



# Progress Energy

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BUREAU OF AIR REGULATION

December 21, 2007

Mr. Jeff Koerner, P.E.  
DEP/DARM  
North Permitting Section  
Division of Air Resource Management  
2600 Blair Stone Road MS 5500  
Tallahassee, Florida 32399-2400

Re: Crystal River Power Plant – Permit Number 0170004-015-AV – Modification of the BART Application

Dear Mr. Koerner:

In accordance with Mr. Dave Meyer's e-mail to you dated December 17, 2007, and Rule 62-296.340 of the Florida Administrative Code (F.A.C.) implementing the federal Best Available Retrofit Technology (BART) Rule (40 CFR 51, Subpart B), attached is the modified BART application.

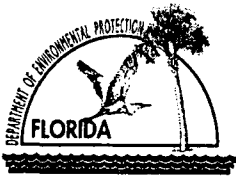
If you have any questions, please contact Dave Meyer at (727) 820-5295. Thank you for your attention to this matter.

Best Regards,

Jeffrey R. Swartz  
General Manager – Fossil Operations

XC: Bernie Cumbie

Attachment



# Department of Environmental Protection

## Division of Air Resource Management

### APPLICATION FOR AIR PERMIT - LONG FORM

#### I. APPLICATION INFORMATION

**Air Construction Permit** – Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

**Air Operation Permit** – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

**Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option)**

– Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

#### Identification of Facility

1. Facility Owner/Company Name: <b>FLORIDA POWER CORPORATION dba PROGRESS ENERGY FLORIDA, INC.</b>	
2. Site Name: <b>CRYSTAL RIVER POWER PLANT</b>	
3. Facility Identification Number: <b>0170004</b>	
4. Facility Location...: Street Address or Other Locator: <b>NORTH OF CRYSTAL RIVER, WEST OF U.S. 19</b> City: <b>CRYSTAL RIVER</b> County: <b>CITRUS</b> Zip Code: <b>34428</b>	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

#### Application Contact

1. Application Contact Name: <b>DAVE MEYER, SENIOR ENVIRONMENTAL SPECIALIST</b>	
2. Application Contact Mailing Address... Organization/Firm: <b>PROGRESS ENERGY FLORIDA</b> Street Address: <b>299 FIRST AVENUE NORTH PEF 903</b> City: <b>ST. PETERSBURG</b> State: <b>FL</b> Zip Code: <b>33701</b>	
3. Application Contact Telephone Numbers... Telephone: <b>(727) 820-5295</b> ext. Fax: <b>(727) 820-5229</b>	
4. Application Contact Email Address: <b>DAVE.MEYER@PGNMAIL.COM</b>	

#### Application Processing Information (DEP Use)

1. Date of Receipt of Application:	<b>12/24/07</b>
2. Project Number(s):	<b>0170004-019-AC</b>
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

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### **Purpose of Application**

**This application for air permit is submitted to obtain: (Check one)**

#### **Air Construction Permit**

☒ Air construction permit.

#### **Air Operation Permit**

- ☐ Initial Title V air operation permit.
- ☐ Title V air operation permit revision.
- ☐ Title V air operation permit renewal.
- ☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
- ☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

#### **Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)**

- ☐ Air construction permit and Title V permit revision, incorporating the proposed project.
- ☐ Air construction permit and Title V permit renewal, incorporating the proposed project.

**Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:**

- ☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

### **Application Comment**

Based on an agreement between PEF and the Department, reached on December 17, 2007, PEF has agreed to submit this modified BART application prior to December 31, 2007. PEF understands that this modified application submittal will restart the BART permit processing time clock. Upon the Department's receipt of PEF's modified application, the FDEP will rescind the BART draft permit and reopen the BART application evaluation process. The BART evaluation process will be conducted within the agreed-upon parameters presented in Attachment BART-1.

## FACILITY INFORMATION

### Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
001	FFSG, Unit 1	AC1F	NA
002	FFSG, Unit 2	AC1F	NA

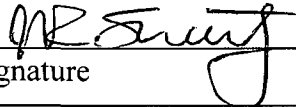
### Application Processing Fee

Check one: ☐ Attached - Amount: \$ \_\_\_\_\_ ☒ Not Applicable

## FACILITY INFORMATION

### Owner/Authorized Representative Statement

**Complete if applying for an air construction permit or an initial FESOP.**

1. Owner/Authorized Representative Name :
<b>JEFFREY R. SWARTZ</b>
2. Owner/Authorized Representative Mailing Address... Organization/Firm: <b>PROGRESS ENERGY FLORIDA, INC.</b> Street Address: <b>299 FIRST AVENUE NORTH CR 36</b> City: <b>ST PETERSBURG</b> State: <b>FLORIDA</b> Zip Code: <b>33701</b>
3. Owner/Authorized Representative Telephone Numbers... Telephone: <b>(352) 563-4484</b> ext. Fax: <b>(352) 563-4496</b>
4. Owner/Authorized Representative Email Address: <b>JEFFREY.SWARTZ@PGNMAIL.COM</b>
5. Owner/Authorized Representative Statement:  <i>I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.</i>  <div style="display: flex; justify-content: space-between;"><div style="text-align: center;"> _____ Signature</div><div style="text-align: center;"><u>21 DECEMBER 2007</u> _____ Date</div></div>

