

# Memorandum

# Florida Department of Environmental Protection

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TO: Trina Vielhauer  
THROUGH: Al Linero *aa*  
FROM: Teresa Heron *T.H.*  
DATE: September 2, 2008  
SUBJECT: DEP File Nos. 1030011-012-AC (PSD-FL-381A)  
P.L. Bartow Power Plant Repowering Project  
Modification of Permit – Removal of Interim Operating Mode

This project is subject to minor source preconstruction review. It is actually a change to a project permitted (reference Permit Nos. 1030011-010-AC and PSD-FL-381) under the major source preconstruction review rules and still under construction. Attached for your review are the following items:

- Written Notice of Intent to Issue Air Permit Modification;
- Public Notice of Intent to Issue Air Permit Modification;
- Technical Evaluation and Preliminary Determination;
- Draft Permit (letter) Modification; and
- P.E. Certification.

On May 6, 2008, PEF submitted a permit modification application requesting changes to certain conditions including the removal of an interim operating mode applicable to the P.L. Bartow Power Plant Repowering Project. The key change is that they will not commercially operate the combined cycle units in simple cycle mode.

For reference, the repowering project will result in large reductions of all PSD pollutants with the exception of carbon monoxide, for which a BACT determination was conducted.

I recommend your approval of the attached Draft Permit package.

Attachments

# PROFESSIONAL ENGINEER CERTIFICATION STATEMENT

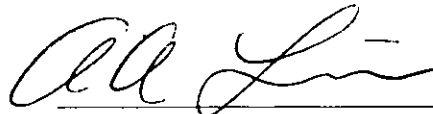
## PERMITTEE

Florida Power Corporation dba  
Progress Energy Florida, Inc.  
1601 Weedon Island Drive  
St. Petersburg, Florida 33711

DEP File No.: 1030011-012-AC (PSD-FL-381A)  
Modification of Interim Operation Modes  
Repowering Project  
P.L. Bartow Power Plant  
Pinellas County

**Project:** The applicant proposes to modify certain specific conditions of a recently-issued PSD permit applicable to the P.L. Bartow Power Plant. The PSD permit [reference: DEP File No. 1030011-010-AC (PSD-FL-381)] authorized the replacement of the three residual fuel oil-fired steam electrical generators with a natural gas-fueled combined cycle unit and a natural gas-fueled simple cycle unit. The key modification to the PSD permit is the elimination of an interim period during which the four combustion turbines that comprise the combined cycle unit (presently under construction) can operate in simple cycle (higher emitting) mode.

*I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).*

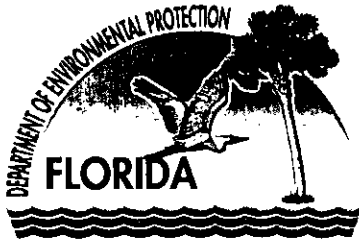


Alvaro A. Linero, P.E.  
Registration Number: 26032

9/3/08

(Date)

as 9/3



# Florida Department of Environmental Protection

Bob Martinez Center  
2600 Blairstone Road  
Tallahassee, Florida 32399-2400

Charlie Crist  
Governor  
Jeff Kottkamp  
Lt. Governor  
Michael W. Sole  
Secretary

September 5, 2008

*Electronically Sent – Received Receipt Requested.*

[Thomas.Lawery@pgnmail.com](mailto:Thomas.Lawery@pgnmail.com)

Mr. Thomas Lawery, Plant Manager  
Florida Power Corporation dba  
Progress Energy Florida (PEF)  
1601 Weedon Island Drive  
St. Petersburg, Florida 33711

Re: DEP File Nos. 1030011-012-AC (PSD-FL-381A)  
P.L. Bartow Power Plant Repowering Project  
Modification of Permit – Removal of Interim Operating Mode

Dear Mr. Lawery:

On May 6, 2008, PEF submitted a permit modification application requesting changes to certain conditions to Permit No. 1030011-010-AC (PSD-FL-381) applicable to the P.L. Bartow Power Plant Repowering Project. The key modification to the PSD permit is the elimination of an interim period during which the four combustion turbines that comprise the combined cycle unit can operate in simple cycle mode. Enclosed are the following documents:

- Written Notice of Intent to Issue Air Permit Modification;
- Public Notice of Intent to Issue Air Permit Modification;
- Technical Evaluation and Preliminary Determination; and
- Draft Permit (letter) Modification.

The Public Notice of Intent to Issue Air Permit Modification is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project.

If you have any questions, please contact the Project Engineer, Teresa Heron, at (850) 921-9529 or A. A. Linero, Program Administrator at (850) 921-9523.

Sincerely,

Trina L. Vielhauer, Chief  
Bureau of Air Regulation

TLV/aal/th

Enclosures

**WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION**

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*In the Matter of an  
Application for Air Permit by:*

Florida Power Corporation dba  
Progress Energy Florida, Inc.  
1601 Weedon Island Drive  
St. Petersburg, Florida 33711  
*Authorized Representative:* Mr. Thomas Lawery

DEP File No.: 1030011-012-AC (PSD-FL-381A)  
Modification of Interim Operation Modes  
Repowering Project  
P.L. Bartow Power Plant  
Pinellas County

**Facility Location:** The applicant, Progress Energy Florida (PEF), operates the existing P.L. Bartow Power Plant, which is located at 1601 Weedon Island Drive in St. Petersburg, Pinellas County, Florida.

**Project:** The applicant proposes to modify certain specific conditions of a recently-issued prevention of significant deterioration (PSD) permit applicable to the P.L. Bartow Power Plant. The PSD permit [reference: DEP File No. 1030011-010-AC (PSD-FL-381)] authorized the replacement of three residual fuel oil-fired steam electrical generators with a natural gas-fueled combined cycle unit and a natural gas-fueled simple cycle unit. The key modification to the PSD permit is the elimination of an interim period during which the four combustion turbines that comprise the combined cycle unit can operate in simple cycle mode.

**Permitting Authority:** Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite 4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, Mail Station (MS) 5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the Draft Permit Modification, the applications, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above. In addition, electronic copies of these documents are available by entering the file number provided above where indicated on the following web site:

<http://www.dep.state.fl.us/air/eproducts/apds/default.asp>

**Notice of Intent to Issue Permit Modification:** The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION

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**Public Notice:** Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public 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 by this project. The newspaper used must meet 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 above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

**Comments:** The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**Petitions:** 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 with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, 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 14 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 (in a proceeding initiated by another party) 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 when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the

**WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION**

relief sought by the petitioner, stating precisely the action the 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 Written Notice of Intent to Issue Air Permit. 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:** Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.



Trina L. Vielhauer, Chief  
Bureau of Air Regulation

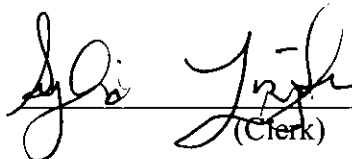
**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Intent to Issue Air Permit package (including the Written Notice of Intent to Issue Air Permit Modification, the Public Notice of Intent to Issue Air Permit Modification, the Technical Evaluation and Preliminary Determination and the Draft Permit Modification) was sent by electronic mail with received receipt requested before the close of business on 9/8/08 to the persons listed below.

- Thomas Lawery: [thomas.lawery@pgnmail.com](mailto:thomas.lawery@pgnmail.com)
- Chris Bradley, PEF: [chris.bradley@pgnmail.com](mailto:chris.bradley@pgnmail.com)
- Scott Osbourn, P.E., Golder: [sosbourn@golder.com](mailto:sosbourn@golder.com)
- Dee Morse, NPS: [dee\\_morse@nps.gov](mailto:dee_morse@nps.gov)
- Meredith Bond, U.S. FWS: [meredith\\_bond@fws.gov](mailto:meredith_bond@fws.gov)
- Kathleen Forney: [forney.kathleen@epa.gov](mailto:forney.kathleen@epa.gov)
- Mara Nasca, DEPSWD: [mara.nasca@dep.state.fl.us](mailto:mara.nasca@dep.state.fl.us)
- Mayor, City of St. Petersburg: [mayor@stpete.org](mailto:mayor@stpete.org)
- Administrator, Pinellas County: [sspratt@pinellascounty.org](mailto:sspratt@pinellascounty.org)
- Peter Hessling, PCDEM: [phesslin@pinellascounty.org](mailto:phesslin@pinellascounty.org)

Clerk Stamp

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

  
(Clerk)

9/8/08  
(Date)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT MODIFICATION

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
DEP File No. 1030011-012-AC (PSD-FL-381A)  
Florida Power Corporation dba Progress Energy Florida, Inc.  
P.L. Bartow Power Plant Repowering Project  
Pinellas County

**Applicant:** The applicant for this project is Florida Power Corporation dba Progress Energy of Florida (PEF), Inc. The applicant's authorized representative and mailing address is: Mr. Thomas Lawery, Plant Manager, P.L. Bartow Power Plant, 1601 Weedon Island Drive in St. Petersburg, Pinellas County, Florida.

