-AC/PSD-FL-181B; and, Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less than 250 MMBtu per Hour Heat Input.

Essential Potential to Emit (PTE) Parameters

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

EU No.	MMBtu/hr Heat Input	Fuel Type
002	69.6	No. 2 Fuel Oil Natural Gas
003	168	No. 2 Fuel Oil Natural Gas

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), 62-214.330 & 62-296.405, F.A.C.; and, Permit No. 0010001-011-AC/PSD-FL-181(B)]

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

A.3. Methods of Operation - Fuels. The fuels that are allowed to be burned in these units are:

a. No. 2 distillate fuel oil with a maximum sulfur content of 0.5% by weight, and
b. Natural gas with a maximum sulfur content of 2 grains of sulfur per 100 scf of natural gas (annual average based on vendor data).

[Rules 62-212.400(12), F.A.C. and 62-213.410, F.A.C., and Permit No. 0010001-011-AC/PSD-FL-181B]

A.4. Hours of Operation. The boilers may be operated as necessary for backup to the CT and DB, and as long as the total NO_X emissions from the four emission units (EU Nos. 002, 003, 005 & 007) at the facility does not exceed 185.3 TPY for any calendar year (see Facility-wide Condition **FW10.**). Emission factors pursuant to Specific Condition **A.18.** shall be applied to the fuel consumed by Boilers Nos. 4 and 5 to determine compliance with the facility cap. See Facility-Wide Condition **FW10**. [Rules 62-212.400(12), F.A.C. and 62-213.410, F.A.C., and Permit No. 0010001-011-AC/PSD-FL-181B]

Emission Limitations and Standards

Unless otherwise specified, the averaging time(s) for Specific Conditions **A.5 – A.9.** are based on the specified averaging time of the applicable test method.

A.5. Emissions Standards – Backup Steam Boilers. To control PM and SO_2 emissions, the backup steam boilers shall fire only natural gas or No. 2 fuel oil. As determined by EPA Method 9, visible emissions when firing any authorized fuel shall not exceed 20% opacity except for one, 6-minute block average per hour not to exceed 27% opacity. [Rule 62-296.406(BACT), F.A.C., and Permit No. 0010001-011-AC/PSD-FL-181B]

A.6. Visible Emissions - Soot Blowing and Load Change. Visible emissions shall not exceed 60 percent opacity during the 3-hours in any 24 hour period of excess emissions allowed for boiler cleaning (soot blowing) and load change. A load change occurs when the operational capacity of a unit is in the 10 percent to 100 percent capacity range, other than startup or shutdown, which exceeds 10 percent of the unit's rated capacity and which occurs at a rate of 0.5 percent per minute or more. [Rule 62-210.700(3), F.A.C.]

A.7. Particulate Matter. Particulate matter emissions shall be controlled by the firing of natural gas and/or low sulfur content No. 2 fuel oil. [Rule 62-296.406(2), F.A.C., BACT]

A.8. Sulfur Dioxide. Sulfur dioxide emissions shall be controlled by firing natural gas and No. 2 fuel oil with a sulfur content that shall not exceed 0.5 percent, by weight. [Rule 62-296.406(3), F.A.C., BACT; and, Permit No. 0010001-011-AC/PSD-FL-181B]

A.9. Nitrogen Oxides. These emissions units are also subject to the facility-wide NO_X limit contained in Facility-wide Condition **FW10**. [Rule 62-212.400(12), F.A.C. and Permit No. 0010001-011-AC/PSD-FL-181B]

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.10. Excess Emissions From Malfunctions Allowed. Excess emissions due to malfunctions shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]

A.11. Excess Emissions From Startup or Shutdown Allowed. Excess emissions resulting from startup or shutdown shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2), F.A.C.]

A.12. 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

A.13. 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
5	Method for Determining Particulate Matter Emissions
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.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88	Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry, Standard Test Method for Sulfur in Petroleum Products by Energy-Dispersive X-Ray Fluorescence

Method	Description of Method and Comments
and ASTM D129-91, ASTM D1552 or equivalent method or the latest edition(s)	Spectroscopy, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method)
ASTM4084-82, D3246-81, D5504* or equivalent method or the latest edition(s)	Standard Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), Standard Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry

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. [Permit No. 0010001-011-AC/PSD-FL-181B; Rules 62-213.440 & 62-297.401, F.A.C.; and, *Applicant Request.]

A.14. Common Testing Requirements. Unless otherwise specified, tests shall be conducted in accordance with the requirements and procedures specified in Appendix TR, Facility-Wide Testing Requirements, of this permit. [Rule 62-297.310, F.A.C.]

A.15. Annual Compliance Tests. Except as provided for in Specific Condition **A.20**., during each federal fiscal year (October 1st to September 30th), each emissions unit (002 and 003) shall be tested to demonstrate compliance with the emissions standards for **VE**. Compliance with the liquid fuel sulfur limit shall be demonstrated through fuel sampling as specified in Specific Condition **A.19**. and the submission of an annual report detailing the results of the samples from the previous year. [Rules 62-213.440 and 62-297.310(7), F.A.C.]

A.16. Compliance Tests Prior to Renewal. Compliance tests shall be performed for **VE** prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **A.5.** and **A.6.** Compliance with the liquid fuel sulfur limit contained in Specific Condition **A.8.** shall be demonstrated through fuel sampling as specified in Specific Condition **A.19**. and the submission of an annual report detailing the results of the samples from the previous year. [Rules 62-210.300(2)(a), 62-213.440 and 62-297.310(7)(a), F.A.C.]

A.17. Visible emissions. The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C. [Rules 62-213.440 and 62-297.401, F.A.C.]

A.18. Nitrogen Oxides. A “lbs/hr” or "lbs/MMBtu" emissions factor for nitrogen oxides for each boiler and for each fuel type fired was established during the initial performance tests required by permit No. AC01-204652/PSD-FL-181. This emissions factor per fuel type shall be used in conjunction with the actual hours operated or total heat input in the previous year per fuel type to assess the nitrogen oxides contribution toward the facility cap of 185.3 TPY. See Specific Conditions **A.4.** and **FW10**. [Rules 62-210.200(PTE), 62-212.400(12), 62-213.440, 62-297.310(7), 62-297.401, F.A.C.]

