

Jeb Bush
Governor

Department of Environmental Protection

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

Colleen M. Castille
Secretary

May 25, 2004

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Wade A. Maye, General Manager
F. J. Gannon Station
Port Sutton Road
Tampa, FL 33619

Re: **Request for Additional Information No. 2**
Project No. 0570040-019-AC
Permit No. PSD-FL-301B
Bayside Unit 3 – Simple Cycle Operation Plus Distillate Oil

Dear Mr. Maye:

On July 22, 2003, the Department received your application for an air construction permit for the Bayside Power Station located in Tampa, Florida. The request is to add simple cycle operation and restricted distillate oil firing to proposed gas turbine units 3A and 3B. On August 13, 2003, the Department requested additional information. On May 11, 2004, the Department received your response to this request. The application remains 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. PSD Permit No. 301A authorizes the construction of Bayside Units 1 through 4 (combined cycle gas turbine systems). Bayside Units 1 and 2 were constructed on schedule and are currently in operation. According to the schedule identified in the PSD permit, Bayside Units 3 and 4 would be complete by May of 2004. The permit also specifies the following, "The permittee shall inform the Department and Compliance Authority of any substantial changes to the construction schedule." Please provide an updated schedule of construction for Bayside Units 3 and 4.
2. TECO completed construction and began commercial operation of Bayside Unit 2D on September 19, 2003, which was the last gas turbine in the initial construction phase to come on line. Since this date, the Department understands that no additional work has been performed to add combined cycle Bayside Units 3 and 4. The authority to construct these units expires on July 1, 2005. As a result of TECO's uncertain plans, will the Bayside Unit 3 simple cycle project replace the previously permitted combined cycle Bayside Units 3-4 project? Please explain.
3. The initial PSD permit recognized the staggered construction schedule to complete Bayside Units 1-2 first and Bayside Units 3-4 would follow. Although it is possible to extend the PSD permit expiration date to complete the Bayside Unit 3 project, construction must begin before March 19, 2005 to maintain the original BACT determination. This date represents 18 months after completing construction of the last Bayside Unit (2D). If construction on Bayside Unit 3 does not begin by this time, TECO must first demonstrate the adequacy of the BACT determination prior to beginning construction. See Condition 9 in Section II of the PSD permit. As a result, a new BACT determination will likely be more stringent. Please comment and provide a schedule for the Bayside Unit 3 project.
4. Attachment A represents a schedule of completed and future activities for Gannon Units 1 through 6 and Bayside Units 1 through 4. Based on this schedule, it appears that emissions decreases from the shutdown of Gannon Units 1-6 would be available until 2008. Please comment.
5. As of your last submittal, the coal-fired Gannon units have all been permanently shut down. Please summarize the current status of, and future plans for, the coal storage and handling activities.
6. In your response, the following project specifications were modified: the simple cycle stack heights were increased to 150 feet; the daily distillate oil firing was restricted to an equivalent 11 hours/day; and the annual distillate oil firing

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remained limited to an equivalent of 700 hours/year. These will become conditions of the permit. In addition, EPA Region 4 maintains that the EPA Consent Decree prohibits oil firing in any re-powered unit as long as natural gas is available. As summarized below, the Consent Decree allows only very limited firing of distillate oil as a backup fuel.

- The unit cannot fire natural gas;
- The backup fuel must be No. 2 distillate oil (or a superior grade) containing less than 0.05% sulfur by weight;
- The unit fires oil for an equivalent of no more than 875 hours per year;
- All air pollution controls are functional and used to the maximum extent possible for the unit; and
- The unit is in compliance with the emissions standards of this permit.

The Department is awaiting final comments from EPA Region 4 regarding oil firing during an initial phase of simple cycle operation for Bayside Unit 3. Please provide any comments you would like considered. Is TECO requesting the capability to fire distillate oil after Bayside Unit 3 is converted to combined cycle operation?

