Department of Environmental Protection

Jeb Bush
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

October 26, 2006

ELECTRONICALLY SENT – Received Receipt Requested

Mr. Martin J. Drango
Plant Manager
Florida Power Corporation dba Progress Energy Florida, Inc.
Hines Energy Complex
100 Central Avenue, HE-44
St. Petersburg, Florida 33701

Re: Draft Air Construction Permit Project No.: 1050234-015-AC/PSD-FL-195(D)/PSD-FL-296(C)/PSD-FL-330(B)
DRAFT/PROPOSED Title V Air Operation Permit Renewal Project No.: 1050234-014-AV
Hines Energy Complex: Power Blocks 1, 2 and 3

Dear Mr. Drango:

One copy of the Technical Evaluation and Preliminary Determination, the combined Public Notice, the Draft Air Construction Permit, and the DRAFT/PROPOSED Title V Air Operation Permit Renewal for the PEFI's Hines Energy Complex Power Blocks 1, 2 and 3, located off County Road 555, approximately 2.5 miles South of County Road 640, Polk County, is enclosed. The permitting authority's "INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL" and the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL" are also included.

An electronic version of the DRAFT/PROPOSED Title V Air Operation Permit Renewal has been posted on the Division of Air Resources Management's world wide web site for the United States Environmental Protection Agency (USEPA) Region 4 office's review. The web site address is:

http://www.dep.state.fl.us/air/eproducts/ards/default.asp

The "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL" must be published as soon as possible. Proof of publication, i.e., newspaper affidavit, must be provided to the permitting authority's office within 7 (seven) days of publication pursuant to Rule 62-110.106(5), F.A.C. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits pursuant to Rule 62-110.106(11), F.A.C.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Jeffrey F. Koerner, P.E., at the above letterhead address. If you have any other questions, please contact Bruce Mitchell at 850/413-9198.

Sincerely,

Trina L. Vielhauer
Chief
Bureau of Air Regulation

TLV/jfk/bm

Enclosures

In the Matter of an
Application for Permits by:

Florida Power Corporation dba Progress Energy Florida, Inc.
100 Central Avenue, HE-44
St. Petersburg, Florida 33701

Draft Air Construction Permit No.: 1050234-015-AC/PSD-FL-195(D)/
PSD-FL-296(C)/PSD-FL-330(B)
DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV
Hines Energy Complex: Power Blocks 1, 2 and 3
Polk County
/

INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue an Air Construction Permit and a Title V Air Operation Permit Renewal (copies of the Draft Air Construction Permit and DRAFT/PROPOSED Title V Air Operation Permit Renewal attached) for the Title V source detailed in the application specified above, for the reasons stated below.

The permittee, Florida Power Corporation dba Progress Energy Florida, Inc., submitted a request on April 21, 2006, for a Title V Air Operation Permit Renewal, and on September 5, 2006, for an Air Construction Permit for the existing facility located off County Road 555, approximately 2.5 miles South of County Road 640, Polk County. Supplemental information was also received in the September 5, 2006 submittal, and on September 15, 2006.

The subjects of the Air Construction Permit are to: (1) remove the Emergency Generator; (2) for Power Blocks 1 - 3, allow the use of the ASTM analytical methods for testing the sulfur content of the fuels as established in 40 CFR 60, Subpart GG; (3) for Power Block 1, allow CEMS data exclusion for fuel switches; and, (4) for Power Blocks 2 and 3, revise the duration of CEMS data exclusions due to cold startups and fuel switches.

The subject of the Title V Air Operation Permit is for the renewal of the initial Title V Air Operation Permit, No. 1050234-001-AV. In addition, the renewal will be used to incorporate the terms and conditions of the ACs identified above.

The facility is also subject to Florida's Power Plant Site Certification Act, project No. PA 92-33.

The permitting authority has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210, 62-212, 62-213 and 62-214, F.A.C. This source is not exempt from Title V permitting procedures. The permitting authority has determined that an Air Construction Permit and a Title V Air Operation Permit Renewal are required to commence or continue operations at the described facility.

The permitting authority intends to issue the Air Construction Permit and Title V Air Operation Permit Renewal based on the belief that reasonable assurances have been provided to indicate that operation of the source will not adversely impact air quality, and the source will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297, F.A.C.

Pursuant to Sections 403.815 and 403.087, F.S., and Rules 62-110.106 and 62-210.350(3), F.A.C., you (the applicant) are required to publish at your own expense the enclosed "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." The notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity

is to take place. If you are uncertain that a newspaper meets these requirements, please contact the permitting authority at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-1344; Fax: 850/922-6979), within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permits pursuant to Rule 62-110.106(11), F.A.C.

The permitting authority will issue the Air Construction Permit in accordance with the conditions of the attached Draft Air Construction Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

EPA has agreed to treat the DRAFT Title V Permit as a PROPOSED Title V Permit and to perform its 45-day review provided by the law and regulations concurrently with the public comment period. Although EPA's 45-day review period will be performed concurrently with the public comment period, the deadline for submitting a citizen petition to object to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended. The FINAL Title V Air Operation Permit will be issued after the conclusion of the 45-day EPA review period so long as no adverse comments are received that results in a different decision or significant change of terms or conditions.

The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen petition can be found at the following website address:

http://www.epa.gov/region4/air/permits/Florida.htm

The permitting authority will accept written comments concerning the proposed Air Construction Permit issuance action for a period of 14 (fourteen) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this Draft Air Construction Permit, the permitting authority shall issue a Revised Draft Air Construction Permit and require, if applicable, another Public Notice.

The permitting authority will accept written comments concerning the proposed Title V Air Operation Permit Renewal issuance action for a period of 30 (thirty) days from the date of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL." Written comments should be provided to the permitting authority office. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this DRAFT/PROPOSED Title V Air Operation Permit Renewal, the permitting authority shall issue a Revised DRAFT Title V Air Operation Permit Renewal and require, if applicable, another Public Notice.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241; Fax: 850/245-2303). Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however,

any person who asked the permitting authority for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of how and when each petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation will not be available in this proceeding.

Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued

pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

Trina L. Vielhauer
Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Permit (including the combined PUBLIC NOTICE, the Draft Air Construction Permit and the DRAFT/PROPOSED Title V Air Operation Permit) and all copies were sent electronically (with Received Receipt requested) before the close of business on 10/27/06 to the person(s) listed below:

Mr. Martin J. Drango, Plant Manager and R.O., PEFI (martin.drango@pgnmail.com)
Ms. Mara Nasca, DAPA, DEP-SWD (Nasca_M@dep.state.fl.us)
Mr. Scott Osbourn, P.E., GAI (sosbourn@golder.com)
Mr. Hamilton Oven, P.E., DEP-SCO (Oven_H@dep.state.fl.us)
Ms. Ann Quillian, P.E., Application Contact (Ann.Quillian@pgnmail.com)
Mr. Gregg Worley, U.S. EPA, Region 4 (worley.gregg@epamail.epa.gov)

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.

Barbara J. Friday 10/27/06
(Clerk) (Date)

PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT AND A TITLE V AIR OPERATION PERMIT RENEWAL

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Draft Air Construction Permit No.: 1050234-015-AC/PSD-FL-195(D)/PSD-FL-296(C)/PSD-FL-330(B)
DRAFT/PROPOSED Title V Air Operation Permit Renewal No.: 1050234-014-AV

Florida Power Corporation dba Progress Energy Florida, Inc. (PEFI)
Hines Energy Complex
Polk County

The Department of Environmental Protection (permitting authority) gives notice of its intent to issue an Air Construction Permit and a Title V Air Operation Permit Renewal for the PEFI's Hines Energy Complex Power Blocks 1, 2 and 3, located off County Road 555, approximately 2.5 miles South of County Road 640, Polk County. The applicant's name and address is: Mr. Martin J. Drango, Plant Manager and responsible Official, Florida Power Corporation dba Progress Energy Florida, Inc., Hines Energy Complex, 100 Central Avenue, HE-44, St. Petersburg, Florida 33701.

The subjects of the Air Construction Permit are to: (1) remove the Emergency Generator; (2) for Power Blocks 1 - 3, allow the use of the ASTM analytical methods for testing the sulfur content of the fuels as established in 40 CFR 60, Subpart GG; (3) for Power Block 1, allow CEMS data exclusion for fuel switches; and, (4) for Power Blocks 2 and 3, revise the duration of CEMS data exclusions due to cold startups and fuel switches.

The subject of the Title V Air Operation Permit is for the renewal of the initial Title V Air Operation Permit, No. 1050234-001-AV. In addition, the renewal will be used to incorporate the terms and conditions of the ACs identified above.

The facility is also subject to Florida's Power Plant Site Certification Act, project No. PA 92-33.

The permitting authority will issue the Air Construction Permit in accordance with the conditions of the Draft Air Construction Permit unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

EPA has agreed to treat the DRAFT Title V Permit as a PROPOSED Title V Permit and to perform its 45-day review provided by the law and regulations concurrently with the public comment period. Although EPA's 45-day review period will be performed concurrently with the public comment period, the deadline for submitting a citizen petition to object to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended. The FINAL Title V Air Operation Permit will be issued after the conclusion of the 45-day EPA review period so long as no adverse comments are received that results in a different decision or significant change of terms or conditions.

The status regarding EPA's 45-day review of this project and the deadline for submitting a citizen petition can be found at the following website address:

http://www.epa.gov/region4/air/permits/Florida.htm

The permitting authority will accept written comments concerning the proposed Draft Air Construction Permit issuance action for a period of 14 (fourteen) days from the date of publication of this Notice. Written comments should be provided to the Department's Bureau of Air Regulation, 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in this

Draft Air Construction Permit, the permitting authority shall issue a Revised Draft Air Construction Permit and require, if applicable, another Public Notice.

The Permitting Authority will accept written comments concerning the DRAFT/PROPOSED Title V Air Operation Permit Renewal for a period of thirty (30) days from the date of publication of this Public Notice. Written comments must be post-marked and all facsimile comments must be received by the close of business (5:00 pm), on or before the end of this 30-day period, by the Permitting Authority's office or facsimile, as listed below. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (http://faw.dos.state.fl.us/) and in a newspaper of general circulation in the area affected by the permitting action. For additional information, contact the Permitting Authority's office at the address or phone number listed below. If written comments or comments received at a public meeting result in a significant change to the DRAFT/PROPOSED Title V Air Operation Permit Renewal, the Permitting Authority shall issue a Revised DRAFT Title V Air Operation Permit Renewal and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 of the Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000 (Telephone: 850/245-2241; Fax: 850/245-2303). Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of the notice of intent, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the permitting authority for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the applicable time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the permitting authority's action is based must contain the following information:

(a) The name and address of each agency affected and each agency's file or identification number, if known;

(b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination;

(c) A statement of how and when each petitioner received notice of the agency action or proposed action;

(d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate;

(e) A concise statement of the ultimate facts alleged, as well as the rules and statutes which entitle the petitioner to relief;

(f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and,

(g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the permitting authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the permitting authority's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the permitting authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available for this proceeding.

In addition to the above, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 (sixty) days of the expiration of the Administrator's 45 (forty-five) day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to issuance of any permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30 (thirty) day public comment period provided in this notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Permitting Authority:
Department of Environmental Protection
Bureau of Air Regulation
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Affected District Office:
Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Telephone: 813/632-7600
Fax: 813/744-6084

The complete project file includes the Technical Evaluation and Preliminary Determination and associated Draft Air Construction Permit and DRAFT/PROPOSED Title V Air Operation Permit Renewal, the application(s), and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact Jeffrey F. Koerner, P.E., at the above address, or call 850/921-9536, for additional information.

TECHNICAL EVALUATION

AND

PRELIMINARY DETERMINATION

Florida Power Corporation dba Progress Energy Florida, Inc.

Hines Energy Complex

Modification to Increase the Allowable Hours of Excess Emissions and to Identify the Methods for Testing Fuel Oil and Natural Gas

Power Blocks 1, 2 and 3
Emission Units -001 & -002 (PB1), -014 & -015 (PB2) and -016 & -017 (PB3)
Combined-Cycle Turbines with Unfired Heat Recovery Steam Generators

Bartow, Polk County

DEP File No. 1050234-015-AC/PSD-FL-195(D)/296(C)/330(B)

Power Plant Siting File No.: PA 92-33

Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Air Permitting North Section

October 26, 2006

1. APPLICATION INFORMATION

1.1 Applicant Name and Address

Florida Power Corporation dba Progress Energy Florida, Inc.
100 Central Avenue – HE44
St. Petersburg, FL 33701

Authorized Representative: *Mr. Martin J. Drango, Plant Manager, Hines Energy Complex*

1.2 Reviewing and Process Schedule

04-21-06: Date of Receipt of Application;
06-08-06: Request for Additional Information clerked on 06/08/06;
09-05-06: Receipt of Supplementary Material; and,
09-15-06: Receipt of Supplementary Material; and, application deemed complete.

2. FACILITY INFORMATION

2.1 Facility Location

The existing Hines Energy Complex is located in the southwest portion of Polk County, Florida, approximately 7 miles south-southwest of Bartow and 5 miles west-northwest of Fort Meade. This site is approximately 34 kilometers southeast and 127 kilometers southwest of the Okefenokee and Wolf Island Class I National Wilderness Areas, respectively. UTM coordinates for this facility are Zone 17; 408.81 km E; 3354.38 km N.

2.2 Standard Industrial Classification Codes (SIC)

Industry Group No.	49	Electric, Gas, and Sanitary Services
Industry No.	4911	Electric Services

2.3 Facility Regulatory Categories

Title III: The existing facility is a major source of hazardous air pollutants (HAPs).

Title IV: The facility operates emissions units subject to the acid rain provisions of the Clean Air Act (CAA, or "the Act").

Title V: Because potential emissions of at least one regulated pollutant exceed 100 tons per year , the existing facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.). Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM/PM_{10}), sulfur dioxide (SO_2), and volatile organic compounds (VOC).

Prevention of Significant Deterioration (PSD): The project is located in an area designated as "attainment" or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard (NAAQS). The facility is considered a "fossil fuel fired steam electric plant of more than 250 million British thermal units (MMBtu) per hour of heat input," which is one of the 28 PSD source categories with the lower PSD applicability threshold of 100 tons per year. Potential emissions of at least one regulated pollutant exceed 100 tons per year. Therefore, the facility is classified as a PSD-major source of air pollution with respect to Rule 62-212.400, F.A.C.

Siting: The project is subject to Electrical Power Plant Siting in accordance with Chapter 62-17, F.A.C. and Chapter 403, Part II, Florida Statutes (F.S.). The Power Plant Siting project number is: PA 92-33.

2.4. Facility History

2.4.1. Power Block 1: Emission Unit (EU) -001 (CT1A) and EU-002 (CT1B).

Power Block 1 consists of two Westinghouse 501F combined cycle combustion turbines (CTs) with unfired heat recovery steam generators (HRSGs), and an associated single steam-turbine electrical generator, for a nominal total generating capacity of 500 MWs, a 99 MMBtu/hr auxiliary boiler, and a 97,570 barrel fuel oil storage tank. Emissions from each CT and HRSG combination are vented through a single stack. For the CTs, the primary fuel is natural gas (NG), which is supplemented with No. 2 fuel oil (FO) with a sulfur content not to exceed 0.05%, by weight. Dry low-NO_x combustors are used to reduce nitrogen oxides (NO_x) emissions.

On March 1, 1994, Power Block (PB) 1 was authorized to be built by air construction permit project, No. PSD-FL-195, and Power Plant Siting project, No. PA 92-33. Fuel oil consumption was limited to a total of 1,000 hrs/yr for both CTs and the maximum sulfur content of the fuel oil is 0.05%, by weight. The maximum heat input to each CT at an ambient temperature of 59 °F were 1,510 MMBtu/hr for NG and 1,730 MMBtu/hr for FO.

On September 29, 1998, permit modification PSD-FL-195(A) was issued to: (1) reflect the installation of Selective Catalytic Reduction (SCR) technology for the control of NO_x emissions; (2) to adjust the heat input of the fuels fired based on the Higher Heating Values (HHV; NG: 1,510 to 1,757 MMBtu/hr; and, FO: 1,730 to 1,846 MMBtu/hr); and, (3) adjust upward the allowable emissions of particulate matter (PM), volatile organic compounds (VOC) and sulfur dioxides SO_2) to accommodate the as built emissions units. The increase of emissions were all less than significant.

On May 27, 1999, permit modification 1050234-002-AC/PSD-FL-195(B) was issued to, again, adjust upward the heat input (HHV @ 59 °F) of the fuels fired (NG: 1,757 to 1,866 MMBtu/hr; and, FO: 1,846 to 1,999 MMBtu/hr). The modification also adjusted the amount of excess emissions allowed for startup, shutdown and malfunction in the event that a steam turbine is shut down for 8-hours or more. Also, the terms of warm startup and cold startup were defined and the amount of excess emissions during each episode were defined (4-hrs for cold and 3-hrs for warm).

On August 16, 2000, permit modification 1050234-003-AC/PSD-FL-195(C) was issued to, again, adjust upward the heat input (HHV @ 59 °F) of the fuels fired (NG: 1,866 to 1,915 MMBtu/hr; and, FO: 1,999 to 2,020 MMBtu/hr). In addition, the modification allowed an adjustment upward of the combined megawatt ratings (485 to 500 MWs). No pollutant emission limit changes were requested.

2.4.2. PB 2: EU-014 (CT2A) and EU-015 (CT2B).

PB 2 consists of two combined cycle CTs with unfired HRSGs, and an associated single steam-turbine electrical generator, for a nominal total generating capacity of 530 MWs. Emissions from each CT and HRSG combination are vented through a single stack. For the CTs, the primary fuel is natural gas (NG), which is supplemented with No. 2 fuel oil (FO) with a sulfur content not to exceed 0.05%, by weight. Dry low-NO_x combustors and SCR technology are used to reduce NO_x emissions.

On June 7, 2002, PB 2 was authorized to be built by air construction permit project, No. 1050234-004-AC/PSD-FL-296, and Power Plant Siting project, No. PA 92-33. FO consumption was limited to a combined total of 19,703,000 gallons in any consecutive 12-month period. The maximum heat inputs to each CT at an ambient temperature of 59 °F and HHV are 1,915 MMBtu/hr for NG and 2,020 MMBtu/hr for FO. In addition, operation at less than 60% load was prohibited, except to cycle the units through periods of startup, shutdown and malfunction.

On September 9, 2003, permit modification 1050234-007-AC/PSD-FL-296(A) was issued to: (1) remove the initial and annual stack tests for PM, because of the use of clean fuels; and, (2) removal of the prohibition of operating at less than 60% of full load, since both the NO_x and CO emissions are continuously monitored and the emission limits are equally applicable whether above or below the 60% load.

On March 3, 2005, permit modification 1050234-011-AC/PSD-FL-296(B) was issued to adjust the heat input of the fuels fired based on the HHV, 59 °F and actual testing (NG: 1,915 to 2,048 MMBtu/hr; and, FO: 2,020 to 2,155 MMBtu/hr). The permitted "potential" emissions were utilized for the PSD evaluation since the EUs had not yet operated for a sufficient timeframe (2 years) to establish "past actual emissions".

2.4.3. PB 3: EU-016 (CT3A) and EU-017 (CT3B).

PB 3 consists of two combined cycle CTs with unfired HRSGs, and an associated single steam-turbine electrical generator, for a nominal total generating capacity of 530 MWs. Emissions from each CT and HRSG combination are vented through a single stack. For the CTs, the primary fuel is natural gas (NG), which is supplemented with No. 2 fuel oil (FO) with a sulfur content not to exceed 0.05%, by weight. Dry low-NO_x combustors (for NG-firing) and water injection (for FO-firing) along with SCR technology are used to reduce NO_x emissions.

On September 19, 2003, PB 3 was authorized to be built by air construction permit project, No. 1050234-006-AC/PSD-FL-330, and Power Plant Siting project, No. PA 92-33. FO consumption was limited to a combined total of 19,703,000 gallons in any consecutive 12-month period. The maximum heat inputs to each CT at an ambient temperature of 59 °F and HHV are 1,915 MMBtu/hr for NG and 2,020 MMBtu/hr for FO.

On March 3, 2005, permit modification 1050234-013-AC/PSD-FL-330(A) was issued to adjust the heat input of the fuels fired based on the HHV, a compressor inlet temperature of 59 °F, 100% load and actual testing (NG: 1,915 to 2,048 MMBtu/hr; and, FO: 2,020 to 2,155 MMBtu/hr). Adjustments were also made to the pollutants potential emissions. The net changes were all less than significant.

2.4.4. Facility.

The entire facility (inclusive of all Power Blocks 1, 2 & 3) has a total generating capacity of approximately 1560 MWs.

3. PROJECT DESCRIPTION

PEFI requested the following:

- Removal of Emergency Diesel Generator, EU-004, from the facility because it was never built.
- For PBs 1, 2, and 3, EU-001 and EU-002, EU-014 and EU-015, and EU-016 and EU-017, respectively, PEFI requests that the latest ASTM analytical methods for testing of the sulfur content of the fuels contained in 40 CFR 60, Subpart GG, be allowed.
- For PB 2's and PB 3's EUs, CT2A & CT2B and CT3A & CT3B, PEFI requested changes with regard to CEMS data exclusion of excess emissions for: (1) Cold Startup of the Steam Turbine Generator (STG); (2) Cold Startup of the combustion turbine-heat recovery steam generator (CT-HRSG); and, (3) Fuel Switches (Oil-to-Gas or Gas-to-Oil). Operational justifications were provided to support the requests.
- For PB 1's EUs, CT1A and CT1B, PEFI requested excess emissions for Fuel Switches.

4. RULE APPLICABILITY

4.1. PSD Applicability - General

The Department regulates major air pollution facilities in accordance with Florida's Prevention of Significant Deterioration (PSD) program, as defined in Rules 62-212.400 (PSD) and 62-210.200 (Definitions), F.A.C. A PSD review is required in areas currently in attainment with the state and federal Ambient Air Quality Standards (AAQS) or areas designated as "unclassifiable" for a given pollutant. A facility is considered "major" with respect to PSD if it emits or has the potential to emit: 250 tons per year or more of any regulated air pollutant, or 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the 28 PSD Major Facility Categories, or 5 tons per year of lead.

For new projects at existing PSD-major facilities, each regulated pollutant is reviewed for PSD applicability based on emissions thresholds known as the Significant Emission Rates defined in Rule 62-210.200, F.A.C. Pollutant emissions from the project exceeding these rates are considered "significant" and the applicant must employ the Best Available Control Technology (BACT) to minimize emissions of each such pollutant and evaluate the air quality impacts. Although a facility may be "major" with respect to PSD for only one regulated pollutant, it may be subject to PSD preconstruction review for several PSD-significant pollutants and required to install BACT controls for these pollutants.

4.2. PSD Applicability - Project

The existing facility is located in an area that is in attainment (or designated as unclassifiable or maintenance) for all pollutants subject to a National Ambient Air Quality Standard (NAAQS) in accordance with Rule 62-204.360, F.A.C. The existing facility is a PSD-major facility a defined in Rule 62-210.200 (Definitions), F.A.C. There is no request to increase the allowable emission limits nor the potential emissions. The Department does not expect the changes to result in actual annual emission increases. Cold startups are simply being revised to a "per episode" basis, which is not expected to increase the frequency or duration of these episodes.

4.3. Justification for Permit Condition Changes Requested

a. Removal of Emergency Diesel Generator, Emissions Unit -004, from the facility because it was never built.