A.19. Sulfur Dioxide - Sulfur Content. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by the vendor providing a fuel analysis upon each fuel delivery. The fuel sulfur content percent by weight, for liquid fuels shall be evaluated using either: ASTM D2622-92, ASTM D2494-90, both D4057-88 and ASTM D129-91, ASTM D1552 or equivalent method, or the latest edition(s). Current applicable alternative methods that are approved ASTM methods as adopted in Rule 62-297.440(1), F.A.C. are also acceptable. [Rules 62-213.440, F.A.C., 62-296.406(3), F.A.C., 62-297.440, F.A.C., BACT]

*{Permitting Note: The permittee may elect to perform on-site sampling analysis using the ASTM methods listed above and in accordance with Part 75 Appendix D (See Specific Condition **B.28.**) instead of relying upon the vendor’s delivery receipts.}*

A.20. Annual VE Test Waiver. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning:

a. only gaseous fuel(s); or
b. gaseous fuel(s) in combination with any amount of liquid fuel(s) for less than 400 hours per year; or
c. only liquid fuel(s) for less than 400 hours per year.

[Rule 62-297.310(7)(a)4., F.A.C.]

Recordkeeping and Reporting Requirements

A.21. The permittee shall maintain the required fuel use records and include the total NO_X emission calculation in each annual operating report. [Rule 62-213.440(1)(b), F.A.C.]

A.22. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements. [Rule 62-213.440(1)(b), F.A.C.]

A.23. Annual Facility-wide NOx Emissions Report: ***By April 1st of each year***, the permittee shall report the facility-wide annual NOx emissions along with the Annual Operating Report. To demonstrate compliance with the facility-wide annual NOx emissions cap, the permittee shall calculate and record annual emissions as follows:

a. Annual NOx emissions from the combined cycle combustion turbine and duct burner system shall be determined by data collected from the NOx CEMS.
b. Annual NOx emissions from the backup steam boilers shall be determined based on the annual fuel consumption rate and either the following NOx emissions factors or more recent stack test data (at the option of the permittee).
   (1) No. 4 Steam Boiler: 0.0745 lb NOx/MMBtu (gas) and 0.0815 lb NOx/MMBtu (oil), and
   (2) No. 5 Steam Boiler: 0.110 lb NOx/MMBtu (gas) and 0.1070 lb NOx/MMBtu (oil).
c. If the facility-wide annual NOx emissions exceed the NOx emissions cap, the permittee shall notify the Compliance Authority within three working days of discovery.

[Permit No. 0010001-011-AC/PSD-FL-181B]

Subsection B. Emissions Units 005 and 007

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

EU No.	Brief Description
007	GE LM6000-PC-ESPRINT Combustion Turbine
005	Duct Burner System associated with a Heat Recovery Steam Generator

Emissions units 007 and 005 are a combustion turbine (CT) with a duct burner-fired (DB) heat recovery steam generator (HRSG), respectively. The CT is a GE LM6000-PC-ESPRINT combustion turbine with a nominal generator rating of 48 megawatts (MW) fired with natural gas. The CT utilizes spray intercooling to maximize throughput, thus reducing supplemental firing in the duct burner for meeting steam and power requirements. The NO_X emissions are controlled with steam injection. The HRSG is equipped with a natural gas-fired duct burner. The DB is equipped with low-NO_X burners to control NO_X emissions. The CT and the DB exhaust through the same HRSG and common stack. The common stack has a height of 93 feet, exit diameter of 9.8 feet, exit temperature of 257 °F, and actual volumetric flow rate of 365,700 acfm, based on CT only @ 59 °F, 60% relative humidity at inlet, maximum dry standard flow rate of 216,956 dscfm, and exit velocity of 80.8 feet per second. The 48 MW CT began commercial service on September 24, 2002 (replacing the original 43 MW CT that was installed in 1994). The DB and HRSG began commercial service January 31, 1994.

{Permitting Note: The CT is regulated under Acid Rain, Phase II; CAIR; 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800(7)(b), F.A.C. The DB and HRSG are regulated under 40 CFR 60, Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.}

B.1. Combined Cycle Combustion Turbine System. The combustion turbine system generally consists of the following components: gas generator, accessory drive system, air inlet and filtration system, fuel delivery system, cooling system, lubrication system, control system, starting system and exhaust system with stack. This aero-derivative gas turbine is designed with modular components to facilitate quick repairs. Common "wear items" include compressor vanes, turbine nozzles, compressor blades, turbine blades, fuel nozzles, combustion chambers, seals, and shaft packing. The concept of modular design extends to the complete replacement of major components of the gas turbine. Replacements are authorized provided the following requirements are met.

a. The "hot section" components (e.g., combustors and high-speed turbines including blades, nozzles and other components) shall be replaced with equivalent "like-kind" equipment. Replacement components shall not increase the maximum heat input rate, capacity or emissions from the combustion turbine. Replacement components shall be designed to achieve and shall achieve the emissions standards specified in this permit or better.
b. Within 90 days of replacing a gas generator, the permittee shall conduct emissions stack tests to demonstrate compliance with the emission standards for CO and visible emissions. The permittee shall comply with the requirements for notification, test methods, test procedures, and reporting required by this permit.
c. To up-rate the gas turbine or increase the maximum heat input rate or capacity, the permittee shall submit an application for an air construction permit.

[Permit No. 0010001-011-AC/PSD-FL-181B*]*

B.2. Federal Rule Requirements. (See Section VI. – Appendices.)

a. *Combustion Turbine*. In addition to the requirements listed below, the combustion turbine shall also comply with all of the terms and requirements of 40 CFR 60, Subpart GG - Standards Of Performance For Stationary Gas Turbines (attached as Appendix GG - Standards Of Performance For Stationary Gas Turbines).

b. *Duct Burner*. In addition to the requirements listed below, the duct burner shall also comply with all of the terms and requirements of 40 CFR 60, Subpart Db - Standards Of Performance For Industrial-Commercial-Institutional Steam Generating Units (attached as Appendix Db - Standards Of Performance For Industrial-Commercial-Institutional Steam Generating Units).

c. *CT and DB*. In addition to the requirements listed below, the CT and the DB shall also comply with all of the applicable general provisions for NSPS units contained in 40 CFR 60, Subpart A – General Provisions.

