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BUREAU OF AIR REGULATION

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4 APT-ARB

A. A. Linero, P.E.
Florida Department of Environmental Protection
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

SUBJ: Preliminary Determination and Draft PSD Permit for TECO Gannon/Bayside Power Station (PSD-FL-301) located in Hillsborough County, Florida

Dear Mr. Linero:

Thank you for sending the preliminary determination and draft prevention of significant deterioration (PSD) permit for the Tampa Electric Company (TECO) Gannon/Bayside Power Station dated February 5, 2001. The draft PSD permit is for a repowering project involving the shutdown of TECO Gannon's coal-fired units 5 and 6 and the addition of seven combined cycle combustion turbines (CTs) with a total nominal generating capacity of 1728 MW. The combustion turbines proposed for the facility are General Electric (GE), frame 7FA units. The CTs will primarily combust pipeline quality natural gas with No. 2 fuel oil combusted as backup fuel. As proposed, the CTs would fire natural gas up to 8,760 hours per year and fire No. 2 fuel oil a maximum of 876 hours per year. Total emissions from the revised project are above the thresholds requiring PSD review for carbon monoxide (CO), volatile organic compounds (VOC), and particulate matter (PM/PM_{10}).

Based on our review of the preliminary determination and draft PSD permit, we do not have any additional comments beyond those previously discussed with Mr. Jeff Koerner of the Florida Department of Environmental Protection and those previously submitted during our review of the PSD permit application. If you have any questions or concerns, please direct them to either Katy Forney at 404-562-9130 or Jim Little at 404-562-9118.

Sincerely,

Douglas Neeley

R. Douglas Neeley
Chief
Air and Radiation Technology Branch
Air, Pesticides and Toxics
Management Division

cc: J. Kahn
C. Holladay
B. Thomas, SWD
J. Campbell, EPC
L. Ladd, TECO
NPS

FAXED 3-13-01
TO: JIM LITTLE, EPA Reg. 4
NEW SOURCE REVIEW
FROM: JEFF KOERNER

TAMPA ELECTRIC

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MAR 12 2001
BUREAU OF AIR REGULATION

March 9, 2001

Mr. Jeffery F. Koerner, P.E.
New Source Review Section
Florida Department of Environmental Protection
111 South Magnolia Avenue, Suite 4
Tallahassee, Florida 32301

Via Facsimile and
FedEx
Airbill No. 7909 1798 5685

Re: Comments on Draft Air Construction Permit
Project No. 0570040-013-AC (PSD-FL-301)
Bayside Power Station (Gannon Repowering Project)

Dear Mr. Koerner:

Tampa Electric Company (TEC) has received the Draft Air Construction Permit addressing the repowering of Gannon Station to Bayside Station. Based on a review by Tampa Electric Company, several comments are presented below. For referencing convenience, the condition or applicable section is in bold text and underlined, followed by the comment underneath.

Section III.A, Condition 13

This Condition requires TEC to dispatch Bayside Units 1 and/or 2 before dispatching any of the existing coal fired generation at Gannon that has not been disabled during the period of time between the initial operation of Bayside Unit 1 and January 1, 2005. The permit references the Consent Final Judgment and the Consent Decree as the basis for this requirement. However, the Consent Final Judgment does not address this type of operation and the Consent Decree does not contain this requirement as applied to Gannon/Bayside Station. The Consent Decree does require TEC to dispatch any unit fully controlled for SO_2 emissions including the natural gas fired combined cycle units at Bayside Station before dispatching an uncontrolled coal fired unit at Big Bend Station. Since this requirement does not apply to the remaining coal fired units at Gannon Station, TEC requests that this condition be removed.