This request is acceptable and the text related to the Emergency Diesel Generator will be removed for the Title V Permit.

b. For PBs 1, 2, and 3, EU-001 and EU-002, EU-014 and EU-015, and EU-016 and EU-017, respectively, PEFI requests that the latest ASTM analytical methods for testing of the sulfur content of the fuels contained in 40 CFR 60, Subpart GG, be allowed.

In Specific Conditions A.15., E.18. and F.23., the latest ASTM Methods have been incorporated from 40 CFR 60, Subpart GG, at 40 CFR 60.335 for NSPS applicability, and 40 CFR 75, Appendix D, for Acid Rain purposes.

c. For PB 2's and PB 3's EUs, CT2A & CT2B and CT3A & CT3B, PEFI requested changes with regard to CEMS data exclusion for the following methods of operation:

(1) "Cold Startup of the STG" means the cold startup of one or both of the CT-HRSG sets and the associated STG in a Power Block where everything has been shutdown for 48 hours or more. Operations are limited by the cold steam-turbine generator.

(2) "Cold Startup of the CT-HRSG" means the cold startup of a CT-HRSG set when the associated STG is hot, but the CT-HRSG has been shutdown for 8 hours or more. Operations are limited by the cold HRSG.

(3) "Fuel Switch" means changing fuel from gas-to-oil or oil-to-gas while operating.

For these requests, the main pollutants of concern are NO_x and CO. PEFI has provided the Department CEMS data for two-year periods to show the levels of NO_x and CO emissions in the cold-start and fuel-switching episodes as well as the frequencies and durations of cold-start and fuel-switching episodes. The following table shows the actual durations and the annual frequencies of cold startups and fuel switches for these units. Power Block 2 (CT2A & CT2B) began commercial operation in 12/2003 and Power Block 3 (CT3A & CT3B) began commercial operation in 11/2005.

Episode	Duration of Episode			Number of Episodes/Year			
	Min.	Avg.	Max.	2003	2004	2005	YTD 6/06
Cold Startup of the CT-HRSG	1 hr. 26 mins.	2 hrs. 3 mins.	2 hrs. 40 mins.	CT2A: 0 CT2B: 0	CT2A: 1 CT2B: 2	CT2A: 3 CT2B: 3 CT3A: 1 CT3B: 0	CT2A: 1 CT2B: 5 CT3A: 4 CT3B: 4
Cold Startup of the STG (for each CT)	4 hrs. 50 mins.	5 hrs. 35 mins.	6 hrs. 20 mins.	CT2A: 1 CT2B: 0	CT2A: 6 CT2B: 6	CT2A: 4 CT2B: 3 CT3A: 1 CT3B: 1	CT2A: 2 CT2B: 2 CT3A: 3 CT3B: 2
Fuel Switching (Gas-to-Oil or Oil-to-Gas)	1 hr. 30 mins.	2 hrs. 2½ mins.	2 hrs. 35 mins.	CT2A: 0 CT2B: 0	CT2A: 2 CT2B: 2	CT2A: 3 CT2B: 2 CT3A: 0 CT3B: 0	CT2A: 2 [1] CT2B: 2 [1] CT3A: 1 [1] CT3B: 2 [1]

[1] Fuel Switches occurred during tuning session.

The original permit condition allowed only 4 hours for the cold startup of the STG in any 24-hour block. As indicated in the table above, such a startup could not be completed within the same day without exceeding 4 hours of excess emissions. To comply with this requirement, the applicant would begin a cold STG startup at 8:00 p.m. and finish about 2:00 a.m. the next day. The applicant indicates that this method forced the plant to bring the unit on line before it was necessary to meet the electrical grid demand. This was not the intent of the original condition.

For NO_x allowable emissions, PB 2's units are permitted at 3.5 ppmvd @ 15% O_2 (NG) and 12 ppmvd @ 15% O_2 (FO); and, PB 3's units are permitted at 2.5 ppmvd @ 15% O_2 (NG) and 10 ppmvd @ 15% O_2 (FO). For a cold startup of the STG for both units in a PB, the NO_x CEMS data shows that actual emissions range from 3.0 to 48.20 ppmvd @ 15% O_2. For a CT-HRSG startup, the NO_x CEMS data shows that actual emissions range from 3.6 to 44.4 ppmvd @ 15% O_2. For fuel switching, the NO_x CEMS data shows that actual emissions range from 2.9 to 53.8 ppmvd @ 15% O_2.

For carbon monoxide (CO) allowable emissions, PB 2's units are permitted at 16 ppmvd @ 15% O_2 (NG) and 30 ppmvd @ 15% O_2 (FO); and, PB 3's units are permitted at 10 ppmvd @ 15% O_2 (NG) and 20 ppmvd @ 15% O_2 (FO). For a cold startup of the STG for both units in a PB, the CO CEMS data shows that actual emissions range from 62.1 to 4563.0 ppmvd @ 15% O_2. For a CT-HRSG startup, the CO CEMS data shows that actual emissions range from 14.8 to 4490.9 ppmvd @ 15% O_2. For fuel switching, the CO CEMS data shows that actual emissions range from 63.2 to 4491.9 ppmvd @ 15% O_2.

Based on the information provided, the Department agrees to allow the following CEMS data exclusion:

- six (6) hours of excess emissions per CT for cold startup of the steam-turbine generator;
- three (3) hours of excess emissions per CT for a cold startup of the CT-HRSG; and,
- two (2) hours of excess emissions per fuel switch (gas-to-oil or oil-to-gas).

d. For NOx allowable emissions, PB 1's units are permitted at 73 lbs/hr (basis: 12 ppmvd @ 15% O2), for NG firing, and 305 lbs/hr (basis: 42 ppmvd @ 15% O2), for FO firing. According to the permittee for PB 1, there are no issues regarding a cold startup of the STG and/or the CT-HRSG because the four hours in a 24-hour block allowed for excess emissions exclusion during these methods of operation are adequate. For carbon monoxide (CO) allowable emissions, PB 1's units are permitted at 77 lbs/hr (basis: 25 ppmvd @ 15% O2), for NG firing, and 93 lbs/hr (basis: 30 ppmvd @ 15% O2), for FO firing. There is no CO CEMS. Compliance with the CO standard is demonstrated by conducting annual tests using EPA Method 10 in Appendix A of 40 CFR 60.

PEFI did request excess emissions allowances for fuel switches for PB 1. As can be seen from the table above and discussions regarding PB 2 and PB 3, fuel switches take approximately 2 hours per fuel switch for these identical emissions units. Based on this information, the request for excess emissions allowances for fuel switches is acceptable. Excess emissions for fuel switching will be allowed for 2 hours per fuel switch per emissions unit.

5. CONCLUSION

This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions. Bruce Mitchell is the project engineer responsible for reviewing the application and drafting the permit. Jeff Koerner, P.E., provided additional project review.

Month Day, 2006

(Electronically Sent – Received Receipt Requested)

Mr. Martin J. Drango, Plant Manager
Florida Power Corporation dba Progress Energy Florida, Inc.
Hines Energy Complex
100 Central Avenue, CX1B
St. Petersburg, Florida 33701

Re: Project No. 1050234-015-AC
Permit Nos. PSD-FL-195(D) / PSD-FL-296(C) / PSD-FL-330(B)
Power Plant Siting: PA 92-33
Hines Energy Complex
Power Block 1 (EUs 001 & 002), Power Block 2 (EUs 014 & 015), Power Block 3 (EUs 016 & 017), and the Emergency Generator (EU 004)

Dear Mr. Drango:

You submitted an application to modify the above referenced air construction permits to: (1) remove the Emergency Generator; (2) for Power Blocks 1 - 3, allow the use of the ASTM analytical methods for testing the sulfur content of the fuels as established in 40 CFR 60, Subpart GG; (3) for Power Block 1, allow CEMS data exclusion for fuel switches; and, (4) for Power Blocks 2 and 3, revise the duration of CEMS data exclusions due to cold startups and fuel switches. Based on the additional supporting information provided, the Department approves these requests as specified in the following revised conditions. This is the final permit modification, which modifies the original air construction permits. Additions are double-underlined and deletions are ~~single strike-through~~.

Permit No. PSD-FL-195(D)

This permit modifies Permit No. PSD-FL-195(C).

Emergency Generator (EU 004)

A.3. Only natural gas (NG) or low sulfur fuel oil shall be fired in each combustion turbine and the auxiliary boiler. ~~Only low sulfur fuel oil shall be fired in the diesel generator. The maximum sulfur content of the low sulfur fuel oil shall not exceed 0.05 percent, by weight.~~

B.8. Reserved. ~~Operation of the emergency diesel generator shall be limited to a maximum of 100 hours per year and only during periods of on site emergency power needs (when no other power source is available) or during periodic testing. The following emission limitations shall apply:~~

~~a. NO_x emissions shall not exceed 9.82 grams/hp-hr.~~

~~b. Sulfur dioxide emissions shall be limited by firing only low sulfur fuel oil with maximum sulfur content of 0.05 percent by weight.~~

~~c. Visible emissions shall not exceed 20 percent opacity.~~

Power Block 1 (EU 1 and 2)

B.3. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period except in the event that the steam turbine has been shut down for 8 hours or more. During a cold start-up to combined cycle operation, up to four hours of excess emissions are allowed in a 24-hour period. Cold start-up is defined as a start-up to combined cycle operation following a steam turbine shutdown of greater than 48 hours. During a warm start up to combined cycle operation, up to three hours of excess emissions are allowed in a 24-hour period. Warm start-up is defined as a startup to combined cycle operation following a steam turbine of greater than 8 hours and less than 48 hours. During fuel switches (oil-to-gas or gas-to-oil), up to two (2) hours of excess emissions per fuel switch per emissions unit are allowed.

[Applicant Request; Vendor Combined Cycle Startup Curves Data; Rule 62-210.700, F.A.C.; and, Permit No. PSD-FL-195(D)/Project No. 1050234-015-AC]

C.1. Initial (I) and annual (A) compliance test shall be performed on each CT with the fuel(s) indicated below. Tests shall be conducted using EPA reference methods in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter~~Rule~~ 62-297, F.A.C.:

No changes were made to paragraphs a. through e.

f. The permittee shall determine compliance (I, A) with the sulfur standards for distillate oil by using the ASTM reference methods specified in 40 CFR 60, Subpart GG, or their latest editions. ~~ASTM D4294 (or equivalent) for sulfur content of distillate oil (I,A), which can be used for determining SO_2 emissions annually.~~ See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

g. The permittee shall determine compliance (I) with the sulfur standards for natural gas by using the ASTM reference methods specified in 40 CFR 60, Subpart GG, or their latest editions. ~~ASTM D1072-80, D3031-81, or D3246-81 (or equivalent) for sulfur content of natural gas (I).~~ See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

No changes were made to paragraphs h. and i.

C.2. The maximum sulfur content of the low sulfur fuel oil shall not exceed 0.05 percent, by weight. Compliance shall be demonstrated in accordance with the requirements of ~~40 CFR 60.334~~ 40 CFR 60, Subpart GG, or their latest editions, testing for sulfur content of the fuel oil in the storage tanks on each occasion that fuel is transferred to the storage tanks from any other source. Testing for fuel bound nitrogen content ~~by ASTM D3431 or D4629 or other equivalent ASTM method~~ and for fuel oil higher heating value~~,~~ shall also be conducted in accordance with 40 CFR 60, Subpart GG, or their latest editions, on the same schedule. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

Permit No. PSD-FL-296(C)

Power Block 2 (EU 014 and EU 015)

13. CEMS Data Exclusion: As provided in this paragraph, NO_x and CO emissions data recorded during periods of startup, shutdown, ~~oil-to-gas~~ fuel switches (oil-to-gas or gas-to-oil), and documented malfunctions may be excluded from the block average calculated to demonstrate compliance with the emission limits of this permit ~~Condition No. 9 of this section~~.

a. Periods of excess emissions~~data~~ excluded ~~for~~ due to startup shall not exceed two (2) hours per startup per unit ~~in any 24-hour block~~ except for the following cold startups. A "cold STG startup" is defined as a startup following a complete steam turbine generator (STG) shutdown lasting a minimum of 48 hours. Periods of excess emissions~~data~~ excluded ~~for~~ due to cold STG startup shall not exceed ~~four~~ six (6) hours per startup per unit ~~in any 24-hour block period~~. A "cold CT-HRSG startup" is defined as startup

hours per startup per unit ~~in any 24-hour block period~~. A "cold CT-HRSG startup" is defined as startup following a complete shutdown of the combustion turbine-heat recovery steam generator (CT-HRSG) lasting a minimum of 8 hours. Periods of excess emissions excluded due to cold CT-HRSG startup shall not exceed three (3) hours per startup per unit.

b. Periods of data excluded for shutdown shall not exceed two (2) hours per shutdown per unit ~~in any 24-hour block~~.

c. Periods of data excluded for ~~oil-to-gas~~ fuel switches shall not exceed two (2) hours per fuel switch per unit ~~in any 24-hour block~~.

d. Periods of data excluded for documented malfunctions shall not exceed two (2) hours per unit in any 24-hour block. A "documented malfunction" means a malfunction that meets the notification requirements specified in Condition No. 26. of this section.

e. All periods of data excluded for any startup, shutdown, ~~oil-to-gas~~ fuel switches, or documented malfunction shall be consecutive for each episode. ~~Periods of data excluded for all startups, shutdowns, oil-to-gas fuel switches, or documented malfunctions shall not exceed six hours in any 24-hour block period during which a cold startup occurred. For all other 24-hour block periods, periods of data excluded for all startups, shutdowns, oil-to-gas fuel switches, or documented malfunctions shall not exceed four hours.~~

f. The permittee shall minimize the duration of data excluded to the extent practicable. Data shall not be excluded if the startup, shutdown, or documented malfunction was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably have been prevented. Best operating practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown, ~~oil-to-gas~~ fuel switching, or documented malfunction.

[Rules 62-212.400(BACT) and 62-210.700, F.A.C.; and, Permit No. PSD-FL-296(C)/Project No. 1050234-015-AC) ~~1050234-007-AC/PSD-FL-296~~]

25. Fuel Sulfur Records: The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the following records of the sulfur contents.

a. Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ~~ASTM methods~~ in accordance with 40 CFR 60, Subpart GG ~~D4084-82, D3246-81 or more recent versions~~. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

b. Compliance with the distillate oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to each Compliance Authority before initial startup. ~~Sampling the fuel oil sulfur content shall be conducted in accordance with ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, and one of the following test methods for sulfur in petroleum products: ASTM D129-91, ASTM D1552-90, ASTM D2622-94, or ASTM D4294-90.~~ Sampling and analysis for the fuel oil sulfur content shall be conducted in accordance with the methods in 40 CFR 60, Subpart GG, or their latest editions. ~~More recent versions of these methods may be used.~~ For each subsequent fuel delivery, the permittee shall either (1) maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor, or (2) take and analyze a sample according to the above procedures and maintain a permanent file of the results of the analysis. At the request of a Compliance Authority, the permittee shall perform additional sampling and analysis for the fuel sulfur content. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

c. The above methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75, Appendix D.

[Rules 62-4.070(3) and 62-4.160(15), F.A.C.; and, Permit No. PSD-FL-296(C)/Project No. 1050234-015-AC ~~1050234-007-AC/PSD-FL-296(A)~~]

Permit No. PSD-FL-330(B)

Power Block 3 (EU 016 and EU 017)

13. CEMS Data Exclusion: As provided in this paragraph, NO_x and CO emissions data recorded during periods of startup, shutdown, ~~oil-to-gas~~ fuel switches (oil-to-gas or gas-to-oil), and documented malfunctions may be excluded from the block average calculated to demonstrate compliance with the emission limits of this permit ~~Condition No. 9 of this section~~.

a. Periods of excess emissions~~data~~ excluded ~~for~~ due to startup shall not exceed two (2) hours per startup per unit ~~in any 24-hour block~~ except for the following cold startups. A "cold STG startup" is defined as a startup following a complete steam turbine generator (STG) shutdown lasting a minimum of 48 hours. Periods of excess emissions~~data~~ excluded ~~for~~ due to cold STG startup shall not exceed ~~four~~ six (6) hours per startup per unit ~~in any 24-hour block period~~. A "cold CT-HRSG startup" is defined as startup following a complete shutdown of the combustion turbine-heat recovery steam generator (CT-HRSG) lasting a minimum of 8 hours. Periods of excess emissions excluded due to cold CT-HRSG startup shall not exceed three (3) hours per startup per unit.

b. Periods of data excluded for shutdown shall not exceed two (2) hours per shutdown per unit ~~in any 24-hour block~~.

c. Periods of data excluded for ~~oil-to-gas~~ fuel switches shall not exceed two (2) hours per fuel switch per unit ~~in any 24-hour block~~.

d. Periods of data excluded for documented malfunctions shall not exceed two (2) hours per unit in any 24-hour block. A "documented malfunction" means a malfunction that meets the notification requirements specified in Condition No. 26. of this section.

e. All periods of data excluded for any startup, shutdown, ~~oil-to-gas~~ fuel switches, or documented malfunction shall be consecutive for each episode. ~~Periods of data excluded for all startups, shutdowns, oil-to-gas fuel switches, or documented malfunctions shall not exceed six hours in any 24-hour block period during which a cold startup occurred. For all other 24-hour block periods, periods of data excluded for all startups, shutdowns, oil-to-gas fuel switches, or documented malfunctions shall not exceed four hours.~~

f. The permittee shall minimize the duration of data excluded to the extent practicable. Data shall not be excluded if the startup, shutdown, or documented malfunction was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably have been prevented. Best operating practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown, ~~oil-to-gas~~ fuel switching, or documented malfunction.

[Rules 62-212.400(BACT) and 62-210.700, F.A.C.; and, Permit No. PSD-FL-330(B)/Project No. 1050234-015-AC~~1050234-006-AC/PSD-FL-330~~]

25. Fuel Sulfur Records: The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the following records of the sulfur contents.

a. Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas

shall be ASTM methods in 40 CFR 60, Subpart GG, or their latest editions ~~D4084-82, D3246-81 or more recent versions~~. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

b. Compliance with the distillate oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to each Compliance Authority before initial startup. ~~Sampling the fuel oil sulfur content shall be conducted in accordance with ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, and one of the following test methods for sulfur in petroleum products: ASTM D129-91, ASTM D1552-90, ASTM D2622-94, or ASTM D4294-90.~~ Sampling and analysis for the fuel oil sulfur content shall be conducted using the ASTM methods in 40 CFR 60, Subpart GG, or their latest editions. ~~More recent versions of these methods may be used.~~ For each subsequent fuel delivery, the permittee shall either (1) maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor, or (2) take and analyze a sample according to the above procedures and maintain a permanent file of the results of the analysis. At the request of a Compliance Authority, the permittee shall perform additional sampling and analysis for the fuel sulfur content. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

c. The above methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75, Appendix D.

[Rules 62-4.070(3) and 62-4.160(15), F.A.C.; and, Permit No. PSD-FL-330(B)/Project No. 1050234-015-AC ~~1050234-006-AC/PSD-FL-330~~]

A copy of this letter (permit modification) shall be filed with the referenced permits and shall become a part of each permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes. Any party to this order has the right to seek judicial review of it under Section 120.68, F.S., 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 thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

Joseph Kahn, Director
Division of Air Resource Management

JK/jfk/bm

cc: Mr. Martin J. Drango, Hines Energy Complex (martin.drango@pgnmail.com)
Ms. Ann Quillian, Progress Energy Services Company (Ann.Quillian@pgnmail.com)
Mr. Scott Osbourn, Golder Associates Inc. (sosbourn@golder.com)
Ms. Mara Nasca, SWD Office (Nasca_M@dep.state.fl.us)
Mr. Mike Halpin, DEP Siting Office (Halpin_M@dep.state.fl.us)
Mr. Gregg Worley, U.S. EPA Region 4 (worley.gregg@epamail.epa.gov)

Statement of Basis

Florida Power Corporation dba Progress Energy Florida, Inc.
Hines Energy Complex

Facility ID No.: 1050234
Polk County

Title V Air Operation Permit Renewal
DRAFT/PROPOSED Permit Project No.: 1050234-014-AV

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

EPA has agreed to treat the DRAFT Title V Permit as a PROPOSED Title V Permit and to perform its 45-day review provided by the law and regulations concurrently with the public comment period. Although EPA's 45-day review period will be performed concurrently with the public comment period, the deadline for submitting a citizen petition to object to the EPA Administrator will be determined as if EPA's 45-day review period is performed after the public comment period has ended. The FINAL Title V Air Operation Permit will be issued after the conclusion of the 45-day EPA review period so long as no adverse comments are received that results in a different decision or significant change of terms or conditions.

Facility:

The entire facility (inclusive of all Power Blocks 1, 2 & 3) has a total generating capacity of approximately 1560 MWs. This facility is a major source of hazardous air pollutants (HAPs). This facility consists of three power blocks (1, 2 and 3), each with two combined cycle combustion turbines with un-fired heat recovery steam generators (HRSGs), a 99 MMBtu/hr auxiliary boiler, a 97,570 barrel fuel oil storage tank, and a relocatable diesel generator that can be located at various Florida Power Corporation power plants, as needed. Emissions from each CT and HRSG combination are vented through a single stack for each. The combustion turbines may fire fuel oil or natural gas.

Power Block 1: Emission Units -001 (CT1A) and -002 (CT1B).

Emission units 001 and 002 each consist of a combined cycle Westinghouse 501FC Combustion Turbine, each with a nominal generator rating of 170 MW and each with a maximum heat input rating of 1,915 MMBtu/hr (HHV), while firing natural gas, and 2,020 MMBtu/hr (HHV), while firing fuel oil, based on a compressor inlet air temperature of 59 °F, the HHV of each fuel, and 100% load. For the CTs, the primary fuel is natural gas (NG), which is supplemented with No. 2 fuel oil (FO) with a sulfur content not to exceed 0.05%, by weight. NO_x emissions are controlled with dry low NO_x burners (DLN) for natural gas firing and wet injection for fuel oil firing, complete with Selective Catalytic Reduction (SCR). Each combustion turbine incorporates an unfired heat recovery steam generator (HRSG). Steam from both HRSGs is delivered to a single steam turbine-electrical generator, which has a generating capacity of 160 MW. The total generating capacity of the "2-on-1" combined cycle unit is approximately 500 MW.

These emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); PSD-FL-195 and revisions (A, B &C); PPSA: PA 92-33; and, Rule 62-212.400(6), F.A.C.

Power Block 2: Emission Units -014 (CT2A) and -015 (CT2B).

Emission units 014 and 015 each consist of a combined cycle Westinghouse 501FD Combustion Turbine, each with a nominal generator rating of 170 MW and each with a maximum heat input rating of 2,048 MMBtu/hr (HHV), while firing natural gas, and 2,155 MMBtu/hr (HHV), while firing fuel oil, based on a compressor inlet air temperature of 59 °F, the LHV of each fuel, and 100% load. For the CTs, the primary fuel is natural gas (NG), which is supplemented with No. 2 fuel oil (FO) with a sulfur content not to exceed 0.05%, by weight. NO_x emissions are controlled with dry low NO_x burners (DLN) for natural gas firing and wet injection for fuel oil firing, complete with Selective Catalytic Reduction (SCR). Each combustion turbine incorporates an unfired heat recovery steam generator (HRSG). Steam from both HRSGs is delivered to a single steam turbine-electrical generator, which has a generating capacity of 190 MW. The total generating capacity of the "2-on-1" combined cycle unit is approximately 530 MW.

These emissions unit are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); PSD-FL-296 and revisions (A & B); and, Rule 62-212.400(6), F.A.C.

Power Block 3: Emission Units -016 (CT3A) and -017 (CT3B).