[Permit No. 0010001-011-AC/PSD-FL-181B]

Essential Potential to Emit (PTE) Parameters

B.3. Permitted Capacity.

a. *Combustion Turbine*. The heat input to the combustion turbine shall not exceed the values defined by the manufacturer's performance curve of heat input rate vs. compressor inlet temperature. The maximum heat input limits are based on the lower heating value (LHV) of natural gas, 100% load and ambient conditions of 60% relative humidity and 14.7 psia. The maximum heat input rates will vary depending upon ambient conditions, the combustion turbine characteristics and the demand.
{Permitting Note: The maximum design heat input rate to the combustion turbine is 480 MMBtu/hour for a compressor inlet temperature of 59°F. See the turbine manufacturer's performance curve of heat input vs. compressor inlet temperature curve in Appendix HI – Heat Input Rate vs. Compressor Inlet Temperature.}

b. *Duct Burner*. The maximum design heat input to the duct burner system is 188 MMBtu/hour of natural gas. The duct burner shall not fire more than 519.5 million ft^3/year of natural gas based on the lower heating value (LHV) of 950 Btu/ft^3.

[Rules 62-4.160(2), 62-204.800, 62-210.200(PTE), F.A.C., Permit No. 0010001-011-AC/PSD-FL-181B]

B.4. Emissions Unit Operating Rate Limitation After Testing. See the related testing provisions in Appendix TR, Facility-wide Testing Requirements. [Rule 62-297.310(2), F.A.C.]

B.5. Methods of Operation – Fuels.

a. *Combustion Turbine.* The only fuel that is allowed to be burned in the CT is natural gas with a maximum sulfur content of 2 grains of sulfur per 100 scf of natural gas (annual average based on vendor data).

b. *Duct Burner.*
   (1) The only fuel that is allowed to be burned in the DB is natural gas with a maximum sulfur content of 2 grains of sulfur per 100 scf of natural gas (annual average based on vendor data).
   (2) The maximum consumption for natural gas in the DB is limited to 519.5 million ft^3/yr.

[Rule 62-213.410, F.A.C. and Permit No. 0010001-011-AC/PSD-FL-181B]

B.6. Hours of Operation.

a. *Combustion Turbine:* Continuously (i.e. 8,760 hours per year).

b. *Duct Burner*. Continuously (i.e. 8,760 hours per year).

[Rule 62-210.200(PTE), F.A.C. and Permit No. 0010001-011-AC/PSD-FL-181B]

Control Technology

B.7. Combustion Turbine – Steam Injection. A steam injection system shall be installed to reduce NOx emissions from the combustion turbine exhaust. In accordance with 40 CFR 60.334, the permittee shall install and operate a continuous monitoring system to monitor and record the ratio of steam to fuel being fired in the combustion turbine. The permittee shall establish the steam-to-fuel ratio that demonstrates compliance with the emissions standards of this permit by correlating with data collected by the NOx CEMS. When the NOx CEMS is down, the permittee shall operate at a steam-to-fuel injection rate that demonstrates compliance. [Rule 62-4.070(3), F.A.C.; 40 CFR 60, Subpart GG; and, Permit No. 0010001-011-AC/PSD-FL-181B]

Emission Limitations and Standards

Unless otherwise specified, the averaging times for Specific Conditions **B.8. - B.12** are based on the specified averaging time of the applicable test method.

B.8. Emissions Standards – Combined Cycle Combustion Turbine with Duct Burner.

a. *Carbon Monoxide (CO) Emissions*:

(1) As determined by EPA Method 10, CO emissions from the combustion turbine shall not exceed 36.0 ppmvd corrected to 15% oxygen. *{Permitting Note: This is equivalent to 35.8 lb/hour at a compressor inlet temperature of 59°F.}*

(2) As determined by EPA Method 10, CO emissions from the duct burner shall not exceed 0.15 lb/MMBtu and 28.1 lb/hour.

b. *Nitrogen Oxides (NOx) Emissions*:

(1) As determined by CEMS, NOx emissions from the combustion turbine shall not exceed 39.6 lb/hour with the duct burner "off" and 58.3 lb/hour with the duct burner "on", based on 30-day rolling averages. *{Permitting Note: The basis for the NO_X limit on the combustion turbine is 25 ppmvd corrected to 15% oxygen as provided by the vendor.}*

(2) As determined by CEMS, NOx emissions from the combustion turbine shall not exceed the applicable NSPS emissions standard in 40 CFR 60.332:

$$STD = 75 \text{ ppmvd corrected to 15\% oxygen} \frac{(14.4)}{(8.8)} = 123 \text{ ppmvd corrected to 15\% oxygen}$$

where:

STD = allowable NOx emissions standard corrected to ISO conditions based on a 4-hour rolling CEMS average. [40 CFR 60.334]

Y = 8.8 kilojoules per watt hour (kJ/W-hr) based on 950 Btu/SCF (LHV) for natural gas, which is the manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt-hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kJ/W-hr.

There is no NO_X emission allowance for fuel-bound nitrogen for natural gas. [40 CFR 60.334]

(3) As determined by CEMS data pursuant to 40 CFR 60.46b, NOx emissions from the duct burner shall not exceed 0.1 lb/MMBtu and 18.7 lb/hour based on 30-day rolling average. [40 CFR 60.44b]

c. *Sulfur Dioxide (SO_2) Emissions*: SO_2 emissions from the combustion turbine shall be controlled by firing natural gas with a maximum sulfur content of 2 grains of sulfur per 100 standard cubic feet of natural gas. This condition also ensures that the fuel contains less than 0.8% by weight pursuant to 40 CFR 60.333(b). [Rules 62-212.400(12) and 40 CFR 60.333]

d. *Visible Emissions*: As determined by EPA Method 9, **v**isible emissions shall not exceed 10% opacity from the combustion turbine with or without the duct burner in operation.

[Permit No. 0010001-011-AC/PSD-FL-181B]

B.9. Visible Emissions.

a. *Combustion Turbine.* Visible emissions shall not exceed 10% opacity.

b. *Duct Burner.* Visible emissions shall not exceed 10% opacity.

c. *CT and DB.* Since the CT and DB are in series, the natural gas opacity standard is applicable when the CT or the CT and DB are in operation.