7. The following summary is an attempt to clarify the PSD “BACT” and PSD “modeling” requirements for this project.

PSD BACT: TECO entered into settlement agreements with EPA and the Department to resolve alleged violations of the New Source Review requirements. With regard to PSD applicability and *BACT determinations*, it was determined that “past actual” emissions must be based on actual emissions *as if BACT-level controls were already installed*. For illustrative purposes, Table 1 in Attachment B shows this analysis based on decreases from the shutdown of Gannon Units 1 through 6 (past actual emissions with BACT-level controls), increases from the startup of Bayside Units 1 and 2 (potential emissions), and increases from the simple cycle startup of Bayside Unit 3 (potential emissions). The analysis shows that the project triggers PSD BACT review for CO, PM, and VOC, which is consistent with TECO’s conclusion.

PSD Modeling: For purposes of determining the PSD *modeling requirements*, the actual emissions from Gannon Units 1 through 6 *does not* consider the actual emissions as if BACT-level controls were already installed. Instead, the full decreases from shutdown of these units were allowed. For illustrative purposes, Table 2 in Attachment B summarizes this analysis, which shows that the project triggers the PSD *modeling requirements* for CO and VOC. There are no modeling requirements for VOC. However, TECO did perform a PSD significant impact analysis that shows modeled impacts from the project are not significant for CO or PM. Therefore, no additional modeling was necessary.

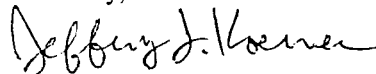
Please provide any comments.

8. TECO also has an open application to make minor revisions to the existing PSD permit (Project No. 0570040-021-AC). Does TECO request that these two projects be merged into a single project with final permit modification?

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, Air Permitting South
DARM – Bureau of Air Regulation

cc: Ms. Karen Sheffield, TECO
Ms. Greer Briggs, TECO
Mr. Tom Davis, ECT
Mr. Jerry Kissel, SWD
Mr. Jerry Campbell, HEPC
Mr. Jim Little, EPA Region 4
Mr. John Bunyak, NPS

ATTACHMENT A
TECO Bayside Unit 3 Simple Cycle Project
Schedule of Past and Future Activities

Date	Activity
01/08/02	Final PSD Permit Issued (PSD-FL-301A)
01/30/03	Gannon Unit 5 shutdown
03/06/03	Bayside Unit 1C commenced commercial operation
03/11/03	Bayside Unit 1B commenced commercial operation
03/16/03	Bayside Unit 1A commenced commercial operation
04/15/03	Gannon Unit 2 shutdown
04/16/03	Gannon Unit 1 shutdown
07/22/03	Bayside Unit 3 simple cycle project - application received
09/05/03	Bayside Unit 2B commenced commercial operation
09/16/03	Bayside Unit 2A commenced commercial operation
09/18/03	Bayside Unit 2C commenced commercial operation
09/19/03	Bayside Unit 2D commenced commercial operation
09/30/03	Gannon Unit 6 shutdown
10/12/03	Gannon Unit 4 shutdown
11/01/03	Gannon Unit 3 shutdown
01/01/04	Official notice of permanent shutdown of Gannon Units 1 - 6
05/11/04	Bayside Unit 3 simple cycle project - additional information received
03/06/05	Bayside Unit 1C has two years of operational data
03/11/05	Bayside Unit 1B has two years of operational data
03/19/05	18 months after last Bayside Unit (2D) was constructed.
03/16/05	Bayside Unit 1A has two years of operational data
07/01/05	PSD Permit expires
09/05/05	Bayside Unit 2B has two years of operational data
09/16/05	Bayside Unit 2A has two years of operational data
09/18/05	Bayside Unit 2C has two years of operational data
09/19/05	Bayside Unit 2D has two years of operational data
01/30/08	Gannon Unit 5 decreases fall out of 5-year contemporaneous period
04/15/08	Gannon Unit 2 decreases fall out of 5-year contemporaneous period
04/16/08	Gannon Unit 1 decreases fall out of 5-year contemporaneous period
09/30/08	Gannon Unit 6 decreases fall out of 5-year contemporaneous period
10/12/08	Gannon Unit 4 decreases fall out of 5-year contemporaneous period
11/01/08	Gannon Unit 3 decreases fall out of 5-year contemporaneous period