Section III.A, Condition 19.e

Condition 19.e requires TEC to submit a startup plan after eight cold steam turbine startups. In addition, after reviewing the data presented, the Department may decrease the period of allowable data exclusion during a cold steam turbine startup. During the startup and initial operation of each Bayside Unit, several cold steam turbine startups may take place in a short period of time

due to unforeseen process upsets that may occur during the "shakedown" period. During the startup and initial operation period, the startup procedures and practices will evolve as operational experience is developed. Because of this ongoing development, it may be possible for TEC to perform eight cold steam turbine startups in a relatively short period of time, without ever establishing what is "typical" or "normal." To alleviate this, TEC requests that the Department modify the condition, in part, to read as follows:

> *"...Within 90 days of completing eight cold steam turbine startups following commercial operation, or within 90 days after 12 months of commercial operation; whichever occurs first, the permittee shall submit a revised plan to the Department based on actual operating data and experience."*

This would allow TEC to work through the "shakedown" period and collect meaningful data regarding the necessary time required to complete a cold steam turbine startup.

In addition to changing the basis of the requirement to submit a startup plan, TEC also requests that FDEP change the reference to "*decreasing* the allowable startup time" to "*modifying* the allowable startup time." This could allow for an increase in startup time in the event that it is not possible to perform a cold steam turbine startup in 16 hours or less due to the mechanical and physical limitations of the process. If additional time is necessary to perform a cold steam turbine startup, TEC could identify the load ranges at which it would operate during such an event to minimize excess emissions. Ultimately, it is in the Company's best interests to minimize startup times so that it can maximize the efficiency of electricity production.

Section III.A, Condition 25

Background

The repowering of the Gannon station provides a significant environmental benefit, particularly in reducing emissions of oxides of nitrogen (NO_x). This repowering will result in the reduction of the overall Tampa Bay nitrogen budget, therefore assisting the Tampa Bay area in meeting goals for ozone maintenance and holding the line on nitrogen input to Tampa Bay. These were all considerations when Tampa Electric Company agreed to the repowering of the Gannon Station and to the installation of Selective Catalytic Reduction (SCR) technology on the units at Gannon that are required to be repowered.

All projects that do not cause a significant increase in the emissions of NO_x are not subject to the requirements of the Prevention of Significant Deterioration (PSD) and therefore are not required to conduct a Best Availability Control Technology (BACT) determination. The Department reviewed and deemed TEC's application complete without a NO_x BACT determination in recognition of the agreement to install SCR and establishing a NO_x emission rate limit of 3.5 ppmvd @ 15% O_2.

In consideration of these facts, it is reasonable for the Department to consider this project in a more favorable light than a greenfield project that adds to the nitrogen budget in the State of Florida. Therefore, TEC holds the position that no unfair precedent is set by proposing a standard for NH_3 different than the standard set on permitted, but not yet constructed greenfield projects.

Condition 25 limits ammonia slip emissions to 5 ppmvd with a trigger to begin quarterly testing if the ammonia slip reaches 4.5 ppmvd. This slip limit and associated testing is not practical, and TEC believes that FDEP's authority to regulate ammonia emissions is limited, since ammonia is not a regulated air pollutant. In addition, the SCRs required for each combustion turbine are not required as a result of a BACT determination, so ammonia slip may not be regulated in accordance with the PSD program.

Nature of SCR operation

The requirement for SCR on low NO_x emitting combined cycle turbines is new in the State of Florida. As such, the Department and TEC have little operational history to rely on in understanding the operational and maintenance issues associated with this NO_x control device. TEC has continued to investigate the expected NH_3 slip characteristics of this device. Recent communication with the SCR vendor, Hitachi, has provided new information that has changed Tampa Electric's position on the testing requirements. Hitachi has estimated that the proposed NH_3 slip limit of 5 ppm is approached at a gradual rate, meaning that the unit may operate in the NH_3 emission concentration range of 4.5 to 5 ppm for approximately 6 months or more prior to triggering the replacement of the catalyst. As the draft permit currently reads this will require the testing of each of the combustion turbines once per quarter for approximately 6 months or more.