**Facility and Location:** PEF operates the existing P.L. Bartow Power Plant, which is located in Pinellas County at 1601 Weedon Island Drive, St. Petersburg. The plant is located approximately 83 kilometers south of the Prevention of Significant Deterioration (PSD) Class I Chassahowitzka Wilderness Area. The facility UTM coordinates are Zone 17, 342.4 km East and 3,082.6 km North. The existing facility consists of three residual fuel oil-fired steam electrical generators, four simple cycle combustion turbines, a pipeline heating boiler and relocatable diesel generators.

**Project:** The applicant proposes to modify certain specific conditions of a recently-issued PSD permit applicable to the P.L. Bartow Power Plant. The PSD permit [reference: DEP File No. 1030011-010-AC (PSD-FL-381)] authorized the replacement of the three residual fuel oil-fired steam electrical generators with a natural gas-fueled combined cycle unit and a natural gas-fueled simple cycle unit. The key modification to the PSD permit is the elimination of an interim period during which the four combustion turbines that comprise the combined cycle unit (presently under construction) can operate in simple cycle (higher emitting) mode. Other changes include additional time to comply with the best available control technology (BACT) for carbon monoxide emissions. This project does not trigger PSD.

**Permitting Authority:** Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit modification is required to perform the proposed work. The Bureau of Air Regulation is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite 4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, Mail Station (MS) 5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

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<http://www.dep.state.fl.us/air/eproducts/apds/default.asp>

**Notice of Intent to Issue Permit Modification:** The Permitting Authority gives notice of its intent to issue an air permit modification (permit) to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in

accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Comments:** The Permitting Authority will accept written comments concerning the proposed Draft Permit for a period of 14 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 14-day period. If written comments received result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

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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 when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the 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 Public Notice. 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:** Mediation is not available in this proceeding.



**TECHNICAL EVALUATION  
AND  
PRELIMINARY DETERMINATION**

**Florida Power Corporation dba  
Progress Energy Florida  
P. L. Bartow Power Plant Repowering Project**

**Modification of Interim Operating Modes**

**Pinellas County**

**DEP File No. 1030011-012-AC (PSD-FL-381A)  
Modification of Permit No. 1030011-010-AC (PSD-FL-381)**



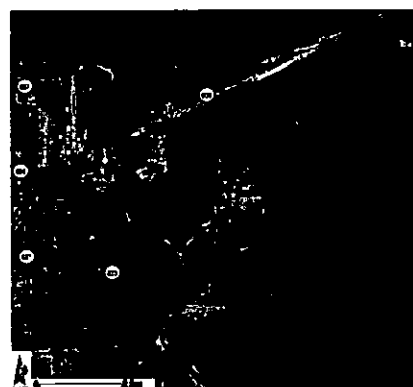
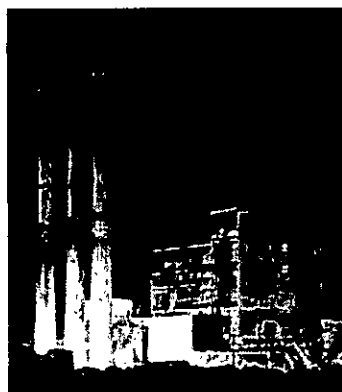
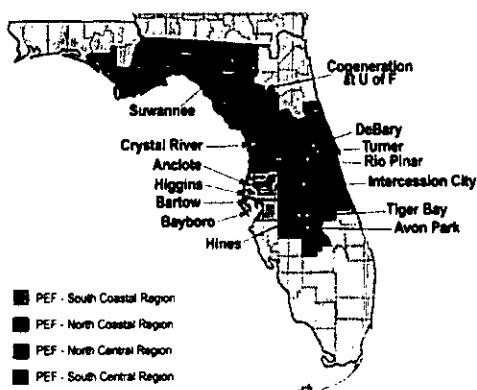
**Florida Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation  
Special Projects Section**

**September 5, 2008**

### Facility Description and Location

The Progress Energy Florida (PEF) P.L. Bartow Plant consists of three residual oil-fueled steam generating units that produce 120, 120 and 225 megawatts (MW) of electrical power and four oil-fueled simple cycle units each of which has a nominal capacity of 56 MW. A nominal 1,475 MW natural gas-fueled repowering project is under construction and is conditioned upon the shut down of the three residual oil-fueled units.

The P.L. Bartow Power Plant is located in Pinellas County, on Weedon Island on the east side of St. Petersburg. The site is located approximately 83 kilometers (km) south from the Chassahowitzka National Wildlife Area; the nearest Federal Prevention of Significant Deterioration (PSD) Class I Area. The facility UTM coordinates are Zone 17, 342.4 km East and 3,082.6 km North. The location of the P.L. Bartow Power Plant is shown below.



**Location of the P.L. Bartow Plant. Residual oil-fueled units. Aerial view of Weedon Island.**

### Facility Regulatory Categories

Title III: According to the present Title V operation permit, the existing facility is identified as a major source of hazardous air pollutants (HAP).

Title IV: The existing facility has units subject to the acid rain provisions of the Clean Air Act.

Title V: The existing facility is a Title V major source of air pollution in accordance with Chapter 213, Florida Administrative Code (F.A.C.)

PSD: The existing facility is a PSD-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

### Project Description and Analysis

PEF submitted an application for a modification of Permit No. 1030011-010-AC (PSD-FL-381). The permit authorized the construction of one nominal 1,280 MW natural gas-fueled combined cycle unit (Unit 4) and one nominal 195 MW natural gas-fueled simple cycle unit (Unit 5). The same permit required the shut down of the three existing residual oil-fueled steam generators designated as Units 1, 2 and 3. The affected permit and supporting documents are at the following link:

[www.dep.state.fl.us/Air/permitting/construction/bartow.htm](http://www.dep.state.fl.us/Air/permitting/construction/bartow.htm)

The key requested modification is removal of a condition that authorized use of two combustion turbines (CT) in simple cycle mode for a seven month period (approximately December 2008 to June 2009) prior to the permanent shut down of Units 1, 2 and 3.

**TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION**

Other changes relate primarily to implementation of the best available control technology (BACT) determination for carbon monoxide (CO) as discussed below and clarification of permit language and terms. Because the described use of two CT would have occurred prior to the shut down of Units 1, 2 and 3 it was not possible for PEF to take “credit” for contemporaneous emissions reductions when calculating net emissions increases. Rather than making permanent and enforceable emissions reductions from Units 1, 2 and 3 applicable for a short period prior to their shut down, a condition was included to insure that emissions from the initial simple cycle phase will not exceed the respective significant emission rate (SER) for any PSD pollutant. The rationale is discussed in pages 9 and 10 of the technical evaluation document available at the following link:

[www.dep.state.fl.us/Air/permitting/construction/pinellas-bartow/TECHNICAL381.pdf](http://www.dep.state.fl.us/Air/permitting/construction/pinellas-bartow/TECHNICAL381.pdf)

The applicant’s summary of net emissions increases and PSD applicability for the operation of two CT in simple cycle mode for seven months in tons per year (TPY) is given below:

Pollutant	Emissions from Two Simple Cycle CT (tons)	PSD SER in TPY	PSD?
Sulfur Dioxide (SO <sub>2</sub> )	<< 39	40	No
Particulate Matter (PM/PM <sub>10</sub> )	< 24/14	25/15	No
Nitrogen Oxides (NO <sub>x</sub> )	39	40	No
Carbon Monoxide (CO)	< 99	100	No
Volatile Organic Compounds (VOC)	<< 39	40	No
Sulfuric Acid Mist (SAM)	<< 6	7	No
Lead (Pb)	<< 0.6	0.6	No

The removal of authority to operate prior to shut down of Units 1, 2 and 3 removes a higher emitting simple cycle mode for the CT that will be incorporated into combined cycle Unit 4. It makes the associated restrictions moot and does not affect the PSD review or the BACT determination conducted for the repowering project. In the long run, the benefits of the repowering (without the temporary simple cycle mode described above) are very significant as measured by the reductions in key pollutants and as detailed in the following table:

Pollutants	Baseline Emissions Units 1,2, 3 in TPY	Future Emissions New Units in TPY	Net Increase (decrease) in TPY
PM/PM <sub>10</sub>	804/559	413/413	(391/146)
SAM	423	72	(351)
SO <sub>2</sub>	24,816	466	(24,350)
NO <sub>x</sub>	4,043	3,191	(852)
VOC	57	145	88
CO	367	938	571

**Proposed Changes to Permit No. 1030011-010-AC, Section III, Subsection A**

Because the authority to operate two CT as described and the associated restrictions are in a federally enforceable permit, a permit modification is needed to remove the applicable requirements. Similarly the other requested changes require a permit modification. All of the requested changes are in Section III, Section A., Combined Cycle Unit 4 and Simple Cycle Unit 5.