[Permit No. 0010001-011-AC/PSD-FL-181B]

B.10. NO_X Emissions. The combustion turbine and the duct burner are subject to the facility-wide NO_X limit of 185.3 TPY contained in Facility-wide Condition **FW10**. The NO_X emissions limits include oxides of nitrogen consisting of both nitric oxide (NO) and nitrogen dioxide (NO_2). By convention, total NO_X on a mass basis is

expressed as equivalent NO_2. NO_X concentration (ppm) is measured as NO by EPA stack sampling methods 7E and 20, and as NO_2 by the CEM analyzer. The NO_X concentration is converted to mass emissions by applying the molecular weight of NO_2 to the total flow rate. [Rules 62-212.400(2) & (12), F.A.C.: and, Permit No. 0010001-011-AC/PSD-FL-181B]

B.11. Particulate Matter. Particulate matter emissions from the duct burner shall be controlled by the firing of natural gas. [Rule 62-296.406(2), F.A.C.]

B.12. Sulfur Dioxide.

a. *Combustion Turbine.* SO_2 emissions shall not exceed 0.015 percent by volume at 15% O_2 and on a dry basis. The sulfur content of the natural gas shall not exceed 2 grain per 100 standard cubic feet of natural gas.

b. *Duct Burner*. Sulfur dioxide emissions from the duct burner shall be controlled by firing natural gas with a sulfur content not to exceed 2 grain per 100 standard cubic feet of natural gas.

[Rule 62-296.406(3), F.A.C.; 40 CFR 60.333(a); and, Permit No. 0010001-011-AC/PSD-FL-181B]

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.13. Excess Emissions Allowed. Best operational practices shall be used to minimize hourly emissions that may occur during episodes of startup, shutdown and malfunction. Excess emissions resulting from startup, shutdown, and malfunction shall be permitted providing: (1) best operational practices to minimize emissions are adhered to, and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. For the combined cycle combustion turbine with a 30-day NOx averaging period, this requirement shall mean the following. The 24-hour period shall be defined as the 24-hour block based on data collected from the NOx CEMS. If the NOx CEMS reports emissions in excess of the 30-day rolling average, the permittee may exclude up to two hours of excess emissions data caused by each startup, shutdown and malfunction during the 30-day period to determine compliance. No NOx emission data shall be excluded from the annual NOx emission caps. This requirement is not intended to limit the duration of a startup – only the amount of data that may be excluded from the 30-day compliance averaging period. If the 30-day rolling NOx emissions rate exceeds the standard, the permittee shall notify the Compliance Authority within one working day with a preliminary report of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. [Rule 62-210.700(1), F.A.C. and 0010001-011-AC/PSD-FL-181B]

B14. Excess Emissions From Startup or Shutdown of The Duct Burner Allowed. Excess emissions resulting from startup or shutdown of the duct burner shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized. [Rule 62-210.700(2)]

B.15. 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 are prohibited. These emissions shall be included in the compliance averages for NOx emissions. [Permit No. 0010001-011-AC/PSD-FL-181B]

Monitoring Requirements

B.16. Fuel Consumption Monitoring of Operations. The permittee shall monitor and record the rates of consumption of natural gas in accordance with the provisions of 40 CFR 75, Appendix D. The permittee shall monitor and record the operating rate of the combustion turbine 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 natural gas in accordance with the provisions of 40 CFR 75, Appendix D. [Permit No. 0010001-011-AC/PSD-FL-181B]

B.17. Fuel Consumption Rates Monthly Monitoring. By the15th calendar day of each month, the permittee shall record the monthly fuel consumption and hours of operation for the CT. The information shall be recorded in a verifiable manner and shall summarize the previous month of operation and the previous 12 months of operation. 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. [Permit No. 0010001-011-AC/PSD-FL-181B]

Continuous Monitoring Requirements

B.18. Continuous Operations Monitoring Systems. Continuous operations monitoring systems shall be operated and maintained in accordance with 40 CFR 60.334. The natural gas and steam injection flows to the cogeneration turbine along with the power output of the generator shall be metered and continuously recorded. The data shall be logged daily and maintained so that it can be provided to the Department upon request. [Permit No. 0010001-011-AC/PSD-FL-181B]

B.19. Continuous NO_X Emission Monitoring System. The owner or operator shall calibrate, maintain, and operate a continuous emission monitoring (CEM) system in the stack to measure and record the emissions of NO_X from the turbine and the duct burner in a manner sufficient to demonstrate compliance with the emission limits of this permit. The NO_X emission rate in lbs/hr and tons/yr from the cogeneration (CT and DB) stack shall be calculated using a continuous emissions monitoring (CEM) system, which is certified pursuant to 40 CFR 75, and used to determine lbs/MMBtu of NO_X. The CEM system shall be operated and maintained in accordance with the applicable requirements of 40 CFR 75, Subparts B and C. Missing data shall be substituted in a manner pursuant to 40 CFR 75, Subpart D. Recordkeeping and reporting shall be conducted pursuant to 40 CFR 75, Subparts F and G. Excess emissions pursuant to 40 CFR 60.334 shall be determined using the 40 CFR Part 75 CEM system. The oxygen content or the carbon dioxide (CO_2) content of the flue gas shall also be monitored at the location where NO_X is monitored to correct the measured NO_X emissions rates to 15% oxygen. [40 CFR 60, Subpart GG & 40 CFR 75; Rule 62-210.700, F.A.C.; Permit No. 0010001-011-AC/PSD-FL-181B; and, Applicant request]

B.20. Use of NO_X CEMS for CT and Duct Burner Compliance. The permittee has elected to demonstrate compliance with the CT and DB's NO_X emission limits using the NO_X CEMS with hourly heat input rates applied to actual operating hours as follows:

a. Since the CT and DB are in series, the allowable emissions for both emissions units shall be combined for ongoing compliance demonstration purposes. For the purpose of demonstrating ongoing compliance with the applicable combined emissions limits for both the CT and DB, using the stack CEMS, compliance is considered to occur when the NO_X emissions are less than or equal to:
   (1) 39.6 lbs/hr when only the CT is operating or,
   (2) 58.3 lbs/hr when both the CT and DB are operating and firing natural gas.

b. The daily rolling average compliance value shall be calculated based on the proportion of hours operated in a day (midnight to midnight) that the CT or both the CT and DB are operating. Any portion of an hour that the DB operates shall be recognized as an hour-period on the daily operation. For example, in a given daily timeframe, with 20 hours of CT operation only while firing natural gas and 4 hours of CT/DB operation while firing natural gas:

   Calculated Daily NO_X Emissions Value =
   [(39.6 lbs/hr x 20 hrs) + (58.3 lbs/hr x 4 hrs)]/24 hrs =
   42.72 lbs/hr daily NO_X emissions value

c. For the 30-day rolling average, this daily calculated emissions value will then be added to the previous 29-day period of daily calculated emission values and divided by 30 (days) to establish the 30-day average emissions value for comparing to the CEMS data over the same 30-day period.