Emission units (EU) 016 and 017 are each a Siemens Westinghouse 501FD gas turbine-electrical generator set with an automated gas turbine control system and an unfired heat recovery steam generator (HRSG). In addition, the project also includes a single steam turbine-electrical generator that serves both gas turbine/HRSG systems. Both of the gas turbine-electrical generator sets have a generating capacity of 170 MW for gas firing. Each gas turbine fires natural gas as the primary fuel and distillate oil as a restricted alternate fuel. Steam from both HRSGs is delivered to a single steam turbine-electrical generator, which has a generating capacity of 190 MW. The total generating capacity of the "2-on-1" combined cycle unit is approximately 530 MW. The maximum heat input rate is based on the higher heating value (HHV) of the fuel, which is 2,048 MMBtu/hr (HHV), while firing natural gas, and 2,155 MMBtu/hr (HHV), while firing fuel oil, based on a compressor inlet air temperature of 59 °F, the HHV of each fuel, and 100% load.

The efficient combustion of natural gas and restricted firing of low sulfur distillate oil minimizes the emissions of CO, PM/PM_{10}, SAM, SO_2 and VOC. Dry low-NO_x (DLN) combustion technology for gas firing and water injection for oil firing reduce NO_x emissions. A selective catalytic reduction (SCR) system – in combination with DLN combustion technology for gas firing and a water injection system for oil firing – reduces NO_x emissions. The HRSGs are designed and constructed such that an oxidation catalyst can be readily installed if necessary to achieve compliance with CO emission limitations.

Each HRSG has a stack that is 125 feet tall and 19 feet in diameter. Each stack is equipped with continuous emissions monitoring systems (CEMS) to measure and record CO and NO_x emissions as well as flue gas oxygen or carbon dioxide content. The Department may require the permittee to perform additional air dispersion modeling should the actual specified stack dimensions change.

These emissions unit are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); PSD-FL-330 and revisions (A); and, Rule 62-212.400(6), F.A.C.

Incorporation of Air Construction Permits

In addition to the permit renewal, the renewal will be used to incorporate the terms and conditions of several Air Construction Permits:

- No. 1050234-006-AC/PSD-FL-330 [Power Block (PB) 3 – initial AC authorization];
- No. 1050234-013-AC/PSD-FL-330(A) [PB3 – change in heat input rate to each combustion turbine, CT3A and CT3B]; and,
- No. 1050234-015-AC/PSD-FL-195(D)/PSD-FL-296(C)/PSD-FL-330(B), PB1/PB2/PB3, respectively [PB1, PB2 & PB3 - changes in the ASTM methods for evaluating fuel quality; PB1 – allowing excess emissions for fuel switches (oil-to-gas or gas-to-oil); PB2 and PB3 - changing the timeframes for data exclusion of excess emissions for cold startups and fuel switches; and, the removal of the Emergency Diesel Generator (EU -004), which was never installed].

Miscellaneous

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

Florida Power Corporation dba Progress Energy Florida, Inc.
Hines Energy Complex
Facility ID No.: 1050234
Polk County

Title V Air Operation Permit Renewal
DRAFT/PROPOSED Permit Project No.: 1050234-014-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation
Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
Telephone: 850/488-1344
Fax: 850/922-6979

Compliance Authority:
Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Telephone: 813/632-7600
Fax: 813/744-6084

Title V Air Operation Permit Renewal
DRAFT/PROPOSED Permit No.: 1050234-014-AV

Table of Contents

Permittee:
FPC dba Progress Energy Florida, Inc.
100 Central Avenue, BB1A-HE4
St. Petersburg, Florida 33701-5511

DRAFT/PROPOSED Permit No.: 1050234-014-AV
Facility ID No.: 1050234
SIC Nos.: 49, 4911
Project: Title V Air Operation Permit Renewal

The purpose of this permitting action is for the renewal of the initial Title V permit and the incorporation of: (1) the terms and conditions established in the air construction permit (AC), No. 1050234-006-AC/PSD-FL-330, for Power Block 3; (2) the terms and conditions established in the AC, No. 1050234-013-AC, for Power Blocks 2 and 3; and, (3) the terms and conditions established in the AC, No. 1050234-015-AC, for Power Blocks 1, 2 and 3. The existing Hines Energy Complex is located at 7700 County Road 555, 2.5 miles South of County Road 640, Bartow, Polk County. UTM Coordinates are: Zone 17, 414.4 km East and 3073.9 km North. Latitude is: 27° 47' 19" North; and, Longitude is: 81° 52' 10" West.

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

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities
Appendix I-1, List of Insignificant Emissions Units and/or Activities
Appendix TV-6, Title V Conditions version dated 06/23/2006
Appendix SS-1, Stack Sampling Facilities version dated 10/07/96
Table 297.310-1, Calibration Schedule version dated 10/07/96
Figure 1 - Summary Report - Gaseous And Opacity Excess Emissions and Monitoring System Performance
Alternate Sampling Procedure: ASP Number 97-B-01
Phase II Acid Rain Application/Compliance Plan dated 07/03/98
Appendix GG - NSPS Subpart GG Requirements for Gas Turbines

Effective Date: January 1, 2007
Renewal Application Due Date: July 5, 2011
Expiration Date: December 31, 2011

Joseph Kahn, P.E., Director
Division of Air Resource Management

jk/jfk/bm

Section I. Facility Information.

Subsection A. Facility Description.

Power Block 1 consists of two combined cycle combustion turbines with unfired heat recovery steam generators (HRSGs), for a nominal total of 500 MWs, a 99 MMBtu/hr auxiliary boiler, and a 97,570 barrel fuel oil storage tank. Emissions from each CT and HRSG combination are vented through a single stack for each.

Power Block 2 consists of two combined cycle combustion turbines with unfired HRSGs, and an associated single steam-turbine electrical generator, for a nominal total of 530 MWs. Emissions from each CT and HRSG combination are vented through a single stack for each.

Power Block 3 consists of two combined cycle combustion turbines with unfired HRSGs, and an associated single steam-turbine electrical generator, for a nominal total of 530 MWs. Emissions from each CT and HRSG combination are vented through a single stack for each.

The entire facility (inclusive of all Power Blocks 1, 2 & 3) has a total generating capacity of approximately 1560 MWs.

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

This facility is a major source of hazardous air pollutants (HAPs).

Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).

E.U. ID No.	Brief Description
-001	170 MW Westinghouse 501F CT1A with unfired HRSG
-002	170 MW Westinghouse 501F CT1B with unfired HRSG
-014	170 MW Westinghouse 501FD CT2A with unfired HRSG
-015	170 MW Westinghouse 501FD CT2B with unfired HRSG
-016	170 MW Westinghouse 501FD CT3A with unfired HRSG
-017	170 MW Westinghouse 501FD CT3B with unfired HRSG
-003	Auxiliary Steam Boiler
-001 (7775047)	Relocatable diesel generator(s) with a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2460 kilowatts. Emissions from the generator(s) are uncontrolled.

Insignificant Emissions Units and/or Activities
{See Appendix I-1}
Unregulated Emissions Units and/or Activities
{see Appendix U-1}

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.

These documents are provided to the permittee for information purposes only:
Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers
Appendix H-1, Permit History/ID Number Changes

Documents on file with USEPA
Risk Management Plan submitted to the RMP Reporting Center on June 21, 2004.

These documents are on file with the permitting authority:
Initial Title V Permit issued May 3, 1999.
Title V Permit Renewal Application received April 21, 2006.
Request for additional information (RAI) mailed/clerked on June 8, 2006.
Response to RAI letter received on September 5, 2006.
Letter with Enclosure from Ms. Ann Quillian received September 15, 2006.

Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-6, TITLE V CONDITIONS, is a part of this permit.
{Permitting note: APPENDIX TV-6, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.
[Rule 62-296.320(2), F.A.C.]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard.
Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than 20 percent opacity. EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).
a. As required by Section 112(r)(7)(B)(iii) of the CAA and 40 CFR 68, the owner or operator shall submit an updated Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center.
b. As required under Section 252.941(1)(c), F.S., the owner or operator shall report to the appropriate representative of the Department of Community Affairs (DCA), as established by department rule, within one working day of discovery of an accidental release of a regulated substance from the stationary source, if the owner or operator is required to report the release to the United States Environmental Protection Agency under Section 112(r)(6) of the CAA.
c. The owner or operator shall submit the required annual registration fee to the DCA on or before April 1, in accordance with Part IV, Chapter 252, F.S., and Rule 9G-21, F.A.C.

Any required written reports, notifications, certifications, and data required to be sent to the DCA, should be sent to:

Department of Community Affairs
Division of Emergency Management
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100
Telephone: 850/413-9921, Fax: 850/488-1739

Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
P.O. Box 1515
Lanham-Seabrook, Maryland 20703-1515
Telephone: 301/429-5018

Any required reports to be sent to the National Response Center, should be sent to:

National Response Center
EPA Office of Solid Waste and Emergency Response
USEPA (5305 W)
401 M Street, SW
Washington, D.C. 20460
Telephone: 1/800/424-8802

Send the required annual registration fee using approved forms made payable to:

Cashier
Department of Community Affairs
State Emergency Response Commission
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2149

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

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.
[Rule 62-213.440(1), F.A.C.]

6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.
[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

7. Not federally enforceable. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.
[Rule 62-296.320(1)(a), F.A.C.; and, 1050234-001-AV]

8. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:

- Maintenance of paved areas as needed;
- Regular mowing of grass and care of vegetation;
- Limiting access to plant property by unnecessary vehicles; and,
- Fugitive dust emissions during the construction period shall be minimized by covering or watering dust generation areas.

[Rule 62-296.320(4)(c)2., F.A.C.; PSD-FL-195(A); and, 1050234-001-AV]

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.
[Rule 62-213.440, F.A.C.]

10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3), F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year. {See condition 51., APPENDIX TV-6, TITLE V CONDITIONS}
[Rule 62-214.420(11), F.A.C.]

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southwest District office.

Department of Environmental Protection
Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, Florida 33637-0926
Telephone: 813/632-7600, Fax: 813/744-6458

12. Any reports, data, notifications, certifications, and requests required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303
Telephone: 404/562-9155, Fax: 404/562-9164

13. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.
[Rule 62-213.420(4), F.A.C.]

14. FPC vs. PEFI. Where previous text referenced "FPC", for Florida Power Corporation, they have been changed to "PEFI" to represent Progress Energy Florida, Inc. FPC is doing business as PEFI.

Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description for Power Block 1
-001	170 MW Westinghouse 501FC CT1A with unfired HRSG
-002	170 MW Westinghouse 501FC CT1B with unfired HRSG

Emission units 001 and 002 each consist of a combined cycle Westinghouse 501FC Combustion Turbine, each with a nominal generator rating of 170 MW and each with a maximum heat input rating of 1,915 MMBtu/hr (HHV), while firing natural gas, and 2,020 MMBtu/hr (HHV), while firing fuel oil, based on a compressor inlet air temperature of 59 °F, the HHV of each fuel, and 100% load. NO_x emissions are controlled with dry low NO_x burners (DLN) and/or Selective Catalytic Reduction (SCR) for natural gas firing and wet injection for fuel oil firing. Each combustion turbine incorporates an unfired heat recovery steam generator (HRSG). Steam from both HRSGs is delivered to a single steam turbine-electrical generator, which has a generating capacity of 160 MW. The total generating capacity of the "2-on-1" combined cycle unit is approximately 500 MW.

{Permitting notes: These emissions units are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); PSD-FL-195 and revisions (A, B &C); PPSA: PA 92-33; and, Rule 62-212.400(6), F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

A.0. Appendix GG - NSPS Subpart GG Requirements for Gas Turbines is a part of the permit and Power Block 1 must comply with it.
[1050234-015-AC/PSD-FL-195(D)]

A.1. Permitted Capacity. At an ambient temperature of 59 °F, each combustion turbine shall not exceed 1,915 MMBtu/hr (HHV), while firing natural gas, or 2,020 MMBtu/hr (HHV), while firing fuel oil. See Attachment G-1 for a plot of heat input versus temperature.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 1050234-003-AC/PSD-FL-195(C)]

A.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **H.4.**

A.3. Methods of Operation - Fuels. Only natural gas, having a maximum sulfur content of 1 grain per 100 cf of natural gas, or low sulfur fuel oil having a maximum sulfur content of 0.05%, by weight, shall be fired in each combustion turbine at all times. The maximum allowable fuel oil consumption for the two turbines is 13,762,806 gallons per year, which is equivalent to an aggregate of 1,000 hours per year of operation at full load.
[Rule 62-213.410, F.A.C.]

A.4. Hours of Operation. Each of the combustion turbines in Power Block 1 may operate continuously, i.e., 8,760 hours/year.
[Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

A.5. Emission Limitations.
1. Emissions from the CT, while firing natural gas or low sulfur fuel oil, shall not exceed the following (at 59 °F reference temperature for NO_x emissions) (except during periods of startup, shutdown, malfunction):

			CT Allowables	
Pollutant	**Fuel**	**Basis(g)**	**lbs/hr**	**TPY(b)**
NO_x (a)	Gas	12 ppmvd (h)	73(i)	639
	Oil	42 ppmvd (c)(h)	305	153
VOC (d)	Gas	7 ppmvw	10.4	91
	Oil	10 ppmvw	19.0	5.6
SO_2	Gas(f)		4.7	44
	Oil(f)		94	47
CO	Gas	25 ppmvd	77	675
	Oil	30 ppmvd	93	47
VE	Gas	10 percent opacity		
	Oil	20 percent opacity		
PM/PM_{10}	Gas		15.6	79
	Oil(e)		44.8	21

a. Pollutant emission rates may vary depending on ambient conditions (compressor inlet temperatures) and the CT characteristics. Manufacturer's curves for the NO_x emission rate correction to other temperatures at different loads were provided to the DEP for review and are now a part of this permit (see Appendix G-1). The manufacturer's curves shall be used to establish pollutant emission rates over a range of temperatures for the purpose of compliance determination. Emission limitations in lbs/hr/CT of NO_x are blocked 24-hour averages (midnight to midnight) and are calculated as follows:

NO_x emissions shall be determined continuously by a Continuous Emissions Monitoring System (CEMS). A CEMS operated and maintained in accordance with 40 CFR 75 shall be used. Compliance with the NO_x emissions standards in the above table shall be demonstrated with this CEMS system based on a 24-hour block average. Based on CEMS data at the end of each operating day, new 24-hour average emission rates, both actual and allowable (based on compressor inlet temperatures) are calculated from the arithmetic average of all valid hourly emission rates during the previous 24 operating hours. Valid hourly emission rates shall not include periods of startup (including fuel switching), shutdown, or malfunction as defined in Rule 62-210.200, F.A.C., where emissions exceed the NO_x standard. These excess emission periods shall be reported as required in 40 CFR 60.7(b). A valid hourly emission rate shall be calculated for each hour in which two NO_x and carbon dioxide (or oxygen) concentrations are obtained at least 15 minutes apart. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate the 24-hour block average.

b. Annual emission limits (TPY) for natural gas are based on a total of two CTs operating at full load 8,760 hours per year [i.e., NO_x: 73 lbs/hr x 2 CTs x 8,760 hrs/yr x 1 ton/2,000 lbs = 639 TPY].

Annual emission limits (TPY) for fuel oil are based on full load operation for a total of 1,000 hours per year for the two CTs [i.e., NO_x: 305 lbs/hr x 1,000 hrs/yr x 1 ton/ 2,000 lbs = 153 TPY].

c. Fuel oil NO_x emissions are based on full load operation and 15 percent oxygen. For fuel oil firing, NO_x levels of 42 ppmvd @ 15 percent O_2 are based on a fuel bound nitrogen content of zero by the firing of No. 2 fuel oil, a distillate, with a maximum sulfur content of 0.05%, by weight.

d. Exclusive of background concentrations.

e. PM/PM_{10} emission limitations include sulfuric acid mist.

f. SO_2 emissions are based on a maximum of 1 grain of S/100 cf of natural gas and 0.05 percent sulfur, by weight, in the fuel oil.

g. The values are the computational basis for the lbs/hr numbers, which are the actual emission limitations.

h. At 15 percent O_2, not ISO corrected.

i. Control of nitrogen oxides from each CT while firing natural gas shall be accomplished using dry low NO_x burners (DLN) and SCR. Ammonia slip shall not exceed 10 ppm.

2. The following pollutants were evaluated under preconstruction review for PSD purposes:

POLLUTANT	**METHOD OF CONTROL**	**Basis (b)**
Benzene	Natural Gas	BACT
Inorganic Arsenic	No. 2 Fuel Oil (a)	BACT
Beryllium	No. 2 Fuel Oil (a)	BACT
Mercury	No. 2 Fuel Oil (a)	(c)
Pb	No. 2 Fuel Oil (a)	(c)

a. The No. 2 fuel oil shall have a maximum sulfur content of 0.05 percent, by weight.

b. Since these pollutants are inherent constituents in the fuel, the basis for control will be by specifying that only natural gas and No. 2 fuel oil can be fired at the facility.

c. Below PSD significant emission levels.

[1050234-002-AC/PSD-FL-195(B); and, 40 CFR 60.334(i)(1)]

A.6. Oxides of Nitrogen. In addition to the specific NO_x emission limits specified for each turbine, NO_x emissions shall not exceed any of the following limits:
a. Nitrogen oxide emissions, expressed as NO_x shall not exceed:

$$STD = 0.0042 + F$$

where:
STD = allowable NO_x emissions (percent by volume at 15 percent O_2 and on a dry basis).
F = NO_x emission allowance for fuel-bound nitrogen defined by the following table:

Fuel-Bound Nitrogen (% by weight)	F (NO_x % by volume)
$0 < N < 0.015$	0
$0.015 < N < 0.03$	0.04(N-0.015)

where: N = the nitrogen content of the fuel (% by weight).

[1050234-002-AC/PSD-FL-195(B)]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

A.7. Excess emissions resulting from startup, shutdown, or malfunction, shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two (2) hours in any 24-hour period except in the event that the steam turbine has been shut down for 8 hours or more. During a cold start-up to combined cycle operation, up to four (4) hours of excess emissions are allowed in a 24-hour period. Cold start-up is defined as a start-up to combined cycle operation following a steam turbine shutdown lasting at least 48 hours. During a warm start up to combined cycle operation, up to three (3) hours of excess emissions are allowed in a 24-hour period. Warm start-up is defined as a startup to combined cycle operation following a steam turbine shutdown lasting at least 8 hours. During fuel switches (oil-to-gas or gas-to-oil), up to two (2) hours of excess emissions per fuel switch per emissions unit are allowed.
[Applicant Request; Vendor Combined Cycle Startup Curves Data; Rule 62-210.700(1), F.A.C.; and, Permit No. PSD-FL-195(D)/Project No. 1050234-015-AC]

Monitoring of Operations

A.8. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

A.9. For each combined cycle unit, the permittee shall install, operate, and maintain a continuous emission monitoring system (CEMS) (in accordance with 40 CFR 60, Appendix F, or 40 CFR 75, whichever is more stringent) or use other DEP approved alternate methods to monitor nitrogen oxides and, if necessary, a diluent gas (CO_2 or O_2). The Federal Acid Rain Program requirements of 40 CFR 75 shall apply when those requirements become effective for the CTs.

1. Each CEMS shall meet performance specifications of 40 CFR 60, Appendix B, or 40 CFR 75, whichever is more stringent.
2. CEMS data shall be recorded and reported in accordance with 40 CFR 60, Appendix A and Subpart GG, or 40 CFR 75, whichever is more stringent. The record shall include periods of start up, shutdown, and malfunction. Compliance with specific condition **A.5.** for NO_x shall be determined by CEMS on a mass emission rate basis (lbs/hr) using EPA Method 19 and hourly averaged heat inputs (MMBtu/hr).
3. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.
4. The procedures under 40 CFR 60.13 or 40 CFR 75, whichever is more stringent, shall be followed for installation, evaluation, and operation of all CEMS.
5. For purposes of the reports required under this permit, excess emissions are defined as any calculated average emission rate, as determined pursuant to specific condition **A.7.**, which exceeds the applicable emission limits in specific condition **A.5.**

[1050234-002-AC/PSD-FL-195(B)]

A.10. Tests Required.

a. PM, VE, and CO. Except as provided in specific conditions **A.17.** , **A.18.** and **H.3.**, emission testing for particulate matter emissions, visible emissions, and carbon monoxide emissions shall be performed annually.

b. Volatile Organic Compounds (VOCs). The initial test requirement for VOCs has been satisfied.

[Rules 62-4.070(3), 62-213.440 and 62-297.310(7), F.A.C.]

A.11. The permittee shall monitor sulfur content and nitrogen content of the new No. 2 distillate fuel oil and sulfur content of natural gas. These values may be provided by the vendor and the frequency of determinations of these values shall be as follows:
a. New No. 2 Distillate Fuel Oil. The values, sulfur and nitrogen content, shall be determined on each occasion that fuel is transferred to the storage tanks from any other source. Records of these values shall be kept by the facility for a five year period for regulatory agency inspection purposes.
b. Natural Gas. Pursuant to 40 CFR 60, Subpart GG, a custom fuel monitoring schedule for the determination of these values shall be followed for the natural gas fired at this facility and shall be as follows (See Appendix GG, NSPS Subpart GG Requirements for Gas Turbines):

Custom Fuel Monitoring Schedule for Natural Gas (NG)

1. Monitoring of fuel nitrogen content shall not be required if NG is the only fuel being fired in the gas turbines.
2. Sulfur Monitoring:
   (a). Analysis for fuel sulfur content of the natural gas shall be conducted using one of the approved ASTM reference methods for the measurement of sulfur in gaseous fuels, or an approved alternative method. These methods are referenced in 40 CFR 60, Subpart GG. The permittee can use these methods or their latest editions.
   (b). This custom fuel monitoring schedule shall become effective on May 3, 2001, the date the Initial Title V Permit was issued. Effective the date of this custom schedule, sulfur monitoring shall be

conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333 and the conditions of this permit, then sulfur monitoring shall be conducted once per quarter for six quarters. If monitoring data is provided by the applicant which demonstrates consistent compliance with the requirements herein the applicant may begin monitoring as per the requirements of 2(c).

(c). If after the monitoring required in item 2(b) above, or herein, the sulfur content of the fuel shows little variability and, calculated as sulfur dioxide, represents consistent compliance with the sulfur dioxide emission limits specified under 40 CFR 60.333 and the conditions of this permit, sample analysis shall be conducted twice per annum. This monitoring shall be conducted during the first and third quarters of each calendar year.

(d). Should any sulfur analysis as required in items 2(b) or 2(c) above indicate noncompliance with 40 CFR 60.333 and the conditions of this permit, the owner or operator shall notify the Department of such excess emissions and the custom schedule shall be reexamined. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

3. If there is a change in fuel supply, the owner or operator must notify the Department of such change for re-examination of this custom schedule. A substantial change in natural gas quality (i.e., sulfur content varying by more than 1 grain/100 standard cubic feet of gas) shall be considered as a change in fuel supply. Sulfur monitoring shall be conducted weekly during the interim period when this custom schedule is being re-examined.

4. Records of sample analysis and fuel supply pertinent to this custom schedule shall be retained for a period of five years, and be available for inspection by personnel of federal, state, and local air pollution control agencies.