Following are the proposed changes to the subject permit in strike through (~~strike through~~) and double underline format where applicable.

**Emissions Unit Table**

The title of the emissions unit table is modified to include Unit 5 consistent with the individual entry (row) that refers to Unit 5 [One 195 MW (ISO) Combustion Turbine]. The title of the table shall now read:

Emissions Units Comprising Combined Cycle Unit 4 and Simple Cycle Unit 5.

**Condition 6. Dry Low NO<sub>x</sub> (DLN) Combustion**

The applicant requests removal of the requirement to simultaneously tune the DLN combustors for VOC emissions when tuning is conducted for NO<sub>x</sub> and CO emissions.

The applicant's request is consistent with the corresponding condition included in the most recent permits issued for the Florida Municipal Power Agency (FMPA) project at Cane Island, the Orlando Utilities Commission (OUC) Stanton Unit B and the Florida Power and Light (FP&L) West County Energy Center.

The Department included the more comprehensive condition for the P. L. Bartow project because of the temporary simple cycle operation and requirement to avoid PSD during the interim operating mode. Since that condition will be removed as described below, there is less need to include VOC in the subject condition. The applicant will conduct an initial VOC compliance test and the Department agrees that demonstration of low CO (by high temperature combustion) will also insure low VOC during tuning and during continuous operation.

The relevant condition will be modified as follows:

6. DLN Combustion: The permittee shall install, operate and maintain Dry Low NO<sub>x</sub> (DLN) systems to control NO<sub>x</sub> emissions from each CT when firing natural gas. Prior to the initial emissions performance tests required for each CT, the DLN combustors and automated combustion turbine control system shall be tuned without a selective catalytic reduction (SCR) system in operation to achieve the permitted CO, ~~VOC~~ and NO<sub>x</sub> levels for simple cycle operation. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations or industry standards.

**Condition 14. Temporary Simple Cycle Operation Prior to Permanent Shutdown of Units 1, 2 and 3**

The language will be struck in its entirety for the reasons described in the previous section.

14. Deleted in accordance with Permit Modification 1030011-012-AC.  
Temporary Simple Cycle Operation of Two CTs Prior to Permanent Shutdown of Units 1, 2 and 3: ~~The permittee may select any two of the five new CTs to be operated as simple cycle units prior to shutdown of Units 1, 2 and 3. The restrictions included in this condition apply only to~~

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

those CTs chosen, and only during the described period. Once selected, only those CTs chosen may be operated prior to shutdown of Units 1, 2 and 3 in accordance with the following restrictions:

a. ~~Restriction on SC Operation:~~

- ~~• The combined operation of the two CTs shall not exceed 1,100 hours.~~
- ~~• A NO<sub>x</sub> CEMS shall be installed and operating in each stack prior to startup of the CTs in order to collect and record data for the purpose of demonstrating compliance with this requirement. Notwithstanding the relative accuracy test audit (RATA) grace period described in 40 CFR 75 Appendix B, the NO<sub>x</sub> CEMS shall be fully certified in accordance with the requirements of 40 CFR 75 (including a RATA), within 30 operating days but not later than 60 calendar days after startup of the CTs.~~
- ~~• Total emissions of NO<sub>x</sub> from the two CTs shall not exceed 39 tons during all operation including startups, shutdowns and malfunctions as measured and recorded by the required NO<sub>x</sub> continuous emissions monitoring systems (CEMS) during the temporary period. Data recorded before and after CEMS certification shall be included in the calculation.~~
- ~~• Each CT shall be stack tested to demonstrate initial compliance with the applicable Subpart KKKK NO<sub>x</sub> emission standard for each fuel to be fired. 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. Data collected during the above described RATA may be used to satisfy this 60-day test requirement provided all requirements of 40 CFR 60.8 and Subpart KKKK are met.~~
- ~~• The BACT emissions standards of specific condition 18 do not apply to these CTs prior to Unit 1, 2 and 3 shutdown. Following shutdown of Units 1, 2 and 3 all restrictions of this permit apply, including the BACT limits of specific condition 18.~~

b. ~~Restriction on CC Operation:~~ No combined cycle operation of any unit is allowed prior to permanent shutdown of Units 1, 2, and 3.

c. ~~Monthly Operations Summary:~~ By the 10<sup>th</sup> calendar day of each month, the permittee shall record the following in a written or electronic log for each CT for the previous month of operation: fuel consumption, hours of operation, NO<sub>x</sub> emissions in total tons for the month, and NO<sub>x</sub> emissions in total tons for the described restricted period of operation. Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request by the Department. The fuel consumption shall be monitored in accordance with the provisions of 40 CFR 75 Appendix D.

*{Permitting note: The limitation on total NO<sub>x</sub> emissions and adherence to the emissions standards in Specific Conditions 18, 19 and 20 along with the compliance and recordkeeping requirements of this condition will effectively ensure that emissions increases of all PSD pollutants from the selected CTs operated in SC mode prior to Unit 1, 2 and 3 shutdown will be less than their respective Significant Emissions Rates per Rule 62-210.200 (Definitions-SER), F.A.C.}*

*[Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400(12)(PSD Avoidance), F.A.C.; 40 CFR 60.8, and 40 CFR Subpart KKKK]*

**Condition 15. Restricted Operation**

In the original permit, the Department provided for operation of each CT for a limited number of hours on distillate fuel oil and also while using the duct burners (DB). The hours were allocated “per CT” on an “aggregate basis” meaning that the sum total of all hours was allocated to the sum total of all CT and that no CT was specifically limited in distillate oil or DB firing.

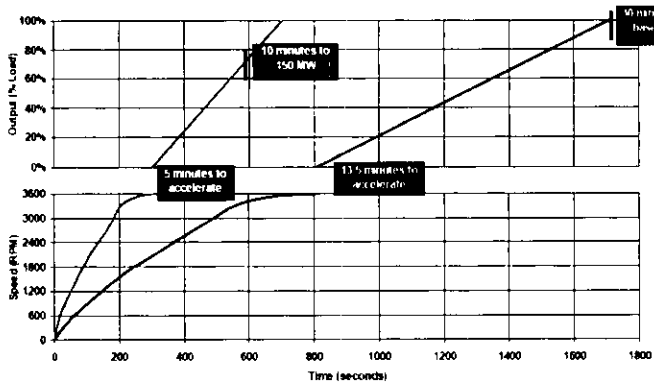
The applicant has requested language that has the same meaning but is more understandable to their personnel. The same 24-hour and 12-month BACT CO limits of 8.0 and 6 parts per million by volume, dry at 15 percent (ppmvd @15% oxygen (O<sub>2</sub>)) respectively will apply. The clarifications will not impact BACT decisions such as whether oxidation catalyst will be more cost-effective for a single CT if that single unit made use of all hours of distillate oil use or DB operation available to the five CT.

In the original permit, the Department limited operation of simple cycle operation to 70% of full load. During simple cycle operation, CO continuous emissions monitoring system (CEMS) are not used. Based on data available to the Department about an older but similar CT within the PEF system, the Department had reason to believe that the five CT selected for the project would not comply with the CO BACT limits if operated at less than 70% of full load during simple cycle operation. The applicant was unable to provide enough details about the selected model to convince the Department otherwise.

