



# Florida Department of Environmental Protection

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## PERMITTEE

Progress Energy Florida, Inc.  
University of Florida Cogeneration Plant  
Mowery Road, Building 82  
Gainesville, FL 32611-2295

*Authorized Representative:*

Wilson B. Hicks, Jr., Plant Manager

Air Permit No. 0010001-011-AC  
PSD-FL-181B  
University of Florida Cogeneration Plant  
Facility ID No. 0010001  
Revised Cogeneration Plant Permit

## PROJECT

This is the final air construction permit, which modifies the original air construction Permit No. PSD-FL-181, as amended. ***There is no expiration date since no new construction is authorized by the permit.*** The existing cogeneration plant is categorized under Standard Industrial Classification No. 4911 and is located in Alachua County at Mowery Road, Building 82 in Gainesville, Florida. The UTM coordinates are Zone 17, 369.4 kilometers East, and 3279.3 kilometers North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit.

## STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida

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

11-10-11

(Date)

PERMIT REVISION

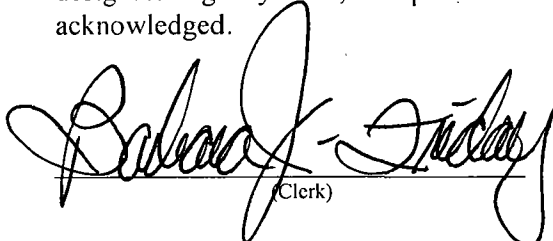
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit with Appendices) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on 11/10/11 to the persons listed below.

- Mr. Wilson Hicks, Progress Energy Florida, Inc. (wilson.hicks@pgnmail.com)
- Mr. Chris Bradley, Progress Energy Florida, Inc. (chris.bradley@pgnmail.com)
- Mr. Scott Osbourn, Golder Associates (scott\_osbourn@golder.com)
- Mr. Christopher Kirts, Northeast District Office (christopher.kirts@dep.state.fl.us)
- Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
- Ms. Lynn Scarce, DEP OPC Reading File (lynn.scarce@dep.state.fl.us)

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

  
\_\_\_\_\_  
(Clerk)

11/10/11  
\_\_\_\_\_  
(Date)

## SECTION 1. GENERAL INFORMATION

### FACILITY AND PROJECT DESCRIPTION

#### Existing Facility

This facility consists of one nominal 48 megawatt (MW) combined cycle system and two backup steam boilers. The combined cycle system consists of a General Electric Model No. LM6000-PC-ESPRINT combustion turbine and a heat recovery steam generator with duct burner. The combustion turbine uses spray inter-cooling to maximize power generation and reduce the need for supplemental firing in the duct burner to meet steam and power requirements. Emissions are vented through the heat recovery steam generator stack. Emissions of nitrogen oxides (NO<sub>x</sub>) are controlled with steam injection and compliance is demonstrated by data collected from a continuous emissions monitoring system (CEMS). Each backup steam boiler has a separate exhaust stack and is used only as a backup source of steam when the combined cycle system is not available.

Facility ID No. 0010001	
ID No.	Emission Unit Description
002	No. 4 Steam Boiler
003	No. 5 Steam Boiler
005	Heat Recovery Steam Generator with Duct Burner System
007	Combustion Turbine, General Electric Model No. LM6000-PC-ESPRINT

#### Permitting History

- AC01-204652/PSD-FL-181: Air construction permit authorizing initial construction of the combined cycle unit and limited operation of two backup boilers.
- AC01-270823: Based on the limited available data, this action appears to have been an extension of the original air construction permit (AC01-204652/PSD-FL-181).
- 0010001-002-AC/PSD-FL-181A: Minor revision to adjust the maximum heat input rate and NO<sub>x</sub> emission rate based on the installed equipment.
- 0010001-003-AC: Replacement of existing 43 MW combustion turbine (GE LM6000-PA) with new 48 MW unit (GE LM6000-PC-ESPRINT) with spray inter-cooling.
- 0010001-004-AC: Replaced maximum hourly heat input rate with heat input versus power output curve. Removed the maximum heat input restriction for the combustion turbine plus duct burner.
- 0010001-006-AC: Revised CO emissions limits/caps, removed the natural gas limit on the combustion turbine and duct burner combined, and clarified individual NO<sub>x</sub> limit on the combustion turbine.
- 0010001-010-AC: Letter of authorization for routine repair, replacement and maintenance of backups boilers.

#### Proposed Project

The permit revises the original PSD air construction permit to bring all of the miscellaneous amendments and revisions up to date and clarify the permit conditions. This includes, but is not limited to: resetting the CO BACT emission limit; removing distillate oil as an authorized fuel for the combustion turbine because the system was never installed; changes to the testing and reporting requirements; clarifying the emissions caps. This permit supersedes all other air construction permits for these units.

#### FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility has units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 62-213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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1. Permitting Authority: The permitting authority for this project is the Office of Permitting and Compliance, Division of Air Resource Management, Florida Department of Environmental Protection (Department) at: 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. All documents related to applications for permits to operate an emissions unit shall be submitted to the Air Resource Section of the Northeast District (as applicable) at: 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590.
2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Air Resource Section of the Northeast District (as applicable) at: 7825 Baymeadows Way, Suite 200B, Jacksonville, Florida 32256-7590.
3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); Appendix D (Common Testing Requirements); Appendix E (Final BACT Determinations); and Appendix F (Heat Input Rate vs. Compressor Inlet Temperature).
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Source Obligation:
  - (a) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12)(b), F.A.C.]
  - (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12)(c), F.A.C.]
8. Title V Permit: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit within 180 days of issuance of this final air construction permit revision. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

## SECTION 2. ADMINISTRATIVE REQUIREMENTS

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9. **Actual Emissions Reporting:** This permit is based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the PSD preconstruction review requirements of Rule 62-212.400(4) through (12), F.A.C. for several pollutants. Therefore, pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is subject to the following monitoring, reporting and recordkeeping provisions.
- a. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 10 years following resumption of regular operations after the change. Emissions shall be computed in accordance with the provisions in Rule 62-210.370, F.A.C., which are provided in Appendix C of this permit.
  - b. The permittee shall report to the Department *within 60 days after the end of each calendar year* during the 10-year period setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:
    - 1) The name, address and telephone number of the owner or operator of the major stationary source;
    - 2) The annual emissions calculations pursuant to the provisions of 62-210.370, F.A.C., which are provided in Appendix C of this permit;
    - 3) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference; and
    - 4) Any other information that the owner or operator wishes to include in the report.
  - c. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1 and 2, F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

For this project, the permit requires the annual reporting of actual 2011 NO<sub>x</sub> emissions from the combustion turbine and duct burner system. *{Permitting Note: The baseline NO<sub>x</sub> emissions are 114.50 tons/year for the combustion turbine and duct burner combined, resulting in a PSD applicability trigger threshold of 154.50 tons/year (114.50+40=154.50). The two calendar years used to establish the 114.50 tons/year baseline were 2000 and 2001. The permittee has already report nine years of this data.}*

[Rules 62-212.300(1)(e) and 62-210.370, F.A.C.]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Cogeneration Plant

This section of the permit addresses the following emissions units.