ATTACHMENT B
TECO Bayside Unit 3 Simple Cycle Project
PSD Applicability Analyses

Note: The following analyses are provided for illustrative purposes only. Past actual emissions for the Gannon Units were based on Annual Operating Reports for 2001 and 2002. Potential emissions were used for Bayside Units 1 and 2 because these units do not yet have two years of operation.

GANNON UNITS 1 - 6

Units	Annual Emissions, Tons per Year						
	CO	NOx	Pb	PM/PM10	SAM	SO2	VOC
Actual Emissions (2001/2002)	655	23,794	0.6	1,664	2,699	53,977	99
Retroactive Control Equipment	NA	a	NA	b	c	c	NA
Control Efficiency (%)	0.0%	90.0%	0.0%	84.5%	35.0%	95.0%	0.0%
Actual Emissions w/BACT Controls	655	2,379	0.6	258	1,754	2,699	99

Notes:

- a. Selective catalytic reduction system
- b. Improvement over existing electrostatic precipitator
- c. Acid gas scrubbing system
- d. Emissions data from 2001 and 2002 were chosen as representative years because the new Bayside Units 1 and 2 began commercial operation in 2003.

BAYSIDE UNITS 1 - 2, COMBINED CYCLE PROJECT

Fuel	Annual Emissions, Tons per Year						
	CO	NOx	Pb	PM/PM10	SAM	SO2	VOC
7 Gas Turbines	1,015	708	0.0	552	37	316	92

BAYSIDE UNITS 3, SIMPLE CYCLE PROJECT

Fuel	Annual Emissions, Tons per Year						
	CO	NOx	Pb	PM/PM10	SAM	SO2	VOC
4 Gas Turbines	630	1,562	0.2	338	36	295	59

TABLE 1. PSD APPLICABILITY - BACT REVIEW ONLY

Projects	Annual Emissions, Tons per Year						
	CO	NOx	Pb	PM/PM10	SAM	SO2	VOC
Gannon Units w/BACT Controls	655	2,379	0.6	258	1,754	2,699	99
Bayside Units 1 and 2	1,015	708	0.0	552	37	316	92
Bayside Unit 3 Simple Cycle Project	630	1,562	0.2	338	36	295	59
Net Emissions Increases	990	-109	-0.4	632	-1,681	-2,088	52
PSD Significant Emission Rates	100	40	0.6	15/25	7	40	40
Subject to PSD BACT?	Yes	No	No	Yes	No	No	Yes

TABLE 2. PSD APPLICABILITY - MODELING REVIEW ONLY

Projects	Annual Emissions, Tons per Year						
	CO	NOx	Pb	PM/PM10	SAM	SO2	VOC
Gannon Units, Actual Emissions	655	23,794	0.6	1,664	2,699	53,977	99
Bayside Units 1 and 2	1,015	708	0.0	552	37	316	92
Bayside Unit 3 Simple Cycle Project	630	1,562	0.2	338	36	295	59
Net Emissions Increases	990	-21,524	-0.4	-774	-2,626	-53,366	52
PSD Significant Emission Rates	100	40	0.6	15/25	7	40	40
Subject to PSD Modeling?	Yes	No	No	No	No	No	Yes

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Mr. Richard Craig
 P.O. of Southeastern Operations
 Florida Gas Transmission Company
 400 Smith Street
 Houston, TX 77002

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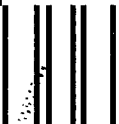
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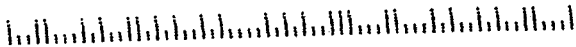
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