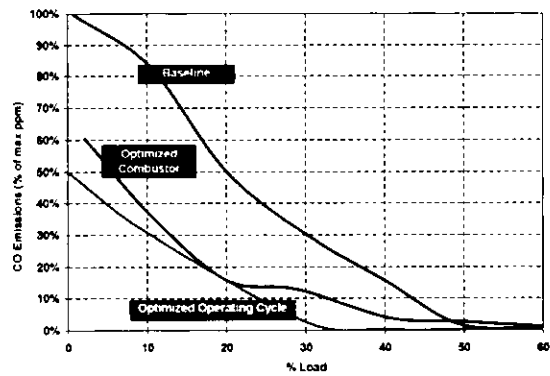
The Department researched available updated product literature about the Siemens CT line and conducted its own separate analysis within the original technical evaluation. According to Siemens:

*“Reduced low load CO emissions were achieved by operational modifications which include a second modulating circuit added to turbine cooling air supply. When load is reduced, the second modulating circuit is opened bypassing additional cooling air around the combustor. Bypassing air around the combustor increases combustor flame temperature and hence limits CO production. There are other measures which can be taken to reduce CO if necessary, including changes to valve scheduling to allow compressor air to be bypassed into the exhaust. With this equipment & operational changes, CO is kept to <10 ppm down to between 45% and 50% load. This CO reduction will reduce total CO mass emissions by 70% per startup-shutdown cycle.”*

According to the Department: *The following figures from the Siemens presentation compare original to improved startup characteristics. The graph on the left demonstrates the reduction of startup times which may be minimized to reduce CO emissions during these periods. The graph on the right suggests that the operating cycle can be improved to extend the “low CO” range to loads at less than 50%.*



**Improved Startup Times to High Load.**



**Relative CO Emissions at Low Load.**

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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*The Department does not dispute that the emissions can be reduced to less than 10 ppmvd in the 45-50% load range as suggested by the Siemens paper. However, the applicant has not provided information regarding the measures to actually be incorporated to avoid very high CO emissions during startups, shutdowns and low load (whether or not the low load is associated with startups and shutdowns).*

*The options described by Siemens may be available for the project to help achieve BACT level CO and VOC emission limits and possibly avoid installation of oxidation catalyst.*

The applicant requests the opportunity to demonstrate the capability of each CT to operate in simple cycle at loads less than 70% while complying with the Department's BACT determination. They propose to demonstrate this capability during the initial compliance test. It is noted that CO-CEMS are not required for the occasional simple cycle operation of the four combustion turbines that comprise combined cycle Unit 4 or for the one combustion turbine that comprises simple cycle Unit 5. CO-CEMS are required for Unit 4 when it operates in combined cycle.

This request is acceptable with the following caveat and would be conducted during the initial compliance tests. Based on the foregoing discussion the Department does not yet have any assurance compliance can be continuously achieved at values less than 45% even if demonstrated by a one-time compliance test. Therefore, the demonstration would need to be made between 45 and 70% of full load.

On August 25, 2008, PEF further requested to be allowed to make the low load simple cycle compliance demonstration during compliance testing conducted in the future (i.e. after the initial compliance tests). The Department has determined that any such demonstrations should be made during the initial compliance testing as discussed above.

Afterwards, PEF can assess the CO-CEMS operational data (after initial compliance testing) during the startups and allowable low load operation of the four combined cycle turbines that comprise Unit 4 to determine how CO is affected by load variations. If the data show that compliance is also achieved at low load, the results can then be applied to those same four combustion turbines so that they may be operated at lower loads (i.e. < 70%) during any simple cycle operation. It should also be possible to infer from the same data how simple cycle Unit 5 behaves. PEF can then submit a report with a permit modification application to recognize operation of Unit 5 and the Unit 4 combustion turbines in simple cycle at loads less than demonstrated during the initial compliance testing.

The relevant condition will be modified as follows:

15. **Restricted Operation:** The permittee shall not exceed the following parameters following shutdown of Units 1, 2 and 3:
  - a. The hours of operation of the CTs are not limited (8,760 hours per year).
  - b. Distillate oil firing is limited to ~~4,000 hours per CT~~ (i.e. 5,000 hours total aggregate for all five CTs) (based on an average of 1,000 hours per CT) during any consecutive 12-month period.
  - c. Operation of the DBs is limited to ~~2,434 hours per DB~~ (i.e. 9,736 hours aggregate for four DBs) (based on an average of 2,434 hours per DB) during any consecutive 12-month period.
  - d. Power (steam) augmentation shall be limited to 6,752 hours aggregate for the four CTs comprising Unit 4 (based on an average of 1,688 hours per CT during any consecutive 12-month period).

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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- e. Other than startup, shutdown, fuel switching or documented malfunction ~~the CTs shall operate above 70% load during simple cycle operation.~~ simple cycle CT operations shall be at a load not less than 45% or that load at which compliance was demonstrated at initial, whichever is higher.

### Condition 16. Methods of Operation

The condition presently describes the operation of the new units after shut down of the existing units. The applicant believes the way in which the condition is worded can be misconstrued to prohibit the commissioning of the units while Units 1, 2 and 3 are still in operation.

The applicant advised they can only include the costs for the new units when they are in commercial operation. The applicant requests that the defining point between operation of the new units and shut down of the existing units be identified as the commercial availability for dispatch.

The introductory part of the relevant condition will be modified as follows:

16. Methods of Operation: Subject to the restrictions and requirements of this permit, the CTs may commence commercial operation and thereafter operate under the following methods of operation after ~~shutdown of~~ Units 1, 2 and 3 cease commercial operation:

The following note will be added:

{Commence commercial operation means to have begun to generate electricity for sale, including the sale of test generation.}

### Condition 17. New Source Performance Standards for NO<sub>x</sub>

Presently, Condition 17, footnote b. does not allow correction of NO<sub>x</sub> concentrations to 15% O<sub>2</sub> in accordance with the originally published version of 40 Code of Federal Regulations Part 60 (40 CFR 60), Subpart KKKK- Standards of Performance for Stationary Combustion Turbines.

Subpart KKKK is under reconsideration by the Environmental Protection Agency (reference Regulatory Identifier No. 2060-AO23) on "several relatively minor issues in the recently finalized stationary combustion." EPA representatives advised Department staff that among the changes will be one that *requires* rather than prohibits correction to 15% O<sub>2</sub>.

Condition 17, Footnote b. will be modified as follows:

- b. A CEMS for NO<sub>x</sub> shall be installed on the CT stacks and on the HRSG stacks. Correction to 15% O<sub>2</sub> is required ~~not allowed~~ consistent with the provisions of 40 CFR 60, Subpart KKKK.

### Condition 18. Best Available Control Technology Emissions Standards for CO and VOC

The request regarding operation at low load during simple cycle operation is the same as discussed with respect to Condition 15.e. above.

Condition 18, Footnote c. will be modified as follows:

- c. CEMS for CO are required only on the HRSG stacks. Other than startup, shutdown, fuel switching or documented malfunction ~~the CTs shall operate above 70% load during simple cycle operation.~~ simple cycle CT operations shall be at a load not less than 45% or that load at which compliance was demonstrated at initial, whichever is higher.



## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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The applicant further requests that in addition to the enforcement discretion (reference Condition 18, Footnote f.) for the 12-month CO emission limit that the Department should also exercise enforcement discretion of the 24-hour CO. According to the applicant “the discretion should logically apply to both standards.”

The Department notes that the 24-hour CO limit is the key BACT determination and also serves as a surrogate for continuous compliance with the VOC BACT determination. The project triggered PSD and required a BACT determination only for CO and VOC. Enforcement discretion would render the BACT determination for this project almost meaningless for as much as two years. Discretion applies to the 12-month limit because it is lower than the 24-hour limit.

For reference, the Department issued permits allowing discretion only for the FP&L West County Energy Center projects where somewhat similar designs are employed on larger turbines. The Department allowed discretion only for the 12-month CO limit but not for the 24-hour limit. The Department did not allow any discretion for the following natural gas-fueled projects (with backup fuel oil) that were assigned the same 24-hour and 12-month CO BACT determination as the P.L. Bartow Repowering Project:

- FMPA Treasure Coast Energy center;
- FP&L Turkey Point Unit 5;
- FP&L West County Energy center; and
- OUC Stanton Unit B.

Condition 18, Footnote f. will not be modified.

### **Condition 19. New Source Performance Standard (NSPS) for SO<sub>2</sub>**

The fuel sulfur limits in the permit that control PM/PM<sub>10</sub> are more stringent than the requirements of Subpart KKKK. The applicant requests that compliance with the fuel sulfur limits in Condition 20.a. serve to demonstrate compliance with the Subpart KKKK standard for SO<sub>2</sub>.

The Department cannot vary the requirements of a New Source Performance Standards (NSPS). Condition 19 refers to the compliance requirements in Subpart KKKK (reference: § 60.4370 - How often must I determine the sulfur content of the fuel?). The applicant can use those same requirements to satisfy the record keeping requirements of Condition 20.a. If the procedures described in Subpart KKKK are used, then the Department agrees that meeting the fuel sulfur limits in Condition 20.a. will insure compliance with the SO<sub>2</sub> limiting requirements of Condition 19.

No change will be made in this condition.

### **Condition 20. Measures to Limit Particulate Emissions (PM/PM<sub>10</sub>/Fine Particulate Matter)**

The following deletion of a typographical error will be made to the visible emissions standard:

- a. *Visible Emissions*: Visible emissions shall not exceed 10 percent opacity for each 6-minute block average. Compliance with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9.23

### Condition 25. Allowable Data Exclusions

The applicant requests deletion of the Condition 25.d. that limits data exclusion for startups related to simple cycle operation to 1 hour in any 24-hour period. The applicant states that “it is more restrictive than the two (2) hours of possible exclusion under the Florida Administrative Code (F.A.C.).”

