Memorandum

Florida Department of Environmental Protection

TO:

Clair Fancy, Chief, BAR

FROM:

Jeff Koerner, New Source Review Section

DATE:

December 18, 2001

SUBJECT:

Florida Power Intercession City Plant

Three 91 MW Simple Cycle Peaking Combustion Turbines (PSD-FL-268A)

Attached for your review is the public notice package for this project, including:

- Intent to Issue Permit and Public Notice Package;
- Technical Evaluation and Preliminary Determination;
- · Draft Permit; and
- P.E. Certification

The project makes minor revisions to the original PSD air construction permit covering three simple cycle, dual-fuel, 91 MW gas turbines. The changes did not result in an emissions increase that would exceed the PSD significant emission rates. The P.E. certification includes a summary of the changes. The Technical Evaluation and Preliminary Determination provides a detailed review of the project. Day #74 is February 7, 2002. I recommend your signature and approval of this project.

CHF/AAL/jfk

Attachments

Florida Department of Environmental Protection Division of Air Resources Management Bureau of Air Regulation New Source Review Section 2600 Blair Stone Road, MS #5505 Tallahassee, Florida, 32399-2400

P.E. CERTIFICATION STATEMENT

Permittee

Florida Power Corporation P.O. Box 14042, MAC BB1A St. Petersburg, FL 33733

Intercession City Plant Project No. 097-0014-006-AC Air Permit No. PSD-FL-268A

Project Description

The applicant requested minor revisions to the original PSD air construction permit covering three simple cycle, dual-fuel, 91 MW gas turbines. The draft permit includes the following changes:

- Increase in heat input rates from 885 to 905 MMBtu for gas firing and from 954 to 978 MMBtu for oil firing.
- Revise NOx mass emissions standards due to increase in heat input from 32.0 to 33.0 lb/hour for gas firing and from 167.0 to 169.0 lb/hour for oil firing.
- Change averaging period for CEMS-based NOx standards from a 3-hour rolling average to a 24-hour block average to accommodate multiple startups and fuel switching at this plant.
- The continuous monitoring conditions were clarified including the amount of data allowed for exclusion from the 24hour compliance average (from two to four in a 24-hour period).
- Reduce minimum observation period during a VE compliance test from 60 minutes to 30 minutes.
- Clarify that the plant may provide an analysis of the fuel sulfur content for distillate oil shipments in addition to an analysis from the fuel vendor.
- Change condition requiring that each unit be "capable of accommodating both gas and oil" to "each unit shall be capable of firing natural gas".

The proposed changes did not result in an increase in emissions that would exceed the PSD significant emissions rates; therefore the project is considered minor with respect to PSD.

I HEREBY CERTIFY that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297. However, I have not evaluated and I do not certify aspects of the proposed project outside of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

Jeffery F. Koerner, P.E.

Registration Number: 49441

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