Calculated 30-Day Average NO_X Emissions Value =
[42.72 lbs/day + "previous 29-daily emission values (lbs/day) summation"]/30-days =
lbs/30-day average NO_X emissions value

d. Compliance with the permitted NO_X emission limitation is considered satisfied as long as the NO_X emissions value from the stack CEMS is less than or equal to the calculated NO_X emissions value, averaged over the same 30-day period.

[Rule 62-212.400(12), F.A.C.; 40 CFR 60.44b(a)(4) & (i); and, Permit No. 0010001-011-AC/PSD-FL-181B]

Test Methods and Procedures

B.21. 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
5	Method for Determining Particulate Matter Emissions
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.}
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.)
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
ASTM D2622-92, ASTM D4294-90, or both ASTM D4057-88 and ASTM D129-91, ASTM D1552 or equivalent method or the latest edition(s)	Standard Test Method for Sulfur in Petroleum Products by Wavelength Dispersive X-ray Fluorescence Spectrometry, Standard Test Method for Sulfur in Petroleum Products by Energy-Dispersive X-Ray Fluorescence Spectroscopy, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, Standard Test Method for Sulfur in Petroleum Products (General Bomb Method), Standard Test Method for Sulfur in Petroleum Products (High-Temperature Method)
ASTM4084-82, D3246-81, D5504* or equivalent method or the latest edition(s)	Standard Method for Analysis of Hydrogen Sulfide in Gaseous Fuels (Lead Acetate Reaction Rate Method), Standard Method for Sulfur in Petroleum Gas by Oxidative Microcoulometry

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. [Permit No. 0010001-011-AC/PSD-FL-181B; Rules 62-213.440 and 62-297.401, F.A.C.; and, *Applicant Request.]

B.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(7), F.A.C.]

B.23. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), the combined cycle combustion turbine system shall be tested to demonstrate compliance with the CO and visible emissions standards. Due to safety considerations, stack testing while firing the duct burner when there is no demand for

steam would require dumping excess steam, which presents a safety issue given the existing configuration. Therefore, subsequent periodic testing for CO emissions may be with the duct burner on or off, as dictated by the system demand. Visible emissions for each backup steam boiler shall be conducted only if No. 2 fuel oil is fired for more than 400 hours during the federal fiscal year. *{Permitting Note:* A *safety evaluation of the steam vent system indicated that it did not meet code and was deemed unsafe; therefore, it was dismantled.}* [Permit No. 0010001-011-AC/PSD-FL-181B]

B.24. Compliance Tests Prior to Renewal. Compliance tests shall be performed for **NO_X, CO, VE** and **SO_2** once every 5 years. The tests shall occur prior to obtaining a renewed operating permit to demonstrate compliance with the emission limits in Specific Conditions **B.7. – B.13.** [Rules 62-210.300(2) & 62-297.310(7)(a), F.A.C.]

B.25. Visible Emissions. The test method for visible emissions (VE) shall be EPA Method 9, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. [Rules 62-204.800, 62-296.320(4)(b)4.a. & 62-297.401, F.A.C.]

B.26. Carbon Monoxide. EPA Method 10 shall be used to demonstrate compliance with the CO limits of this permit, in accordance with Chapter 62-297, F.A.C., and 40 CFR 60, Appendix A. [Permit No. 0010001-011-AC/PSD-FL-181B]

B.27. Sulfur Dioxide. When required, the test method for sulfur dioxide shall be EPA Method 20, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. [Rule 62-4.070(3), F.A.C.]

B.28. Sulfur Dioxide Annual Test Waiver. In lieu of an annual compliance test for SO_2, the fuels fired in the CT and the DB shall meet the sulfur content limits listed in Specific Condition **B.13.** Ongoing compliance with the fuel sulfur limit for natural gas shall be demonstrated by the fuel supplier's analysis reports containing the sulfur content of the fuel being supplied. Methods for determining the sulfur content of natural gas shall be ASTM methods D4084-82, D3246-81, D5504* or more recent versions or equivalent approved ASTM analytical methods. Current applicable alternative methods that are approved ASTM methods as adopted in Rule 62-297.440(1), F.A.C. are also acceptable. At the request of the Department's Northeast District office, the permittee shall perform additional sampling and analysis for the fuel sulfur content. [Rules 62-4.070(3) & 62-4.160(15), F.A.C., *Applicant Request, Permit No. 0010001-011-AC/PSD-FL-181B]

{Permitting Note: The permittee may elect to perform on-site sampling and analysis using the ASTM methods listed above instead of relying upon the vendor's delivery receipts.}

B.29. Nitrogen Oxides. The test methods for NO_X shall be EPA Method 7E or EPA Method 20, incorporated and adopted by reference in Rule 62-204.800, F.A.C., and referenced in Chapter 62-297, F.A.C. Ongoing and annual compliance for the CT, and the CT and DB firing simultaneously, shall be determined by the existing NO_X CEM system on a 30-day rolling average basis and reported as required by this permit, except for the following addition/revision. To verify the facility-wide compliance with the 185.3 TPY cap for NO_X emissions, including the CT, the DB and Boilers Nos. 4 and 5 (EUs 002 and 003, respectively), and to provide reasonable assurance that NO_X emissions will not be PSD-significant, CEM system records for the CT and DB, along with cumulative fuel consumption records for Boiler Nos. 4 and 5, shall be kept and maintained by the permittee. The NO_X emission rate (lbs/MMBtu) from the CT and DB shall be calculated using the NO_X analyzer data and equation F-6 from 40 CFR 75, Appendix F. Hourly heat input rates (MMBtu/hr) shall be used to convert lbs/MMBtu of NO_X to lbs/hr of NO_X and actual operating hours shall be used to obtain tons per year. Total NO_X emissions for both calendar year caps shall be reported in the facility's annual operating report. [Rules 62-4.070(3) & 62-212.400(12), F.A.C.; and Permit No 0010001-011-AC/PSD-FL-181B]

{Permitting Note: Because the permittee has agreed to use the NO_X CEMS for compliance and the formal annual stack test requirement is being incorporated into the CEMS RATA demonstration, then a separate annual stack test is not required. However, this does not preclude the imposition of a "Special Compliance Test" pursuant to Rule 62-297.310(7)(b), F.A.C. (See Appendix TR)}

Recordkeeping and Reporting Requirements

B.30. Reporting Schedule. The following reports and notifications shall be submitted to the Compliance Authority:

Report	Reporting Deadline	Related Condition(s)
Notice of Excess Emissions	Semi-annually	B.33.
Notice of Excess Emissions, Startup, Shutdown and Malfunction	Immediately	B.34.