The Department notes that the Department can issue more stringent data exclusion conditions than the default values when issuing State Implementation Plan (SIP) emission standards. More stringent requirements are very common for SIP-based PSD permits and BACT determinations. The matter was assessed in the original technical evaluation and the actual rule cited. According to the rule:

*Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions **shall be minimized but in no case exceed two hours** in any 24 hour period unless specifically authorized by the Department for longer duration. (emphasis added)*

The graphs on page 6 above suggest that it is possible to reach full load in 15 minutes. The matter is discussed in the original technical evaluation: According to Siemens (with some minor paraphrasing):

*“The original startup time from initiation to full power took approximately 30 minutes. The improved start time capability is as follows: 5 minutes from start initiation to minimum load, and then the GT is loaded at 30 MW/minute. This permits 150 MW within 10 minutes.*

*“To achieve the improved start capability the following steps were taken:*

*“Implement static frequency converter (static start), whereby the CTG generator operates as a motor replacing the mechanical starter motor. This allows more efficient and faster rotor acceleration than the equivalently sized mechanical starting motor.”*

Expressing the exclusions in terms of minutes instead of hours will insure that all of the possible valid minutes-based data are used to maximize the valid hours in a single day. Similarly, the applicant will not use up the single available hour e.g. by conducting a 17 minute startup that straddles three distinct quarters of an hour that would otherwise invalidate the entire hour.

It is safe to conclude that startups (including some time to stabilize) in simple cycle will actually take between 15 and 30 minutes. It should be possible for the applicant to comply with the revised condition below and have several startups in a single day.

Condition 25.d. will be modified as follows:

- d. *Simple Cycle CT Startup:* For startup of a CT for the purpose of operation in simple cycle mode, up to 1 hour or 60 minutes of CEMS data in any 24-hour period of excess emissions can be excluded.

### Condition 27. Test Methods

The reference to EPA Method 20 in the table comprising Condition 27 will be removed in favor of EPA Method 7E (also in the table), the CEMS requirements, relative accuracy test audits (RATA) and the compliance procedures in Subpart KKKK.

Condition 27 will be modified as follows:

**TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION**

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

<b>Method</b>	<b>Description of Method and Comments</b>
CTM-027 320	Procedure for Collection and Analysis of Ammonia in Stationary Source. {Notes: This is an EPA conditional test method.} The minimum detection limit shall be 1 ppm. Measurement of Vapor Phase Organic and Inorganic Emissions by Extractive Fourier Transform Infrared (FTIR) Spectroscopy
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources
9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Notes: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography {Note: EPA Method 18 may be used (optional) concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions.}
20	<del>Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines</del>
25A	Determination of Volatile Organic Concentrations

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]

**Condition 28. Initial Compliance Determinations**

The applicant requests inclusion of VOC as a pollutant for which (like CO) compliance with the mass emission rate limits can be demonstrated with flow measurements and CEMS. The Department will not make this change because an installed permanent CEMS is not required for VOC. Rather, an initial compliance test will be conducted for VOC using EPA Method 25A. The applicant may use the concurrent “flow measurements (or fuel measurements and F-factors)” with the EPA Method 25A instrument readings to demonstrate compliance with the VOC mass emission rate. Condition 28 will be modified as follows:

28. Initial Compliance Determinations: Each CT shall be stack tested to demonstrate initial compliance with the emission standards for CO, NO<sub>x</sub>, 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 configuration. Each unit shall be tested when firing natural gas, when using the duct burners and when firing distillate fuel oil. Reference method data collected during the required Relative Accuracy Test Audits (RATAs) may be used to demonstrate compliance with the initial CO and NO<sub>x</sub> compliance tests. With appropriate flow measurements (or fuel measurements and approved F-factors), CEMS data may be used to demonstrate compliance with the CO mass rate emissions standards. With appropriate flow measurements (or fuel measurements and approved F-factors), the EPA Method 25A instrumental data may be used to demonstrate initial compliance with the VOC mass rate emissions standards. CO and NO<sub>x</sub> 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

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

air pollution control equipment, such as the SCR catalyst, oxidation catalyst, DLN combustors, etc. [Rule 62-297.310(7)(a)1, F.A.C. and 40 CFR 60.8]

### Condition 31. CEM Systems

In Condition 31.a., the applicant requests replacement of the term “Specification 4 or 4A” with “Specification 4 and/or 4A”. No change is needed since they mean the same thing. The applicant requests that the CO CEMS RATA language referring to a “continuous sampling train” be struck. The request is acceptable because EPA Method 10 for CO is sufficient for the purpose without specifying the continuous sampling train.

In Condition 31.b., the applicant requests removal of reference to EPA Method 20. Refer to the discussion in Condition 27 above.

In Condition 31.c., the applicant requests recognition that NO<sub>x</sub> emissions are corrected to 15% O<sub>2</sub>. Refer to the change in Condition 17, Footnote b.

Condition 31 will be modified as follows:

31. **CEM Systems:** The permittee shall install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) to measure and record the emissions of CO from the HRSG stacks and NO<sub>x</sub> from all stacks in a manner sufficient to demonstrate continuous compliance with the CEMS emission standards of this section. Each monitoring system shall be installed, calibrated, and properly functioning prior to the initial performance tests. Within one working day of discovering emissions in excess of a CO or NO<sub>x</sub> standard (and subject to the specified averaging period), the permittee shall notify the Compliance Authority.
  - a. **CO Monitors.** The CO monitors shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A within 60 calendar days of achieving permitted capacity as defined in Rule 62-297.310(2), F.A.C., but no later than 180 calendar days after initial startup. 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 Compliance Authority. The RATA tests required for the CO monitor shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 ~~and shall be based on a continuous sampling train~~. The CO monitor span values shall be set appropriately considering the allowable methods of operation and corresponding emission standards.
  - b. **NO<sub>x</sub> Monitors.** Each NO<sub>x</sub> monitor shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75. Record keeping and reporting shall be conducted pursuant to Subparts F and G in 40 CFR 75. The RATA tests required for the NO<sub>x</sub> monitor shall be performed using EPA ~~Method 20 or 7E~~ in Appendix A of 40 CFR 60.
  - c. **Diluent Monitors.** The oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) content of the flue gas shall be monitored at the location where NO<sub>x</sub> and CO are ~~is~~ monitored to correct the measured emissions rates to 15% oxygen. If a CO<sub>2</sub> 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.

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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### Condition 32. CEM Data Requirements

The applicant requests recognition that NO<sub>x</sub> emissions are corrected to 15% O<sub>2</sub>. Refer to the change in Condition 17, Footnote b. and Condition 31.c.

Condition 32, first bullet will be modified as follows:

#### 32. CEM Data Requirements:

- *Data Collection*: Emissions shall be monitored and recorded at all times including startup, operation, shutdown, and malfunction except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over an hour. If the CEMS measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEMS shall be expressed as ppmvd of NO<sub>x</sub> and CO corrected to 15% oxygen ~~and as ppmvd of NO<sub>x</sub> (uncorrected)~~. The CEMS shall be used to demonstrate compliance with the CEMS emission standards for CO and NO<sub>x</sub> as specified in this permit. For purposes of determining compliance with the CEMS emissions standards of this permit, missing (or excluded) data shall not be substituted. Upon request by the Department, the CEMS emission rates shall be corrected to ISO conditions.

## 2. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. 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. Al Linero is the project engineer responsible for reviewing the application and drafting the permit. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

# DRAFT PERMIT

Day Month, 2008

*Electronically Sent – Received Receipt Requested*

Thomas.Lawery@pgnmail.com  
Mr. Thomas Lawery, Plant Manager  
P.L. Bartow Power Plant  
Florida Power Corporation dba  
Progress Energy Florida (PEF)  
1601 Weedon Island Drive  
St. Petersburg, Florida 33711

Re: DEP File No. 1030011-012-AC (PSD-FL-381A)  
P.L. Bartow Power Plant Repowering Project  
Modification of Interim Operation Modes

Dear Mr. Lawery:

On May 6, 2008, PEF submitted a permit modification application requesting changes to certain specific conditions of the air construction permit [reference: DEP File No. 1030011-010-AC (PSD-FL-381)] that authorized the replacement of the three residual fuel oil-fired steam electrical generators with a natural gas-fueled combined cycle unit and a natural gas-fueled simple cycle unit.

The key requested modification to the permit is the elimination of an interim period during which the four combustion turbines that comprise the combined cycle unit (presently under construction) can operate in simple cycle (higher emitting) mode. The requests were assessed in the Department's Technical Evaluation and Preliminary Determination issued on September 4, 2008.

The following sections or conditions in Permit No. 1030011-010-AC (PSD-FL-381) are hereby modified as shown below in strike through (~~strike through~~) and double underline format.

## Section III, Subsection A, Emissions Unit Table

The title of the table shall now read:

Emissions Units Comprising Combined Cycle Unit 4 and Simple Cycle Unit 5.