Other reasonable assurance

The Department has maintained that an ammonia slip rate of 5 ppm is necessary to ensure the proper operation of the SCR system. However, since catalyst life and operation of the SCR can be easily determined through the examination of the NO_x emission rate and the ammonia injection rate, TEC suggests that the Department will have reasonable assurance that each SCR system is operating at an optimal level through the examination of these parameters. That is, if TEC establishes an ammonia injection rate that controls NO_x at full load upon initial operation, a large increase in that injection rate could signal a problem with the SCR such as degrading catalyst.

Recommendation

Based on the information discussed above, TEC recommends that this condition be changed to read:

> *"If the ammonia slip exceeds 7 ppmvd corrected to 15% oxygen when firing natural gas as determined through annual stack testing, the permittee shall take corrective action, test and comply with the limit of 7 ppmvd corrected to 15% oxygen within 180 days of first detection."*

Section III. A, Condition 27

Based on the assumption that the operation of Bayside Station will result in a significant increase in Carbon Monoxide (CO) emissions, the Department has required TEC to install, calibrate and operate a continuous emissions monitor for CO. CO emissions data will be used to monitor startup operations as well as provide surrogate data for volatile organic compounds (VOC) and Particulate Matter (PM) emissions.

Background

The Department believes that it is appropriate to install and operate a CO continuous emissions monitoring system (CEMs) for each combustion turbine at Bayside Power Station. This requirement stems from the fact that based on calculated past actual CO emissions from Gannon Units 5 and 6, and future potential emissions from Bayside Units 1 and 2, the Department believes that a significant increase in CO emissions will occur as a result of operating Bayside Units 1 and 2. This significant increase would trigger PSD review and a subsequent BACT analysis. TEC performed and submitted this BACT analysis, and although the data demonstrated that adding oxidation catalyst to control CO emissions was infeasible, the Department has included a requirement to operate and maintain CO CEMs for each Bayside Unit in the draft air construction permit to provide 'reasonable assurance' that CO emissions are being minimized.

TEC has attempted to demonstrate to the Department that past actual CO emissions from Gannon Units 5 and 6 were significantly elevated due to efforts to lower NO_x emissions from those units. This demonstration shows that the operation of Bayside Units 1 and 2 will not result in a significant increase in CO emissions, since the baseline used in the netting analysis is significantly higher. The Department was provided with a thorough explanation of why the actual CO emissions from Gannon Units 5 and 6 were substantially higher than was previously estimated through the use of AP-42 emission factors, but has thus far rejected this argument.

Additional assurance

Another method to assure the Department that CO emissions will not significantly increase in conjunction with this project is to demonstrate that actual CO emissions from the seven Bayside combustion turbines are much lower than originally believed. Based on the initial compliance testing of Polk Unit 2, this may be the case. While GE guarantees a CO emission rate of 9 ppmvd @ 15% O_2, the results of the Polk Unit 2 initial compliance test show a CO emission rate that is much lower than the GE guarantee. Although CO emissions from the Bayside units are expected to be lower than the GE guarantee, it is not clear if they will be as low as those observed during the initial compliance test of Polk Unit 2 due to the fact that the Bayside units will operate in combined cycle mode and utilize SCR for NO_x control.

Recommendation

TEC recommends that the Department postpone the requirement for the CO CEMs until TEC has an opportunity to test Bayside Units 1 and 2 for CO emissions. If the CO emissions during the Bayside 1 and 2 initial compliance tests are lower than the emissions guaranteed by GE, then TEC may be able to demonstrate that CO emissions remain unchanged or decrease as a result of the operation of Bayside Units 1 and 2. If this is the case, then TEC may be willing to accept a more stringent CO emission limit, which would result in CO emissions netting out of PSD review. If this proves to be the case, then CO CEMs for Bayside Units 1 and 2 would be unnecessary. If, however, the testing does reveal that CO emissions are significantly increased as a result of the operation of Bayside Units 1 and 2, then TEC will install and operate CO CEMs on each combustion turbine.