ID No.	Emission Unit Description
002	No. 4 Steam Boiler
003	No. 5 Steam Boiler
005	Heat Recovery Steam Generator with Duct Burner System
007	Combustion Turbine, General Electric Model No. LM6000-PC-ESPRINT

The steam boilers (EU-002 and 003) are used only as back-up sources of steam. Each boiler has its own exhaust stack. The maximum design heat input rate for the No. 4 steam boiler is 69.6 million British thermal units per hour (MMBtu/hour) based on firing 68,000 cubic feet of natural gas per hour and 444 gallons per hour of No. 2 fuel oil. The maximum design heat input rate for the No. 5 steam boiler is 168 MMBtu/hour based on firing 164,000 cubic feet of natural gas per hour and 1067 gallons per hour of No. 2 fuel oil. The No. 4 steam boiler has a stack height of 82 feet, exit diameter of 5 feet, exit temperature of 350°F and an actual volumetric flow rate of 13,500 actual cubic feet per minute (acfm). The 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 backup steam boilers are regulated under this permit and Rule 62-296.406, F.A.C., Fossil Fuel Steam Generators with Less than 250 MMBtu per Hour Heat Input. The steam boilers began commercial service in January 1976.

The combined cycle system (EU-005 and 007) consists of a nominal 48 MW combustion turbine and a heat recovery steam generator with duct burner. The combustion turbine is fired with natural gas and utilizes spray inter-cooling to maximize power output, which reduces the need for supplemental firing in the duct burner to meet steam and power requirements. Steam injection is used to control NO<sub>x</sub> emissions from the combustion turbine. The duct burner is equipped with low-NO<sub>x</sub> burners to control NO<sub>x</sub> emissions while firing natural gas. Exhaust gas from the combined cycle system exits the heat recovery steam generator stack at 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 the combustion turbine only at a compressor inlet temperature of 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. Originally, a 43 MW combustion turbine (GE LM6000-PA) began commercial service on January 31, 1994. It was replaced with new 48 MW unit (GE LM6000-PC-ESPRINT) with spray inter-cooling, which began commercial service on September 24, 2002.

*{Permitting Note: This facility was permitted originally in 1992 to provide electrical power and steam for the University of Florida. The original project (PSD-FL-181) authorized the construction of the cogeneration facility and required the permanent shutdown of Boilers Nos. 1, 2 and 3. In accordance with Rule 62-212.400(PSD), F.A.C., the above emission units are subject to Best Available Control Technology (BACT) determinations for carbon monoxide (CO). The final BACT determinations are presented in Appendix E of this permit.}*

#### OTHER PERMITS

1. New Permit: This permit supersedes all previous air construction permits for the specified emissions units at the cogeneration plant. The conditions of the new permit are based upon Application No. 0010001-011-AC as well as previous applications for the original Permit No. PSD-FL-181 as well as subsequent modifications and amendments. [Rule 62-4.070(3), F.A.C.]

#### SHUTDOWN UNITS

2. Shutdown Units: Boilers 1, 2 and 3 shall be permanently shut down as a part of this PSD project. *{Permitting Note: This requirement of the original permit has been previously satisfied.}* [Rule 62-212.400(12), F.A.C.]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Cogeneration Plant

#### EQUIPMENT

3. Combined Cycle Combustion Turbine System: The permittee is authorized to construct, operate and maintain as combined cycle combustion turbine system consisting of a nominal 48 MW combustion turbine (GE LM6000-PC-ESPRINT) and a heat recovery steam generator with duct burner. 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.
- 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.
  - Within 90 days of replacing a gas turbine, 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.
  - 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.

[Application and Design]

4. Combustion Turbine – Steam Injection: A steam injection system shall be installed to reduce NO<sub>x</sub> 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 NO<sub>x</sub> CEMS. When the NO<sub>x</sub> 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. and NSPS Subpart GG in 40 CFR 60]
5. Backup Steam Boilers: The permittee is authorized to operate and maintain backup steam boilers Nos. 4 and 5 to provide a source of steam in case the combustion turbine is unavailable. [Application and Design]

#### PERFORMANCE RESTRICTIONS

6. Permitted Capacities:
- 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.}
  - 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<sup>3</sup>/year of natural gas based on the lower

SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

A. Cogeneration Plant

heating value (LHV) of 950 Btu/ft<sup>3</sup>.

- c. *Backup Steam Boilers:* When either firing natural gas or No. 2 fuel oil, the maximum design heat input rate for the No. 4 steam boiler is 69.6 MMBtu/hour (equivalent to 68,000 cubic feet of natural gas per hour or 444 gallons per hour of No. 2 fuel oil). When either firing natural gas or No. 2 fuel oil, the maximum design heat input rate for the No. 5 steam boiler is 168 MMBtu/hour (equivalent to 164,000 cubic feet of natural gas per hour or 1067 gallons per hour of No. 2 fuel oil).

[Application, Design and Rule 62-210.200(PTE), F.A.C.]

- 7. Authorized Fuel: The combustion turbine, HRSG duct burners, and backup steam boilers are authorized to fire natural gas with a maximum sulfur content of 2 grains of sulfur per 100 scf of natural gas (annual average based on vendor data). The backup steam boilers are authorized to fire No. 2 fuel oil with a maximum sulfur content of 0.5% by weight. [Rules 62-210.200(PTE), 62-212.400(12), 62-296.406, F.A.C., and 40 CFR 60.333(b)]
- 8. Restricted Operation: The hours of operation for equipment authorized by this permit are not limited (8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

EMISSIONS STANDARDS

9. 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.

[Rule 62-212.400(BACT), F.A.C.]

b. *Nitrogen Oxides (NOx) Emissions:*

- (1) As determined by CEMS, NO<sub>x</sub> 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<sub>x</sub> limit on the combustion turbine is 25 ppmvd corrected to 15% oxygen as provided by the vendor.}* [PSD avoidance pursuant to Rule 62-212.400(12), F.A.C.]
- (2) As determined by CEMS, NO<sub>x</sub> emissions from the combustion turbine shall not exceed the applicable NSPS emissions standard in 40 CFR 60.332:

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

where:

STD = allowable NO<sub>x</sub> 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.



## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Cogeneration Plant

There is no NO<sub>x</sub> 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, NO<sub>x</sub> 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 and original Permit No. PSD-FL-181]
- c. *Sulfur Dioxide (SO<sub>2</sub>) Emissions:* SO<sub>2</sub> 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, visible emissions shall not exceed 10% opacity from the combustion turbine with or without the duct burner in operation. [Rule 62-4.070(3), F.A.C.]
10. Emissions Standards – Backup Steam Boilers: To control PM and SO<sub>2</sub> 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.]
11. Facility-Wide Annual NO<sub>x</sub> Emission Cap: NO<sub>x</sub> 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<sub>x</sub> emissions from all emissions units regulated by this permit comply with this facility-wide NO<sub>x</sub> emissions cap. [PSD avoidance pursuant to 62-212.400(12), F.A.C.]

### EXCESS EMISSIONS

12. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction are prohibited. These emissions shall be included in the compliance averages for NO<sub>x</sub> emissions. [Rule 62-210.700(4), F.A.C.]
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 NO<sub>x</sub> 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 NO<sub>x</sub> CEMS. If the NO<sub>x</sub> 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 NO<sub>x</sub> emission data shall be excluded from the annual NO<sub>x</sub> 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 NO<sub>x</sub> 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.]

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS**

**A. Cogeneration Plant**

**STACK TESTING REQUIREMENTS**

- 14. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(7), F.A.C.]
- 15. Initial Compliance Stack Tests: The emissions units shall be tested to demonstrate initial compliance with the emissions standards within 60 days after achieving permitted capacity, but not later than 180 days after initial operation of the unit.
  - a. *Combustion Turbine*: Initial compliance tests for CO and visible emissions shall be conducted at 90% to 100% of the maximum heat input rate for the actual compressor inlet temperature conditions during the test. Compliance with the NOx limits shall be demonstrated by data collected from the CEMS. *{Permitting Note: The requirements in the original permit to conduct initial compliance tests have previously been satisfied.}*
  - b. *Duct Burner*: Initial compliance tests for CO emissions shall be conducted at 90% to 100% of the maximum heat input rate. Compliance with the NOx limits shall be demonstrated by data collected from the CEMS. *{Permitting Note: The requirements in the original permit to conduct initial compliance tests have previously been satisfied. Safety considerations prevent subsequent periodic testing of the duct burner, which would likely require dumping excess steam during the test.}*
  - c. *Backup Steam Boilers*: Initial informational stack tests on the backup boilers shall be conducted to establish the NOx emissions rate for purposes of reporting the NOx emission rate and complying with the facility-wide NOx emission cap. *{Permitting Note: The requirements in the original permit to conduct initial compliance tests have previously been satisfied.}*

[Rules 62-4.070(3) and 62-297.310(7), F.A.C.]

- 16. Annual Compliance Tests: During each federal fiscal year (October 1<sup>st</sup> to September 30<sup>th</sup>), 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.}* [Rules 62-4.070(3) and 62-297.310(7), F.A.C.]
- 17. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rules 62-297.310(7), F.A.C.]
- 18. Test Methods: Any tests required by this permit 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

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

#### A. Cogeneration Plant

Method	Description of Method and Comments
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.)

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800 and 62-297.100, F.A.C.; and Appendix A of 40 CFR 60]

#### MONITORING REQUIREMENTS

19. Continuous Emission Monitoring System: The permittee shall install, calibrate, maintain and operate a CEMS in the stack to measure and record the emissions of NO<sub>x</sub> from the combined cycle combustion turbine and duct burner system in a manner sufficient to demonstrate compliance with the NO<sub>x</sub> emission limits and caps specified in this permit. The oxygen content or the carbon dioxide content of the flue gas shall also be monitored at the location where NO<sub>x</sub> is monitored to correct the measured NO<sub>x</sub> emissions rates to 15% oxygen and also reported as lb/hour. The NO<sub>x</sub> CEMS shall be maintained in accordance with the monitoring equipment requirements in 40 CFR 75 for acid rain units. [Rule 62-4.070(3), F.A.C., NSPS Subpart GG in 40 CFR 60 and 40 CFR 75]
20. Fuel Flow Monitoring: The permittee shall install equipment to monitor the fuel flow rates of the combustion turbine, duct burner and steam boilers. [Rules 62-4.070(3) and 62-212.400(12), F.A.C. and NSPS Subpart GG in 40 CFR 60]

#### RECORDS AND REPORTS

21. Fuel Consumption Rates Monthly Monitoring: By the 15<sup>th</sup> 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. [Rule 62-4.070(3), F.A.C.]
22. Annual Facility-wide NO<sub>x</sub> Emissions Report: To demonstrate compliance with the facility-wide annual NO<sub>x</sub> emissions cap, the permittee shall calculate and record annual emissions as follows:
- Annual NO<sub>x</sub> emissions from the combined cycle combustion turbine and duct burner system shall be determined by data collected from the NO<sub>x</sub> CEMS.
  - By April 1<sup>st</sup> of each year**, the permittee shall report the facility-wide annual NO<sub>x</sub> emissions along with the Annual Operating Report. Annual NO<sub>x</sub> emissions from the backup steam boilers shall be determined based on the annual fuel consumption rate and either the following NO<sub>x</sub> emissions factors or more recent stack test data (at the option of the permittee).  
  
No. 4 Steam Boiler: 0.0745 lb NO<sub>x</sub>/MMBtu (gas) and 0.0815 lb NO<sub>x</sub>/MMBtu (oil), and  
No. 5 Steam Boiler: 0.110 lb NO<sub>x</sub>/MMBtu (gas) and 0.1070 lb NO<sub>x</sub>/MMBtu (oil).

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS

### A. Cogeneration Plant

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.

- c. *Before March 1<sup>st</sup> of 2012, the permittee shall submit a report to the Compliance Authority comparing the 2011 annual NOx emissions from the combustion turbine and duct burner to the estimated baseline actual emissions of 114.5 tons/year and the PSD applicability trigger threshold of 154.50 tons/year (114.5 + 40.0 = 154.50 tons/year). This condition becomes obsolete after this reporting requirement is met.*

[Rules 62-4.070(3) and PSD avoidance pursuant to 62-212.400(12), F.A.C.]