B.31. Other Reporting Requirements. See Appendix RR, Facility-Wide Reporting Requirements, for additional reporting requirements.

B.32. NSPS Notifications. All applicable notifications and reports required by 40 CFR 60, Subpart A, shall be submitted to the Department's Northeast District office. [Permit No. 0010001-011-AC/PSD-FL-181B]

B.33. Semi-Annual Reports. Semi-annual excess emission reports, in accordance with 40 CFR 60.7(c), shall be submitted to the Department's Northeast District office. See Appendix NSPS, Subpart A - General Provisions. [Permit No. 0010001-011-AC/PSD-FL-181B]

B.34. Notification of Excess Emissions During Startup, Shutdown, and Documented Unavoidable Malfunctions. If a CEM system reports emissions in excess of the standard, the permittee shall notify the Department's Northeast District office within (1) working day with a preliminary report of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. [Rule 62-210.700, F.A.C. and Permit No. 0010001-011-AC/PSD-FL-181B]

Operated By: Florida Power Corporation dba Progress Energy Florida, Inc.
Plant: University of Florida Cogeneration Facility
ORIS Code: 7345

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

EU No.	EPA Unit ID#	Brief Description
-007	1	General Electric LM6000-PC-ESPRINT Combustion Turbine

A.1. The Phase II Acid Rain Part application submitted for this facility, as approved by the Department, is a part of this permit. The owners and operators of these Phase II acid rain units must comply with the standard requirements and special provisions set forth in the application listed below:
a. DEP Form No. 62-210.900(1)(a), dated 04/23/09, received 05/15/09.
[Chapter 62-213, F.A.C. and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO_2) Emission Allowances. SO_2 emissions from sources subject to the Federal Acid Rain Program (Title IV) shall not exceed any allowances that the source lawfully holds under the Federal Acid Rain Program. Allowances shall not be used to demonstrate compliance with a non-Title IV applicable requirement of the Act.
a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the Federal Acid Rain Program, provided that such increases do not require a permit revision pursuant to Rule 62-213.400(3), F.A.C.
b. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
c. Allowances shall be accounted for under the Federal Acid Rain Program.
[Rule 62-213.440(1)(c)1., 2. & 3., F.A.C.]

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

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.

University of Florida	Fl.	7345
Plant name	State	ORIS/Plant Code

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

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

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

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

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

1

University of Florida
Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

Acid Rain Part Requirements.

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

Monitoring Requirements.

(1) The owners and operators and, to the extent applicable, designated representative of each Acid Rain source and each Acid Rain unit at the source shall comply with the monitoring requirements as provided in 40 CFR Part 75, and Rule 62-214.420, F.A.C.
(2) The emissions measurements recorded and reported in accordance with 40 CFR Part 75 shall be used to determine compliance by the unit with the Acid Rain emissions limitations and emissions reduction requirements for sulfur dioxide and nitrogen oxides under the Acid Rain Program.
(3) The requirements of 40 CFR Part 75 shall not affect the responsibility of the owners and operators to monitor emissions of other pollutants or other emissions characteristics at the unit under other applicable requirements of the Act and other provisions of the operating permit for the source.
(4) For applications including a SO_2 Opt-in unit, a monitoring plan for each SO_2 Opt-in unit must be submitted with this application pursuant to 40 CFR 74.14(a). For renewal applications for SO_2 Opt-in units include an updated monitoring plan if applicable under 40 CFR 75.53(b).

Sulfur Dioxide Requirements.

(1) The owners and operators of each source and each Acid Rain unit at the source shall:
(i) Hold allowances, as of the allowance transfer deadline, in the unit's compliance subaccount (after deductions under 40 CFR 73.34(c)), or in the compliance subaccount of another Acid Rain unit at the same source to the extent provided in 40 CFR 73.35(b)(3), not less than the total annual emissions of sulfur dioxide for the previous calendar year from the unit; and
(ii) Comply with the applicable Acid Rain emissions limitations for sulfur dioxide.
(2) Each ton of sulfur dioxide emitted in excess of the Acid Rain emissions limitations for sulfur dioxide shall constitute a separate violation of the Act.
(3) An Acid Rain unit shall be subject to the requirements under paragraph (1) of the sulfur dioxide requirements as follows:
(i) Starting January 1, 2000, an Acid Rain unit under 40 CFR 72.6(a)(2); or
(ii) Starting on the later of January 1, 2000, or the deadline for monitor certification under 40 CFR Part 75, an Acid Rain unit under 40 CFR 72.6(a)(3).
(4) Allowances shall be held in, deducted from, or transferred among Allowance Tracking System accounts in accordance with the Acid Rain Program.
(5) An allowance shall not be deducted in order to comply with the requirements under paragraph (1) of the sulfur dioxide requirements prior to the calendar year for which the allowance was allocated.
(6) An allowance allocated by the Administrator under the Acid Rain Program is a limited authorization to emit sulfur dioxide in accordance with the Acid Rain Program. No provision of the Acid Rain Program, the Acid Rain Part application, the Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8 and no provision of law shall be construed to limit the authority of the United States to terminate or limit such authorization.
(7) An allowance allocated by the Administrator under the Acid Rain Program does not constitute a property right.

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

(1) Unless otherwise provided, the owners and operators of the source and each Acid Rain unit at the source shall keep on site at the source each of the following documents for a period of 5 years from the date the document is created. This period may be extended for cause, at any time prior to the end of 5 years, in writing by the EPA or the DEP:
(i) The certificate of representation for the designated representative for the source and each Acid Rain unit at the source and all documents that demonstrate the truth of the statements in the certificate of representation, in accordance with Rule 62-214.350, F.A.C.; provided that the certificate and documents shall be retained on site at the source beyond such 5-year period until such documents are superseded because of the submission of a new certificate of representation changing the designated representative;
(ii) All emissions monitoring information, in accordance with 40 CFR Part 75, provided that to the extent that 40 CFR Part 75 provides for a 3-year period for recordkeeping, the 3-year period shall apply;
(iii) Copies of all reports, compliance certifications, and other submissions and all records made or required under the Acid Rain Program; and,

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STEP 3, Continued.