TEC will also utilize the period of time prior to the shutdown of Gannon Units 5 and 6 to continue investigating the past actual CO emissions from these units. TEC will keep the Department advised of any testing conducted to support this activity. The results of this testing may provide new information to support TEC's position on the Gannon 5 and 6 CO baseline.

Section III.A, Condition 8

Condition 8 requires TEC to tune the dry-low NO_x combustors to minimize emissions of NO_x, CO and VOC. Since the combustors are designed to minimize NO_x emissions, TEC believes that they should be tuned only to minimize NO_x emissions as specified by General Electric. If the combustors were tuned to minimize CO and VOC emissions, it is unclear how the Department could verify this, it is unclear what the effect of this would be on the dry-low NO_x combustors performance, it is unclear what level of CO and VOC emissions would be considered 'optimal', and it is also unclear what level of NO_x emissions would be associated with these 'optimal' levels.

In addition, because the Department has identified CO as a surrogate for PM and VOC emissions, an annual test of CO emissions will provide reasonable assurance that PM and VOC emission limits are met. Furthermore, a comparison of CO emissions versus unit load graph as provided by General Electric should give the Department reasonable assurance that all CO emissions remain constant between 50% and 100% load. Therefore, TEC requests that the language in Condition 8 require TEC to tune each dry-low NO_x combustor to minimize NO_x emissions only, and that the reference to tuning the combustors to minimize CO and VOC emissions be removed from the permit.

Finally, this condition requires at least five days advanced notice prior to any tuning of the combustors. This requirement is unnecessary and will be difficult to comply with, since, in the event of a malfunction, some tuning sessions may need to be performed with much less than five days notice to return emissions to permitted levels. In fact, some tuning sessions may be able to be performed instantly, while the unit is online. Therefore, TEC requests that the Department remove this portion of Condition 8 from the permit.

Statement of Basis

The sentence: "The conditions of this permit do not relieve the permittee from any applicable requirement of the DEP/TEC Consent Final Judgement or the EPA/TEC Consent Decree" in the general introduction to the permit is not standard permit language. This statement can be found in several places throughout the permit. TEC requests that this language be changed to:

> *"The conditions of this permit do not relieve the permittee from any applicable regulation, or agency requirement."*

This language is more general and conveys the same message.

Facility Description, Page 2

The Facility Description indicates that the nominal electrical production of the Bayside Power Station will be 1,742 MW. However, elsewhere in the draft permit, the capacity of the Bayside Power Station is identified as 1,700 MW. Since it is only Bayside Units 1 and 2, and not Bayside Power Station that are being permitted, TEC requests that FDEP strike the reference to "the new Bayside Power Station" and insert "Bayside Units 1 and 2". In addition, although this is not a large difference, TEC requests that the Department make all references to the Bayside Power Station nominal capacity consistent by identifying it as 'nominal net 1,742 MW' throughout the permit.

Section III.A, Condition 19.b

This condition prohibits the operation of any Bayside Station combustion turbine below 50% load except during startup and shutdown operation. TEC understands that the intent of this condition is to minimize excess emissions. However, 62-21.700, F.A.C. allows for excess emissions during startup, shutdown, and malfunction. As such, TEC requests that operation below 50% load be allowed in the event of an unforeseen malfunction. In addition, it may be possible for TEC to operate the combustion turbines below 50% load while maintaining compliance with all applicable emission limits. Therefore, to incorporate both of the above referenced changes, TEC requests that the condition be changed to read:

> *"Except for startup, shutdown, malfunction, and periods during which all applicable emission limits are complied with, operation below 50% base load is prohibited."*

Section III,A, Condition 23

Condition 23 requires a revised MACT applicability determination, and a MACT analysis, if required, to be submitted with the HAP emissions test report. Submittal of a revised MACT applicability determination concurrently with the HAP emission test report submittal is reasonable. However, to allow time to prepare a case-by-case MACT analysis (if required), TEC requests that

the deadline for the MACT analysis submittal be no later than 60 days following submittal of the HAP test report.