(The rest of the table is unchanged)

- DLN Combustion:** The permittee shall install, operate and maintain Dry Low NO<sub>x</sub> (DLN) systems to control NO<sub>x</sub> emissions from each CT when firing natural gas. Prior to the initial emissions performance tests required for each CT, the DLN combustors and automated combustion turbine control system shall be tuned without a selective catalytic reduction (SCR) system in operation to achieve the permitted CO, ~~VOG~~ and NO<sub>x</sub> levels for simple cycle operation. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations or industry standards.

14. ~~Deleted in accordance with Permit Modification 1030011-012-AC.~~

~~Temporary Simple Cycle Operation of Two CTs Prior to Permanent Shutdown of Units 1, 2~~

~~and 3: The permittee may select any two of the five new CTs to be operated as simple cycle units prior to shutdown of Units 1, 2 and 3. The restrictions included in this condition apply only to those CTs chosen, and only during the described period. Once selected, only those CTs chosen may be operated prior to shutdown of Units 1, 2 and 3 in accordance with the following restrictions:~~

~~a. Restriction on SC Operation:~~

- ~~• The combined operation of the two CTs shall not exceed 1,100 hours.~~
- ~~• A NO<sub>x</sub> CEMS shall be installed and operating in each stack prior to startup of the CTs in order to collect and record data for the purpose of demonstrating compliance with this requirement. Notwithstanding the relative accuracy test audit (RATA) grace period described in 40 CFR 75 Appendix B, the NO<sub>x</sub> CEMS shall be fully certified in accordance with the requirements of 40 CFR 75 (including a RATA), within 30 operating days but not later than 60 calendar days after startup of the CTs.~~
- ~~• Total emissions of NO<sub>x</sub> from the two CTs shall not exceed 39 tons during all operation including startups, shutdowns and malfunctions as measured and recorded by the required NO<sub>x</sub> continuous emissions monitoring systems (CEMS) during the temporary period. Data recorded before and after CEMS certification shall be included in the calculation.~~
- ~~• Each CT shall be stack tested to demonstrate initial compliance with the applicable Subpart KKKK NO<sub>x</sub> emission standard for each fuel to be fired. 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. Data collected during the above described RATA may be used to satisfy this 60-day test requirement provided all requirements of 40 CFR 60.8 and Subpart KKKK are met.~~
- ~~• The BACT emissions standards of specific condition 18 do not apply to these CTs prior to Unit 1, 2 and 3 shutdown. Following shutdown of Units 1, 2 and 3 all restrictions of this permit apply, including the BACT limits of specific condition 18.~~

~~b. Restriction on CC Operation: No combined cycle operation of any unit is allowed prior to permanent shutdown of Units 1, 2, and 3.~~

~~c. Monthly Operations Summary: By the 10<sup>th</sup> calendar day of each month, the permittee shall record the following in a written or electronic log for each CT for the previous month of operation: fuel consumption, hours of operation, NO<sub>x</sub> emissions in total tons for the month, and NO<sub>x</sub> emissions in total tons for the described restricted period of operation. Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request by the Department. The fuel consumption shall be monitored in accordance with the provisions of 40 CFR 75 Appendix D.~~

~~{Permitting note: The limitation on total NO<sub>x</sub> emissions and adherence to the emissions standards in Specific Conditions 18, 19 and 20 along with the compliance and recordkeeping requirements of this condition will effectively ensure that emissions increases of all PSD pollutants from the selected CTs operated in SC mode prior to Unit 1, 2 and 3 shutdown will be less than their respective Significant Emissions Rates per Rule 62-210.200 (Definitions-SER), F.A.C.}~~

~~{Rules 62-4.070(3), 62-210.200(PTE) and 62-212.400(12)(PSD Avoidance), F.A.C.; 40 CFR 60.8, and 40 CFR Subpart KKKK}~~

15. Restricted Operation: The permittee shall not exceed the following parameters following shutdown of Units 1, 2 and 3:

- a. The hours of operation of the CTs are not limited (8,760 hours per year).
- b. Distillate oil firing is limited to ~~1,000 hours per CT (i.e. 5,000 hours total aggregate for all five CTs)~~ (based on an average of 1,000 hours per CT) during any consecutive 12-month period.
- c. Operation of the DBs is limited to ~~2,434 hours per DB (i.e. 9,736 hours aggregate for four DBs)~~ (based on an average of 2,434 hours per DB) during any consecutive 12-month period.
- d. Power (steam) augmentation shall be limited to ~~6,752 hours aggregate for the four CTs comprising Unit 4~~ (based on an average of 1,688 hours per CT during any consecutive 12-month period.
- e. Other than startup, shutdown, fuel switching or documented malfunction ~~the CTs shall operate above 70% load during simple cycle operation.~~ simple cycle CT operations shall be at a load not less than 45% or that load at which compliance was demonstrated at initial, whichever is higher.

16. Methods of Operation: Subject to the restrictions and requirements of this permit, the CTs may commence commercial operation and thereafter operate under the following methods of operation after shutdown of Units 1, 2 and 3 cease commercial operation:

{Commence commercial operation means to have begun to generate electricity for sale, including the sale of test generation.}

(The rest of the condition is unchanged)

Condition 17, Footnote b. will be modified as follows:

- b. A CEMS for NO<sub>x</sub> shall be installed on the CT stacks and on the HRSG stacks. Correction to 15% O<sub>2</sub> is required, not allowed consistent with the provisions of 40 CFR 60, Subpart KKKK.

(The rest of Condition 17 is unchanged)

Condition 18, Footnote c. will be modified as follows:

- c. CEMS for CO are required only on the HRSG stacks. Other than startup, shutdown, fuel switching or documented malfunction ~~the CTs shall operate above 70% load during simple cycle operation.~~ simple cycle CT operations shall be at a load not less than 45% or that load at which compliance was demonstrated at initial, whichever is higher.

(The rest of Condition 18 is unchanged)

Condition 20.a. will be modified as follows:

- a. *Visible Emissions*: Visible emissions shall not exceed 10 percent opacity for each 6-minute block average. Compliance with the visible emissions standard shall be demonstrated by conducting tests in accordance with EPA Method 9.23

(The rest of Condition 20 is unchanged)

Condition 25.d. will be modified as follows:

- b. *Simple Cycle CT Startup*: For startup of a CT for the purpose of operation in simple cycle mode, up to 1 hour or 60 minutes of CEMS data in any 24-hour period of excess emissions can be excluded.



(The rest of Condition 25 is unchanged)

27. **Test Methods:** Any required tests shall be performed in accordance with the following reference methods.

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

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]

28. **Initial Compliance Determinations:** Each CT shall be stack tested to demonstrate initial compliance with the emission standards for CO, NO<sub>x</sub>, 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 configuration. Each unit shall be tested when firing natural gas, when using the duct burners and when firing distillate fuel oil. Reference method data collected during the required Relative Accuracy Test Audits (RATAs) may be used to demonstrate compliance with the initial CO and NO<sub>x</sub> compliance tests. With appropriate flow measurements (or fuel measurements and approved F-factors), CEMS data may be used to demonstrate compliance with the CO mass rate emissions standards. With appropriate flow measurements (or fuel measurements and approved F-factors), the EPA Method 25A instrumental data may be used to demonstrate initial compliance with the VOC mass rate emissions standards. CO and NO<sub>x</sub> 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, oxidation catalyst, DLN combustors, etc. [Rule 62-297.310(7)(a)1, F.A.C. and 40 CFR 60.8]
31. **CEM Systems:** The permittee shall install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) to measure and record the emissions of CO from the HRSG stacks and NO<sub>x</sub> from all stacks in a manner sufficient to demonstrate continuous compliance with the CEMS emission standards of this section. Each monitoring system shall be installed, calibrated, and properly functioning prior to the initial performance tests. Within one working day of discovering

emissions in excess of a CO or NO<sub>x</sub> standard (and subject to the specified averaging period), the permittee shall notify the Compliance Authority.

- a. *CO Monitors.* The CO monitors shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A within 60 calendar days of achieving permitted capacity as defined in Rule 62-297.310(2), F.A.C., but no later than 180 calendar days after initial startup. 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 Compliance Authority. The RATA tests required for the CO monitor shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 ~~and shall be based on a continuous sampling train~~. The CO monitor span values shall be set appropriately considering the allowable methods of operation and corresponding emission standards.
- b. *NO<sub>x</sub> Monitors.* Each NO<sub>x</sub> monitor shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75. Record keeping and reporting shall be conducted pursuant to Subparts F and G in 40 CFR 75. The RATA tests required for the NO<sub>x</sub> monitor shall be performed using EPA Method ~~20 or~~ 7E in Appendix A of 40 CFR 60.
- c. *Diluent Monitors.* The oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) content of the flue gas shall be monitored at the location where NO<sub>x</sub> and CO are is-monitored to correct the measured emissions rates to 15% oxygen. If a CO<sub>2</sub> 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.

