



Florida Department of Environmental Protection

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2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Rottkamp
Lt. Governor

Michael W. Sade
Secretary

February 27, 2007

Mr. Bernie M. Cumbie, Manager
Progress Energy Florida, Inc.
100 Central Avenue, CN77
St. Petersburg, Florida 33701

Re: Request For Additional Information Regarding BART Application For Crystal River Power Plant
Construction Permit Project No. 0170004-017-AC

Dear Mr. Cumbie:

Thank you for your Best Available Retrofit Technology (BART) Determination Application received on January 31, 2007, for Units 1 and 2 at the Crystal River Plant. Upon review, it was determined that the submitted application is incomplete. Please respond to the following items so that we may continue processing the application:

1. Section 5.3 of the "BART Analysis For PM Emissions From Unit Nos. 1 And 2" contains a statement that "PEF does not believe that Units 1 and 2 can continuously achieve levels lower than the actual historical PM emissions used in this analysis". Please explain why PEF believes this to be true.
2. Considering the results from past compliance tests, please identify and justify what PEF believes to be the lowest, continuously achievable emission rate from the existing ESPs.
3. A review of the past compliance tests shows that Unit 2 has been consistently testing fairly low (0.002 - 0.027 lb/MMBtu). For Unit 1, the results show a gradual increase from 0.03 lb/MMBtu in 1995 to 0.0774 lb/MMBtu in 2000. From 2001 - 2006, the results dropped and are now in the range of 0.02 - 0.037 lb/MMBtu. Please explain what happened to cause this decrease.
4. Please provide an analysis and cost evaluation for physical refinements/refurbishments to the existing ESPs. For example, you have recently proposed modifications to the existing ESPs for Units 4 and 5 to achieve an emissions level of 0.03 lb/MMBtu.
5. Please provide an analysis and cost evaluation for replacing the old electrostatic precipitators (ESPs) with new, higher-efficiency ESPs.
6. Please provide an analysis and cost evaluation for adding baghouses following the existing ESPs.
7. Please provide an analysis and cost evaluation for installing cyclones prior to the ESPs.
8. For each cost analysis, please provide the bid specification/vendor estimate or other supporting documentation.
9. For each of the above options, please provide the visibility impact modeling results for the expected level of lowered emissions related to each of the proposed changes.
10. Please explain why the modeled results (Table 5-8) show an increase in visibility impacts when modeling the BACT equivalent emissions of 56.25 lb/hr for Unit 1 and 71.93 lb/hr for Unit 2 (based on the BACT equivalent rate of 0.015 lb PM/MMBtu, as shown in Table 5-8) compared to the current

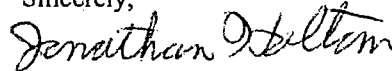
actual emissions of 140.82 lb/hr for Unit 1 and 115.22 lb/hr for Unit 2 (based on tested emissions rates of 0.037 lb PM/MMBtu for Unit 1 and 0.027 lb PM/MMBtu, as shown in Table 3-1).

11. Please provide the active Excel Worksheets with formulas for Tables 5-2 through 5-4 of the Air Modeling Report and Tables 2-3 through 2-7 of the Modeling Protocol.
12. Table 5-4 shows that H_2SO_4 emissions increase for Unit 2 to 184.40 lb/hr from 94.0 lb/hr given in Table 2-7 for Unit 2. Table 5-3 shows that these emissions increase for Unit 1 to 80.0 lb/hr from 78.0 lb/hr given in Table 2-6 for Unit 1. Please explain why these emissions are expected to increase for the controlled case.
13. Please send the CALPUFF files for all of the NEW IMPROVE results.

The above comments require a written response to the Department within ninety days of receipt of this notice unless additional time is requested pursuant to Rule 62-4.055(1), F.A.C. Rule 62-4.050(3), F.A.C., requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature.

If you should have any questions, please contact me at (850) 921-9531.

Sincerely,



Jonathan Holtom, P.E.
North Permitting Section

/jh

EC:

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