[40 CFR 60.334; 40 CFR 60.335; PSD-FL-195(B); Custom Fuel Monitoring Schedule Approved on June 1, 2000; and, 1050234-014-AV]

Test Methods and Procedures

A. 12. Critical Fuel Parameters. The maximum sulfur content of the low sulfur fuel oil shall not exceed 0.05 percent, by weight. Compliance shall be demonstrated in accordance with the requirements of 40 CFR 60, Subpart GG, or their latest editions, testing for sulfur content of the fuel oil in the storage tanks on each occasion that fuel is transferred to the storage tanks from any other source. Testing for fuel bound nitrogen content per 40 CFR 60, Subpart GG, or their latest editions, and for fuel oil higher heating value, shall also be conducted on the same schedule. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

[40 CFR 60.334; and, 1050234-015-AC/PSD-FL-195(D)]

A.13. Particulate Matter. The test methods for particulate emissions shall be either EPA Method 5 or Method 17, incorporated by reference in Chapter 62-297, F.A.C.

[Rule 62-297.401, F.A.C.; and, 1050234-002-AC/PSD-FL-195(B)]

A.14. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.

[Rule 62-297.401, F.A.C.; and, 1050234-002-AC/PSD-FL-195(B)]

A.15. Sulfur Dioxide - NSPS. The permittee shall determine compliance with the sulfur standard of 40 CFR 60.333(b) for distillate oil by using the reference methods specified in 40 CFR 60, Subpart GG, or their latest editions. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

[40 CFR 60.334; 40 CFR 60.335; Rules 62-297.440 and 62-297.620(2)(d), F.A.C.; PSD-FL-195(B); and, 1050234-015-AC/PSD-FL-195(D)]

A.15. Sulfur Dioxide - NSPS. The permittee shall determine compliance with the sulfur standards for distillate oil by using the ASTM reference methods specified in 40 CFR 60, Subpart GG, or their latest editions. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.
[40 CFR 60.334; 40 CFR 60.335; Rules 62-297.440 and 62-297.620(2)(d), F.A.C.; PSD-FL-195(B); and, 1050234-015-AC/PSD-FL-195(D)]

A.16. Carbon Monoxide and Volatile Organic Compounds.

a. Carbon Monoxide. The test method for carbon monoxide shall be EPA Method 10, incorporated and adopted by reference in Chapter 62-297, F.A.C.

b. Volatile Organic Compounds (VOCs). The test method for VOCs shall be EPA Method 18 or Method 25A, incorporated and adopted by reference in Chapter 62-297, F.A.C.

[Rule 62-297.401, F.A.C.; and, 1050234-002-AC/PSD-FL-195(B)]

A.17. Frequency of Compliance Tests. Any combustion turbine that does not operate for more than 400 hours per year shall conduct a visible emissions compliance test once per each five-year period, coinciding with the term of its air operation permit.
[Rule 62-297.310(7)(a)8., F.A.C.]

A.18. Annual emissions compliance testing for particulate matter emissions, carbon monoxide emissions, and visible emissions shall be performed for oil and only if fuel oil is used for more than 400 hours by the emission unit in the previous federal fiscal year.
[1050234-002-AC/PSD-FL-195(B)]

A.19. Other DEP approved methods may be used for compliance testing after prior Departmental approval.
[1050234-002-AC/PSD-FL-195(B)]

A.20. To meet the requirements of 40 CFR 60, Subpart GG, the permittee shall use the methods specified in 40 CFR 60.334 and 40 CFR 60.335 to determine the sulfur content of the fuel being burned. The analysis may be performed by the permittee, a service contractor retained by the permittee, the fuel vendor, or any other qualified agency. See specific conditions **A.11.** and **A.12.** See Appendix GG, NSPS Subpart GG Requirements for Gas Turbines.
[40 CFR 60.334; 40 CFR 60.335; and, 1050234-015-AC/PSD-FL-195(D)]

Continuous Monitoring Requirements

A.21. Oxides of Nitrogen. NO_x emissions shall be determined continuously by a Continuous Emissions Monitoring System (CEMS). A CEMS operated and maintained in accordance with 40 CFR 75 shall be used. Compliance with the NO_x emissions standards in the above table (see specific condition **A.5.**) shall be demonstrated with this CEMS based on a 24-hour block average. Based on CEMS data at the end of each operating day, new 24-hour average emission rates, both actual and allowable (based on compressor inlet temperatures) are calculated from the arithmetic average of all valid hourly emission rates during the previous 24 operating hours. Valid hourly emission rates shall not include periods of startup (including fuel switching), shutdown, or malfunction as defined in Rule 62-210.200(Definitions), F.A.C., where emissions exceed the NO_x standard. These excess emission periods shall be reported as required by 40 CFR 60.7(b). A valid hourly emission rate shall be calculated for each hour in which two (2) NO_x and carbon dioxide (or oxygen) concentrations are obtained at least 15 minutes apart. When monitoring

and carbon dioxide (or oxygen) concentrations are obtained at least 15 minutes apart. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate the 24-hour block average.
[1050234-002-AC/PSD-FL-195(B)]

Recordkeeping and Reporting Requirements

A.22. To determine compliance with the natural gas and fuel oil firing heat input limitation, the permittee shall maintain daily records of natural gas and fuel oil consumption for each turbine, as well as recent records of the heating value for each fuel. All records shall be maintained for a minimum of five years after the date of each record and shall be made available to representatives of the Department upon request.
[Rule 62-4.070(3), F.A.C.; and, 1050234-002-AC/PSD-FL-195(B)]

Miscellaneous Conditions

A.23. The permittee shall have the option of installing duct module(s) suitable for possible future installation of an oxidation catalyst and/or SCR equipment on each combined cycle generating unit. In the event that the module(s) are not installed in the HRSG, the retrofit costs associated with not making provisions for such technology (initially) shall not be considered in any future economic evaluation to justify not installing SCR or an oxidation catalyst.
[1050234-002-AC/PSD-FL-195(B)]

A.24. Units to be constructed or modified in later phases of the project will be reviewed under the supplementary review process of the Power Plant Siting Act. If site construction has not commenced within 18 months of issuance of this certification, then PEFI shall obtain from DEP a review and, if necessary, a modification of the BACT determination and allowable emissions for the unit(s) on which construction has not commenced.
[1050234-002-AC/PSD-FL-195(B)]

Common Conditions

A.25. These emissions unit are also subject to specific conditions **H.1.** through **H.22.** contained in **Subsection H. Common Conditions.**

Subsection B. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description
-003	Auxiliary Steam Boiler

Emission unit 003 is a fossil fuel steam boiler rated at 99 MMBtu at 1,050 Btu/cf natural gas (HHV). The boiler provides steam for periods of combustion turbine startup or quick startup out of a short-term shutdown. The boiler has no add-on pollution control equipment. Air pollution emissions are controlled by efficient combustion and firing natural gas.

{Permitting note: The emissions unit is regulated under NSPS - 40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units, adopted and incorporated by reference in Rule 62-204.800, F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

Essential Potential to Emit (PTE) Parameters

B.1. Permitted Capacity. The maximum operation heat input rate for the boiler is as follows:

Unit No.	Fuel Type	MMBtu/hr Heat Input
003	Natural Gas	99

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, 1050234-002-AC/PSD-FL-195(B)]

B.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **H.4.**

B.3. Methods of Operation - (i.e., Fuels). Only natural gas shall be fired in the auxiliary steam boiler at all times.
[1050234-003-AC/PSD-FL-195(C)]

B.4. Hours of Operation. The operation of the auxiliary steam boiler shall be limited to a maximum of 1000 hours per year and only during periods of cold CT startup or quick startup out of a short-term shutdown mode, when no other source of steam is available or during periodic testing.
[PSD-FL-195(A); and, Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

B.5. Nitrogen Oxides (NO_x). NO_x emissions shall not exceed 0.1 lb/MMBtu for natural gas firing based on vendor-certified stack test data for this model of auxiliary boiler.
[1050234-003-AC/PSD-FL-195(C)]

B.6. Sulfur Dioxide. Emissions shall be limited by firing natural gas.
[Rule 62-296.406(2), F.A.C.; and, 1050234-003-AC/PSD-FL-195(C)]

B.7. Visible Emissions. Visible emissions shall not exceed 10 percent opacity while burning natural gas.
[1050234-003-AC/PSD-FL-195(C)]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

B.8. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two (2) hours in any 24-hour period unless specifically authorized by the Department for a longer duration.
[Rule 62-210.700(1), F.A.C.]

B.9. 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.]

Test Methods and Procedures

B.10. Visible Emissions. The test method for visible emissions shall be EPA Method 9, incorporated in Chapter 62-297, F.A.C.
[1050234-003-AC/PSD-FL-195(C); and, Rules 62-213.440 and 62-297.401, F.A.C.]

B.11. DEP Method 9. The provisions of EPA Method 9 (40 CFR 60, Appendix A) are adopted by reference with the following exceptions:

1. EPA Method 9, Section 2.4, Recording Observations. Opacity observations shall be made and recorded by a certified observer at sequential fifteen second intervals during the required period of observation.
2. EPA Method 9, Section 2.5, Data Reduction. For a set of observations to be acceptable, the observer shall have made and recorded, or verified the recording of, at least 90 percent of the possible individual observations during the required observation period. For single-valued opacity standards (e.g., 20 percent opacity), the test result shall be the highest valid six-minute average for the set of observations taken. For multiple-valued opacity standards (e.g., 20 percent opacity, except that an opacity of 40 percent is permissible for not more than two minutes per hour) opacity shall be computed as follows:
   a. For the basic part of the standard (i.e., 20 percent opacity) the opacity shall be determined as specified above for a single-valued opacity standard.
   b. For the short-term average part of the standard, opacity shall be the highest valid short-term average (i.e., two-minute, three-minute average) for the set of observations taken.

In order to be valid, any required average (i.e., a six-minute or two-minute average) shall be based on all of the valid observations in the sequential subset of observations selected, and the selected subset shall contain at least 90 percent of the observations possible for the required averaging time. Each required average shall be calculated by summing the opacity value of each of the valid observations in the appropriate subset, dividing this sum by the number of valid observations in the subset, and rounding the result to the nearest whole number. The number of missing observations in the subset shall be indicated in parenthesis after the subset average value.
[Rule 62-297.401, F.A.C.]

B.12. 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.]

B.13. All recorded data shall be maintained on file by the Source for a period of five (5) years.
[Rule 62-213.440, F.A.C.]

B.14. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department's Southwest District office or Southwest District Branch office on the results of each such test.
(b) The required test report shall be filed with the Department's Southwest District office or Southwest District Branch office as soon as practical but no later than 45 days after the last sampling run of each test is completed.

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

B.15. This emissions unit is also subject to specific conditions **H.1** through **H.22.** contained in **Subsection H. Common Conditions.**

Subsection C. Reserved.

Subsection D. This section addresses the following emissions unit(s).

Facility ID No.	E.U. ID No.	Brief Description
7775047	-001	Relocatable diesel generator(s) with a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2,460 kilowatts. Emissions from the generator(s) are uncontrolled.

The generators may be relocated to any of the following facilities:

1. Crystal River Plant, Powerline Road, Red Level, Citrus County.
2. Bartow Plant, Weedon Island, St. Petersburg, Pinellas County.
3. Higgins Plant, Shore Drive, Oldsmar, Pinellas County.
4. Bayboro Plant, 13th Ave. & 2nd St. South, St. Petersburg, Pinellas County.
5. Wildwood Reclamation Facility, State Road 462, 1 mi. east of U.S. 301, Wildwood, Sumter County.
6. Hines Energy Complex, County Road 555, 1 mi. southwest of Homeland, Polk County.
7. Anclote Power Plant, 1729 Baileys Road, Holiday, Pasco County

{Permitting notes: These emissions units are regulated under Rule 62-210.300, F.A.C., Permits Required. Each generator has its own stack. This section of the permit is only applicable when the generator(s) is(are) located at the Hines Energy Complex.}

The following specific conditions apply to the emissions units listed above regardless of location:

Essential Potential to Emit (PTE) Parameters

D.1. Permitted Capacity. The maximum (combined) heat input rate shall not exceed 25.74 million Btu per hour.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

D.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition **D.13.**
[Rule 62-297.310(2), F.A.C.]

D.3. Methods of Operation - Fuels. Only new No. 2 fuel oil with a maximum sulfur content of 0.5%, by weight, shall be fired in the diesel generator(s).
[Rule 62-213.410, F.A.C.; and, AC09-202080]

D.4. Hours of Operation. The hours of operation expressed as "engine-hours" shall not exceed 2,970 hours in any consecutive 12-month period. The total hours of operation expressed as "engine-hours" shall be the summation of the individual hours of operation of each generator.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, AC09-202080]

Emission Limitations and Standards

D.5. Visible Emissions. Visible emissions from each generator shall not be equal to or greater than 20 percent opacity, six minute average.
[Rule 62-296.320(4)(b)1., F.A.C.; and, AC09-202080]

Excess Emissions

D.6. Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two (2) hours in any 24-hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

D.7. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

D.8. Fuel Sulfur Analysis. The permittee shall demonstrate compliance with the liquid fuel sulfur limit by means of a fuel analysis provided by the vendor or permittee upon each fuel delivery. See specific conditions **D.3.** and **D.10.**
[Rule 62-213.440, F.A.C.]

Test Methods and Procedures

D.9. The test method for visible emissions shall be EPA Method 9, incorporated and adopted by reference in Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)4.a. and 62-297.401, F.A.C.]

D.10. The fuel sulfur content, percent by weight, for liquid fuels shall be evaluated using either ASTM D2622-94, ASTM D4294-90, both ASTM D4057-88 and ASTM D129-95, or the latest edition(s).
[Rules 62-213.440 and 62-297.440, F.A.C.]

D.11. Visible Emissions Testing - Annual. By this permit, annual emissions compliance testing for visible emissions is not required for these emissions units while burning liquid fuels for less than 400 hours per year.
[Rules 62-297.310(7)(a)4. & 8., F.A.C.]

D.12. After each relocation, each generator shall be tested within 30 days of startup for opacity and the fuel shall be analyzed for the sulfur content. See specific conditions **D.3.**, **D.5.** and **D.8.**
[Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.; and, AO09-205952]

D.13. Operating Rate During Testing. Testing of emissions shall be conducted with the generator(s) operating at 90 to 100 percent of the maximum fuel firing rate for each generator. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity (i.e., at less than 90 percent of the maximum operation rate allowed by the permit); in this case,

subsequent emissions unit operations may be limited to 110 percent of the test load until a new test is conducted, provided however, operations do not exceed 100 percent of the maximum operation rate allowed by the permit. Once the emissions 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. Failure to submit the actual operating rate may invalidate the test.
[Rules 62-297.310(2), F.A.C.; and, AC09-202080]

Recordkeeping and Reporting Requirements

D.14. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, the owner or operator shall notify the Department's Southwest District Air Section, 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's Southwest District Air Section.
[Rule 62-210.700(6), F.A.C.]

D.15. Test Reports.
(a) Each generator shall be tested on an annual basis within 30 days of the date October 25.
(b) 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.
(c) The required test report shall be filed with the Department's Southwest District office, as soon as practical but no later than 45 days after the last sampling run of each test is completed.
(d) The test reports for a unit that has been relocated shall be submitted to the Department's Southwest District office.
[Rule 62-297.310(8), F.A.C.; and, AO09-205952]

D.16. To demonstrate compliance with specific condition **D.4.**, records shall indicate the daily hours of operation for each of the generators, the daily hours of operation expressed as "engine-hours" and the cumulative total hours of operation expressed as "engine-hours" for each month. The records shall be maintained for a minimum of 5 years and made available to the Department's Southwest District office upon request. The records shall be maintained at each individual site.
[Rules 62-213.440 and 62-297.310(8), F.A.C.; and, AO09-205952]

D.17. To demonstrate compliance with specific condition **D.3.**, records of the sulfur content, in percent by weight, of all the fuel burned shall be kept based on either vendor provided as-delivered or as-received fuel sample analysis. The records shall be maintained for a minimum of 5 years and made available to the Department's Southwest District office upon request. The records shall be maintained at each individual site.
[Rule 62-297.310(8), F.A.C.; and, AC09-202080]

Source Obligation

D.18. Source Obligation. Specific conditions in construction permit AC 09-202080, limiting the "engine hours", were accepted by the applicant to escape Prevention of Significant Deterioration new source review. If PEFI requests a relaxation of any of the federally enforceable emission limits in this permit, the relaxation of limits may be subject to the preconstruction review requirements of Rule 62-212.400, F.A.C., as though construction had not yet begun.
[Rule 62-212.400(12)(b), F.A.C.; and, AC09-202080]

D.19. PEFI shall notify the Department's Southwest District office, in writing, at least 15 days prior to the date on which any diesel generator is to be relocated. The notification shall specify the following:

a. Which generator, by serial number, is being relocated;
b. Which location the generator is being relocated from and which location it is being relocated to; and,
c. The approximate startup date at the new location.

[Rule 62-4.070(3), F.A.C.; and, AC09-202080]

D.20. These emissions units are also subject to specific conditions **H.1.** through **H.22.,** except for specific condition **H.4,** contained in **Subsection H. Common Conditions.**

Subsection E. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description of Power Block 2
-014	170 MW Westinghouse 501FD CT2A with unfired HRSG
-015	170 MW Westinghouse 501FD CT2B with unfired HRSG

Emission units 014 and 015 each consist of a combined cycle Westinghouse 501FD Combustion Turbine, each with a nominal generator rating of 170 MW and each with a maximum heat input rating of 2,048 MMBtu/hr (HHV), while firing natural gas, and 2,155 MMBtu/hr (HHV), while firing fuel oil, based on a compressor inlet air temperature of 59 °F, the LHV of each fuel, and 100% load. NO_x emissions are controlled with dry low NO_x burners (DLN) for natural gas firing and wet injection for fuel oil firing, complete with Selective Catalytic Reduction (SCR). Each combustion turbine incorporates an unfired heat recovery steam generator (HRSG). Steam from both HRSGs is delivered to a single steam turbine-electrical generator, which has a generating capacity of 190 MW. The total generating capacity of the "2-on-1" combined cycle unit is approximately 530 MW.

{Permitting notes: These emissions unit are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); PSD-FL-296 and revisions (A & B); and, Rule 62-212.400(6), F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

General

E.0. Appendix GG - NSPS Subpart GG Requirements for Gas Turbines is a part of the permit and Power Block 2 must comply with it.

[1050234-015-AC/PSD-FL-195(D)]

Essential Potential to Emit (PTE) Parameters

E.1. Permitted Capacity. The maximum heat input rates, based on the higher heating value of the fuels, and an ambient air temperature of 59 °F, shall not exceed 2,048 MMBtu per hour when firing natural gas and 2,155 MMBtu per hour when firing distillate oil (based on a compressor inlet air temperature of 59 °F, the HHV of each fuel, and 100% load). Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, alternate fuels, and evaporative cooling. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.
[Rule 62-210.200(PTE), F.A.C.; 1050234-007-AC/PSD-FL-296(A); and, 1050234-011-AC/PSD-FL-296(B)]

E.2. Equipment and Controls - Gas Turbines. The permittee is authorized to install, tune, operate, and maintain two Siemens Westinghouse Model 501 FD gas turbine-electrical generator sets each with a generating capacity of 170 MW. Each gas turbine shall include the Siemens TXP automated gas turbine control system and have dual-fuel capability. The gas turbines will utilize DLN combustors. [Application; and, Design]

a. Gas Turbine NO_x Controls

1. *DLN Combustion*. The permittee shall operate and maintain the DLN combustion system to control NO_x emissions from each gas turbine when firing natural gas. Prior to the initial emissions performance tests required for each gas turbine, the DLN combustors and automated gas turbine control system shall be tuned, in conjunction with any post-combustion emissions control equipment, to achieve the permitted levels for CO and NO_x emissions. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations.

2. *Water Injection*. The permittee shall install, operate, and maintain a water injection system to reduce NO_x emissions from each gas turbine when firing distillate oil. Prior to the initial emissions performance tests required for each gas turbine, the water injection system shall be tuned, in conjunction with any post-combustion emissions control equipment, to achieve the permitted levels for CO and NO_x emissions. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations.

3. *SCR System*. The permittee shall install, tune, operate, and maintain a SCR system to control NO_x emissions from each gas turbine when firing either natural gas or distillate oil. The SCR system consists of an ammonia injection grid, catalyst, ammonia storage, monitoring and control system, electrical, piping and other ancillary equipment. The SCR system shall be designed, constructed and operated to achieve the permitted levels for NO_x emissions and ammonia slip.

   {Permitting note: In accordance with 40 CFR 60.130, the storage of ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.}

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

b. HRSGs. The permittee is authorized to install, operate, and maintain two unfired HRSGs. Each HRSG shall be designed to recover heat energy from one of the two gas turbines (CT 2A or CT 2B) and deliver steam to the steam turbine-electrical generator through a common manifold.

   {Permitting note: The two HRSGs deliver steam to a single steam turbine-electrical generator with a generating capacity of 190 MW.}

[Application; and, Design]

c. CO Controls. The permittee shall design and construct the HRSGs such that an oxidation catalyst can be readily installed if necessary to achieve compliance with the CO emission limitations.

[Rule 62-4.070(3), F.A.C.]

E.3. Methods of Operation. Subject to the restrictions and requirements of this permit, the gas turbines may operate under the following methods of operation.

a. *Hours of Operation*. Subject to the other operational restrictions of this permit, the gas turbines may operate throughout the year (8,760 hours per year).

b. *Authorized Fuels*. Each gas turbine shall fire natural gas as the primary fuel, which shall contain no more than 1.0 grains of sulfur per 100 standard cubic feet of natural gas. As a restricted alternate fuel, each gas turbine may fire No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur, by weight. Distillate fuel oil consumption of both emissions units shall not exceed 19,703,000 gallons in any consecutive 12-month period.

{Permitting note: This condition limits annual average fuel oil consumption to the equivalent of approximately 720 hours of operation per year per turbine, based on 59 °F annual average temperature. Fuel oil consumption is not limited per turbine, and the allowable fuel may be used in a single turbine.}

c. *Combined Cycle Operation*. Each gas turbine/HRSG system may operate to produce direct, shaft-driven electrical power and steam-generated electrical power from the steam turbine-electrical generator as a "2-on-1" combined cycle unit subject to the restrictions of this permit. In accordance with the specifications of the SCR and HRSG manufacturers, the SCR system shall be on line and functioning properly during combined cycle operation or when the HRSG is producing steam.

d. *Ammonia Injection*. Ammonia injection shall begin as soon as operation of the gas turbine/HRSG system achieves the operating parameters specified by the manufacturer.

[Application; Rules 62-210.200(PTE) and 62-212.400(BACT), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

Emission Limitations and Standards

E.4. Emissions Standards. Emissions from each gas turbine/HRSG shall not exceed the following limits for the listed pollutants at any ambient temperature.

{Permitting note: Unless otherwise specified, the averaging times are based on the specified averaging time of the applicable test method.}

Pollutant	Emission Limit (ppmvd corrected to 15% oxygen)		Averaging Time
	Natural Gas	Fuel Oil	
CO [a]	16	30	24 hour block
NO_x [b]	3.5	12	24 hour block
VOC [c]	2	10	3 hours
Ammonia [d]	5	9	3 hours

Pollutant	Fuel Specification and Emission Limit
PM/PM_{10} [e]	Fuel specifications. Visible emissions shall not exceed 10% opacity for each 6-minute block average.
SAM/SO_2 [f]	Fuel specifications.

a. Compliance with the CO standards shall be demonstrated based on data collected by the required CEMS. Compliance with the 24-hour CO CEMS standards shall be determined separately based on the hours of operation for each alternative fuel.

{Permitting note: A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data.}

b. Compliance with the NO_x standards shall be demonstrated based on data collected by the required CEMS. NO_x mass emission rates are defined as oxides of nitrogen expressed as NO_2. Compliance with the 24-hour NO_x CEMS standards shall be determined separately based on the hours of operation for each alternative fuel.