Condition 32, first bullet will be modified as follows:

32. CEM Data Requirements:

- *Data Collection:* Emissions shall be monitored and recorded at all times including startup, operation, shutdown, and malfunction except for continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over an hour. If the CEMS measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEMS shall be expressed as ppmvd of NO<sub>x</sub> and CO corrected to 15% oxygen ~~and as ppmvd of NO<sub>x</sub> (uncorrected)~~. The CEMS shall be used to demonstrate compliance with the CEMS emission standards for CO and NO<sub>x</sub> as specified in this permit. For purposes of determining compliance with the CEMS emissions standards of this permit, missing (or excluded) data shall not be substituted. Upon request by the Department, the CEMS emission rates shall be corrected to ISO conditions.

(The rest of Condition 32 is unchanged)

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. Any party to this permitting decision (order) has the right to seek judicial review of it under Section 120.68 of the Florida Statutes, by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate

District Court of Appeal. The notice must be filed within 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

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this PERMIT MODIFICATION was sent by electronic mail with received receipt requested before the close of business on \_\_\_\_\_ to the persons listed below:

- cc: Thomas Lawery: [thomas.lawery@pgnmail.com](mailto:thomas.lawery@pgnmail.com)
- Chris Bradley, PEF: [chris.bradley@pgnmail.com](mailto:chris.bradley@pgnmail.com)
- Scott Osbourn, P.E., Golder: [sosbourn@golder.com](mailto:sosbourn@golder.com)
- Dee Morse, NPS: [dee\\_morse@nps.gov](mailto:dee_morse@nps.gov)
- Meredith Bond, U.S. FWS: [meredith\\_bond@fws.gov](mailto:meredith_bond@fws.gov)
- Kathleen Forney: [forney.kathleen@epa.gov](mailto:forney.kathleen@epa.gov)
- Mara Nasca, DEPSWD: [mara.nasca@dep.state.fl.us](mailto:mara.nasca@dep.state.fl.us)
- Mayor, City of St. Petersburg: [mayor@stpete.org](mailto:mayor@stpete.org)
- Administrator, Pinellas County: [sspratt@pinellascounty.org](mailto:sspratt@pinellascounty.org)
- Peter Hessling, PCDEM: [phesslin@pinellascounty.org](mailto:phesslin@pinellascounty.org)

Clerk Stamp

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

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

\_\_\_\_\_  
(Date)

## Livingston, Sylvia

---

**From:** Bradley, Chris [Chris.Bradley@pgnmail.com]  
**Sent:** Monday, September 15, 2008 2:24 PM  
**To:** Livingston, Sylvia  
**Cc:** Lawery, Thomas D  
**Subject:** RE: BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)

Thank you Sylvia. We have received the document you referenced - 1030011-012-AC, .

Gartefully

Chris Bradley

---

**From:** Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]  
**Sent:** Mon 9/15/2008 1:17 PM  
**To:** Lawery, Thomas D; Bradley, Chris  
**Subject:** FW: BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)

I have not received notice of acceptance of the attached document regarding permit 1030011-012-AC. Please reply to this email as verification of receipt of the attached document and is accessible.

Thanks,

Sylvia Livingston  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
850/921-0771

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey <<http://survey.dep.state.fl.us/?refemail=Sylvia.Livingston@dep.state.fl.us>> . Thank you in advance for completing the survey.

**From:** Livingston, Sylvia  
**Sent:** Monday, September 08, 2008 2:45 PM  
**To:** 'thomas.lawery@pgnmail.com'; 'chris.bradley@pgnmail.com'  
**Cc:** 'sosbourn@golder.com'; 'dee\_morse@nps.gov'; 'meredith\_bond@fws.gov'; 'forney.kathleen@epa.gov'; Nasca, Mara; 'mayor@stpete.org'; 'sspratt@pinellascounty.org'; 'phesslin@pinellascounty.org'; Linero, Alvaro; Heron, Teresa; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)

Dear Sir/Madam:

Attached is the official Written Notice of Intent to Issue for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be

done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send". We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

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<[http://arm-permit2k.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/1030011.012.AC.D\\_pdf.zip](http://arm-permit2k.dep.state.fl.us/adh/prod/pdf_permit_zip_files/1030011.012.AC.D_pdf.zip)>

Owner/Company Name: FLORIDA POWER CORPDBAPROGRESS ENERGY FLA Facility Name: BARTOW PLANT  
Project Number: 1030011-012-AC Permit Status: DRAFT Permit Activity: CONSTRUCTION/  
REPOWERING PROJECT REVISION Facility County: PINELLAS  
Processor: Theresa Heron/ Al Linero

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<http://www.dep.state.fl.us/air/eproducts/apds/default.asp>  
<<http://www.dep.state.fl.us/air/eproducts/apds/default.asp>>

Permit project documents are addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
850/921-9506

<<1030011-012-AC\_INTENT381A.pdf>>

**Livingston, Sylvia**

**From:** Meredith\_Bond@fws.gov  
**Sent:** Monday, September 08, 2008 3:30 PM  
**To:** Livingston, Sylvia  
**Cc:** Catherine\_Collins%FWS@fws.gov  
**Subject:** Re: BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)  
**Attachments:** 1030011-012-AC\_INTENT381A.pdf

Sylvia,

Thank you for the e-notification. I was able to access the files.

\*\*\*Please include Catherine Collins of my office on any future transmissions - she's the engineer handing permit project in Florida. Her e-mail address is in the cc list above.\*\*

Thank you!

-- Meredith

---

CDR Meredith Bond, P.E., USPHS  
 Deputy Chief  
 U.S. Fish and Wildlife Service  
 Branch of Air Quality  
 7333 W Jefferson Ave., Suite 375  
 Lakewood, CO 80235  
 303-914-3808  
 303-969-5444 fax  
 Meredith\_Bond@fws.gov

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"Livingston, Sylvia" <Sylvia.Livingston@dep.state.fl.us>

09/08/2008 12:45 PM

To <thomas.lawery@pgnmail.com>, <chris.bradley@pgnmail.com>  
 cc <sosbourn@golder.com>, <dee\_morse@nps.gov>, <meredith\_bond@fws.gov>, <forney.kathleen@epa.gov>, "Nasca, Mara" <Mara.Nasca@dep.state.fl.us>, <mayor@stpete.org>, <sspratt@pinellascounty.org>, <pnesslin@pinellascounty.org>, "Linero, Alvaro" <Alvaro.Linero@dep.state.fl.us>, "Heron, Teresa" <Teresa.Heron@dep.state.fl.us>, "Walker, Elizabeth (AIR)" <Elizabeth.Walker@dep.state.fl.us>, "Gibson, Victoria" <Victoria.Gibson@dep.state.fl.us>

Subject BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)

Dear Sir/Madam:

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'2008

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**Owner/Company Name:** FLORIDA POWER CORPDBAPROGRESS ENERGY FLA

**Facility Name:** BARTOW PLANT

**Project Number:** 1030011-012-AC

**Permit Status:** DRAFT

**Permit Activity:** CONSTRUCTION/ REPOWERING PROJECT REVISION

**Facility County:** PINELLAS

**Processor:** Theresa Heron/ Al Linero

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Sylvia Livingston  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
850/921-9506

<<1030011-012-AC\_INTENT381A.pdf>>

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## Livingston, Sylvia

---

**From:** Nasca, Mara  
**Sent:** Monday, September 08, 2008 4:01 PM  
**To:** Prickett, Patricia  
**Cc:** Zhang-Torres; Livingston, Sylvia  
**Subject:** FW: BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)

**Attachments:** 1030011-012-AC\_INTENT381A.pdf

Thanks

---

**From:** Livingston, Sylvia  
**Sent:** Monday, September 08, 2008 2:45 PM  
**To:** 'thomas.lawery@pgnmail.com'; 'chris.bradley@pgnmail.com'  
**Cc:** 'sosbourn@golder.com'; 'dee\_morse@nps.gov'; 'meredith\_bond@fws.gov'; 'forney.kathleen@epa.gov'; Nasca, Mara; 'mayor@stpete.org'; 'sspratt@pinellascounty.org'; 'phesslin@pinellascounty.org'; Linero, Alvaro; Heron, Teresa; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)

Dear Sir/Madam:

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**Owner/Company Name:** FLORIDA POWER CORPDBAPROGRESS ENERGY FLA  
**Facility Name:** BARTOW PLANT  
**Project Number:** 1030011-012-AC  
**Permit Status:** DRAFT  
**Permit Activity:** CONSTRUCTION/ REPOWERING PROJECT REVISION  
**Facility County:** PINELLAS  
**Processor:** Theresa Heron/ Al Linero

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**Livingston, Sylvia**

---

**From:** Hessling, Peter A [phesslin@co.pinellas.fl.us]  
**Sent:** Monday, September 08, 2008 4:10 PM  
**To:** Livingston, Sylvia  
**Subject:** RE: BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)

We have received the notice and the documents are viewable. Thank you.