## FACILITY INFORMATION

### Application Responsible Official Certification

**Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."**

1. Application Responsible Official Name:
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source.
3. Application Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
4. Application Responsible Official Telephone Numbers... Telephone: ( ) - ext. Fax: ( ) -
5. Application Responsible Official Email Address:
6. Application Responsible Official Certification: I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.  Signature _____ Date _____

## FACILITY INFORMATION

**Professional Engineer Certification**1. Professional Engineer Name: **SCOTT OSBOURN**Registration Number: **57557**

2. Professional Engineer Mailing Address...

Organization/Firm: **Golder Associates Inc.\*\***Street Address: **5100 West Lemon St., Suite 114**City: **Tampa**State: **FL**Zip Code: **33609**

3. Professional Engineer Telephone Numbers...

Telephone: **(813) 287-1717** ext.211 Fax: **(813) 287-1716**4. Professional Engineer Email Address: **SOSBOURN@GOLDER.COM**

5. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:**(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and**(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.**(3) If the purpose of this application is to obtain a Title V air operation permit (check here ☐, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.**(4) If the purpose of this application is to obtain an air construction permit (check here ☒, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here ☐, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.**(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here ☐, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.*

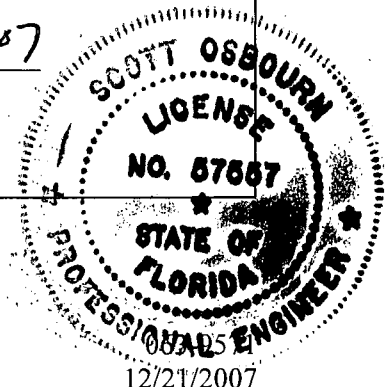
Signature

Date

(seal)

\* Attach any exception to certification statement.

\*\* Board of Professional Engineers Certificate of Authorization #00001670



## **ATTACHMENT BART-1**

**December 21, 2007**

This attachment for Crystal River Power Plant Florida Power Corporation dba Progress Energy Florida, Inc. (PEF) is being provided to the Florida Department of Environmental Protection (FDEP) as a modification to its application under Rule 62-296.340 of the Florida Administrative Code (F.A.C.) implementing the federal Best Available Retrofit Technology (BART) Rule (40 CFR 51, Subpart B). The source information and methodologies used for the BART analysis for this facility are the same as those presented in the document entitled "Air Modeling Protocol to Evaluate Best Available Retrofit Technology (BART) Options for PEF", submitted to the FDEP in 2006.

Based on an agreement between PEF and the Department, reached on December 17, 2007, PEF has agreed to submit this modified BART application prior to December 31, 2007. PEF understands that this modified application submittal will restart the BART permit processing time clock. Upon the Department's receipt of PEF's modified application, the FDEP has agreed to rescind the BART draft permit and reopen the BART application evaluation process. The BART evaluation process will be conducted within the following agreed-upon parameters:

- PEF will work with the FDEP to integrate Reasonable Progress Control Technology (RPCT) with Best Available Retrofit Technology (BART) for early implementation (before 2018) of cost effective methods for reducing visibility impacts in Class I areas.
- PEF will identify preliminary options under investigation (e.g., lower sulfur coal, post-combustion controls, etc.);
- PEF will target dates for submission of additional information on the control options and modeling scenarios; and

### **Integration of BART and Reasonable Progress Control Technology (RPCT)**

PEF will work with the FDEP to integrate Reasonable Progress Control Technology (RPCT) with Best Available Retrofit Technology (BART) for early implementation (before 2018) and beneficial environmental reductions that will have a positive impact on visibility. The controls under consideration could also provide a co-benefit by reducing emissions of sulfuric acid mist and opacity, which ultimately affect visibility. PEF understands that the option(s) selected as a result of this process may also meet the obligation for Crystal River Units 1 and 2 toward compliance with the requirements of RPCT.

### **Control Option Assessment**

PEF will continue the BART study, engineering, and analysis to support the development of PEF's future plans, for Crystal River Units 1 and 2. However, there are still a number of uncertainties and outstanding issues that require a prudent assessment of risks that could impact



the costs and timing of PEF's implementation of emission reduction options. Compliance planning is a dynamic process and PEF will continue to evaluate compliance options in light of changed circumstances and will adjust accordingly. The following control options are currently under consideration:

- Use of low sulfur fuels
- Co-firing with biomass
- Installation of post-combustion controls

#### **Proposed Implementation Schedule**

Within 90 days of submittal of this application, PEF will meet with the Department to discuss the preliminary findings of an assessment of the options listed above. PEF will propose to narrow the list to several of the most promising options and conduct a more rigorous assessment, to be presented to the Department by mid-2008. The outcome of a meeting between PEF and the Department at that time will determine further proposed milestone dates for implementation.