{Permitting note: A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data.}

c. Compliance with the VOC standards shall be demonstrated by conducting tests in accordance with EPA Method 25A. Optionally, EPA Method 18 may also be performed to deduct emissions of methane and ethane. The emission standards are based on VOC measured as propane.

d. Subject to the requirements of this permit, each SCR system shall be designed and operated for an initial ammonia slip target of less than 5 ppmvd corrected to 15% oxygen when firing natural gas based on the average of three test runs. Compliance with the ammonia slip standard shall be demonstrated by conducting tests in accordance with EPA Method CTM-027.

e. The fuel specifications established in specific condition **E.3.** combined with the efficient combustion design and operation of each gas turbine represents the BACT determination for PM/PM_{10} emissions. Compliance with the fuel specifications, CO standards, and visible emissions standards shall serve as indicators of good combustion. Compliance with the fuel specifications shall be demonstrated by keeping records of the fuel sulfur content. Compliance

with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9.

f. The fuel sulfur specifications in specific condition **E.3.** effectively limit the potential emissions of SAM and SO_2 from the gas turbines and represent the BACT determination for these pollutants. Compliance with the fuel sulfur specifications shall be determined by the requirements in specific condition **E.18.**

{Permitting note: The concentration limits and fuel specifications for the control of the above pollutants are equivalent to the following mass emission rates (at 20 °F):

- *CO = 78.7 lbs/hr for natural gas firing and 119.5 lbs/hr for distillate fuel oil firing,*
- *NO_x = 27.0 lbs/hr for natural gas firing and 99.7 lbs/hr for distillate fuel oil firing,*
- *VOC = 5.0 lbs/hr for natural gas firing and 23.5 lbs/hr for distillate fuel oil firing,*
- *PM_{10} = 7.3 lbs/hr for natural gas firing and 64.8 lbs/hr for distillate fuel oil firing, and*
- *SO_2 = 5.6 lbs/hour for natural gas firing and 105.6 lbs/hr for distillate fuel oil firing.*

SAM emissions are estimated to be less than 10% of the SO_2 emissions.}

[Rules 62-210.200(PTE) and 62-212.400(BACT), F.A.C.; 1050234-007-AC/PSD-FL-296(A); and, 1050234-011-AC/PSD-FL-296(B)]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

E.5. Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data.
[Rule 62-210.700(4), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

E.6. Visible emissions due to startups, shutdowns, and malfunctions shall not exceed 10% opacity except for up to ten, 6-minute averaging periods during a calendar day, which shall not exceed 20% opacity.
[Rule 62-212.400(BACT), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

Monitoring of Operations

E.7. The BACT determinations established by this permit rely on "good operating practices" to reduce emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the gas turbines, HRSGs, and pollution control systems in accordance with the guidelines and procedures established by each manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions.
[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

E.8. CEMS Data Exclusion. As provided in this paragraph, NO_x and CO emissions data recorded during periods of startup, shutdown, fuel switches (oil-to-gas or gas-to-oil), and documented malfunctions may be excluded from the block average calculated to demonstrate compliance with the emission limits of this permit. See specific condition **E.4.**

a. Periods of excess emissions excluded due to startup shall not exceed two (2) hours per startup per unit except for the following cold startups. A "cold STG startup" is defined as a startup following a complete steam turbine generator (STG) shutdown lasting a minimum of 48 hours. Periods of excess emissions excluded due to cold STG startup shall not exceed six (6) hours per startup per unit. A "cold CT-HRSG startup" is defined as startup following a complete shutdown of the combustion turbine-heat recovery steam generator (CT-HRSG) lasting a minimum of 8 hours. Periods of excess emissions excluded due to cold CT-HRSG startup shall not exceed three (3) hours per startup per unit.

b. Periods of data excluded for shutdown shall not exceed two (2) hours per shutdown per unit.

c. Periods of data excluded for fuel switches shall not exceed two (2) hours per fuel switch per unit.

d. Periods of data excluded for documented malfunctions shall not exceed two (2) hours per unit in any 24-hour block. A "documented malfunction" means a malfunction that meets the notification requirements specified in specific condition **E.19.**

e. All periods of data excluded for any startup, shutdown, fuel switches, or documented malfunction shall be consecutive for each episode.

f. The permittee shall minimize the duration of data excluded to the extent practicable. Data shall not be excluded if the startup, shutdown, or documented malfunction was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably have been prevented. Best operating practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown, fuel switching, or documented malfunction.

[Rules 62-212.400(BACT) and 62-210.700, F.A.C.; and, Permit No. PSD-FL-296(C)/Project No. 1050234-015-AC]

E.9. CEMS Data Exclusion – DLN Tuning. CEMS data collected during initial or other major DLN tuning sessions shall be excluded from the CEMS compliance demonstration provided the tuning session is performed in accordance with the manufacturer's specifications. A "major tuning session" would occur after completion of initial construction, a combustor change-out, a major repair or maintenance to a combustor, or other similar circumstances. Prior to performing any major tuning session, the permittee shall provide the Department's Southwest District Compliance Authority with an advance notice that details the activity and proposed tuning schedule. The notice may be by telephone, facsimile transmittal, or electronic mail.
[Rule 62-4.070(3), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

E.10. Tests Required.

a. Initial Compliance Determinations. Each gas turbine shall be stack tested to demonstrate initial compliance with the emission standards for CO, NO_x, VOC, visible emissions, and ammonia slip. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup of each unit. Each unit shall be tested when firing natural gas and when firing distillate fuel oil. CEMS data collected during the required Relative Accuracy Test Assessments (RATA) may be used to

demonstrate compliance with the initial CO and NO_x standards. CO and NO_x emissions recorded by the CEMS shall also be reported for each run during tests for visible emissions, VOC and ammonia slip. The Department may require the permittee to conduct additional tests after major replacement or major repair of any air pollution control equipment, such as the SCR catalyst, DLN combustors, etc.

[Rule 62-297.310(7)(a)1., F.A.C.; and, 40 CFR 60.8]

b. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), each gas turbine shall be tested to demonstrate compliance with the emission standards for visible emissions and ammonia.

1. *Visible Emissions*. Each unit shall be tested for visible emissions when firing natural gas and when firing distillate fuel oil. Annual emissions testing while firing fuel oil is not required during any federal fiscal year in which less than 5,473,000 gallons of distillate fuel oil is fired in both emission units combined. CO emissions recorded by the CEMS shall be reported for the visible emissions observation period.

{Permitting note: The fuel limitation for waiving testing while firing distillate fuel oil corresponds to the equivalent of approximately 200 hours of operation per year per turbine.}

2. *Ammonia.* Annual testing to determine the ammonia slip shall be conducted while firing natural gas. NO_x emissions recorded by the CEMS shall be reported for each ammonia slip test run.

{Permitting note: After initial compliance with the VOC standards is demonstrated, annual compliance tests for VOC emissions are not required. Compliance with the continuously monitored CO standards shall indicate efficient combustion and low VOC emissions.}

[Rules 62-212.400(BACT) and 62-297.310(7)(a)4., F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

c. Continuous Compliance. The permittee shall demonstrate continuous compliance with the CO and NO_x emissions standards based on data collected by the certified CEMS. Within 45 days of conducting any RATA on a CEMS, the permittee shall submit a report to the Department's Southwest District Compliance Authority summarizing results of the RATA.

{Permitting note: Compliance with the CO emission standards also serves as an indicator of efficient fuel combustion, which reduces emissions of PM/PM_{10} and VOC.}

[Rule 62-212.400(BACT), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

Test Methods and Procedures

E.11. Test Methods. Any required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
CTM-027	*Procedure for Collection and Analysis of Ammonia in Stationary Sources* This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.
7E	*Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)*
9	*Visual Determination of the Opacity of Emissions from Stationary Sources* The test shall be conducted for a minimum of 30 minutes.
10	*Determination of Carbon Monoxide Emissions from Stationary Sources* This method shall be based on a continuous sampling train.
18	*Measurement of Gaseous Organic Compound Emissions by Gas Chromatography* (Optional) EPA Method 18 may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions.
20	*Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines*
25A	*Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer*

Note: Method CTM-027 is published on EPA's Technology Transfer Network Web Site at http://www.epa.gov/ttn/emc/ctm.html. The other methods are described in Appendix A, 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.

[Rule 62-204.800, F.A.C.; and, 40 CFR 60, Appendix A]

E. 12. Operating Procedures. The BACT determinations established by this permit rely on "good operating practices" to reduce emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the gas turbines, HRSGs, and pollution control systems in accordance with the guidelines and procedures established by each manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions.
[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

Continuous Monitoring Requirements

E.13. CEMS. The permittee shall install, calibrate, maintain, and operate CEMS to measure and record the emissions of CO and NO_x from the combined cycle gas turbine. The CEMS shall be used to demonstrate continuous compliance with the CEMS emission standards specified in this permit. Upon request by the Department's Southwest District Compliance Authority, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332. Each monitoring system shall be installed, calibrated, and properly functioning prior to the initial performance tests. Within one working day of discovering emissions in excess of a CO or NO_x standard (and subject to the specified averaging period), the permittee shall notify the Department's Southwest District Compliance Authority.

a. *CO Monitors*. Except as otherwise specified by this condition, the CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Department's Southwest District Compliance Authority. The RATA tests required for the CO monitor shall be performed using EPA Method 10 in Appendix A, 40 CFR 60. The Method 10 analysis shall be based on a continuous sampling train, and the ascarite trap may be omitted or the interference trap of Section 10.1 may be used in lieu of the silica gel and ascarite traps. The CO monitor shall be a dual range monitor. The span for the lower range shall not be greater than 50 ppm. The span for the upper range shall be set at a level that provides for accurate measurement during startups and shutdowns.

b. *NO_x Monitors*. Except as otherwise specified by this condition, the NO_x monitor shall be certified pursuant to 40 CFR 75, and shall be operated and maintained in accordance with the applicable requirements of 40 CFR 75, Subparts B and C. Record keeping and reporting shall be conducted pursuant to 40 CFR 75, Subparts F and G. The RATA tests required for the NO_x monitor shall be performed using EPA Method 20 or 7E in Appendix A, 40 CFR 60. The NO_x monitor shall be a dual range monitor. The span for the lower range shall not be greater than 10 ppm. The span for the upper range shall be set at a level that provides for accurate measurement during startups and shutdowns.

c. *Diluent Monitors*. The oxygen or carbon dioxide (CO_2) content of the flue gas shall be monitored at the location where CO and NO_x are monitored to correct the measured emissions rates to 15% oxygen. If a CO_2 monitor is installed, the oxygen content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

d. *Moisture Correction*. Final results of the CEMS shall be expressed as ppmvd corrected to 15% oxygen. If the CEMS measures concentration on a wet basis, the CEMS shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the permittee may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). If the CEMS measures concentration on a wet basis and the diluent monitor measures CO_2 on a wet basis, then the permittee may develop an algorithm to enable correction of the CEMS results to a dry basis (0% moisture) without determining the corresponding moisture content.

e. *1-Hour Block Averages*. Hourly average values shall begin at the top of each hour. Each hourly average value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). If less than two such data points are available, the hourly average value is not valid. An hour in which any oil is fired is attributed towards compliance with the permit standards for oil firing. The permittee shall use all valid measurements or data points collected during an hour to calculate the hourly average values. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over an hour.

f. *24-hour Block Average*. A 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average emission rate values. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of available valid

hourly average emission rate values for the 24-hour block. For purposes of determining compliance with the 24-hour CEMS emissions standards of this permit, missing (or excluded) data shall not be substituted. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block.

{Permitting note: There may be more than one 24-hour compliance demonstration required for CO and NO_x emissions depending on the use of alternate fuels}.

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

g. *Data Exclusion*. Each CEMS shall monitor and record emissions during all operations including episodes of startup, shutdown, malfunction, fuel switches, and DLN tuning. CEMS emissions data recorded during some of these episodes may be excluded from the corresponding CEMS compliance demonstration subject to the provisions of specific conditions **E.8.** and **E.9.**

h. *Availability*. Monitor availability for the CEMS shall be 95% or greater in any calendar quarter. The quarterly permit excess emissions report shall be used to demonstrate monitor availability. In the event 95% availability is not achieved, the permittee shall provide the Department's Southwest District Compliance Authority with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Department's Southwest District Compliance Authority.

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

[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

E.14. Water Injection Monitoring Requirements. In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain a monitoring system to continuously measure and record the water-to-fuel ratio when firing distillate oil. The permittee shall document the water-to-fuel ratio required to meet permitted emissions levels over the range of load conditions allowed by this permit. The NO_x CEMS is used to demonstrate compliance with the NO_x emissions standards. During NO_x CEMS downtimes or malfunctions, the permittee shall monitor the water-to-fuel ratio and operate at a level that is consistent with the documented flow rate for the gas turbine load condition.
[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

E.15. Ammonia Monitoring Requirements. In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain an ammonia flow meter to measure and record the ammonia injection rate to the SCR system. The permittee shall document the general range of ammonia flow rates required to meet permitted emissions levels over the range of load conditions allowed by this permit by comparing NO_x emissions recorded by the CEM system with ammonia flow rates recorded using the ammonia flow meter. During NO_x monitor downtimes or malfunctions, the permittee shall operate at the ammonia flow rate that is consistent with the documented flow rate for the combustion turbine load condition.
[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

Recordkeeping and Reporting Requirements

E.16. Monitoring of Operation. To demonstrate compliance with the fuel consumption limits of this permit, the permittee shall record the distillate fuel oil consumption on a rolling 12-month basis. [Rules 62-4.070(3) and 62-212.400, F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

E.17. Frequency of Recordkeeping. Specific condition **E.12.** requires the calculation of one or more 24-hour block average emission rates for each operating day. Within 24 hours of the conclusion of each operating day, the permittee shall complete the calculations and record the results for that operating day. [Rule 62-4.070(3), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

E.18. Fuel Sulfur Records. The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the following records of the sulfur contents.

a. Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods in 40 CFR 60, Subpart GG, or their latest editions. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

b. Compliance with the distillate oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to each Compliance Authority before initial startup. Sampling and analysis for the fuel oil sulfur content shall be conducted using the ASTM methods in 40 CFR 60, Subpart GG, or their latest editions. More recent editions of these methods may be used. For each subsequent fuel delivery, the permittee shall either (1) maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor, or (2) take and analyze a sample according to the above procedures and maintain a permanent file of the results of the analysis. At the request of a Compliance Authority, the permittee shall perform additional sampling and analysis for the fuel sulfur content. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

c. The above methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75, Appendix D.

[Rules 62-4.070(3) and 62-4.160(15), F.A.C.; 40 CFR 75, Appendix D; and, Permit No. PSD-FL-296(C)/Project No. 1050234-015-AC]

E.19. Malfunction Notification. Within one working day of a malfunction for which CEMS data is excluded pursuant to specific condition **E.8.**, the permittee shall notify the Department's Southwest District Compliance Authority by telephone, facsimile transmittal, or electronic mail. The notification shall include a preliminary report of: the nature, extent, and duration of the emissions; the probable cause of the emissions; and the actions taken to correct the problem. If requested by the Department's Southwest District Compliance Authority, the permittee shall submit written quarterly reports summarizing the malfunctions in lieu of the individual malfunction notifications otherwise required. [Rule 62-210.700, F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

E.20. Semiannual NSPS Excess Emissions Report. In accordance with 40 CFR 60.7(c), the permittee shall semiannually submit a report to the Department's Southwest District Compliance Authority summarizing any emissions in excess of the NSPS standards. All reports shall be postmarked by the 30th day following the end of each six-month period. Written reports of excess emissions shall include the

information specified in 40 CFR 60.7(c)(1) through (c)(4). For purposes of reporting emissions in excess of 40 CFR 60, Subpart GG, excess emissions from the gas turbine are defined as: any CEMS hourly average value exceeding the NSPS NO_x emission standard identified in Appendix GG - NSPS Subpart GG Requirements for Gas Turbines (i.e., 112.5 ppmvd corrected to 15% oxygen for both natural gas and fuel oil); and any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds the NSPS standard identified in Appendix GG - NSPS Subpart GG Requirements for Gas Turbines (i.e., sulfur in excess of 0.8% by weight). An example of an acceptable report format is provided in Figure 1 - Summary Report-Gaseous And Opacity Excess Emissions and Monitoring System Performance.
[40 CFR 60.7(c); and, 1050234-007-AC/PSD-FL-296(A)]

E.21. Quarterly Data Exclusion and Monitor Availability Report. The permittee shall quarterly submit a report to the Department's Southwest District Compliance Authority summarizing all periods of valid hourly CO and NO_x emissions data excluded from the 24-hour block average compliance determinations pursuant to specific conditions **E.13.** and **E.14.** In addition, the quarterly report shall summarize the CEMS availability for the previous quarter. All reports shall be postmarked by the 30th day following the end of each calendar quarter. An example of an acceptable report format for monitoring systems availability is provided in Figure 1 - Summary Report-Gaseous And Opacity Excess Emissions and Monitoring System Performance.
[Rules 62-4.130, 62-204.800 and 62-210.700(6), F.A.C.; 40 CFR 60.7(c) and (d); and, 1050234-007-AC/PSD-FL-296(A)]

Miscellaneous Conditions

E.22. Additional Ammonia Slip Testing. If the tested ammonia slip rate for a gas turbine exceeds 5 ppmvd corrected to 15% oxygen when firing natural gas during the annual test, the permittee shall:

a. Begin testing and reporting the ammonia slip for each subsequent calendar quarter;

b. Before the ammonia slip exceeds 7 ppmvd corrected to 15% oxygen, take corrective actions that result in lowering the ammonia slip to less than 5 ppmvd corrected to 15% oxygen; and,

c. Test and demonstrate that the ammonia slip is no more than 5 ppmvd corrected to 15% oxygen within 15 days after completing the corrective actions.

Corrective actions may include, but are not limited to, adding catalyst, replacing catalyst, or other SCR system maintenance or repair. After demonstrating that the ammonia slip level is no more than 5 ppmvd corrected to 15% oxygen, testing and reporting shall resume on an annual basis.

[Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.; and, 1050234-007-AC/PSD-FL-296(A)]

E.23. These emissions unit are also subject to specific conditions **H.1.** through **H.22.** contained in **Subsection H. Common Conditions.**

Subsection F. This section addresses the following emissions unit(s).

E.U. ID No.	Brief Description of Power Block 3
-016	170 MW Westinghouse 501FD CT3A with unfired HRSG
-017	170 MW Westinghouse 501FD CT3B with unfired HRSG

Emission units (EU) 016 and 017 are each a Siemens Westinghouse 501 FD gas turbine-electrical generator set with an automated gas turbine control system and an unfired heat recovery steam generator (HRSG). In addition, the project also includes a single steam turbine-electrical generator that serves both gas turbine/HRSG systems. Both of the gas turbine-electrical generator sets have a generating capacity of 170 MW for gas firing. Each gas turbine fires natural gas as the primary fuel and distillate oil as a restricted alternate fuel. Steam from both HRSGs is delivered to a single steam turbine-electrical generator, which has a generating capacity of 190 MW. The total generating capacity of the "2-on-1" combined cycle unit is approximately 530 MW. The maximum heat input rate is based on the higher heating value (HHV) of the fuel, which is 2,048 MMBtu/hr (HHV), while firing natural gas, and 2,155 MMBtu/hr (HHV), while firing fuel oil, based on a compressor inlet air temperature of 59 °F, the HHV of each fuel, and 100% load.

The efficient combustion of natural gas and restricted firing of low sulfur distillate oil minimizes the emissions of CO, PM/PM_{10}, SAM, SO_2 and VOC. Dry low-NO_x (DLN) combustion technology for gas firing and water injection for oil firing reduce NO_x emissions. A selective catalytic reduction (SCR) system – in combination with DLN combustion technology for gas firing and a water injection system for oil firing – reduces NO_x emissions. The HRSGs are designed and constructed such that an oxidation catalyst can be readily installed if necessary to achieve compliance with CO emission limitations.

Each HRSG has a stack that is 125 feet tall and 19 feet in diameter. Each stack is equipped with continuous emissions monitoring systems (CEMS) to measure and record CO and NO_x emissions as well as flue gas oxygen or carbon dioxide content. The Department may require the permittee to perform additional air dispersion modeling should the actual specified stack dimensions change. The following table summarizes the exhaust characteristics for the combined cycle systems. Heat input rate is based on the higher heating value (HHV) of the fuel, assuming 1,030 British thermal units (Btu) per standard cubic feet of natural gas and 19,892 Btu/lb of fuel oil.

Fuel	Heat Input Rate (HHV)	Compressor Inlet Temp	Exhaust Temperature	Exit Velocity	Flow Rate
Natural Gas	1,830 MMBtu/hour	59 °F	190 °F	59.2 ft/sec	1,009,487 acfm
Oil	1,932 MMBtu/hour	59 °F	270 °F	67.0 ft/sec	1,139,394 acfm

{Permitting notes: These emissions unit are regulated under Acid Rain, Phase II; NSPS - 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted and incorporated by reference in Rule 62-204.800, F.A.C.; Rule 212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); PSD-FL-330 and revisions (A); and, Rule 62-212.400(6), F.A.C.}

The following specific conditions apply to the emissions unit(s) listed above:

General

F.0. Appendix GG - NSPS Subpart GG Requirements for Gas Turbines is a part of the permit and Power Block 3 must comply with it.

[1050234-015-AC/PSD-FL-330(B)]

F.1. BACT Determinations. Determinations of BACT were made for CO, NO_x, PM/PM_{10}, sulfuric acid mist (SAM), SO_2, and VOC.
[1050234-006-AC/PSD-FL-330]

F.2. New Source Performance Standards (NSPS). The Department determines that compliance with the BACT emissions performance and monitoring requirements also assures compliance with the NSPS for gas turbines at 40 CFR 60, Subpart GG. See Appendix GG of this permit for a summary of the applicable NSPS requirements.
[Rule 62-212.400(BACT), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

F.3. Applicable Regulations, Forms and Application Procedures. Unless otherwise indicated in the permit, No. 1050234-006-AC/PSD-FL-330, the construction and operation of this emissions unit 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.; Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C.; and, 40 CFR Parts 60, 72, 73, and 75, adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C., and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
[Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.; and, 1050234-006-AC/PSD-FL-330]

F.4. Operating Procedures. The BACT determinations established by this permit rely on "good operating practices" to reduce emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the gas turbines, HRSGs, and pollution control systems in accordance with the guidelines and procedures established by each manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions.
[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

Essential Potential to Emit (PTE) Parameters

F.5. Permitted Capacity. The maximum heat input rate to each gas turbine is 2,048 MMBtu per hour when firing natural gas and 2,155 MMBtu per hour when firing distillate oil (based on a compressor inlet air temperature of 59 °F, the HHV of each fuel, and 100% load). Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, alternate fuels, and evaporative cooling. The permittee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45 days of completing the initial compliance testing. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.
[Rule 62-210.200(Definitions-PTE), F.A.C.; 1050234-006-AC/PSD-FL-330; and, 1050234-013-AC/PSD-FL-330(A)]

F.6. Gas Turbines. The permittee is authorized to install, tune, operate, and maintain two Siemens Westinghouse Model 501FD gas turbine-electrical generator sets each with a generating capacity of 170 MW. Each gas turbine shall include the Siemens TXP automated gas turbine control system and have dual-fuel capability. The gas turbines will utilize DLN combustors.
[Application and design; and, 1050234-006-AC/PSD-FL-330]

a. Gas Turbine NO_x Controls

1. DLN Combustion. The permittee shall operate and maintain the DLN combustion system to control NO_x emissions from each gas turbine when firing natural gas. Prior to the initial emissions performance tests required for each gas turbine, the DLN combustors and automated gas turbine control system shall be tuned, in conjunction with any post-combustion emissions control equipment, to achieve the permitted levels for CO and NO_x emissions. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations.