Recordkeeping and Reporting Requirements (cont)

(iv) Copies of all documents used to complete an Acid Rain Part application and any other submission under the Acid Rain Program or to demonstrate compliance with the requirements of the Acid Rain Program.

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

Liability.

(1) Any person who knowingly violates any requirement or prohibition of the Acid Rain Program, a complete Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7 or 72.8, including any requirement for the payment of any penalty owed to the United States, shall be subject to enforcement pursuant to section 113(c) of the Act.
(2) Any person who knowingly makes a false, material statement in any record, submission, or report under the Acid Rain Program shall be subject to criminal enforcement pursuant to section 113(c) of the Act and 18 U.S.C. 1001.
(3) No permit revision shall excuse any violation of the requirements of the Acid Rain Program that occurs prior to the date that the revision takes effect.
(4) Each Acid Rain source and each Acid Rain unit shall meet the requirements of the Acid Rain Program.
(5) Any provision of the Acid Rain Program that applies to an Acid Rain source (including a provision applicable to the designated representative of an Acid Rain source) shall also apply to the owners and operators of such source and of the Acid Rain units at the source.
(6) Any provision of the Acid Rain Program that applies to an Acid Rain unit (including a provision applicable to the designated representative of an Acid Rain unit) shall also apply to the owners and operators of such unit. Except as provided under 40 CFR 72.44 (Phase II repowering extension plans) and 40 CFR 76.11 (NO_X averaging plans), and except with regard to the requirements applicable to units with a common stack under 40 CFR Part 75 (including 40 CFR 75.16, 75.17, and 75.18), the owners and operators and the designated representative of one Acid Rain unit shall not be liable for any violation by any other Acid Rain unit of which they are not owners or operators or the designated representative and that is located at a source of which they are not owners or operators or the designated representative.
(7) Each violation of a provision of 40 CFR Parts 72, 73, 74, 75, 76, 77, and 78 by an Acid Rain source or Acid Rain unit, or by an owner or operator or designated representative of such source or unit, shall be a separate violation of the Act.

Effect on Other Authorities.

No provision of the Acid Rain Program, an Acid Rain Part application, an Acid Rain Part, or an exemption under 40 CFR 72.7or 72.8 shall be construed as:
(1) Except as expressly provided in title IV of the Act, exempting or excluding the owners and operators and, to the extent applicable, the designated representative of an Acid Rain source or Acid Rain unit from compliance with any other provision of the Act, including the provisions of title I of the Act relating to applicable National Ambient Air Quality Standards or State Implementation Plans;
(2) Limiting the number of allowances a unit can hold; *provided,* that the number of allowances held by the unit shall not affect the source's obligation to comply with any other provisions of the Act;
(3) Requiring a change of any kind in any state law regulating electric utility rates and charges, affecting any state law regarding such state regulation, or limiting such state regulation, including any prudence review requirements under such state law;
(4) Modifying the Federal Power Act or affecting the authority of the Federal Energy Regulatory Commission under the Federal Power Act; or,
(5) Interfering with or impairing any program for competitive bidding for power supply in a state in which such program is established.

STEP 4
For SO_2 Opt-in units only.

In column "f" enter the unit ID# for every SO_2 Opt-in unit identified in column "a" of STEP 2.

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

In column "h" enter the hours.

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

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STEP 5

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

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

For columns "j" through "n," enter the information required under 40 CFR 74.20-74.25 and attach all supporting documentation required by 40 CFR 74.20-74.25.

i	j	k	l	m	n
Unit ID#	Baseline or Alternative Baseline under 40 CFR 74.20 (mmBtu)	Actual SO_2 Emissions Rate under 40 CFR 74.22 (lbs/mmBtu)	Allowable 1985 SO_2 Emissions Rate under 40 CFR 74.23 (lbs/mmBtu)	Current Allowable SO_2 Emissions Rate under 40 CFR 74.24 (lbs/mmBtu)	Current Promulgated SO_2 Emissions Rate under 40 CFR 74.25 (lbs/mmBtu)

STEP 6

For SO_2 Opt-in units only.

Attach additional requirements, certify and sign.

A. If the combustion source seeks to qualify for a transfer of allowances from the replacement of thermal energy, a thermal energy plan as provided in 40 CFR 74.47 for combustion sources must be attached.
B. A statement whether the combustion unit was previously an affected unit under 40 CFR 74.
C. A statement that the combustion unit is not an affected unit under 40 CFR 72.6 and does not have an exemption under 40 CFR 72.7, 72.8, or 72.14.
D. Attach a complete compliance plan for SO_2 under 40 CFR 72.40.
E. The designated representative of the combustion unit shall submit a monitoring plan in accordance with 40 CFR 74.61. For renewal application, submit an updated monitoring plan if applicable under 40 CFR 75.53(b).
F. The following statement must be signed by the designated representative or alternate designated representative of the combustion source: "I certify that the data submitted under 40 CFR Part 74, Subpart C, reflects actual operations of the combustion source and has not been adjusted in any way."

Signature | Date

STEP 7

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

Certification (for designated representative or alternate designated representative only)

I am authorized to make this submission on behalf of the owners and operators of the Acid Rain source or Acid Rain units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name Brenda Brickhouse | Title Director – Environmental Health and Safety

Owner Company Name Florida Power Corporation dba Progress Energy Florida, Inc.

Phone 727 820 5153 | E-mail address brenda.brickhouse@pgnmail.com

Signature | Date 8/14/09

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Operated by: Progress Energy Florida, Inc
Plant: University of Florida Cogeneration Facility
ORIS Code: 7345

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

EU No.	EPA Unit ID#	Brief Description
005	DB	Duct Burner System associated with a HRSG
007	1	General Electric LM6000-PC-ESPRINT Combustion Turbine

1. Clean Air Interstate Rule Application. The Clean Air Interstate Rule Part Form submitted for this facility is a part of this permit. The owners and operators of these CAIR units as identified in this form must comply with the standard requirements and special provisions set forth in the CAIR Part Form (DEP Form No. 62-210.900(1)(b)) dated March 16, 2008, which is attached at the end of this section. [Chapter 62-213, F.A.C. and Rule 62-210.200, F.A.C.]