Section III.A, Condition 26

In this condition, the Department has the option to require additional performance testing after a 'substantial' modification of the dry-low NO_x combustors or other control equipment. TEC believes that any problem following any 'substantial' modification will be revealed by the data collected by the CEMs. As such, this condition seems unnecessary since the Department will have reasonable assurance that any problem with the dry-low NO_x combustors or other control equipment will be evident based on a review of the CEMs data. For these reasons, TEC requests that this condition be removed from the permit.

Section III.A, Condition 24

Condition 24 requires TEC to perform ammonia slip and opacity testing for any combined cycle combustion turbine that fires more than 200 hours of distillate oil during the federal fiscal year. However, according to 62-297.310(7)(a)5., F.A.C., compliance testing for particulate matter is required only when a unit exceeds 400 hours of annual operation. In addition, ammonia slip testing is not mentioned within this regulation. Therefore, TEC requests that FDEP change the trigger for requiring visible emissions testing from 200 hours of operation to 400 hours of operation per calendar year as well as remove the requirement for ammonia slip testing.

Section III.A, Condition 27.c

This condition identifies certification requirements for an oxygen monitor. However, the CEMs included in the Bayside project will not utilize an oxygen monitor to measure diluent flow. Rather, they will utilize a CO_2 monitor to measure diluent flow. As such, TEC requests that FDEP remove all references to the oxygen monitor in the permit.

Section III.A, Condition 27.d(2)

Please see the comment addressing Section III.A, Condition 19.e. In addition, this comment defines a cold steam turbine startup as a "startup after the steam turbine has been offline for 24 hours or more *and* the first stage turbine metal temperature is 250°F or less." (emphasis added) In correspondence dated November 14, 2000, TEC defined a cold steam turbine startup as the following: "A cold startup occurs either (1) when the first stage turbine metal temperature is 250°F or colder *or* (2) when the steam turbine has been offline for 24 hours or longer." (emphasis added) To be consistent with this definition, TEC requests that the Department modify the definition of a cold steam turbine startup to "startup after the steam turbine has been offline for 24 hours or more *or* the first stage turbine metal temperature is 250°F or less." (emphasis added)

Section III.C, Conditions 1 and 2

These conditions require that upon the shutdown of Gannon Units 5 and 6, the heat input limit from the coal yard must be reduced by the representative heat input of each shutdown unit. This condition is not required by either the Consent Decree or the Consent Final Judgment and does not allow for the degradation in heat rate of the remaining coal fired units, increased customer demand or the increased operation of the remaining coal fired units in the event of an unforeseen decrease in generation capacity due to the malfunction of another unit(s) on Tampa Electric Company's generating system. The heat input limit was placed on the coal yard to allow TEC to fire a variety of fuels without triggering PSD, not to limit the availability of the remaining coal fired units in accordance with the repowering project. Finally, compliance with the limits found in the coal yard permit is based on a calendar year. The new heat input limits in the draft Bayside air construction permit impose a new 12 month rolling average. To alleviate the concerns above, TEC requests that the heat input limits be changed as shown in the table below:

Condition	Limit in Draft Permit*	Proposed Limit**
III.C.1 Shutdown of Gannon Unit 5	$56.7 \times 10^{+06}$	$61.0 \times 10^{+06}$
III.C.2 Shutdown of Gannon Unit 6	$35.3 \times 10^{+06}$	$37.0 \times 10^{+06}$

*Units are mmBTU per consecutive 12 months.
**Units are mmBTU per calendar year.

Facility Description, Page 3

Within the Relevant Documents section, the EPA Consent Decree is described as being signed in February 2000. Although this is correct, the conditions contained within the Consent Decree did not take effect until the agreement was entered, which occurred on October 5, 2000. To be consistent with this, TEC requests that any references to the Consent Decree being signed in February 2000 be changed to reflect the fact that the Consent Decree was actually entered on October 5, 2000.