23. **Fuel Sulfur Records:** The permittee shall maintain records of the fuel sulfur content of natural gas and No. 2 fuel oil fired. Such information may be provided by the natural gas pipeline vendor or the fuel oil vendor. The following methods shall be used to determine the sulfur content of natural gas: ASTM methods D4084-82, D3246-81, D5504, more recent versions of these methods, methods prescribed in Appendix D of 40 CFR 75, or other methods approved by the Department. The following methods shall be used to determine the sulfur content of fuel oil: ASTM D1552, ASTM D5453, ASTM D129-91, D2622-94 or D4294-90, more recent versions of these methods, methods prescribed in NSPS Subpart GG of 40 CFR 60 or other methods approved by the Department. The permittee may also have a sample of fuel analyzed to determine the actual sulfur content. [NSPS Subparts Db and GG in 40 CFR 60, 40 CFR 75 and Rule 62-4.070(3), F.A.C.]
24. **Stack Test Reports:** The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. For each test run, the report shall also indicate the heat input rate of the emissions unit. [Rule 62-297.310(8), F.A.C.]
25. **Semi-Annual NSPS Excess Emissions Reports:** The permittee shall submit semi-annual excess emission reports in accordance with 40 CFR 60.7(d) to the Compliance Authority. [40 CFR 60.7]

### NSPS PROVISIONS

26. **NSPS Requirements:** The combustion turbine shall comply with the applicable provisions of NSPS Subpart GG in 40 CFR 60, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800, F.A.C. The duct burner shall comply with the applicable provisions of NSPS Subpart Db in 40 CFR 60, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units, adopted by reference in Rule 62-204.800, F.A.C. The emissions units shall also comply with the applicable requirements of 40 CFR 60, Subpart A, General Provisions, including:
- 40CFR60.7 Notification and Record Keeping
  - 40CFR60.8 Performance Tests
  - 40CFR60.11 Compliance with Standards and Maintenance Requirements
  - 40CFR60.12 Circumvention
  - 40CFR60.13 Monitoring Requirements
  - 40CFR60.19 General Notification and Reporting requirements

[40 CFR 60, NSPS Subparts A, Db and GG]

## SECTION 4. APPENDICES

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- Appendix A. Citation Formats and Glossary of Common Terms
- Appendix B. General Conditions.
- Appendix C. Common Conditions
- Appendix D. Common Testing Requirements
- Appendix E. BACT Determinations
- Appendix F. Heat Input Rate vs. Compressor Inlet Temperature

## SECTION 4. APPENDIX A

### Citation Formats and Glossary of Common Terms

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#### CITATION FORMATS

The following illustrate the formats used in the permit to identify applicable requirements from permits and regulations.

##### Old Permit Numbers

Example: Permit No. AC50-123456 or Permit No. AO50-123456

Where: “AC” identifies the permit as an Air Construction Permit

“AO” identifies the permit as an Air Operation Permit

“123456” identifies the specific permit project number

##### New Permit Numbers

Example: Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

Where: “099” represents the specific county ID number in which the project is located

“2222” represents the specific facility ID number for that county

“001” identifies the specific permit project number

“AC” identifies the permit as an air construction permit

“AF” identifies the permit as a minor source federally enforceable state operation permit

“AO” identifies the permit as a minor source air operation permit

“AV” identifies the permit as a major Title V air operation permit

##### PSD Permit Numbers

Example: Permit No. PSD-FL-317

Where: “PSD” means issued pursuant to the preconstruction review requirements of the Prevention of Significant Deterioration of Air Quality

“FL” means that the permit was issued by the State of Florida

“317” identifies the specific permit project number

##### Florida Administrative Code (F.A.C.)

Example: [Rule 62-213.205, F.A.C.]

Means: Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

##### Code of Federal Regulations (CFR)

Example: [40 CFR 60.7]

Means: Title 40, Part 60, Section 7

#### GLOSSARY OF COMMON TERMS

° F: degrees Fahrenheit

AAQS: Ambient Air Quality Standard

acf: actual cubic feet

acfm: actual cubic feet per minute

ARMS: Air Resource Management System (DEP database)

BACT: best available control technology

bhp: brake horsepower

Btu: British thermal units

CAM: compliance assurance monitoring

CEMS: continuous emissions monitoring system

cfm: cubic feet per minute

CFR: Code of Federal Regulations

CAA: Clean Air Act

CMS: continuous monitoring system

CO: carbon monoxide

CO<sub>2</sub>: carbon dioxide

## SECTION 4. APPENDIX A

### Citation Formats and Glossary of Common Terms

<b>COMS:</b> continuous opacity monitoring system	<b>NSPS:</b> New Source Performance Standards
<b>DARM:</b> Division of Air Resource Management	<b>O&amp;M:</b> operation and maintenance
<b>DEP:</b> Department of Environmental Protection	<b>O<sub>2</sub>:</b> oxygen
<b>Department:</b> Department of Environmental Protection	<b>Pb:</b> lead
<b>dscf:</b> dry standard cubic feet	<b>PM:</b> particulate matter
<b>dscfm:</b> dry standard cubic feet per minute	<b>PM<sub>10</sub>:</b> particulate matter with a mean aerodynamic diameter of 10 microns or less
<b>EPA:</b> Environmental Protection Agency	<b>ppm:</b> parts per million
<b>ESP:</b> electrostatic precipitator (control system for reducing particulate matter)	<b>ppmv:</b> parts per million by volume
<b>EU:</b> emissions unit	<b>ppmvd:</b> parts per million by volume, dry basis
<b>F.A.C.:</b> Florida Administrative Code	<b>QA:</b> quality assurance
<b>F.A.W.:</b> Florida Administrative Weekly	<b>QC:</b> quality control
<b>F.D.:</b> forced draft	<b>PSD:</b> prevention of significant deterioration
<b>F.S.:</b> Florida Statutes	<b>psi:</b> pounds per square inch
<b>FGD:</b> flue gas desulfurization	<b>PTE:</b> potential to emit
<b>FGR:</b> flue gas recirculation	<b>RACT:</b> reasonably available control technology
<b>Fl:</b> fluoride	<b>RATA:</b> relative accuracy test audit
<b>ft<sup>2</sup>:</b> square feet	<b>RBLC:</b> EPA's RACT/BACT/LAER Clearinghouse
<b>ft<sup>3</sup>:</b> cubic feet	<b>SAM:</b> sulfuric acid mist
<b>gpm:</b> gallons per minute	<b>scf:</b> standard cubic feet
<b>gr:</b> grains	<b>scfm:</b> standard cubic feet per minute
<b>HAP:</b> hazardous air pollutant	<b>SIC:</b> standard industrial classification code
<b>Hg:</b> mercury	<b>SIP:</b> State Implementation Plan
<b>I.D.:</b> induced draft	<b>SNCR:</b> selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
<b>ID:</b> identification	<b>SO<sub>2</sub>:</b> sulfur dioxide
<b>kPa:</b> kilopascals	<b>TPD:</b> tons/day
<b>lb:</b> pound	<b>TPH:</b> tons per hour
<b>MACT:</b> maximum achievable technology	<b>TPY:</b> tons per year
<b>MMBtu:</b> million British thermal units	<b>TRS:</b> total reduced sulfur
<b>MSDS:</b> material safety data sheets	<b>UTM:</b> Universal Transverse Mercator coordinate system
<b>MW:</b> megawatt	<b>VE:</b> visible emissions
<b>NESHAP:</b> National Emissions Standards for Hazardous Air Pollutants	<b>VOC:</b> volatile organic compounds
<b>NO<sub>x</sub>:</b> nitrogen oxides	

## SECTION 4. APPENDIX B

### General Conditions

The permittee shall comply with the following general conditions from Rule 62-4.160, F.A.C.