2. Water Injection. The permittee shall install, operate, and maintain a water injection system to reduce NOx emissions from each gas turbine when firing distillate oil. Prior to the initial emissions performance tests required for each gas turbine, the water injection system shall be tuned, in conjunction with any post-combustion emissions control equipment, to achieve the permitted levels for CO and NO_x emissions. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations.

3. SCR System. The permittee shall install, tune, operate, and maintain a SCR system to control NO_x emissions from each gas turbine when firing either natural gas or distillate oil. The SCR system consists of an ammonia injection grid, catalyst, ammonia storage, monitoring and control system, electrical, piping and other ancillary equipment. The SCR system shall be designed, constructed and operated to achieve the permitted levels for NO_x emissions and ammonia slip.

Permitting note: In accordance with 40 CFR 60.130, the storage of ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.}

[Design; Rule 62-212.400(BACT), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

b. HRSGs. The permittee is authorized to install, operate, and maintain two HRSGs. Each HRSG shall be designed to recover heat energy from one of the two gas turbines (CT 3A or CT 3B) and deliver steam to the steam turbine-electrical generator through a common manifold.

{Permitting note: The two HRSGs deliver steam to a single steam turbine-electrical generator with a generating capacity of 190 MW.}

[Application and design; and, 1050234-006-AC/PSD-FL-330]

c. CO Controls. The permittee shall design and construct the HRSGs such that an oxidation catalyst can be readily installed if necessary to achieve compliance with the CO emission limitations. The oxidation catalyst, should it be installed, shall be designed and operated to achieve a maximum outlet concentration of 3.5 ppmvd corrected to 15% oxygen when natural gas is fired and 7.0 ppmvd corrected to 15% oxygen when distillate oil is fired.

[Rule 62-4.070(3), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

F.7. Methods of Operation. Subject to the restrictions and requirements of this permit, the gas turbines may operate under the following methods of operation.

a. Hours of Operation. Subject to the other operational restrictions of this permit, the gas turbines may operate throughout the year (8,760 hours per year).

b. Authorized Fuels. Each gas turbine shall fire natural gas as the primary fuel, which shall contain no more than 1.0 grains of sulfur per 100 standard cubic feet of natural gas. As a restricted alternate fuel, each gas turbine may fire No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. Distillate fuel oil consumption of both emissions units shall not exceed 19,703,000 gallons in any consecutive 12 month period.

{Permitting note: This condition limits annual average fuel oil consumption to the equivalent of approximately 720 hours of operation per year per turbine, based on 59 °F annual average temperature. Fuel oil consumption is not limited per turbine, and the allowable fuel may be used in a single turbine.}

c. Combined Cycle Operation. Each gas turbine/HRSG system may operate to produce direct, shaft-driven electrical power and steam-generated electrical power from the steam turbine-electrical generator as a "2-on-1" combined cycle unit subject to the restrictions of this permit. In accordance with the specifications of the SCR and HRSG manufacturers, the SCR system shall be on line and functioning properly during combined cycle operation or when the HRSG is producing steam.

d. Ammonia Injection. Ammonia injection shall begin as soon as operation of the gas turbine/HRSG system achieves the operating parameters specified by the manufacturer.

[Application; Rules 62-210.200(PTE) and 62-212.400(BACT), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

Emission Limitations and Standards

F.8. Emissions Standards. Emissions from each gas turbine/HRSG shall not exceed the following limits for the listed pollutants at any ambient temperature.

Pollutant	Emission Limit (ppmvd corrected to 15% oxygen)		Averaging Time
	Natural Gas	Fuel Oil	
CO [a]	10	20	24 hour block
NO_x [b]	2.5	10	24 hour block
VOC [c]	2	10	3 hours
Ammonia [d]	5	5	3 hours

Pollutant	Fuel Specification and Emission Limit
PM/PM_{10} [e]	Fuel specifications. Visible emissions shall not exceed 10% opacity for each 6-minute block average.
SAM/SO_2 [f]	Fuel specifications.

a. Compliance with the CO standards shall be demonstrated based on data collected by the required CEMS. Compliance with the 24-hour CO CEMS standards shall be determined separately based on the hours of operation for each alternative fuel.

*{Permitting note: A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data. The Department shall revise the CO emissions standards following any future installation of an oxidation catalyst pursuant to specific condition **F.6.c.**}*

b. Compliance with the NO_x standards shall be demonstrated based on data collected by the required CEMS. NO_x mass emission rates are defined as oxides of nitrogen expressed as NO_2. Compliance with the 24-hour NO_x CEMS standards shall be determined separately based on the hours of operation for each alternative fuel.

{Permitting note: A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data.}

c. Compliance with the VOC standards shall be demonstrated by conducting tests in accordance with EPA Method 25A. Optionally, EPA Method 18 may also be performed to deduct emissions of methane and ethane. The emission standards are based on VOC measured as propane.

d. Subject to the requirements of specific condition **F.17.**, each SCR system shall be designed and operated for an initial ammonia slip target of less than 5 ppmvd corrected to 15% oxygen when firing natural gas based on the average of three test runs. Compliance with the ammonia slip standard shall be demonstrated by conducting tests in accordance with EPA Method CTM-027.

e. The fuel specifications established in specific condition **F.7.** combined with the efficient combustion design and operation of each gas turbine represents the BACT determination for PM/PM_{10} emissions. Compliance with the fuel specifications, CO standards, and visible emissions standards shall serve as indicators of good combustion. Compliance with the fuel specifications shall be demonstrated by keeping records of the fuel sulfur content. Compliance

with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9.

f. The fuel sulfur specifications in specific condition **F.7.** effectively limit the potential emissions of SAM and SO_2 from the gas turbines and represent the BACT determination for these pollutants. Compliance with the fuel sulfur specifications shall be determined by the requirements in specific condition **F.23.**

{Permitting note: The concentration limits and fuel specifications for the control of the above pollutants are equivalent to the following mass emission rates (at 20 °F):

- *CO = 49.2 lbs/hr for natural gas firing and 80.0 lbs/hr for distillate fuel oil firing,*
- *NO_x = 19.1 lbs/hr for natural gas firing and 82.0 lbs/hr for distillate fuel oil firing,*
- *VOC = 5.7 lbs/hr for natural gas firing and 23.5 lbs/hr for distillate fuel oil firing,*
- *PM_{10} = 8.5 lbs/hr for natural gas firing and 64.8 lbs/hr for distillate fuel oil firing, and*
- *SO_2 = 5.6 lbs/hour for natural gas firing and 105.6 lbs/hr for distillate fuel oil firing.*

SAM emissions are estimated to be less than 10% of the SO_2 emissions.}

[Rule 62-212.400(BACT), F.A.C.; and, 1050234-013-AC/PSD-FL-330(A)]

F.9. Alternate Visible Emissions Standard. Visible emissions due to startups, shutdowns, and malfunctions shall not exceed 10% opacity except for up to ten, 6-minute averaging periods during a calendar day, which shall not exceed 20% opacity.
[Rule 62-212.400(BACT), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

F.10. Excess Emissions Prohibited. Excess emissions caused entirely or in part by poor maintenance, poor operation or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. All such preventable emissions shall be included in any compliance determinations based on CEMS data.
[Rule 62-210.700(4), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

Monitoring of Operations

F.11. CEMS Data Exclusion. As provided in this paragraph, NO_x and CO emissions data recorded during periods of startup, shutdown, fuel switches, and documented malfunctions may be excluded from the block average calculated to demonstrate compliance with the emission limits of specific condition **F.8.**

a. Periods of excess emissions excluded due to startup shall not exceed two (2) hours per startup per unit except for the following cold startups. A "cold STG startup" is defined as a startup following a complete steam turbine generator (STG) shutdown lasting a minimum of 48 hours. Periods of excess emissions excluded due to cold STG startup shall not exceed six (6) hours per startup per unit. A "cold CT-HRSG startup" is defined as startup following a complete shutdown

of the combustion turbine-heat recovery steam generator (CT-HRSG) lasting a minimum of 8 hours. Periods of excess emissions excluded due to cold CT-HRSG startup shall not exceed three (3) hours per startup per unit.

b. Periods of data excluded for shutdown shall not exceed two (2) hours per shutdown per unit.

c. Periods of data excluded for fuel switches shall not exceed two (2) hours per fuel switch per unit.

d. Periods of data excluded for documented malfunctions shall not exceed two (2) hours per unit in any 24-hour block. A "documented malfunction" means a malfunction that meets the notification requirements specified in specific condition **F.24.**

e. All periods of data excluded for any startup, shutdown, fuel switches, or documented malfunction shall be consecutive for each episode.

f. The permittee shall minimize the duration of data excluded to the extent practicable. Data shall not be excluded if the startup, shutdown, or documented malfunction was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably have been prevented. Best operating practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown, fuel switching, or documented malfunction.

[Rules 62-212.400(BACT) and 62-210.700, F.A.C.; and, Permit No. PSD-FL-330(B)/Project No. 1050234-015-AC]

F.12. CEMS Data Exclusion – DLN Tuning. CEMS data collected during initial or other major DLN tuning sessions shall be excluded from the CEMS compliance demonstration provided the tuning session is performed in accordance with the manufacturer's specifications. A "major tuning session" would occur after completion of initial construction, a combustor change-out, a major repair or maintenance to a combustor, or other similar circumstances. Prior to performing any major tuning session, the permittee shall provide the Department's Southwest District Compliance Authority with an advance notice that details the activity and proposed tuning schedule. The notice may be by telephone, facsimile transmittal, or electronic mail.

[Design; Rule 62-4.070(3), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

Test Methods and Procedures

F.13. Test Methods. Any required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
CTM-027	*Procedure for Collection and Analysis of Ammonia in Stationary Sources* This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.
7E	*Determination of Nitrogen Oxide Emissions from Stationary Sources (Instrumental Analyzer Procedure)*
9	*Visual Determination of the Opacity of Emissions from Stationary Sources* The test shall be conducted for a minimum of 30 minutes.
10	*Determination of Carbon Monoxide Emissions from Stationary Sources* This method shall be based on a continuous sampling train.
18	*Measurement of Gaseous Organic Compound Emissions by Gas Chromatography* (Optional) EPA Method 18 may be used concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions.
20	*Determination of Nitrogen Oxides, Sulfur Dioxide, and Diluent Emissions from Stationary Gas Turbines*
25A	*Determination of Total Gaseous Organic Concentration Using a Flame Ionization Analyzer*

Note: Method CTM-027 is published on EPA's Technology Transfer Network Web Site at http://www.epa.gov/ttn/emc/ctm.html. The other methods are described in Appendix A, 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.

[Rules 62-204.800, F.A.C.; 40 CFR 60, Appendix A; and, 1050234-006-AC/PSD-FL-330]

F.14. Initial and Subsequent Compliance Determinations. Each gas turbine shall be stack tested to demonstrate initial compliance with the emission standards for CO, NO_x, VOC, visible emissions, and ammonia slip. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup of each unit. Each unit shall be tested when firing natural gas and when firing distillate fuel oil. CEMS data collected during the required Relative Accuracy Test Assessments (RATA) may be used to demonstrate compliance with the initial CO and NO_x standards. CO and NO_x emissions recorded by the CEMS shall also be reported for each run during tests for visible emissions, VOC and ammonia slip. The Department may require the permittee to conduct additional tests after major replacement or major repair of any air pollution control equipment, such as the SCR catalyst, DLN combustors, etc.
[Rule 62-297.310(7)(a)1., F.A.C.; and, 40 CFR 60.8]

F.15. Continuous Compliance. The permittee shall demonstrate continuous compliance with the CO and NO_x emissions standards based on data collected by the certified CEMS. Within 45 days of conducting any RATA on a CEMS, the permittee shall submit a report to the Compliance Authority summarizing results of the RATA.

{Permitting note: Compliance with the CO emission standards also serves as an indicator of efficient fuel combustion, which reduces emissions of PM/PM_{10} and VOC.}

[Rule 62-212.400 (BACT), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

F.16. Annual Compliance Tests. During each federal fiscal year (October 1st to September 30th), each gas turbine shall be tested to demonstrate compliance with the emission standards for visible emissions and ammonia.

1. Visible Emissions. Each unit shall be tested for visible emissions when firing natural gas and when firing distillate fuel oil. Annual emissions testing while firing fuel oil is not required during any federal fiscal year in which less than 5,473,000 gallons of distillate fuel oil is fired in both emission units combined. CO emissions recorded by the CEMS shall be reported for the visible emissions observation period.

   {Permitting note: The fuel limitation for waiving testing while firing distillate fuel oil corresponds to the equivalent of approximately 200 hours of operation per year per turbine.}

2. Ammonia. Annual testing to determine the ammonia slip shall be conducted while firing natural gas. NO_x emissions recorded by the CEMS shall be reported for each ammonia slip test run.

   {Permitting note: After initial compliance with the VOC standards is demonstrated, annual compliance tests for VOC emissions are not required. Compliance with the continuously monitored CO standards shall indicate efficient combustion and low VOC emissions.}

[Rules 62-212.400(BACT) and 62-297.310(7)(a)4., F.A.C.; and, 1050234-006-AC/PSD-FL-330]

F.17. Additional Ammonia Slip Testing. If the tested ammonia slip rate for a gas turbine exceeds 5 ppmvd corrected to 15% oxygen when firing natural gas during the annual test, the permittee shall:

a. Begin testing and reporting the ammonia slip for each subsequent calendar quarter;

b. Before the ammonia slip exceeds 7 ppmvd corrected to 15% oxygen, take corrective actions that result in lowering the ammonia slip to less than 5 ppmvd corrected to 15% oxygen; and

c. Test and demonstrate that the ammonia slip is no more than 5 ppmvd corrected to 15% oxygen within 15 days after completing the corrective actions.

Corrective actions may include, but are not limited to, adding catalyst, replacing catalyst, or other SCR system maintenance or repair. After demonstrating that the ammonia slip level is no more than 5 ppmvd corrected to 15% oxygen, testing and reporting shall resume on an annual basis.

[Rules 62-4.070(3) and 62-297.310(7)(b), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

Continuous Monitoring Requirements

F.18. Continuous Emissions Monitoring System (CEMS). The permittee shall install, calibrate, maintain, and operate CEMS to measure and record the emissions of CO and NO_x from the combined cycle gas turbine. The CEMS shall be used to demonstrate continuous compliance with the CEMS emission standards specified in this permit. Upon request by the Department, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332. Each monitoring system shall be installed, calibrated, and properly functioning prior to the initial performance tests. Within one working day of discovering emissions in excess of a CO or NO_x standard (and subject to the specified averaging period), the permittee shall notify the Department's Southwest District Compliance Authority.

a. CO Monitors. Except as otherwise specified by this condition, the CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Department's Southwest District Compliance Authority. The RATA tests required for the CO monitor shall be performed using EPA Method 10 in Appendix A, 40 CFR 60. The Method 10 analysis shall be based on a continuous sampling train, and the ascarite trap may be omitted or the interference trap of Section 10.1 may be used in lieu of the silica gel and ascarite traps. The CO monitor shall be a dual range monitor. The span for the lower range shall not be greater than 50 ppm. The span for the upper range shall be set at a level that provides for accurate measurement during startups and shutdowns.

b. NO_x Monitors. Except as otherwise specified by this condition, the NO_x monitor shall be certified pursuant to 40 CFR 75, and shall be operated and maintained in accordance with the applicable requirements of 40 CFR 75, Subparts B and C. Record keeping and reporting shall be conducted pursuant to 40 CFR 75, Subparts F and G. The RATA tests required for the NO_x monitor shall be performed using EPA Method 20 or 7E in Appendix A, 40 CFR 60. The NO_x monitor shall be a dual range monitor. The span for the lower range shall not be greater than 10 ppm. The span for the upper range shall be set at a level that provides for accurate measurement during startups and shutdowns.

c. Diluent Monitors. The oxygen or carbon dioxide (CO_2) content of the flue gas shall be monitored at the location where CO and NO_x are monitored to correct the measured emissions rates to 15% oxygen. If a CO_2 monitor is installed, the oxygen content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

d. Moisture Correction. Final results of the CEMS shall be expressed as ppmvd corrected to 15% oxygen. If the CEMS measures concentration on a wet basis, the CEMS shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the permittee may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). If the CEMS measures concentration on a wet basis and the diluent monitor measures CO_2 on a wet basis, then the permittee may develop an algorithm to enable correction of the CEMS results to a dry basis (0% moisture) without determining the corresponding moisture content.

e. 1-Hour Block Averages. Hourly average values shall begin at the top of each hour. Each hourly average value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). If less than two such data points are available, the hourly average value is not valid. An hour in which any oil is fired is attributed towards compliance with the permit standards for oil firing. The permittee shall use all valid measurements or data points collected during an hour to calculate the hourly average values. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over an hour.

f. 24-hour Block Averages. A 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average emission rate values. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of available

valid hourly average emission rate values for the 24-hour block. For purposes of determining compliance with the 24-hour CEMS emissions standards of this permit, missing (or excluded) data shall not be substituted. Instead, the 24-hour block average shall be determined using the remaining hourly data in the 24-hour block.

{Permitting note: There may be more than one 24-hour compliance demonstration required for CO and NO_x emissions depending on the use of alternate fuels}

g. Data Exclusion. Each CEMS shall monitor and record emissions during all operations including episodes of startup, shutdown, malfunction, fuel switches, and DLN tuning. CEMS emissions data recorded during some of these episodes may be excluded from the corresponding CEMS compliance demonstration subject to the provisions of specific conditions **F.11.** and **F.12.**

h. Availability. Monitor availability for the CEMS shall be 95% or greater in any calendar quarter. The quarterly permit excess emissions report shall be used to demonstrate monitor availability. In the event 95% availability is not achieved, the permittee shall provide the Department's Southwest District Compliance Authority with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Department's Southwest District Compliance Authority.

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

[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

F.19. Water Injection Monitoring Requirements. In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain a monitoring system to continuously measure and record the water-to-fuel ratio when firing distillate oil. The permittee shall document the water-to-fuel ratio required to meet permitted emissions levels over the range of load conditions allowed by this permit. The NO_x CEMS is used to demonstrate compliance with the NO_x emissions standards. During NO_x CEMS downtimes or malfunctions, the permittee shall monitor the water-to-fuel ratio and operate at a level that is consistent with the documented flow rate for the gas turbine load condition.
[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

F.20. Ammonia Monitoring Requirements. In accordance with the manufacturer's specifications, the permittee shall install, calibrate, operate and maintain an ammonia flow meter to measure and record the ammonia injection rate to the SCR system. The permittee shall document the general range of ammonia flow rates required to meet permitted emissions levels over the range of load conditions allowed by this permit by comparing NO_x emissions recorded by the CEM system with ammonia flow rates recorded using the ammonia flow meter. During NO_x monitor downtimes or malfunctions, the permittee shall operate at the ammonia flow rate that is consistent with the documented flow rate for the combustion turbine load condition.
[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

Recordkeeping and Reporting Requirements

F.21. Monitoring of Operation. To demonstrate compliance with the fuel consumption limits of specific condition **F.7.**, the permittee shall record the distillate fuel oil consumption on a rolling 12-month basis.
[Rules 62-4.070(3) and 62-212.400(BACT), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

F.22. Frequency of Recordkeeping. Specific condition **F.18.** requires the calculation of one or more 24-hour block average emission rates for each operating day. Within 24 hours of the conclusion of each operating day, the permittee shall complete the calculations and record the results for that operating day.
[Rule 62-4.070(3), F.A.C.; and, 1050234-006-AC/PSD-FL-330]

F.23. Fuel Sulfur Records. The permittee shall demonstrate compliance with the fuel sulfur limits specified in this permit by maintaining the following records of the sulfur contents.

a. Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods in 40 CFR 60, Subpart GG, or their latest editions. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

b. Compliance with the distillate oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to each Compliance Authority before initial startup. Sampling and analysis for the fuel oil sulfur content shall be conducted using the ASTM methods in 40 CFR 60, Subpart GG, or their latest editions. More recent editions of these methods may be used. For each subsequent fuel delivery, the permittee shall either (1) maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor, or (2) take and analyze a sample according to the above procedures and maintain a permanent file of the results of the analysis. At the request of a Compliance Authority, the permittee shall perform additional sampling and analysis for the fuel sulfur content. See Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.

c. The above methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75, Appendix D.

[Rules 62-4.070(3) and 62-4.160(15), F.A.C.; 40 CFR 75, Appendix D; and, Permit No. PSD-FL-330(B)/Project No. 1050234-015-AC]

F.24. Malfunction Notification. Within one working day of a malfunction for which CEMS data is excluded pursuant to specific condition **F.11.**, the permittee shall notify the Department's Southwest District Compliance Authority by telephone, facsimile transmittal, or electronic mail. The notification shall include a preliminary report of: the nature, extent, and duration of the emissions; the probable cause of the emissions; and the actions taken to correct the problem. If requested by the Department's Southwest District Compliance Authority, the permittee shall submit written quarterly reports summarizing the malfunctions in lieu of the individual malfunction notifications otherwise required.
[Rule 62-210.700, F.A.C.; and, 1050234-006-AC/PSD-FL-330]

F.25. Semiannual NSPS Excess Emissions Report. In accordance with 40 CFR 60.7(c), the permittee shall semiannually submit a report to the Department's Southwest District Compliance Authority summarizing any emissions in excess of the NSPS standards. All reports shall be postmarked by the 30th

day following the end of each six-month period. Written reports of excess emissions shall include the information specified in 40 CFR 60.7(c)(1) through (c)(4). For purposes of reporting emissions in excess of NSPS Subpart GG, excess emissions from the gas turbine are defined as: any CEMS hourly average value exceeding the NSPS NO_x emission standard identified in Appendix GG - NSPS Subpart GG Requirements for Gas Turbines (i.e., 112.5 ppmvd corrected to 15% oxygen for both natural gas and fuel oil); and any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds the NSPS standard identified in Appendix GG - NSPS Subpart GG Requirements for Gas Turbines (i.e., sulfur in excess of 0.8% by weight). See in Figure 1 - Summary Report-Gaseous And Opacity Excess Emissions and Monitoring System Performance.
[40 CFR 60.7(c); and, 1050234-006-AC/PSD-FL-330]

F.26. Quarterly Data Exclusion and Monitor Availability Report. The permittee shall quarterly submit a report to the Department's Southwest District Compliance Authority summarizing all periods of valid hourly CO and NO_x emissions data excluded from the 24-hour block average compliance determinations pursuant to specific conditions **F.11.** and **F.12.** In addition, the quarterly report shall summarize the CEMS availability for the previous quarter. All reports shall be postmarked by the 30th day following the end of each calendar quarter. See in Figure 1 - Summary Report-Gaseous And Opacity Excess Emissions and Monitoring System Performance.
[Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C.; 40 CFR 60.7(c) and (d); and, 1050234-006-AC/PSD-FL-330]

Subsection G. This area reserved for Power Block 4 emissions unit(s).

Subsection H. Common Conditions.

E.U. ID No.	Brief Description
001	170 MW Westinghouse 501FC CT1A with unfired HRSG
002	170 MW Westinghouse 501FC CT1B with unfired HRSG
014	170 MW Westinghouse 501FD CT2A with unfired HRSG
015	170 MW Westinghouse 501FD CT2B with unfired HRSG
016	170 MW Westinghouse 501FD CT3A with unfired HRSG
017	170 MW Westinghouse 501FD CT3B with unfired HRSG
003	Auxiliary Steam Boiler
001 (7775047)	Relocatable diesel generator(s) will have a maximum (combined) heat input of 25.74 MMBtu/hour while being fueled by 186.3 gallons of new No. 2 fuel oil per hour with a maximum (combined) rating of 2,460 kilowatts. Emissions from the generator(s) are uncontrolled.

