

Jeb Bush  
Governor

# Department of Environmental Protection

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

Colleen M. Castille  
Secretary

July 24, 2006

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Bernie Cumbie  
Plant Manager  
Progress Energy  
100 Central Ave. CN77  
St. Petersburg, FL 33701

Re: **Request for Additional Information – Reminder: Project 1070004-013-AC**

Dear Mr. Cumbie,

On April 25, 2006, the Department received your application for an air construction permit to construct SCR systems on units 4 and 5 at the Crystal River Plant located in Citrus County, Florida. The application was deemed incomplete and the Department requested additional information on May 18, 2006 that would allow continued processing of your application. To date, we have not received the requested additional information. Rule 62-4.055(1) of the Florida Administrative Code requires the following:

*"The applicant shall have ninety days after the Department mails a timely request for additional information to submit that information to the Department. If an applicant requires more than ninety days in which to respond to a request for additional information, the applicant may notify the Department in writing of the circumstances, at which time the application shall be held in active status for one additional period of up to ninety days. Additional extensions shall be granted for good cause shown by the applicant. A showing that the applicant is making a diligent effort to obtain the requested additional information shall constitute good cause. Failure of an applicant to provide the timely requested information by the applicable deadline shall result in denial of the application."*

In addition, no air dispersion modeling has been performed in the vicinity of this facility recently (at least not in the last ten years), please provide air dispersion modeling which will show that the Class II AAQS and PSD Class II increments are not being exceeded for PM<sub>10</sub>, SO<sub>2</sub> and NO<sub>2</sub> even though these pollutants may not be PSD significant. For predicting Class II impacts, please use the 2001-2005 Tampa AERMET dataset which the Department will provide to you. In addition, CALPUFF modeling results for the Chassahowitzka National Wilderness Area, submitted by Seminole Electric for its proposed Unit #3, indicate that the SO<sub>2</sub> emissions from Progress Energy's Crystal River facility are predicted to violate the 3-hour and 24-hour PSD Class I increments. Please perform a Class I modeling analysis for SO<sub>2</sub>, using the 2001-2003 CALMET meteorological dataset provided by the Department, to show that the projected scrubber project will not result in predicted SO<sub>2</sub> impacts greater than the Class I increments.

It has been more than 45 days since our request for additional information (copy attached). You are reminded that the permit processing time clock has stopped for this project and that we will not continue our review until we receive the additional information. If you require a period of time in addition to the 90 days allowed by rule, please submit a written request indicating the amount of time necessary. If you fail to provide the additional information or request additional time to submit the additional information, the Department will deny your application for air permit. If you have any questions regarding this matter, please call the project engineer, Bobby Bull, at 850/921-9585.

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Crystal River Facility  
July 24, 2006  
Page 2 of 2

Reminder of Request for Additional Information  
Project No. 0170004-013-AC  
Units 4 and 5 SCR Project

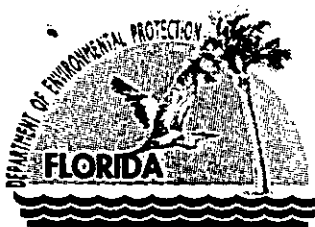
Sincerely,



*for* Jeffery F. Koerner, P.E.  
Air Permitting South Program

JFK/rfb

cc: Mara Nasca, DEP-SWD  
Dave Meyer, Progress  
Scott Osbourn, Golder



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Governor

# Department of Environmental Protection

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

Colleen M. Castille  
Secretary

July 18, 2006

CERTIFIED MAIL- Return Receipt Requested

Mr. Bernie Cumbie  
Plant Manager  
Progress Energy  
100 Central Ave. CN77  
St. Petersburg, FL 33701

Re: Request to Construct SCR systems on Units 4 and 5

Dear Mr. Cumbie,

On May 18, 2006, the Department sent a request for additional information for your application received on April 25, 2006, requesting permission to construct SCR systems on Units 4 and 5. The Department requested the information be submitted 45 days from May 18, 2006. At this time, the Department has not received a response from you. If the Department does not receive this the requested information by August 16, 2006, the Department will deny your permit application request. The following information was requested in the May 18, 2006 is needed to process your application:

1. Emission Unit Information: The application does not include the emissions unit sections for Units 4 and 5. Provide information for all sections of the emissions unit section.
2. Criteria Pollutants: Provide estimated facility increases (or decreases) emissions for all criteria pollutants.
3. Sulfuric Acid Mist Emissions: The application indicated an increase of SO<sub>3</sub> emissions with this installation of the SCR units. Quantify the estimated SO<sub>3</sub> and H<sub>2</sub>SO<sub>4</sub> emissions due to the installation the SCR units.
4. Process Flow Diagram: Provide a process flow diagram of the entire system (boiler through stack) identifying the process and control equipment, flue gas fans, fuel inputs, CEMS monitoring points, ammonia injection grid, mixing grid, bypass damper locations (if applicable), and ash removal. Identify the approximate exhaust flows, temperatures, and pressure drop for each major component and for any substantial change in these parameters. Will the existing stacks or CEMS be modified due to this project? What will the pressure drop due to the SCR system even when it is not in operation? What is this in terms of energy loss?
5. Selective Catalytic Reduction (SCR) System: Identify the following SCR design parameters: general catalyst composition (material); catalyst structure (honeycomb, plate, etc.); approximate catalyst volume (ft<sup>3</sup>); catalyst operational temperature range (° F); molar ratio of ammonia/NO<sub>x</sub>; design inlet and outlet NO<sub>x</sub> emission rates (lb/MMBtu); and design control efficiency. What are the baseline NO<sub>x</sub> emissions for determining the design control efficiency? Describe the ammonia distribution, flow control, and monitoring systems. What are the general procedures for startup and shutdown of the SCR system? What critical operating parameters and levels must be attained before commencing ammonia injection? Explain how the control system will monitor, adjust, and inject ammonia at a given rate. What are the estimated ammonia injection rates at 50%, 75%, and 100% of the maximum coal-firing rate? What is the target ammonia slip level based on the design criteria NO<sub>x</sub> reduction?

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Describe the design and operating techniques used to prevent particulate matter from fouling and masking the catalyst beds. Provide the catalyst vendor's recommendations describing catalyst maintenance procedures and schedule. In response to catalyst deactivation, describe the process of gradually adding catalyst until it is necessary for complete replacement.

6. Bid Specifications: Please provide a copy of the bid specifications for this project.
7. SCR Bypass Duct: Is an SCR bypass duct proposed? Describe the general location and operation of the SCR bypass duct. Under what conditions is it necessary to use the bypass? For each condition, estimate the duration of bypass operation and the number of times per year the bypass is expected to operate under the condition.

Permits applicants are advised that Rule 62-4.055(1), F.A.C. requires applicants to respond to requests for information within 90 days. If you have any questions regarding this request for additional information, please contact Bobby Bull at [Robert.Bull@dep.state.fl.us](mailto:Robert.Bull@dep.state.fl.us) or (850) 921-9585.

Sincerely,

Jeffery F. Koerner  
North Permitting Administrator

JFK/rlb

cc: Mara Nasca, DEP-SWD  
Dave Meyer, Progress  
Scott Osbourn, Golder

**COMPLETE THIS SECTION ON DELIVERY**

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

**1. Article Addressed to:**

Mr. Bernie Cumbie, Plant Manager  
Progress Energy Florida  
Crystal River Units 1&2  
100 Central Avenue CN77  
St. Petersburg, Florida 33701

**A Signature**

**x**

~~Agent~~

☐ Addressee

B. Received by (Printed Name)

C. Date of Delivery

D. Is delivery address different from item 1? ☐ Yes

If YES, enter delivery address below: ☐ No

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 **Express Mail**

☐ Registered☐ Return Receipt for Merchandise☐ Insured Mail☐ C.O.D.

4. Restricted Delivery? (Extra Fee)

☐ Yes

## 2. Article Number

(Transfer from service label)

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PS Form 3811, February 2004

Domestic Return Receipt

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Mr. Bernie Cumble, Plant Manager  
Progress Energy Florida  
Crystal River Units 1&2  
100 Central Avenue CN77  
St. Petersburg, Florida 33701

PS Form 3800, May 2000

See reverse for instructions