1. The terms, conditions, requirements, limitations and restrictions set forth in this permit, are "permit conditions" and are binding and enforceable pursuant to Sections 403.141, 403.727, or 403.859 through 403.861, F.S. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in subsections 403.987(6) and 403.722(5), F.S., the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This permit is not a waiver of or approval of any other department permit that may be required for other aspects of the total project which are not addressed in this permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at reasonable times, access to the premises where the permitted activity is located or conducted to:
  - a. Have access to and copy any records that must be kept under conditions of the permit;
  - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
  - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules. Reasonable time may depend on the nature of the concern being investigated.
8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
  - a. A description of and cause of noncompliance; and
  - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.
9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or



## SECTION 4. APPENDIX B

### General Conditions

Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.

11. This permit is transferable only upon Department approval in accordance with Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
  - a. Determination of Best Available Control Technology (resets previous CO BACT);
  - b. Determination of Prevention of Significant Deterioration (not applicable to project, but revises PSD permit); and
  - c. Compliance with New Source Performance Standards (NSPS Subparts A, Db and GG).
14. The permittee shall comply with the following:
  - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
  - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
  - c. Records of monitoring information shall include:
    - (a) The date, exact place, and time of sampling or measurements;
    - (b) The person responsible for performing the sampling or measurements;
    - (c) The dates analyses were performed;
    - (d) The person responsible for performing the analyses;
    - (e) The analytical techniques or methods used;
    - (f) The results of such analyses.
15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware the relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

## SECTION 4. APPENDIX C

### Common Conditions

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

#### EMISSIONS AND CONTROLS

1. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. Circumvention: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration. Pursuant to Rule 62-210.700(5), F.A.C., the permit subsection may specify more or less stringent requirements for periods of excess emissions. Rule 62-210-700(Excess Emissions), F.A.C., cannot vary or supersede any federal NSPS or NESHAP provision. [Rule 62-210.700(1), F.A.C.]
4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. Excess Emissions - Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Compliance Authority in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. VOC or OS Emissions: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds (VOC) or organic solvents (OS) without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. 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. [Rules 62-296.320(2) and 62-210.200(Definitions), F.A.C.]
8. 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. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

#### RECORDS AND REPORTS

10. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]
11. Emissions Computation and Reporting:
  - a. Applicability. This rule sets forth required methodologies to be used by the owner or operator of a facility for computing actual emissions, baseline actual emissions, and net emissions increase, as defined at Rule 62-210.200, F.A.C., and for computing emissions for purposes of the reporting requirements of subsection 62-210.370(3) and paragraph 62-212.300(1)(e), F.A.C., or of any permit condition that requires emissions be computed in accordance with this rule. This rule is not intended to establish methodologies for determining compliance with the emission

## SECTION 4. APPENDIX C

### Common Conditions

limitations of any air permit. [Rule 62-210.370(1), F.A.C.]

- b. *Computation of Emissions.* For any of the purposes set forth in subsection 62-210.370(1), F.A.C., the owner or operator of a facility shall compute emissions in accordance with the requirements set forth in this subsection.
- (1) *Basic Approach.* The owner or operator shall employ, on a pollutant-specific basis, the most accurate of the approaches set forth below to compute the emissions of a pollutant from an emissions unit; provided, however, that nothing in this rule shall be construed to require installation and operation of any continuous emissions monitoring system (CEMS), continuous parameter monitoring system (CPMS), or predictive emissions monitoring system (PEMS) not otherwise required by rule or permit, nor shall anything in this rule be construed to require performance of any stack testing not otherwise required by rule or permit.
- (a) If the emissions unit is equipped with a CEMS meeting the requirements of paragraph 62-210.370(2)(b), F.A.C., the owner or operator shall use such CEMS to compute the emissions of the pollutant, unless the owner or operator demonstrates to the department that an alternative approach is more accurate because the CEMS represents still-emerging technology.
- (b) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C. but emissions of the pollutant can be computed pursuant to the mass balance methodology of paragraph 62-210.370(2)(c), F.A.C., the owner or operator shall use such methodology, unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- (c) If a CEMS is not available or does not meet the requirements of paragraph 62-210.370(2)(b), F.A.C., and emissions cannot be computed pursuant to the mass balance methodology, the owner or operator shall use an emission factor meeting the requirements of paragraph 62-210.370(2)(d), F.A.C., unless the owner or operator demonstrates to the department that an alternative approach is more accurate.
- (2) *Continuous Emissions Monitoring System (CEMS).*
- (a) An owner or operator may use a CEMS to compute emissions of a pollutant for purposes of this rule provided:
- 1) The CEMS complies with the applicable certification and quality assurance requirements of 40 CFR Part 60, Appendices B and F, or, for an acid rain unit, the certification and quality assurance requirements of 40 CFR Part 75, all adopted by reference at Rule 62-204.800, F.A.C.; or
- 2) The owner or operator demonstrates that the CEMS otherwise represents the most accurate means of computing emissions for purposes of this rule.
- (b) Stack gas volumetric flow rates used with the CEMS to compute emissions shall be obtained by the most accurate of the following methods as demonstrated by the owner or operator:
- 1) A calibrated flow meter that records data on a continuous basis, if available; or
- 2) The average flow rate of all valid stack tests conducted during a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
- (c) The owner or operator may use CEMS data in combination with an appropriate f-factor, heat input data, and any other necessary parameters to compute emissions if such method is demonstrated by the owner or operator to be more accurate than using a stack gas volumetric flow rate as set forth at subparagraph 62-210.370(2)(b)2., F.A.C., above.
- (3) *Mass Balance Calculations.*
- (a) An owner or operator may use mass balance calculations to compute emissions of a pollutant for purposes of this rule provided the owner or operator:
- 1) Demonstrates a means of validating the content of the pollutant that is contained in or created by all materials or fuels used in or at the emissions unit; and
- 2) Assumes that the emissions unit emits all of the pollutant that is contained in or created by any material or fuel used in or at the emissions unit if it cannot otherwise be accounted for in the

## SECTION 4. APPENDIX C

### Common Conditions

process or in the capture and destruction of the pollutant by the unit's air pollution control equipment.