Except as otherwise specified under Subsections A. through G., the following conditions apply to the emissions unit(s) listed above:

Excess Emissions

{Permitting note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS, NESHAP, or Acid Rain program provision.}

H.1. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Monitoring of Operations

H.2. 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.]

H.3. 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.
2. For excess emission limitations for particulate matter specified in Rule 62-210.700, F.A.C., a compliance test shall be conducted annually while the emissions unit is operating under soot blowing conditions in each federal fiscal year during which soot blowing is part of normal emissions unit

operation, except that such test shall not be required in any federal fiscal year in which a fossil fuel steam generator does not burn liquid fuel for more than 400 hours other than during startup.

3. 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 Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department 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 fuel for a total of no more than 400 hours.

4. 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:

a. Visible emissions, if there is an applicable standard.

b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and,

c. Each NESHAP pollutant, if there is an applicable emission standard.

9. 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 may 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.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; SIP approved; and, AO 09-205952]

Test Methods and Procedures

H.4. Operating Rate During Testing. Testing of emissions shall be conducted with the source operating at capacity (maximum heat input rate for the tested operating temperature). Capacity is defined as 90 - 100 percent of permitted capacity. If it is impracticable to test at capacity, then sources may be tested at less than capacity; in this case subsequent source operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for purposes of additional compliance testing to regain the rated capacity in the permit, with prior notification to the Department.
[Rules 62.297.310(2) and (2)(b), F.A.C.]

H.5. Applicable Test Procedures.
(a) Required Sampling Time.
1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. 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:
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.
(b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
(c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
(d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1. (See attachment.)
(e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.
[Rule 62-297.310(4), F.A.C.]

H.6. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee

may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

H.7. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.
[Rule 62-297.310(6), F.A.C.]

Recordkeeping and Reporting Requirements

H.8. Test Reports.
(a) The owner or operator an emissions unit for which a compliance test is required shall file a report with the Department's Southwest District office on the results of each such test.
(b) The required test report shall be filed with the Department's Southwest District office as soon as practical but no later than 45 days after the last sampling run of each test is completed.
(c) 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, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. 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.
5. 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.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.

18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. 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.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. 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.]

H.9. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department's Southwest District office or Southwest District Branch office 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's Southwest District office or Southwest District Branch office.
[Rule 62-210.700(6), F.A.C.]

H.10. The permittee shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.
[40 CFR 60.7(b)]

H.11. Quarterly Report. PEFI shall submit a quarterly excess emissions report and monitoring systems performance report. All reports shall be postmarked by the 30th day following the end of each quarter. Written reports of excess emissions shall include the following information:

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

[40 CFR 60.7(c)(1) thru (4)]

H.12. Summary Report. The summary report form shall contain the information and be in the format shown in Figure 1 of 40 CFR 60.7(d) unless otherwise specified by the Department. One summary report form shall be submitted for each pollutant monitored.

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

five percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.
[40 CFR 60.7(d)(1) and (2)]

H.13. Reporting Frequency. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), a permittee who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

(i) For 1 year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
(ii) PEFI continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
(iii) The Department does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after PEFI notifies the Department in writing of his or her intention to make such a change and the Department does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Department may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of a PEFI conformance with operation and maintenance requirements. Such information may be used by the Department to make a judgment about the source's potential for noncompliance in the future. If the Department disapproves the PEFI's request to reduce the frequency of reporting , the Department will notify the permittee in writing within 45 days after receiving notice of PEFI's intention. The notification from the Department to the permittee will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.
(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the permittee shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with applicable standard for another full year, the permittee may again request approval from the Department to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).
[40 CFR 60.7(e)(1), (2) and (3)]

H.14. Records Retention. The permittee shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.
[40 CFR 60.7(f); and, Rule 62-213.440(1)(b)2.b., F.A.C.]

H.15. Credible Evidence. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant

to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.
[40 CFR 60.11(g)]

Miscellaneous Conditions

H.16. Department Notification. PEFI shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted timely and 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.
[40 CFR 60.7(a)]

Modifications

H.17. Except as provided under 40 CFR 60.14(e) and 40 CFR 60.14(f), any physical or operational change to an existing facility which results in an increase in the emission rate to the atmosphere of any pollutant to which a standard applies shall be considered a modification within the meaning of section 111 of the Act. Upon modification, an existing facility shall become an affected facility for each pollutant to which a standard applies and for which there is an increase in the emission rate to the atmosphere.
[Rule 62-296.800, F.A.C.; and, 40 CFR 60.14(a)]

H.18. Emission rate shall be expressed as kg/hr (lbs/hr) of any pollutant discharged into the atmosphere for which a standard is applicable. The Department shall use the following to determine emission rate:
(1) Emission factors as specified in the latest issue of "Compilation of Air Pollutant Emission Factors", EPA Publication No. AP-42, or other emission factors determined by the Department to be superior to AP-42 emission factors, in cases where utilization of emission factors demonstrate that the emission level resulting from the physical or operational change will either clearly increase or clearly not increase.
(2) Material balances, continuous monitor data, or manual emission tests in cases where utilization of emission factors as referenced in 40 CFR 60.14(b)(1) does not demonstrate to the Department's satisfaction whether the emission level resulting from the physical or operational change will either clearly increase or clearly not increase, or where an owner or operator demonstrates to the Department's satisfaction that there are reasonable grounds to dispute the result obtained by the Department utilizing emission factors as referenced in 40 CFR 60.14(b)(1). When the emission rate is based on results from manual emission tests or continuous monitoring systems, the procedures specified in 40 CFR 60, Appendix C, shall be used to determine whether an increase in emission rate has occurred. Tests shall be conducted under such conditions as the Department shall specify to the owner or operator based on representative performance of the facility. At least three valid test runs must be conducted before and at least three after the physical or operational change. All operating parameters which may affect emissions must be held constant to the maximum feasible degree for all test runs.
[Rule 62-296.800, F.A.C.; and, 40 CFR 60.14(b)]

H.19. The addition of an affected facility to a stationary source as an expansion to that source or as a replacement for an existing facility shall not by itself bring within the applicability of 40 CFR 60 any other facility within that source.
[Rule 62-296.800, F.A.C.; and, 40 CFR 60.14(c)]

H.20. The following shall not, by themselves, be considered modifications under 40 CFR 60:
(1) Maintenance, repair, and replacement which the Department determines to be routine for a source category, subject to the provisions of 40 CFR 60.14(c) and 40 CFR 60.15.
(2) An increase in production rate of an existing facility, if that increase can be accomplished without a capital expenditure on that facility.
(3) An increase in the hours of operation.
(4) Use of an alternative fuel or raw material if, prior to the date any standard under 40 CFR 60 becomes applicable to that source type, as provided by 40 CFR 60.1, the existing facility was designed to accommodate that alternative use. A facility shall be considered to be designed to accommodate an alternative fuel or raw material if that use could be accomplished under the facility's construction specifications as amended prior to the change. Conversion to coal required for energy considerations, as specified in section 111(a)(8) of the Act, shall not be considered a modification.
(5) The addition or use of any system or device whose primary function is the reduction of air pollutants, except when an emission control system is removed or is replaced by a system which the Department determines to be less environmentally beneficial.
(6) The relocation or change in ownership of an existing facility.
[Rule 62-296.800, F.A.C.; and, 40 CFR 60.14(e)]

H.21. Special provisions set forth under an applicable subpart of 40 CFR 60 shall supersede any conflicting provisions of this section.
[Rule 62-296.800, F.A.C.; and, 40 CFR 60.14(f)]

H.22. Within 180 days of the completion of any physical or operational change subject to the control measures specified in 40 CFR 60.14(a), compliance with all applicable standards must be achieved.
[Rule 62-296.800, F.A.C.; and, 40 CFR 60.14(g)]

Section IV. This section is the Acid Rain Part.

Operated by: Florida Power Corporation
ORIS code: 7302
Subsection A. This subsection addresses Acid Rain, Phase II.

The emissions unit(s) listed below are regulated under Acid Rain, Phase II.

E.U. ID No.	Brief Description
-001	170 MW Combined Cycle Westinghouse 501FC CT1A
-002	170 MW Combined Cycle Westinghouse 501FC CT1B
-014	170 MW Combined Cycle Westinghouse 501FD CT2A
-015	170 MW Combined Cycle Westinghouse 501FD CT2B
-016	170 MW Combined Cycle Westinghouse 501FD CT3A
-017	170 MW Combined Cycle Westinghouse 501FD CT3B

A.1. The Phase II permit application(s) 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 unit(s) must comply with the standard requirements and special provisions set forth in the application(s) listed below:
a. DEP Form No. 62-210.900(1)(a), Chapter 62-210, F.A.C.
[Chapter 62-213 and Rule 62-214.320, F.A.C.]

A.2. Sulfur dioxide (SO_2) allowance allocations and nitrogen oxide (NO_x) requirements for each Acid Rain unit are as follows:

E.U. ID No.	EPA ID	Year	2007	2008	2009	2010	2011
-001	1A	**SO_2 allowances, under Table 2 of 40 CFR Part 73**	0*	0*	0*	0*	0*
-002	1B	**SO_2 allowances, under Table 2 of 40 CFR Part 73**	0*	0*	0*	0*	0*
-014	2A	**SO_2 allowances, under Table 2 of 40 CFR Part 73**	0*	0*	0*	0*	0*
-015	2B	**SO_2 allowances, under Table 2 of 40 CFR Part 73**	0*	0*	0*	0*	0*

-016	3A	**SO_2 allowances, under Table 2 of 40 CFR Part 73**	0*	0*	0*	0*	0*
-017	3B	**SO_2 allowances, under Table 2 of 40 CFR Part 73**	0*	0*	0*	0*	0*

*The number of allowances held by an Acid Rain source in a unit account may differ from the number allocated by the USEPA under Table 2 of 40 CFR 73.

A.3. Emission Allowances. 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.
1. 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.
2. No limit shall be placed on the number of allowances held by the source under the Federal Acid Rain Program.
3. Allowances shall be accounted for under the Federal Acid Rain Program.
[Rule 62-213.440(1)(c), F.A.C.]

A.4. Fast-Track Revisions of Acid Rain Parts. Those Acid Rain sources making a change described at Rule 62- 214.370(4), F.A.C., may request such change as provided in Rule 62-213.413, F.A.C., Fast-Track Revisions of Acid Rain Parts.
[Rules 62-213.413 and 62-214.370(4), F.A.C.]

A.5. Comments, notes, and justifications: Phase II Permit received 1/19/99.

A.6. Where an applicable requirement of the Act is more stringent than an applicable requirement of regulations promulgated under Title IV of the Act, both provisions shall be incorporated into the permit and shall be enforceable by the Administrator.
[40 CFR 70.6(a)(1)(ii); and, Rule 62-210.200(Definitions-Applicable Requirements), F.A.C.]

Appendix H-1: Permit History

PEFI
Hines Energy Complex

DRAFT/PROPOSED Permit No.: 1050234-014-AV
Facility ID No.: 1050234

E.U. ID No.	Description	Permit No.	Effective Date [1]	Expiration Date	Project Type
All	Facility	1050234-001-AV	01/01/2002	12/31/2006	Initial
Power Block 1					
-001	170 MW Westinghouse 501F CT1A with unfired HRSG and an associated shared steam turbine generator	1050234-014-AV	01/01/2007	12/31/2011	Renewal
		1050234-015-AC	Pending	12/31/2011	Construction (mod.)
-002	170 MW Westinghouse 501F CT1B with unfired HRSG and an associated shared steam turbine generator	1050234-014-AV	01/01/2007	12/31/2011	Renewal
		1050234-015-AC	Pending	12/31/2011	Construction (mod.)
Power Block 2					
-014	170 MW Westinghouse 501FD CT2A with unfired HRSG and an associated shared steam turbine generator	1050234-014-AV	01/01/2007	12/31/2011	Renewal
		1050234-015-AC	Pending	12/31/2011	Construction (mod.)
-015	170 MW Westinghouse 501FD CT2A with unfired HRSG and an associated shared steam turbine generator	1050234-014-AV	01/01/2007	12/31/2011	Renewal
		1050234-015-AC	Pending	12/31/2011	Construction (mod.)
Power Block 3					
-016	170 MW Westinghouse 501FD CT3A with unfired HRSG and an associated shared steam turbine generator	1050234-014-AV	01/01/2007	12/31/2011	Renewal
		1050234-015-AC	Pending	12/31/2011	Construction (mod.)
-017	170 MW Westinghouse 501FD CT3A with unfired HRSG and an associated shared steam turbine generator	1050234-014-AV	01/01/2007	12/31/2011	Renewal
		1050234-015-AC	Pending	12/31/2011	Construction (mod.)

[1] Change to an actual date, which is day 55 from the date of posting the PROPOSED Permit for EPA review (see confirmation e-mail from Tallahassee) or the date that EPA confirms resolvement of any objections.

Appendix I-1, List of Insignificant Emissions Units and/or Activities

PEFI **DRAFT/PROPOSED** Permit No.: 1050234-014-AV
Hines Energy Complex

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

1. Sand blaster, welding, lathes, hand-held tools, etc.
2. Diesel generator.
3. Fire water tank(s).
4. Brazing, soldering, or welding equipment.
5. Fire and safety equipment.
6. Surface coating operations within a single facility if the total quantity of coatings containing greater than 5.0 percent VOCs, by volume, used is 6.0 gallons per day or less, averaged monthly provided:
   a. Such operations are not subject to a volatile organic compound Reasonably Available Control Technology (RACT) requirement of Chapter 62-296, F.A.C.; and
   b. The amount of coatings used shall include any solvents and thinners used in the process including those used for cleanup.

Appendix U-1, List of Unregulated Emissions Units and Activities

PEFI **DRAFT/PROPOSED** Permit No.: 1050234-014-AV
Hines Energy Complex

Unregulated Emissions Units and/or Activities. An emissions unit which emits no emissions limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unitspecific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'exempt emissions units'.

E.U. ID No.	Brief Description of Emissions Units and/or Activities
-xxx	Three Lube Oil Storage Tanks (two with 7000 gallon capacity, one with 5550 gallon capacity)
	Two Waste Oil Storage Tanks (500 gallon capacity)
	One No. 2 Fuel Oil Storage Tank (3.80 million gallon capacity)
	One Diesel Fuel Storage Tank (300 gallon capacity)
	One Ammonium Storage Tank (30,000 gallon capacity)
	One Sodium Hypochlorite Storage Tank (4800 gallon capacity)
	Fuel loading and unloading activities
	Lube oil vents with demisters
	Non-halogenated solvents

Progress Energy

Via Certified Mail
October 23, 2006

Mr. Bruce Mitchell
Division of Air Resource Management
Florida Department of Environmental Protection
2600 Blair Stone Road, M.S. 5505
Tallahassee, Florida 32399-2400

RE: Acid Rain Part Application, DEP Form 62-210.900(1)(a)
Application for Title V Permit Renewal and Title V Permit Revision
Florida Power Corporation d/b/a Progress Energy Florida, Inc.
Hines Energy Complex
Title V Permit No. 1050234-008-AV/-012-AV
Facility ID 1050234

Dear Mr. Mitchell:

Per your telephone conversation with Ann Quillian today, please find enclosed of the DEP Form 62-210.900(1)(a) - Acid Rain Part Application for the renewal of the Florida Power Corporation d/b/a Progress Energy Florida, Inc. ("PEF") Hines Energy Complex Acid Rain portion of the Title V permit renewal.

Thank you for your assistance. If you have any questions, please let me know at 727-820-5567 or Ann Quillian at 727-820-5962.

Sincerely,

J. Michael Kennedy
Principal Environmental Specialist
Designated Representative

Enclosure

cc: Martin J. Drango, PEF – Hines Energy Complex

Progress Energy Florida, Inc.
100 Central Avenue
Saint Petersburg, FL 33701

Acid Rain Part Application

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

This submission is: ☐ New ☐ Revised XX RENEWAL

STEP 1
Identify the source by plant name, State, and ORIS code

Plant Name	State	ORIS Code
Hines Energy Complex	Florida	7302

STEP 2

Enter the unit ID# for every Acid Rain unit at the Acid Rain source in column "a." For new units, enter the requested information in columns "c" and "d."

a Unit ID#	b Unit will hold allowances in accordance with 40 CFR 72.9(c)(1)	c New Units Commence Operation Date	d New Units Monitor Certification Deadline
1A	Yes	Existing	
1B	Yes	"	
2A	Yes	"	
2B	Yes	"	
3A	Yes	"	
3B	Yes	"	
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		
	Yes		

RECEIVED
OCT 27 2006
BUREAU OF AIR REGULATION

Hines Energy Complex
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 Department 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 Department; 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.

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 Department:
(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,

Hines Energy Complex
Plant Name (from Step 1)

STEP 3, Cont'd.

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, 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) Intertering with or impairing any program for competitive bidding for power supply in a State in which such program is established.

STEP 4

Read the certification statement, sign, and date

Certification

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 J. Michael Kennedy	
Signature J. Michael Kennedy	Date 10-23-06

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:	)	
	)	
Florida Electric Power Coordinating Group, Inc.,	)	ASP No. 97-B-01
	)	
Petitioner.	)	

ORDER ON REQUEST
FOR
ALTERNATE PROCEDURES AND REQUIREMENTS

Pursuant to Rule 62-297.620, Florida Administrative Code (F.A.C.), the Florida Electric Coordinating Group, Incorporated, (FCG) petitioned for approval to: (1) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test; and, (2) Exempt fossil fuel steam generators which burn liquid and/or solid fuel for less than 400 hours during the federal fiscal year from the requirement to conduct an annual particulate matter compliance test during the year prior to renewal of an operation permit. This Order is intended to clarify particulate testing requirements for those fossil fuel steam generators which primarily burn gaseous fuels including, but not necessarily limited to natural gas.

Having considered the provisions of Rule 62-296.405(1), F.A.C., Rule 62-297.310(7), F.A.C., and all supporting documentation, the following Findings of Fact, Conclusions of Law, and Order are entered:

FINDINGS OF FACT

1. The Florida Electric Power Coordinating Group, Incorporated, petitioned the Department to exempt those fossil fuel steam generators which have a heat input of more than 250 million Btu per hour and burn solid and/or liquid fuel less than 400 hours during the year from the requirement to conduct an annual particulate matter compliance test. [Exhibit 1]

2. Rule 62-296.405(1)(a), F.A.C., applies to those fossil fuel steam generators that are not subject to the federal standards of performance for new stationary sources (NSPS) in 40 CFR 60 and which have a heat input of more than 250 million Btu per hour.

3. Rule 62-296.405(1)(a), F.A.C., limits visible emissions from affected fossil fuel steam generators to, "20 percent opacity except for either one six-minute period per hour during which

not exceed 40 percent. The option selected shall be specified in the emissions unit's construction and operation permits. Emissions units governed by this visible emission limit shall test for particulate emission compliance annually and as otherwise required by Rule 62-297, F.A.C."

4. Rule 62-296.405(1)(a), F.A.C., further states, "Emissions units electing to test for particulate matter emission compliance quarterly shall be allowed visible emissions of 40 percent opacity. The results of such tests shall be submitted to the Department. Upon demonstration that the particulate standard has been regularly complied with, the Secretary, upon petition by the applicant, shall reduce the frequency of particulate testing to no less than once annually.

5. Rule 297.310(7)(a)1., F.A.C., states, "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."

6. Rule 297.310(7)(a)3., F.A.C., states, "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.

7. Rule 297.310(7)(a)3., F.A.C., further states, "In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department 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."

8. Rule 297.310(7)(a)4., F.A.C., states, "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: a. Visible emissions, if there is an applicable standard; b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant..."

9. Rule 297.310(7)(a)5., F.A.C., states, "An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours."

10. Rule 297.310(7)(a)6., F.A.C., states, "For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be

required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup."

11. Rule 297.310(7)(a)7., F.A.C., states, "For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(2)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup." [Note: The reference should be to Rule 62-296.405(1)(a), F.A.C., rather than Rule 62-296.405(2)(a), F.A.C.]

12. The fifth edition of the U. S. Environmental Protection Agency's Compilation of Air Pollutant Emission Factors, AP-42, that emissions of filterable particulate from gas-fired fossil fuel steam generators with a heat input of more than about 10 million Btu per hour may be expected to range from 0.001 to 0.006 pound per million Btu. [Exhibit 2]

13. Rule 62-296.405(1)(b), F.A.C. and the federal standards of performance for new stationary sources in 40 CFR 60.42, Subpart D, limit particulate emissions from uncontrolled fossil fuel fired steam generators with a heat input of more than 250 million Btu to 0.1 pound per million Btu.

CONCLUSIONS OF LAW

1. The Department has jurisdiction to consider the matter pursuant to Section 403.061, Florida Statutes (F.S.), and Rule 62-297.620, F.A.C.

2. Pursuant to Rule 62-297.310(7), F.A.C., the Department may require Petitioner to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.

3. There is reason to believe that a fossil fuel steam generator which does not burn liquid and/or solid fuel (other than during startup) for a total of more than 400 hours in a federal fiscal year and complies with all other applicable limits and permit conditions is in compliance with the applicable particulate mass emission limiting standard.

ORDER

Having considered the requirements of Rule 62-296.405, F.A.C., Rule 62-297.310, F.A.C., and supporting documentation, it is hereby ordered that:

1. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours;

2. For fossil fuel steam generators on a semi-annual particulate matter emission compliance testing schedule, a compliance test shall not be required for any six-month period in which liquid and/or solid fuel is not burned for more than 200 hours other than during startup;

3. For emissions units electing to conduct particulate matter emission compliance testing quarterly pursuant to Rule 62-296.405(1)(a), F.A.C., a compliance test shall not be required for any quarter in which liquid and/or solid fuel is not burned for more than 100 hours other than during startup;

4. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

5. Pursuant to Rule 62-297.310(7), F.A.C., owners of affected fossil fuel steam generators may be required to conduct compliance tests that identify the nature and quantity of pollutant emissions, if, after investigation, it is believed that any applicable emission standard or condition of the applicable permits is being violated.

6. Pursuant to Rule 62-297.310(8), F.A.C., owners of affected fossil fuel steam generators shall submit the compliance test report to the District Director of the Department district office having jurisdiction over the emissions unit and, where applicable, the Air Program Administrator of the appropriate Department-approved local air program within 45 days of completion of the test.

PETITION FOR ADMINISTRATIVE REVIEW

The Department will take the action described in this Order unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 of the Florida Statutes, or a party requests mediation as an alternative remedy under section 120.573 before the deadline for filing a petition. Choosing mediation will not adversely affect the right to a hearing if mediation does not result in a settlement. The procedures for petitioning for a hearing are set forth below, followed by the procedures for requesting mediation.

A person whose substantial interests are affected by the Department's proposed decision may petition for an administrative hearing in accordance with sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000. Petitions must be filed within 21 days of receipt of this Order. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition (or a request for mediation, as discussed below) within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 of

the Florida Statutes, or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information:

(a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Department File Number, and the county in which the project is proposed;

(b) A statement of how and when each petitioner received notice of the Department's action or proposed action;

(c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;

(d) A statement of the material facts disputed by each petitioner, if any;

(e) A statement of facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action;

(f) A statement identifying the rules or statutes each petitioner contends require reversal or modification of the Department's action or proposed action; and,

(g) A statement of the relief sought by each petitioner, stating precisely the action each petitioner wants the Department to take with respect to the Department's action or proposed action in the notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this Order. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A person whose substantial interests are affected by the Department's proposed decision, may elect to pursue mediation by asking all parties to the proceeding to agree to such mediation and by filing with the Department a request for mediation and the written agreement of all such parties to mediate the dispute. The request and agreement must be filed in (received by) the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000, by the same deadline as set forth above for the filing of a petition.

