

## Department of Environmental Protection

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

David B. Struhs Secretary

March 19, 2004

**CERTIFIED MAIL - RETURN RECEIPT REQUESTED** 

Wade A. Maye, General Manager Bayside Power Station / F. J. Gannon Station P.O. Box 111 Tampa, FL 336601-0111

Re: Request for Additional Information

Project No. 0570040-021-AC
Permit No. PSD-FL-301B
Minor Modifications to PSD Permit, Specific Condition 17

Dear Mr. Maye:

On February 26, 2004, the Department received your application requesting minor modifications to the PSD air construction permit for the Bayside Power Station, which is located on Port Sutton Road in Tampa, Florida. The requested changes relate to Specific Condition 17 and generally regard low load operation and emissions data exclusion for certain recognized periods. The application is incomplete. In order to continue processing your application, the Department will need the additional information requested below. 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. Low Load Conditions: The application requests the ability to operate at loads lower than 50% load as long as the emissions standards are met. This may be acceptable as long as the unit is operating in full "lean pre-mix mode" with the low CO and NOx characteristics. Is this the case?

## 2. CEMS Data Exclusion

Malfunctions: The application requests removal of the requirement to notify the Compliance Authority within one working day of a malfunction that results in elevated emissions. Note that only malfunctions resulting in the exclusion of emissions data must be documented. Notification may be by telephone, facsimile transmittal, or electronic mail. The purpose of this notification is to ensure that malfunctions are quickly recognized and corrected. It is important that the Compliance Authority be aware of frequently recurring malfunctions so that they do not become "normal operation" for a facility. A part of the authority for this requirement is based on Rule 62-4.130, F.A.C., which requires "immediate" notification. Please comment.

Steam Turbine Cold Startup: The application requests retaining the 16 hours of data exclusion for a cold startup and 8 hours of data exclusion for a warm startup. The PSD permit requires, "... the permittee shall submit a revised plan to the Department based on actual operating data and experience. The Department shall review the actual operational data and determine whether data exclusion allowed for a steam turbine cold startup defined in Condition 23 of this section shall be modified to represent good operational practices. The Department shall also evaluate the operational information and determine whether a separate "warm startup" requirement shall be specified in the Title V operation permit for startup after the steam turbine has been offline for 24 hours or more, but less than 48 hours." To support your request, please provide the following "operational data": the number of cold and warm steam turbine startups to date; the

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hours operated at each of the six phases of startup defined in Attachment D; the CO emissions, NOx emissions, gas turbine load (MW), and first stage metal temperature during each 1-hour block of startup. Have the requirements of the current condition prevented a "warm startup" and caused additional cold startups? Similar to a cold startup, is only one gas turbine operated at low load during a warm startup?

<u>Tuning</u>: The application requests removing the 5-day advance notice prior to a tuning session and allowing all data collected during a tuning session to be excluded from the compliance demonstration. Please provide an example of emissions (CO and NOx) and load data during a major tuning session to support this request. Is the SCR functioning during a tuning session? Is the request limited to the exclusion of CO data? Approximately how many major tuning sessions are necessary each year?

<u>Drying After an Off-Line Compressor Water Wash</u>: The application requests up to two hours to perform a water wash of the compressor for maintenance purposes. Are such compressor water washes regularly scheduled by General Electric, performed on an "as needed" basis, or both? During the drying period, is the gas turbine operated at loads less than 10 MW?

3. **Startup Plans**: The application requests removal of the requirement to provide a 24-hour notice prior to a cold steam turbine startup. To support this request, please submit the "operational data" for startups as requested above. For Attachments D and F (Plans for Steam Turbine Cold and Warm Startups) of the application, please clarify the loads at each of the six identified operating steps.

The Department will resume processing your application after receipt of the requested information. 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. For any material changes to the application, please include a new certification statement by the authorized representative or responsible official. You are reminded that Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days or provide a written request for an additional period of time to submit the information.

If you have any questions regarding this matter, please call me at 850/921-9536.

Sincerely,

Jeffery F. Koerner

New Source Review Section

cc: Ms. Greer Briggs, TECO

Mr. Tom Davis, ECT

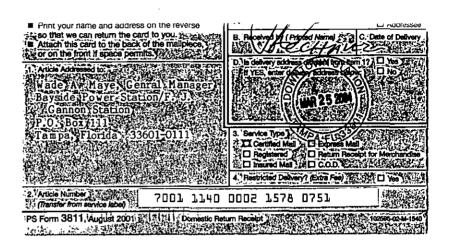
Mr. Jerry Kissel, SWD

Mr. Jerry Campbell, HEPC

Mr. Jim Little, EPA Region 4

3/22/04 cc=

Mr. John Bunyak, NPS



Wade A. Maye Coneral Manager 3 :
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City State, 279-4 Tampa, Florida 33601-0111 PS Form 3800, January 2001 See Reverse for Instructions