- (b) Where the vendor of a raw material or fuel which is used in or at the emissions unit publishes a range of pollutant content from such material or fuel, the owner or operator shall use the highest value of the range to compute the emissions, unless the owner or operator demonstrates using site-specific data that another content within the range is more accurate.
  - (c) In the case of an emissions unit using coatings or solvents, the owner or operator shall document, through purchase receipts, records and sales receipts, the beginning and ending VOC inventories, the amount of VOC purchased during the computational period, and the amount of VOC disposed of in the liquid phase during such period.
- (4) Emission Factors.
- a. An owner or operator may use an emission factor to compute emissions of a pollutant for purposes of this rule provided the emission factor is based on site-specific data such as stack test data, where available, unless the owner or operator demonstrates to the department that an alternative emission factor is more accurate. An owner or operator using site-specific data to derive an emission factor, or set of factors, shall meet the following requirements.
    - 1) If stack test data are used, the emission factor shall be based on the average emissions per unit of input, output, or gas volume, whichever is appropriate, of all valid stack tests conducted during at least a five-year period encompassing the period over which the emissions are being computed, provided all stack tests used shall represent the same operational and physical configuration of the unit.
    - 2) Multiple emission factors shall be used as necessary to account for variations in emission rate associated with variations in the emissions unit's operating rate or operating conditions during the period over which emissions are computed.
    - 3) The owner or operator shall compute emissions by multiplying the appropriate emission factor by the appropriate input, output or gas volume value for the period over which the emissions are computed. The owner or operator shall not compute emissions by converting an emission factor to pounds per hour and then multiplying by hours of operation, unless the owner or operator demonstrates that such computation is the most accurate method available.
  - b. If site-specific data are not available to derive an emission factor, the owner or operator may use a published emission factor directly applicable to the process for which emissions are computed. If no directly-applicable emission factor is available, the owner or operator may use a factor based on a similar, but different, process.
- (5) Accounting for Emissions During Periods of Missing Data from CEMS, PEMS, or CPMS. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of missing data from CEMS, PEMS, or CPMS using other site-specific data to generate a reasonable estimate of such emissions.
- (6) Accounting for Emissions During Periods of Startup and Shutdown. In computing the emissions of a pollutant, the owner or operator shall account for the emissions during periods of startup and shutdown of the emissions unit.
- (7) Fugitive Emissions. In computing the emissions of a pollutant from a facility or emissions unit, the owner or operator shall account for the fugitive emissions of the pollutant, to the extent quantifiable, associated with such facility or emissions unit.
- (8) Recordkeeping. The owner or operator shall retain a copy of all records used to compute emissions pursuant to this rule for a period of five years from the date on which such emissions information is submitted to the department for any regulatory purpose.

[Rule 62-210.370(2), F.A.C.]

## SECTION 4. APPENDIX C

### Common Conditions

c. *Annual Operating Report for Air Pollutant Emitting Facility*

- (1) The Annual Operating Report for Air Pollutant Emitting Facility (DEP Form No. 62-210.900(5)) shall be completed each year for the following facilities:
  - a. All Title V sources.
  - b. All synthetic non-Title V sources.
  - c. All facilities with the potential to emit ten (10) tons per year or more of volatile organic compounds or twenty-five (25) tons per year or more of nitrogen oxides and located in an ozone nonattainment area or ozone air quality maintenance area.
  - d. All facilities for which an annual operating report is required by rule or permit.
- (2) Notwithstanding paragraph 62-210.370(3)(a), F.A.C., no annual operating report shall be required for any facility operating under an air general permit.
- (3) The annual operating report shall be submitted to the appropriate Department of Environmental Protection (DEP) division, district or DEP-approved local air pollution control program office by April 1 of the following year, except that the annual operating report for year 2008 shall be submitted by May 1, 2009. If the report is submitted using the Department's electronic annual operating report software, there is no requirement to submit a copy to any DEP or local air program office.
- (4) Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C., for purposes of the annual operating report.
- (5) Facility Relocation. Unless otherwise provided by rule or more stringent permit condition, the owner or operator of a relocatable facility must submit a Facility Relocation Notification Form (DEP Form No. 62-210.900(6)) to the Department at least 30 days prior to the relocation. A separate form shall be submitted for each facility in the case of the relocation of multiple facilities which are jointly owned or operated.

[Rule 62-210.370(3), F.A.C.]

**SECTION 4. APPENDIX D**  
**Common Testing Requirements**

Unless otherwise specified in the permit, the following testing requirements apply to all emissions units at the facility.

**COMPLIANCE TESTING REQUIREMENTS**

1. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]

2. Applicable Test Procedures - Opacity Compliance Tests: When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

- a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
- b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

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

3. Determination of Process Variables:

- a. *Required Equipment*. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. *Accuracy of Equipment*. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

4. Frequency of Compliance Tests: The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

- a. *General Compliance Testing*.
  - 1. The owner or operator of a new or modified emissions unit that is subject to an emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining an operation permit for such emissions unit.
  - 2. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to sub-subparagraph 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department

**SECTION 4. APPENDIX D**  
**Common Testing Requirements**

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shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- (a) Did not operate; or
  - (b) In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours,
3. During each federal fiscal year (October 1 – September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for visible emissions, if there is an applicable standard.
4. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.
- b. *Special Compliance Tests.* When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

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

**RECORDS AND REPORTS**

5. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report shall provide the following information.
- a. The type, location, and designation of the emissions unit tested.
  - b. The facility at which the emissions unit is located.
  - c. The owner or operator of the emissions unit.
  - d. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  - e. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  - f. The date, starting time and end time of the observation.
  - g. The test procedures used.
  - h. The names of individuals who furnished the process variable data, conducted the test, and prepared the report.
  - i. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
  - j. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

**SECTION 4. APPENDIX E**  
**Final BACT Determination**

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**PROJECT DESCRIPTION**

Progress Energy Florida, Inc. operates the existing University of Florida Cogeneration Plant, which is located Alachua County at Mowery Road, Building 82 in Gainesville, Florida. This facility consists of one nominal 48 megawatt (MW) combined cycle system and two backup steam boilers. The combined cycle system consists of a General Electric Model No. LM6000-PC-ESPRINT combustion turbine and a heat recovery steam generator with duct burner. The combustion turbine uses spray inter-cooling to maximize power generation and reduce the need for supplemental firing in the duct burner to meet steam and power requirements. Emissions are vented through the heat recovery steam generator stack. Emissions of nitrogen oxides (NO<sub>x</sub>) are controlled with steam injection and compliance is demonstrated by data collected from a continuous emissions monitoring system (CEMS). Each backup steam boiler has a separate exhaust stack and is used only as a backup source of steam when the combined cycle system is not available.