A request for mediation must contain the following information:

(a) The name, address, and telephone number of the person requesting mediation and that person's representative, if any;

(b) A statement of the preliminary agency action;

(c) A statement of the relief sought; and

(d) Either an explanation of how the requester's substantial interests will be affected by the action or proposed action addressed in this notice of intent or a statement clearly identifying the petition for hearing that the requester has already filed, and incorporating it by reference.

The agreement to mediate must include the following:

(a) The names, addresses, and telephone numbers of any persons who may attend the mediation;

(b) The name, address, and telephone number of the mediator selected by the parties, or a provision for selecting a mediator within a specified time;

(c) The agreed allocation of the costs and fees associated with the mediation;

(d) The agreement of the parties on the confidentiality of discussions and documents introduced during mediation;

(e) The date, time, and place of the first mediation session, or a deadline for holding the first session, if no mediator has yet been chosen;

(f) The name of each party's representative who shall have authority to settle or recommend settlement; and

(g) The signatures of all parties or their authorized representatives.

As provided in section 120.573 of the Florida Statutes, the timely agreement of all parties to mediate will toll the time limitations imposed by sections 120.569 and 120.57 for requesting and holding an administrative hearing. Unless otherwise agreed by the parties, the mediation must be concluded within sixty days of the execution of the agreement. If mediation results in settlement of the administrative dispute, the Department must enter a final order incorporating the agreement of the parties. Persons whose substantial interests will be affected by such a modified final decision of the Department have a right to petition for a hearing only in accordance with the requirements for such petitions set forth above. If mediation terminates without settlement of the dispute, the Department shall notify all parties in writing that the administrative hearing processes under sections 120.569 and 120.57 remain available for disposition of the dispute, and the notice will

specify the deadlines that then will apply for challenging the agency action and electing remedies under those two statutes.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under section 120.542 of the Florida Statutes. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station 35, Tallahassee, Florida 32399-3000.

The petition must specify the following information:

(a) The name, address, and telephone number of the petitioner;

(b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any;

(c) Each rule or portion of a rule from which a variance or waiver is requested;

(d) The citation to the statute underlying (implemented by) the rule identified in (c) above;

(e) The type of action requested;

(f) The specific facts that would justify a variance or waiver for the petitioner;

(g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and

(h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver, when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully

each of those terms is defined in section 120.542(2) of the Florida Statutes, and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner. Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This Order constitutes final agency action unless a petition is filed in accordance with the above paragraphs. Upon timely filing of a petition, this Order will not be effective until further Order of the Department.

RIGHT TO APPEAL

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station 35, 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 of Appeal must be filed within 30 days from the date the Notice of Agency Action is filed with the Clerk of the Department.

DONE AND ORDERED this 17 day of March, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION

Howard L. Rhodes

HOWARD L. RHODES, Director
Division of Air Resources Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-0114

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that a copy of the foregoing was mailed to Rich Piper, Chair, Florida Power Coordinating Group, Inc., 405 Reo Street, Suite 100, Tampa, Florida 33609-1004, on this 18th day of March 1997.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Martha M Wise 3-18-97
Clerk Date

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In the matter of:	)	
	)	
Florida Electric Power Coordinating Group, Inc.,	)	ASP No. 97-B-01
	)	
Petitioner.	)	

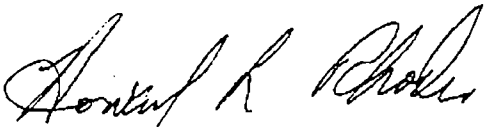
ORDER CORRECTING SCRIVENER'S ERROR

The Order which authorizes owners of natural gas fired fossil fuel steam generators to forgo particulate matter compliance testing on an annual basis and prior to renewal of an operation permit entered on the 17th day of March, 1997, is hereby corrected on page 4, paragraph number 4, by deleting the words "pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.":

4. In renewing an air operation permit ~~pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C.,~~ the Department shall not require submission of particulate matter emission compliance test results for any fossil fuel steam generator emissions unit that burned liquid and/or solid fuel for a total of no more than 400 hours during the year prior to renewal.

DONE AND ORDERED this 2 day of July, 1997 in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



HOWARD L. RHODES, Director
Division of Air Resources Management
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
(904) 488-0114

Friday, Barbara

To: epa

Cc: Mitchell, Bruce

Subject: New Posting #1050234

There is a new posting on Florida's website.

1050234014AV
FLORIDA POWER CORPORATION dba
PROGRESS ENERGY FLORIDA, INC.
HINES ENERGY COMPLEX

Proposed Permit Renewal

If you have any questions, feel free to contact me.

Thanks,
Barbara

Friday, Barbara

From: Friday, Barbara

Sent: Wednesday, November 01, 2006 3:15 PM

To: 'martin.drango@pgnmail.com'; Nasca, Mara; 'sosbourn@golder.com'; Oven, Hamilton; 'worley.gregg@epa.gov'

Cc: Mitchell, Bruce

Subject: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296 (C)/PSD-FL-330(B)

Tracking:

Recipient	Delivery
'martin.drango@pgnmail.com'	
Nasca, Mara	Delivered: 11/1/2006 3:15 PM
'sosbourn@golder.com'	
Oven, Hamilton	Delivered: 11/1/2006 3:15 PM
'worley.gregg@epa.gov'	
Mitchell, Bruce	Delivered: 11/1/2006 3:15 PM

There is a new posting on Florida's website.

1050234014AV
FLORIDA POWER CORPORATION dba
PROGRESS ENERGY FLORIDA, INC.
HINES ENERGY COMPLEX

Proposed Permit Renewal

If you have any questions, feel free to contact me.

Thanks,
Barbara

Friday, Barbara

From: System Administrator
To: Nasca, Mara
Sent: Wednesday, November 01, 2006 3:15 PM
Subject: Delivered:DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your message

To:	'martin.drango@pgnmail.com'; Nasca, Mara; 'sosbourn@golder.com'; Oven, Hamilton; 'worley.gregg@epa.gov'
Cc:	Mitchell, Bruce
Subject:	DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)
Sent:	11/1/2006 3:15 PM

was delivered to the following recipient(s):

Nasca, Mara on 11/1/2006 3:15 PM

Friday, Barbara

From: Oven, Hamilton
Sent: Wednesday, November 01, 2006 3:15 PM
To: Friday, Barbara
Subject: Out of Office AutoReply: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

I am out of Office on 11/1/06. If you need help ask for Mike Halpin or Steve Palmer.

Friday, Barbara

From: Exchange Administrator
Sent: Wednesday, November 01, 2006 3:15 PM
To: Friday, Barbara
Subject: Delivery Status Notification (Relay)

Attachments: ATT143957.txt; DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)


ATT143957.txt
(285 B)


DRAFT/PROPOSED
Title V Permit ...

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

sosbourn@golder.com

Friday, Barbara

From: Osbourn, Scott [Scott_Osbourn@golder.com]

Sent: Wednesday, November 01, 2006 3:16 PM

To: Friday, Barbara

Subject: Out of Office AutoReply: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

I'll be out of the office on 11/1/06, returning on 11/2/06. Please contact Debra Groh at (813) 287-1717, should you require immediate assistance.

Friday, Barbara

From: EPA Postmaster automated message [postmaster@epamail.epa.gov]
Sent: Wednesday, November 01, 2006 3:15 PM
To: Friday, Barbara
Subject: Delivery Notification: Message successfully forwarded

Attachments: ATT144661.txt; ATT144662.txt


ATT144661.txt (626 B)


ATT144662.txt (2 KB)

This report relates to a message you sent with the following header fields:

Message-id: <5280B20498F24C46A51A87E86A0C8F97039D2F@tlhexsmb5.floridadep.net>
Date: Wed, 01 Nov 2006 15:14:35 -0500
From: "Friday, Barbara" <Barbara.Friday@dep.state.fl.us>
To: martin.drango@pgnmail.com, "Nasca, Mara" <Mara.Nasca@dep.state.fl.us>, sosbourn@golder.com, "Oven, Hamilton" <Hamilton.Oven@dep.state.fl.us>, worley.gregg@epamail.epa.gov
Subject: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your message has been successfully relayed to the recipients

Recipient address: worley.gregg@mseive.epa.gov
Original address: worley.gregg@epa.gov
Reason: Message successfully relayed to a system that does not support receipts
Diagnostic code: dns;mseive01.rtp.epa.gov (TCP|134.67.208.99|3856|134.67.221.149|25) (mseive01.rtp.epa.gov ESMTP Postfix) smtp;250 Ok
Remote system: dns;mseive01.rtp.epa.gov (TCP|134.67.208.99|3856|134.67.221.149|25) (mseive01.rtp.epa.gov ESMTP Postfix)

on a remote system that does not support the generation of successful delivery receipts. This does NOT mean that your message has actually been placed in the recipients' mailboxes; merely that it has passed through a part of the message transport infrastructure. In the event of a nondelivery you should expect to receive a nondelivery notification; in the event of successful delivery, however, you are unlikely to receive a positive confirmation of delivery.

Friday, Barbara

From: Nasca, Mara
To: Friday, Barbara
Sent: Wednesday, November 01, 2006 9:06 PM
Subject: Read: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your message

To:	'martin.drango@pgnmail.com'; Nasca, Mara; 'sosbourn@golder.com'; Oven, Hamilton; 'worley.gregg@epa.gov'
Cc:	Mitchell, Bruce
Subject:	DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)
Sent:	11/1/2006 3:15 PM

was read on 11/1/2006 9:06 PM.

Friday, Barbara

From: Osbourn, Scott [Scott_Osbourn@golder.com]
Sent: Thursday, November 02, 2006 8:35 AM
Subject: Read: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your message

To: Scott_Osbourn@golder.com
Subject:

was read on 11/2/2006 8:35 AM.

Friday, Barbara

From: Mitchell, Bruce
Sent: Wednesday, November 01, 2006 12:03 PM
To: 'Forney.Kathleen@epamail.epa.gov'; 'danois.gracy@epamail.epa.gov'
Cc: Koerner, Jeff; Vielhauer, Trina; Friday, Barbara
Subject: FW: Public Notice for 1050234-014-AV and 1050234-015-AC: PEFI's Hines Energy Complex.

11/1/06

Dear Katey and Gracy,

Good afternoon! This e-mail message is to serve as notification that the Public Notice for the FPC dba PEFI Hines Energy Complex DRAFT/PROPOSED Title V Permit Renewal was published today. Please start the review clock for this combined project. If there are any questions, please give me a call at 850/413-9198 or send me an e-mail. Many thanks and take care.

Bruce

From: Quillian, Ann [mailto:Ann.Quillian@pgnmail.com]
Sent: Wednesday, November 01, 2006 11:06 AM
To: Mitchell, Bruce
Cc: Koerner, Jeff; Lobe, Mark A; Drango, Martin J; West, Patricia Q.
Subject: RE: Public Notice for 1050234-014-AV and 1050234-015-AC: PEFI's Hines Energy Complex.

Bruce:

I just received word from a PEF employee in one of our Polk County offices that the public notice did appear in *The Lakeland Ledger* today (November 1, 2006).

Let me know, if you have any questions.

Ann Quillian, PE
Environmental Services (ESS)
Progress Energy Service Company
100 Central Avenue - CX1B
St. Petersburg, FL 33701
727.820.5962
Ann.Quillian@pgnmail.com

-----Original Message-----
From: Quillian, Ann
Sent: Monday, October 30, 2006 9:00 AM
To: 'Mitchell, Bruce'
Cc: 'Koerner, Jeff'; Lobe, Mark A; Drango, Martin J; West, Patricia Q.
Subject: RE: Public Notice for 1050234-014-AV and 1050234-015-AC: PEFI's Hines Energy Complex.

FYI. I received an e-mail response from The Ledger on Friday, October 27th. The public notice is expected to be in the November 1st issue. I will send you a confirmation e-mail, when I get the final word.

Regards,

Ann Quillian, PE
Environmental Services (ESS)
Progress Energy Service Company
100 Central Avenue - CX1B
St. Petersburg, FL 33701
727.820.5962
Ann.Quillian@pgnmail.com

-----Original Message-----
From: Mitchell, Bruce [mailto:Bruce.Mitchell@dep.state.fl.us]
Sent: Thursday, October 26, 2006 1:31 PM
To: Quillian, Ann
Cc: Koerner, Jeff
Subject: Public Notice for 1050234-014-AV and 1050234-015-AC: PEFI's Hines Energy Complex.

12/26/06

Dear Ann,

I have attached the Public Notice, in Word, for the above referenced project. Please have this published as soon as possible, but no earlier than Monday, the 31st. If there are any questions, please give me a call. Take care.

Bruce
850/413-9198

Friday, Barbara

To: martin.drango@pgnmail.com; Nasca, Mara; 'sosbourn@golder.com'; Oven, Hamilton; worley.gregg@epa.gov

Cc: Mitchell, Bruce

Subject: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Attachments: TV-6.pdf; 297310-1.pdf; 1050234.014.AV.Renewal.SOB.PEFI.Hines.Energy.Complex.pdf; 1050234.015 AC.letterAC.Draft.FPCdbaPEFI.Hines.Energy.Complex.pdf; 1050234.015.AC.PSD.FL.195(D).296(C).330(B).TEPD.PEFI.Hines.Energy.Complex.pdf; 1050234dp.014.AV.Renewal.PEFI.Hines.Energy.Complex.pdf; 1050234G.014.AV.Renewal.PEFI.Hines.Energy.Complex.pdf; 1050234H.014.AV.Renewal.DRAFT.PEFI.Hines.Energy.Complex.pdf; 1050234i.014.AV.Renewal.015.AC.PEFI.Hines.Energy.Complex.pdf; 1050234U.014.AV.Renewal.PEFI.Hines.Energy.Complex.pdf; Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.pdf; ASPB9701.pdf; FIGURE1.pdf; SS-1.pdf

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The 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.

The Bureau of Air Regulation 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. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

Friday, Barbara

To: Ann.Quillian@pgnmail.com

Cc: Mitchell, Bruce

Subject: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Attachments: TV-6.pdf; 297310-1.pdf; 1050234.014.AV.Renewal.SOB.PEFI.Hines.Energy.Complex.pdf; 1050234.015 AC.letterAC.Draft.FPCdbaPEFI.Hines.Energy.Complex.pdf; 1050234.015.AC.PSD.FL.195(D).296(C).330(B).TEPD.PEFI.Hines.Energy.Complex.pdf; 1050234dp.014.AV.Renewal.PEFI.Hines.Energy.Complex.pdf; 1050234G.014.AV.Renewal.PEFI.Hines.Energy.Complex.pdf; 1050234H.014.AV.Renewal.DRAFT.PEFI.Hines.Energy.Complex.pdf; 1050234i.014.AV.Renewal.015.AC.PEFI.Hines.Energy.Complex.pdf; 1050234U.014.AV.Renewal.PEFI.Hines.Energy.Complex.pdf; Appendix GG - NSPS Subpart GG Requirements for Gas Turbines.pdf; ASPB9701.pdf; FIGURE1.pdf; SS-1.pdf

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The 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.

The Bureau of Air Regulation 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. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

Note: The Acid Rain Form was received in our office today 10/27/06.

Friday, Barbara

From: Quillian, Ann [Ann.Quillian@pgnmail.com]
To: Friday, Barbara
Sent: Monday, October 30, 2006 10:29 AM
Subject: Read: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your message

To: Ann.Quillian@pgnmail.com
Subject:

was read on 10/30/2006 10:29 AM.

Friday, Barbara

From: Quillian, Ann [Ann.Quillian@pgnmail.com]
Sent: Monday, October 30, 2006 12:52 PM
To: Friday, Barbara
Cc: Mitchell, Bruce; Drango, Martin J
Subject: RE: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your e-mail with 14 attachments was received.

Thank you,
Ann Quillian
Florida Power Corporation d/b/a Progress Energy Florida, Inc.
727-820-5962

-----Original Message-----
From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]
Sent: Friday, October 27, 2006 11:05 AM
To: Quillian, Ann
Cc: Mitchell, Bruce
Subject: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296 (C)/PSD-FL-330(B)

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The 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.

The Bureau of Air Regulation 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. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

Note: The Acid Rain Form was received in our office today 10/27/06.

Friday, Barbara

From: Drango, Martin J [Martin.Drango@pgnmail.com]
Sent: Friday, October 27, 2006 2:08 PM
To: Friday, Barbara
Cc: Quillian, Ann; Lobe, Mark A; ONeal, Tommy; Kerst, George
Subject: RE: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Barbara

Received

Marty Drango

-----Original Message-----
From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]
Sent: Friday, October 27, 2006 11:04 AM
To: Drango, Martin J; Nasca, Mara; sosbourn@golder.com; Oven, Hamilton; worley.gregg@epa.gov
Cc: Mitchell, Bruce
Subject: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296 (C)/PSD-FL-330(B)

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The 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.

The Bureau of Air Regulation 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. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

Friday, Barbara

From: System Administrator
To: Nasca, Mara
Sent: Friday, October 27, 2006 11:04 AM
Subject: Delivered:DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your message

To:	'martin.drango@pgnmail.com'; Nasca, Mara; 'sosbourn@golder.com'; Oven, Hamilton; 'worley.gregg@epa.gov'
Cc:	Mitchell, Bruce
Subject:	DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)
Sent:	10/27/2006 11:04 AM

was delivered to the following recipient(s):

Nasca, Mara on 10/27/2006 11:04 AM

Friday, Barbara

From: Nasca, Mara
To: Friday, Barbara
Sent: Friday, October 27, 2006 11:14 AM
Subject: Read: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your message

To:	'martin.drango@pgnmail.com'; Nasca, Mara; 'sosbourn@golder.com'; Oven, Hamilton; 'worley.gregg@epa.gov'
Cc:	Mitchell, Bruce
Subject:	DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)
Sent:	10/27/2006 11:04 AM

was read on 10/27/2006 11:14 AM.

Friday, Barbara

From: System Administrator
To: Oven, Hamilton
Sent: Friday, October 27, 2006 11:04 AM
Subject: Delivered:DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your message

To:	'martin.drango@pgnmail.com'; Nasca, Mara; 'sosbourn@golder.com'; Oven, Hamilton; 'worley.gregg@epa.gov'
Cc:	Mitchell, Bruce
Subject:	DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)
Sent:	10/27/2006 11:04 AM

was delivered to the following recipient(s):

Oven, Hamilton on 10/27/2006 11:04 AM

Friday, Barbara

From: EPA Postmaster automated message [postmaster@epamail.epa.gov]
Sent: Friday, October 27, 2006 11:05 AM
To: Friday, Barbara
Subject: Delivery Notification: Message successfully forwarded

Attachments: ATT144420.txt; ATT144420.txt


ATT144420.txt (626 B)


ATT144420.txt (2 KB)

This report relates to a message you sent with the following header fields:

Message-id: <5280B20498F24C46A51A87E86A0C8F97038C1E@tlhexsmb5.floridadep.net>
Date: Fri, 27 Oct 2006 11:03:40 -0400
From: "Friday, Barbara" <Barbara.Friday@dep.state.fl.us>
To: martin.drango@pgnmail.com, "Nasca, Mara" <Mara.Nasca@dep.state.fl.us>, sosbourn@golder.com, "Oven, Hamilton" <Hamilton.Oven@dep.state.fl.us>, worley.gregg@epamail.epa.gov
Subject: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your message has been successfully relayed to the recipients

Recipient address: worley.gregg@mseive.epa.gov
Original address: worley.gregg@epa.gov
Reason: Message successfully relayed to a system that does not support receipts
Diagnostic code: dns;mseive02.rtp.epa.gov (TCP|134.67.208.99|3058|134.67.221.150|25) (mseive02.rtp.epa.gov ESMTP Postfix) smtp;250 Ok
Remote system: dns;mseive02.rtp.epa.gov (TCP|134.67.208.99|3058|134.67.221.150|25) (mseive02.rtp.epa.gov ESMTP Postfix)

on a remote system that does not support the generation of successful delivery receipts. This does NOT mean that your message has actually been placed in the recipients' mailboxes; merely that it has passed through a part of the message transport infrastructure. In the event of a nondelivery you should expect to receive a nondelivery notification; in the event of successful delivery, however, you are unlikely to receive a positive confirmation of delivery.

Friday, Barbara

From: Exchange Administrator
Sent: Friday, October 27, 2006 11:23 AM
To: Friday, Barbara
Subject: Delivery Status Notification (Relay)

Attachments: ATT144504.txt; DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)


ATT144504.txt
(286 B)


DRAFT/PROPOSED
Title V Permit ...

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

sosbourn@golder.com

Friday, Barbara

From: Oven, Hamilton
To: Friday, Barbara
Sent: Friday, October 27, 2006 11:32 AM
Subject: Read: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your message

To:	'martin.drango@pgnmail.com'; Nasca, Mara; 'sosbourn@golder.com'; Oven, Hamilton; 'worley.gregg@epa.gov'
Cc:	Mitchell, Bruce
Subject:	DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)
Sent:	10/27/2006 11:04 AM

was read on 10/27/2006 11:31 AM.

Friday, Barbara

From: Osbourn, Scott [Scott_Osbourn@golder.com]
Sent: Friday, October 27, 2006 12:21 PM
Subject: Read: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Your message

To: Scott_Osbourn@golder.com
Subject:

was read on 10/27/2006 12:21 PM.

Friday, Barbara

From: Osbourn, Scott [Scott_Osbourn@golder.com]
Sent: Friday, October 27, 2006 2:30 PM
To: Friday, Barbara
Subject: RE: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Yes- I received it.

Scott Osbourn, P.E.
Golder Associates Inc
5100 West Lemon St., Suite 114
Tampa, FL 33609
Tel: (813) 287-1717
Fax: (813) 287-1716
E-mail: sosbourn@golder.com

From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]
Sent: Friday, October 27, 2006 11:22 AM
To: Osbourn, Scott
Subject: DRAFT/PROPOSED Title V Permit Renewal No.: 1050234-014-AV/1050234-015-AC/PSD-FL-296(C)/PSD-FL-330(B)

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The 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.

The Bureau of Air Regulation 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. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

Memorandum

Florida Department of
Environmental Protection

TO: Trina Vielhauer

THRU: Jeff Koerner

FROM: Bruce Mitchell

DATE: October 25, 2006

SUBJECT: Florida Power Corporation dba Progress Energy Florida, Inc.
Hines Energy Complex
Draft Air Construction Permit and DRAFT/PROPOSED Title V Air Operation Permit Renewal
1050234-015-AC/PSD-FL-195(D)/296(C)/330(B) and 1050234-014-AV

Attached is the Draft Air Construction Permit (AC) and DRAFT/PROPOSED Title V Air Operation Permit Renewal.

The subjects of the Air Construction Permit are: (1) removal of Emergency Diesel Generator, Emissions Unit - 004, from the facility because it was never built; (2) allow the latest ASTM analytical methods for testing of the sulfur content of the fuels contained in 40 CFR 60, Subpart GG; and, (3) allow certain Power Blocks CEMS data exclusion of excess emissions for "Cold Start of the CT-HRSG", "Cold Startup of the Combustion Turbine Generator", and "Fuel Switches".

The subject of the Title V Air Operation Permit is for the renewal of the initial Title V Air Operation Permit, No. 1050234-001-AV. In addition, the renewal will be used to incorporate the terms and conditions of the ACs identified above.

Attachments

TLV/jk/bm