



Florida Department of Environmental Protection

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July 3, 2012

Electronically Sent – Received Receipt Requested

William.Luke@pgnmail.com

Mr. William Luke, Plant Manager
Florida Power Corporation
dba Progress Energy Florida, Inc.
1729 Baillies Bluff Road
Holiday, Florida 34692-9753

Re: Request for Additional Information
File No. 1010017-013-AC (PSD-FL-419)
Anclote Power Generating Facility – Natural Gas Conversion

Mr. Luke:

On June 18, 2012, Progress Energy Florida (PEF), Inc. submitted an application for an air construction permit that is subject to the preconstruction review requirements of Rule 62-212.400, Florida Administrative Code (F.A.C.). The application is for the conversion of Units 1 and 2 at the Anclote Power Generating Facility from the combustion of heavy fuel oil and natural gas to the exclusive use of natural gas.

Overall, we are excited with the prospects of the conversion project and the realization of emission reductions (especially of sulfur dioxide) on the order of 25,000 tons/year.

Pursuant to Rule 62-4.055(1), F.A.C., the Department reviewed the application and requests submittal of the following additional information. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

1. Please resubmit Table 1 in accordance with the definitions and procedures for “Baseline Actual Emissions” and “Projected Actual Emissions” contained in Rule 62-210.200(Definitions). The definitions are attached for your convenience. Some of the factors used in determining baseline and projected actual emissions would not be important for the project. However an estimate of expected future operation (even if unchanged from recent operation) would be very helpful.
2. Please submit, if available, curves showing the relationship between NO_x mass (lb/hour) and concentration (lb/MMBtu) emissions with respect to unit load. The data should be readily available because it is submitted to EPA on a quarterly basis for purposes of compliance with Clean Air Act Title IV requirements.
3. The proposed NO_x guarantee is 0.3 lb/MMBtu. Please advise whether this factor applies throughout the entire range of operation or just at high load. It is possible that the curve for the new gas burners may show superior NO_x emissions throughout the entire range of operation, in which case it may not be necessary to specify maximum hours of operation (as appears to be suggested by the application).

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We would like to discuss these items with your consultant (Golder) and yourself or your representatives at an early date. It may be fruitful to discuss with Alstom the applicable range for their NO_x guarantee. As an example, you may refer to their recent presentation (Slide 19) where they indicate substantial reductions in NO_x emission factor at coal to gas conversion projects. [Link to Alstom Gas Projects](#) They may be able to provide similar assurances or expectations for the Anclote project without changing their present guarantee at all.

The Department will immediately resume processing your permit application after receipt of the requested information. Rule 62-4.050(3), F.A.C., requires that all applications for a construction 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. For any material changes to the application, please include a new certification statement by the authorized representative or responsible official.

If you have any question please do not hesitate to contact me at alvaro.linero@dep.state.fl.us or at 1-850-717-9076.

Sincerely,



A.A. Linero, P.E.
Office of Permitting and Compliance

Attachment

cc: Scott Osbourn, P.E., Golder Associates: sosbourn@golder.com
Robert Wong, Administrator, DEP SWD: robert.wong@dep.state.fl.us
Lynn Scarce, DEP (file Copy): lynn.scarce@dep.state.fl.us

Definitions of Baseline Actual Emissions and Future Projected Emissions

Definition of Baseline Actual Emissions: Rule 62-210.200(36) states with regard to “*Baseline Actual Emissions*”:

For any existing electric utility steam generating unit, “baseline actual emissions” means the average rate, in tons per year, at which the unit actually emitted the pollutant during any consecutive 24-month period selected by the owner or operator within the 5-year period immediately preceding the date a complete permit application is received by the Department. The Department shall allow the use of a different time period upon a determination that it is more representative of normal source operation.

1. The average rate shall include fugitive emissions to the extent quantifiable, and emissions associated with startups and shutdowns.
2. The average rate shall be adjusted downward to exclude any non-compliant emissions that occurred while the source was operating above any emission limitation that was legally enforceable during the consecutive 24-month period.
3. For a PSD pollutant, when a project involves multiple emissions units, only one consecutive 24-month period must be used to determine the baseline actual emissions for the emissions units being changed. A different consecutive 24-month period can be used for each PSD pollutant.
4. The average rate shall not be based on any consecutive 24-month period for which there is inadequate information for determining annual emissions, in tons per year, and for adjusting this amount if required by subparagraph (a)2. above.

Base on the above definition of “*Baseline Actual Emissions*”; please reevaluate the two-year average emissions from Units 1 and 2 given on page 5 of the application along with the results for baseline emissions given in Table 1 of the application.

[Rules 62-4.070 F.A.C and 62-212.400]

Definition of Projected Actual Emissions: Rule 62-210.200(252) states with regard to “*Projected Actual Emissions*”:

*“Projected Actual Emissions” means the maximum annual rate, in tons/year, at which an existing emissions unit is projected to emit a PSD pollutant in **any one** of the 5 years following the date the unit resumes regular operation after the project, or in **any one** of the 10 years following that date, if the project involves increasing the emissions unit’s design capacity or its potential to emit that PSD pollutant and full utilization of the unit would result in a significant emissions increase or a significant net emissions increase at the major stationary source. One year is one 12-month period. In determining the projected actual emissions, the Department:*

- (a) Shall consider all relevant information, including historical operational data, the company’s own representations, the company’s expected business activity and the company’s highest projections of business activity, the company’s filings with the State or Federal regulatory authorities, and compliance plans or orders, including consent orders; and
- (b) Shall include fugitive emissions to the extent quantifiable and emissions associated with startups and shutdowns; and
- (c) Shall exclude that portion of the unit’s emissions following the project that an existing unit could have accommodated during the consecutive 24-month period used to establish the baseline actual emissions and that are also unrelated to the particular project including any increased utilization due to product demand growth; or
- (d) In lieu of using the method set out in paragraphs (a) through (c) above, may be directed by the owner or operator to use the emissions unit’s potential to emit, in tons per year.