Originally constructed in accordance with Permit No. PSD-FL-181, and was based on a PSD netting analysis. With the permanent shutdown of existing Boilers 1, 2 and 3, the project netted out of PSD preconstruction review for all pollutants except carbon monoxide (CO).

**FINAL BACT DETERMINATIONS**

**Combustion Turbine**

In accordance with Rule 62-212.400, F.A.C., the Department previously determined the following Best Available Control Technology (BACT) standards for CO emissions:

- As determined by EPA Method 10, CO emissions from the combustion turbine (EU-007) shall not exceed 36.0 ppmvd corrected to 15% oxygen based on the combustion design and firing of natural gas. Compliance shall be demonstrated by initial and annual stack tests.
- As determined by EPA Method 10, CO emissions from the duct burner (EU-005) shall not exceed 0.15 lb/MMBtu and 28.1 lb/hour. Compliance shall be demonstrated initial stack tests only, which has been satisfied. *{Permitting Note: With the upgraded General Electric Model No. LM6000-PC-ESPRINT combustion turbine, the duct burner is used less and rarely at permitted capacity. This makes it difficult to schedule and conduct periodic stack tests since there may be no demand for steam. If the test is conducted when steam is not needed, it is necessary to dump steam to the atmosphere, which was determined to be unsafe and the steam vent system removed.}*

**Backup Steam Boilers**

In accordance with Rule 62-296.406, F.A.C., the Department determined the following BACT work practice standards for controlling PM and SO<sub>2</sub> emissions from the backup steam boilers (EU-002 and 003):

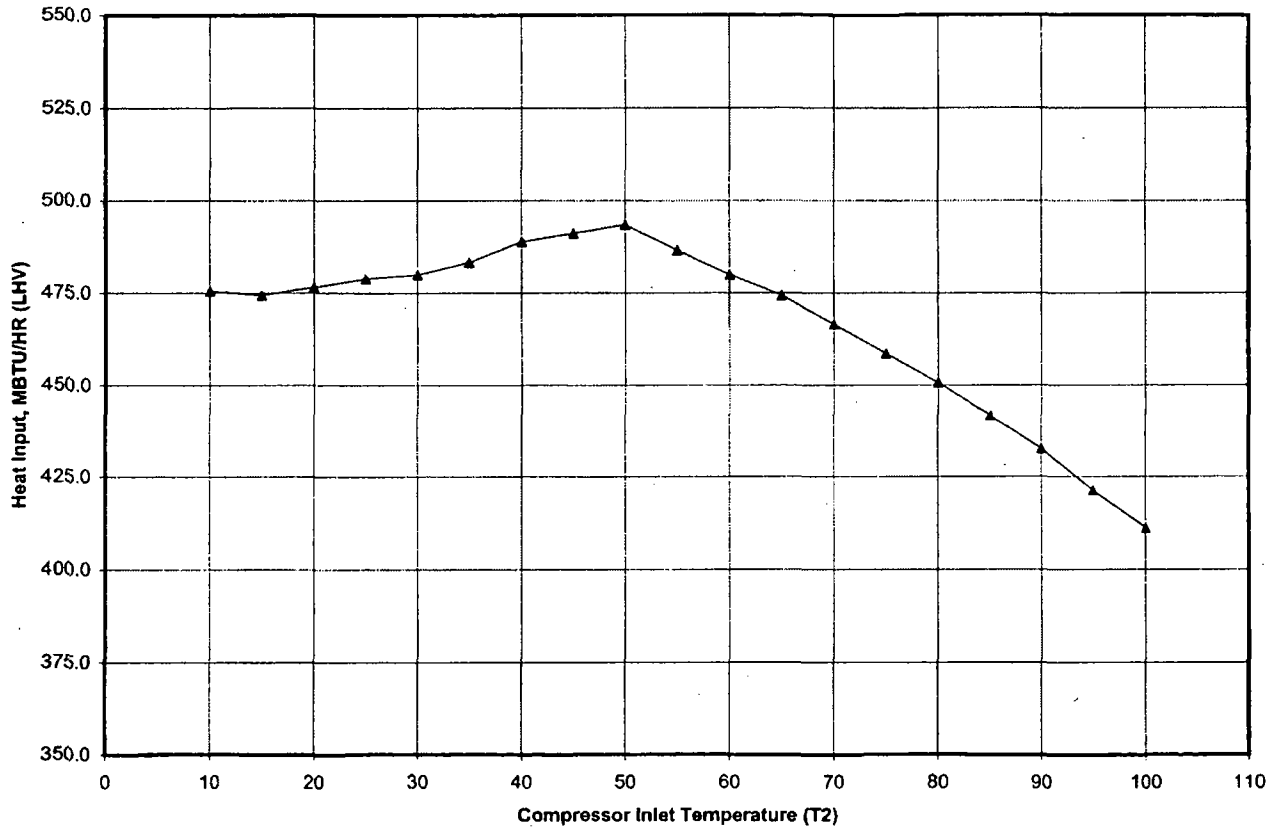
- The backup boilers shall fire natural gas or, No. 2 fuel oil with a maximum sulfur content of 0.5% sulfur by weight.
- As determined by EPA Method 9, visible emissions shall not exceed 20% opacity except for no more than one, 6-minute period per hour that shall not exceed 27% opacity.



SECTION 4. APPENDIX F

Heat Input Rate vs. Compressor Inlet Temperature

University of Florida  
Heat Input Curve for the GE LM6000-PC-ESPRINT Combustion Turbine



## FINAL DETERMINATION

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### PERMITTEE

Progress Energy Florida, Inc.  
University of Florida Cogeneration Plant  
Mowery Road, Building 82  
Gainesville, FL 32611-2295

### PERMITTING AUTHORITY

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

### PROJECT

Air Permit No. 0010001-011-AC  
University of Florida Cogeneration Plant

This facility is located in Alachua County on Mowery Road, Building 82, in Gainesville, Florida. The final permit revised the original PSD air construction permit (as previously amended). In addition, several clarifications and simplifications were made.

### NOTICE AND PUBLICATION

The Department distributed an Intent to Issue Air Permit package on October 5, 2011. The applicant published the Public Notice of Intent to Issue Air Permit in the Gainesville Sun on October 10, 2011. The Department received the proof of publication on October 11, 2011. There were no petitions for an administrative hearing filed or requests for an extension of time to file a petition submitted.