Peter Hessling  
Air Quality Division Director  
Pinellas Co. Dept. of Envir. Mgt.

---

**From:** Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]  
**Sent:** Monday, September 08, 2008 2:45 PM  
**To:** thomas.lawery@pgnmail.com; chris.bradley@pgnmail.com  
**Cc:** sosbourn@golder.com; dee\_morse@nps.gov; meredith\_bond@fws.gov; forney.kathleen@epa.gov; Nasca, Mara; mayor@stpete.org; sspratt@pinellascounty.org; Hessling, Peter A; Linero, Alvaro; Heron, Teresa; Walker, Elizabeth (AIR); Gibson, Victoria  
**Subject:** BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)

Dear Sir/Madam:

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**Owner/Company Name:** FLORIDA POWER CORPDBAPROGRESS ENERGY FLA  
**Facility Name:** BARTOW PLANT  
**Project Number:** 1030011-012-AC  
**Permit Status:** DRAFT  
**Permit Activity:** CONSTRUCTION/ REPOWERING PROJECT REVISION  
**Facility County:** PINELLAS  
**Processor:** Theresa Heron/ Al Linero

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Sylvia Livingston  
Bureau of Air Regulation

9/15/2008

## Livingston, Sylvia

---

**From:** Dee\_Morse@nps.gov  
**Sent:** Monday, September 08, 2008 4:56 PM  
**To:** Livingston, Sylvia  
**Subject:** Re: BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)

**Attachments:** 1030011-012-AC\_INTENT381A.pdf



1030011-012-AC\_I  
NTENT381A.pdf ...

Document received

Dee Morse  
Environmental Protection Specialist  
Air Resources Division  
Natural Resource Program Center  
National Park Service  
Phone: 303 969-2817  
Fax: 303 969-2822  
e-mail: dee\_morse@nps.gov

"Livingston,  
Sylvia"  
<Sylvia.Livingsto  
n@dep.state.fl.us  
>

09/08/2008 02:45  
PM AST

<thomas.lawery@pgnmail.com>, To  
<chris.bradley@pgnmail.com>  
cc  
<sosbourn@golder.com>,  
<dee\_morse@nps.gov>,  
<meredith\_bond@fws.gov>,  
<forney.kathleen@epa.gov>, "Nasca,  
Mara" <Mara.Nasca@dep.state.fl.us>,  
<mayor@stpete.org>,  
<sspratt@pinellascounty.org>,  
<phesslin@pinellascounty.org>,  
"Linero, Alvaro"  
<Alvaro.Linero@dep.state.fl.us>,  
"Heron, Teresa"  
<Teresa.Heron@dep.state.fl.us>,  
"Walker, Elizabeth \ (AIR\)"  
<Elizabeth.Walker@dep.state.fl.us>,  
"Gibson, Victoria"  
<Victoria.Gibson@dep.state.fl.us>  
Subject  
BARTOW PLANT; 1030011-012-AC  
(PSD-FL-381A)

Dear Sir/Madam:

Attached is the official Written Notice of Intent to Issue for the project referenced

below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; this may be done by selecting "Reply" on the menu bar of your e-mail software, noting that you can view the documents, and then selecting "Send". We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).

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

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/1030011.012.AC.D\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/1030011.012.AC.D_pdf.zip)

Owner/Company Name: FLORIDA POWER CORPDBAPROGRESS ENERGY FLA Facility Name: BARTOW PLANT  
Project Number: 1030011-012-AC Permit Status: DRAFT Permit Activity: CONSTRUCTION/  
REPOWERING PROJECT REVISION Facility County: PINELLAS  
Processor: Theresa Heron/ Al Linero

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. Access these documents by clicking on the link provided above, or search for other project documents using the "Air Permit Documents Search" website at <http://www.dep.state.fl.us/air/eproducts/apds/default.asp> .

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Bureau of Air Regulation at (850)488-0114.

Sylvia Livingston  
Bureau of Air Regulation  
Division of Air Resource Management (DARM)  
850/921-9506

<<1030011-012-AC\_INTENT381A.pdf>>

The Department of Environmental Protection values your feedback as a customer. DEP Secretary Michael W. Sole is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on this link to the DEP Customer Survey. Thank you in advance for completing the survey. (See attached file: 1030011-012-AC\_INTENT381A.pdf)

## Livingston, Sylvia

---

**From:** Osbourn, Scott [Scott\_Osbourn@golder.com]  
**To:** undisclosed-recipients  
**Sent:** Monday, September 08, 2008 2:56 PM  
**Subject:** Read: BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)

Your message

To: Scott\_Osbourn@golder.com  
Subject:

was read on 9/8/2008 2:56 PM.

## Livingston, Sylvia

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**From:** Exchange Administrator  
**Sent:** Monday, September 08, 2008 2:46 PM  
**To:** Livingston, Sylvia  
**Subject:** Delivery Status Notification (Relay)

**Attachments:** ATT253863.txt; BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)



ATT253863.txt  
(282 B)

BARTOW PLANT;  
1030011-012-AC (...)

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.

mayor@stpete.org

## Livingston, Sylvia

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**From:** Mail Delivery System [MAILER-DAEMON@mseive01.rtp.epa.gov]  
**Sent:** Monday, September 08, 2008 2:46 PM  
**To:** Livingston, Sylvia  
**Subject:** Successful Mail Delivery Report

**Attachments:** Delivery report; Message Headers



Delivery report.txt  
(484 B)



Message  
Headers.txt (2 KB)

This is the mail system at host mseive01.rtp.epa.gov.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<forney.kathleen@epa.gov>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK,  
sent 48C572CB\_6082\_959\_5 3E69E443D2

Message Headers.txt

Received: from tlhexsprot2.floridadep.net (tlhexsprot2.floridadep.net [199.73.152.8])  
by mseive01.rtp.epa.gov (Postfix) with ESMTP id 4DB81443D1  
for <forney.kathleen@epa.gov>; Mon, 8 Sep 2008 14:45:28 -0400 (EDT)  
Content-Transfer-Encoding: 7bit  
Importance: normal  
Priority: normal  
Received: from tlhexsmb4.floridadep.net ([172.20.30.47]) by tlhexsprot2.floridadep.net with Microsoft  
SMTPSVC(5.0.2195.6713); Mon, 8 Sep 2008 14:45:26 -0400  
X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2800.1896  
Content-Class: urn:content-classes:message  
Return-Receipt-To: "Livingston, Sylvia" <Sylvia.Livingston@dep.state.fl.us>  
MIME-Version: 1.0  
Content-Type: multipart/mixed;  
boundary="----=\_NextPart\_001\_01C911E3.0E3ADF7E"  
Disposition-Notification-To: "Livingston, Sylvia" <Sylvia.Livingston@dep.state.fl.us>  
Subject: BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)  
Date: Mon, 8 Sep 2008 14:45:25 -0400  
Message-ID: <864D0E673032DD47ABE8B4EE542DF7CAC71D5B@tlhexsmb4.floridadep.net>  
X-MS-Has-Attach: yes  
X-MS-TNEF-Correlator:  
Thread-Topic: BARTOW PLANT; 1030011-012-AC (PSD-FL-381A)  
thread-index: AckR4w5YJVXgCP+VSzymBv0TtpaXdA==  
From: "Livingston, Sylvia" <Sylvia.Livingston@dep.state.fl.us>  
To: <thomas.lawery@pgnmail.com>,  
<chris.bradley@pgnmail.com>  
Cc: <sosbourn@golder.com>,  
<dee\_morse@nps.gov>,  
<meredith\_bond@fws.gov>,  
<forney.kathleen@epa.gov>,  
"Nasca, Mara" <Mara.Nasca@dep.state.fl.us>,  
<mayor@stpete.org>,  
<sspratt@pinellascounty.org>,  
<phesslin@pinellascounty.org>,  
"Linero, Alvaro" <Alvaro.Linero@dep.state.fl.us>,  
"Heron, Teresa" <Teresa.Heron@dep.state.fl.us>,  
"Walker, Elizabeth \(\AIR\)" <Elizabeth.Walker@dep.state.fl.us>,  
"Gibson, Victoria" <Victoria.Gibson@dep.state.fl.us>  
X-OriginalArrivalTime: 08 Sep 2008 18:45:26.0081 (UTC) FILETIME=[0ED44310:01C911E3]