Clean Air Interstate Rule (CAIR) Part

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

This submission is: ☐ New ☐ Revised ☑ Renewal

STEP 1

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

Plant Name: UNIVERSITY OF FLORIDA CO-GENERATION	State: Florida	ORIS or EIA Plant Code: 7345

STEP 2

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

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

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

a	b	c	d	e	f
Unit ID#	Unit will hold nitrogen oxides (NO_X) allowances in accordance with 40 CFR 96.106(c)(1)	Unit will hold sulfur dioxide (SO_2) allowances in accordance with 40 CFR 96.206(c)(1)	Unit will hold NO_X Ozone Season allowances in accordance with 40 CFR 96.306(c)(1)	New Units Expected Commence Commercial Operation Date	New Units Expected Monitor Certification Deadline
DB or EU005	X	X	X		
1 or EU007	X	X	X		

DEP Form No. 62-210.900(1)(b) – Form
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UNIVERSITY OF FLORIDA CO-GENERATION
Plant Name (from STEP 1)

STEP 3

Read the standard requirements.

CAIR NO_X ANNUAL TRADING PROGRAM

CAIR Part Requirements.

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

Monitoring, Reporting, and Recordkeeping Requirements.

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

NO_X Emission Requirements.

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

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

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Effective: 3/16/08

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UNIVERSITY OF FLORIDA CO-GENERATION
Plant Name (from STEP 1)

STEP 3, Continued

Liability.

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

Effect on Other Authorities.

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

CAIR SO_2 TRADING PROGRAM

CAIR Part Requirements.

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

Monitoring, Reporting, and Recordkeeping Requirements.

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

SO_2 Emission Requirements.

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

Excess Emissions Requirements.

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

UNIVERSITY OF FLORIDA CO-GENERATION
Plant Name (from STEP 1)

STEP 3, Continued

Recordkeeping and Reporting Requirements.

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

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

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

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

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

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

Liability.

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

Effect on Other Authorities.

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

CAIR NO_x OZONE SEASON TRADING PROGRAM

CAIR Part Requirements.

(1) The CAIR designated representative of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall:
(i) Submit to the DEP a complete and certified CAIR Part form under 40 CFR 96.322 and Rule 62-296.470, F.A.C., in accordance with the deadlines specified in Rule 62-213.420, F.A.C.; and
(ii) [Reserved];
(2) The owners and operators of each CAIR NO_X Ozone Season source required to have a Title V operating permit or air construction permit, and each CAIR NO_X Ozone Season unit required to have a Title V operating permit or air construction permit at the source shall have a CAIR Part included in the Title V operating permit or air construction permit issued by the DEP under 40 CFR Part 96, Subpart CCCC, for the source and operate the source and the unit in compliance with such CAIR Part.

Monitoring, Reporting, and Recordkeeping Requirements.

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

NO_x Ozone Season Emission Requirements.

(1) As of the allowance transfer deadline for a control period, the owners and operators of each CAIR NO_X Ozone Season source and each CAIR NO_X Ozone Season unit at the source shall hold, in the source's compliance account, CAIR NO_X Ozone Season allowances available for compliance deductions for the control period under 40 CFR 96.354(a) in an amount not less than the tons of total NO_X emissions for the control period from all CAIR NO_X Ozone Season units at the source, as determined in accordance with 40 CFR Part 96, Subpart HHHH.
(2) A CAIR NO_X Ozone Season unit shall be subject to the requirements under paragraph (1) of the NO, Ozone Season Emission Requirements starting on the later of May 1, 2009 or the deadline for meeting the unit's monitor certification requirements under 40 CFR 96.370(b)(1),(2), or (3) and for each control period thereafter.
(3) A CAIR NO_X Ozone Season allowance shall not be deducted, for compliance with the requirements under paragraph (1) of the NO_X Ozone Season Emission Requirements, for a control period in a calendar year before the year for which the CAIR NO_X Ozone Season allowance was allocated.
(4) CAIR NO_X Ozone Season allowances shall be held in, deducted from, or transferred into or among CAIR NO_X Ozone Season Allowance Tracking System accounts in accordance with 40 CFR Part 96, Subparts FFFF and GGGG.
(5) A CAIR NO_X Ozone Season allowance is a limited authorization to emit one ton of NO_X in accordance with the CAIR NO_X Ozone Season Trading Program. No provision of the CAIR NO_X Ozone Season Trading Program, the CAIR Part, or an exemption under 40 CFR 96.305 and no provision of law shall be construed to limit the authority of the state or the United States to terminate or limit such authorization.
(6) A CAIR NO_X Ozone Season allowance does not constitute a property right.
(7) Upon recordation by the Administrator under 40 CFR Part 96, Subpart EEEE, FFFF or GGGG, every allocation, transfer, or deduction of a CAIR NO_X Ozone Season allowance to or from a CAIR NO_X Ozone Season unit's compliance account is incorporated automatically in any CAIR Part of the source that includes the CAIR NO_X Ozone Season unit.

UNIVERSITY OF FLORIDA CO-GENERATION Plant Name (from STEP 1)

STEP 3, Continued

Excess Emissions Requirements.

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

Recordkeeping and Reporting Requirements.

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

Liability.

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

Effect on Other Authorities.

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

STEP 4

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

Certification (for designated representative or alternate designated representative only)

I am authorized to make this submission on behalf of the owners and operators of the CAIR source or CAIR units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment.

Name: Patricia Q. West	Title: Manager, Environmental Services - Florida
Company Owner Name FLORIDA POWER CORPORATION DBA PROGRESS ENERGY FLORIDA, INC.	
Phone: 727.820.5739	E-mail Address: patricia.west@pgnmail.com
Signature Patricia Q. West	Date 7/23/09

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

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SECTION VI. APPENDICES.

The Following Appendices Are Enforceable Parts of This Permit:

Appendix A, Glossary.
Appendix HI, Heat Input vs. Inlet temperature Curve.
Appendix I, List of Insignificant Emissions Units and/or Activities.
Appendix NSPS, Subpart A – General Provisions.
Appendix NSPS, Subpart Db – Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.
Appendix NSPS, 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.