### COMMENTS

No comments on the Draft Permit were received from the public, the EPA Region 4 Office, or the applicant.

### CONCLUSION

The final action of the Department is to issue the permit as drafted.

## Friday, Barbara

---

**From:** Friday, Barbara  
**Sent:** Thursday, November 10, 2011 1:13 PM  
**To:** 'wilson.hicks@pgnmail.com'  
**Cc:** 'forney.kathleen@epamail.epa.gov'; Searce, Lynn; Koerner, Jeff; 'chris.bradley@pgnmail.com'; 'scott\_osbourn@golder.com'; Kirts, Christopher; Koerner, Jeff  
**Subject:** Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B  
**Attachments:** 0010001-011-ACFinalPermitSignaturePages.pdf

Tracking:	Recipient	Delivery
	'wilson.hicks@pgnmail.com'	
	'forney.kathleen@epamail.epa.gov'	
	Searce, Lynn	Delivered: 11/10/2011 1:13 PM
	Koerner, Jeff	Delivered: 11/10/2011 1:13 PM
	'chris.bradley@pgnmail.com'	
	'scott_osbourn@golder.com'	
	Kirts, Christopher	Delivered: 11/10/2011 1:13 PM
	Koerner, Jeff	

Dear Mr. Hicks:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

*Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).*

Owner/Company Name: FLORIDA POWER CORPORATION D/B/A PROGRESS  
Facility Name: UNIVERSITY OF FLORIDA COGENERATION PLANT  
Project Number: 0010001-011-AC  
Permit Status: FINAL  
Permit Activity: CONSTRUCTION  
Facility County: ALACHUA

Click on the following link to access the permit project documents:

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0010001.011.AC.F\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0010001.011.AC.F_pdf.zip)

The Office of Permitting and Compliance is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at <http://www.dep.state.fl.us/air/emission/apds/default.asp>.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems

opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Office of Permitting and Compliance.

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <<http://www.adobe.com/products/acrobat/readstep.html>> .

Regards,

**Barbara Friday**

Office of Permitting and Compliance (OPC)

Division of Air Resources Management

850-717-9095

*Please take a few minutes to share your comments on the service you received from the department by clicking on this link [DEP Customer Survey](#).*

**Friday, Barbara**

---

**From:** Microsoft Exchange  
**To:** 'wilson.hicks@pgnmail.com'; 'chris.bradley@pgnmail.com'  
**Sent:** Thursday, November 10, 2011 1:14 PM  
**Subject:** Relayed: Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

**Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:**

'wilson.hicks@pgnmail.com'

'chris.bradley@pgnmail.com'

**Subject:** Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

---

Sent by Microsoft Exchange Server 2007

**Friday, Barbara**

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**From:** Hicks Jr, Wilson B [Wilson.Hicks@pgnmail.com]  
**To:** Friday, Barbara  
**Sent:** Thursday, November 10, 2011 1:17 PM  
**Subject:** Read: Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

Your message was read on Thursday, November 10, 2011 1:16:37 PM (GMT-05:00) Eastern Time (US & Canada).

## Friday, Barbara

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**From:** Hicks Jr, Wilson B [Wilson.Hicks@pgnmail.com]  
**Sent:** Thursday, November 10, 2011 1:28 PM  
**To:** Friday, Barbara  
**Subject:** RE: Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

---

**From:** Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]  
**Sent:** Thursday, November 10, 2011 1:13 PM  
**To:** Hicks Jr, Wilson B  
**Cc:** 'forney.kathleen@epamail.epa.gov'; Searce, Lynn; Koerner, Jeff; Bradley, Chris; 'scott\_osbourn@golder.com'; Kirts, Christopher; Koerner, Jeff  
**Subject:** Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

Dear Mr. Hicks:

Attached is the official **Notice of Final Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send".

*Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).*

Owner/Company Name: FLORIDA POWER CORPORATION D/B/A PROGRESS  
Facility Name: UNIVERSITY OF FLORIDA COGENERATION PLANT  
Project Number: 0010001-011-AC  
Permit Status: FINAL  
Permit Activity: CONSTRUCTION  
Facility County: ALACHUA

Click on the following link to access the permit project documents:

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0010001.011.AC.F\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0010001.011.AC.F_pdf.zip)

The Office of Permitting and Compliance is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at <http://www.dep.state.fl.us/air/emission/apds/default.asp>.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems

opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Office of Permitting and Compliance.

Note: The attached document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: <http://www.adobe.com/products/acrobat/readstep.html> .

Regards,

**Barbara Friday**

Office of Permitting and Compliance (OPC)

Division of Air Resources Management

850-717-9095

*Please take a few minutes to share your comments on the service you received from the department by clicking on this link [DEP Customer Survey](#).*



## Friday, Barbara

---

**From:** Bradley, Chris [Chris.Bradley@pgnmail.com]  
**To:** Friday, Barbara  
**Sent:** Thursday, November 10, 2011 3:04 PM  
**Subject:** Read: Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

Your message was read on Thursday, November 10, 2011 3:04:03 PM (GMT-05:00) Eastern Time (US & Canada).

## Friday, Barbara

---

**From:** Osbourn, Scott [Scott\_Osbourn@golder.com]  
**To:** Friday, Barbara  
**Sent:** Thursday, November 10, 2011 1:20 PM  
**Subject:** Read: Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

Your message was read on Thursday, November 10, 2011 1:19:35 PM (GMT-05:00) Eastern Time (US & Canada).

**Friday, Barbara**

---

**From:** Microsoft Exchange  
**To:** Kirts, Christopher; Searce, Lynn  
**Sent:** Thursday, November 10, 2011 1:13 PM  
**Subject:** Delivered: Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

**Your message has been delivered to the following recipients:**

Kirts, Christopher

Searce, Lynn

Subject: Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

---

Sent by Microsoft Exchange Server 2007

**Friday, Barbara**

---

**From:** Microsoft Exchange  
**To:** Koerner, Jeff  
**Sent:** Thursday, November 10, 2011 1:13 PM  
**Subject:** Delivered: Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

**Your message has been delivered to the following recipients:**

Koerner, Jeff

Subject: Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

---

Sent by Microsoft Exchange Server 2007

**Friday, Barbara**

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**From:** Koerner, Jeff  
**To:** Friday, Barbara  
**Sent:** Thursday, November 10, 2011 1:58 PM  
**Subject:** Read: Progress Energy Florida, Inc. - University of Florida CoGeneration Plant - 0010001-011-AC/PSD-FL-181B

Your message was read on Thursday, November 10, 2011 1:58:23 PM (GMT-05:00) Eastern Time (US & Canada).