Section III.A, Condition 5

This condition states that each General Electric Model PG7241 (FA) is designed to produce 170 MW of *direct* electrical power. It is unclear why the word direct is emphasized in the condition, and what it is intended to mean. Rather than using the word 'direct', TEC suggests using the word 'nominal' to describe the capacity of the combustion turbines.

Section III.A, Condition 14.c

Condition 14.c limits oil firing in each combustion turbine at Bayside Station to 11,775,000 gallons per consecutive 12 months, and is based on an equivalent 875 hours per year of oil firing. However, at 59°F and 100% load, the fuel oil consumption as presented in the air construction permit application is 13,644 gallons per hour per combustion turbine. Over the course of one

calendar year, this would equate to 11,938,500 gallons of fuel oil consumed per combustion turbine. As such, TEC requests that the fuel oil consumption limit be modified to reflect this. In addition, to truly be equivalent, the condition should limit oil firing to 11,938,500 gallons of low sulfur distillate oil per *calendar year*, rather than per *consecutive 12 months*. For consistency, TEC requests that FDEP modify this condition to limit the low sulfur distillate oil firing in any Bayside Station combustion turbine to 11,938,500 gallons per calendar year.

Section III.A, Condition 16.c

Condition 16.c. limits the NO_x exhaust concentration when firing distillate oil to 12 ppmvd corrected to 15% oxygen. However, the permit application indicated that NO_x emissions when firing distillate oil would actually be 16.4 ppmvd corrected to 15% oxygen. The resulting NO_x emission rate at 59°F and 100% load is calculated to be 90.9 lb/hr as opposed to the 79.2 lb/hr value shown in the draft permit. Accordingly, TEC requests that the allowable NO_x emission limit during oil firing be changed from 79.2 lb/hr to 90.9 lb/hr.

Section III.A, Condition 27.a

This condition requires TEC to record CEM data, to the extent practicable, evenly over the course of an hour. This condition is unnecessary so long as TEC complies with the provisions of 40 CFR 75. As such, this language seems to be unnecessary and TEC requests that the Department remove it from the permit.

Section III.A, Condition 30

This condition requires TEC to monitor the fuel consumption rates of all allowable fuels to demonstrate compliance with fuel consumption limits. Since oil is the only fuel that is limited by the permit, TEC requests that this condition specify that natural gas consumption need not be monitored and recorded.

Section IV, Appendix GC, Condition G.2

This condition states, in part: "Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department." This language is vague and should be further defined to specify what constitutes an 'unauthorized deviation from the approved drawings or exhibits, specifications, or conditions'. For example, since the project is currently in the engineering/design phase, there may be deviations from the original drawings, exhibits, specifications, or conditions. However, most of these deviations will be minor and will not affect the operating characteristics of the units. To address this issue, TEC requests that FDEP modify the language by adding the underlined text as shown below:

"Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit resulting in a significant increase in actual annual emissions may constitute grounds for revocation and enforcement action by the Department."

Section II. Condition 12

Condition 12 requires submittal of a Title V operation permit application "at least ninety days prior to the expiration of this permit, but no later than 180 days after commencing operation." Bayside Units 1 and 2 are anticipated to commence operation in May 2003 and May 2004, respectively. To avoid multiple Title V permit revisions, TEC requests that this condition be changed to read:

"at least at least ninety days prior to the expiration of this permit, but no later than 180 days after commencing operation of Bayside Unit 2".

This schedule of Title V permit application submittal is consistent with recent Department guidance provided for Polk Power Station simple-cycle combustion turbines Units 2 and 3.

Technical Evaluation and Preliminary Determination, Paragraph 3.7

This paragraph refutes the claim that efforts to reduce NO_x emissions from Gannon Units 5 and 6 resulted in substantially higher CO emissions. In addition, the Department claims that AP-42 emission factors should be used in the netting analysis to determine past actual CO emissions from Gannon Units 5 and 6. The Department has not provided supporting evidence indicating that: 1) efforts to reduce NO_x emissions through limiting combustion O_2 do not have a substantial effect on CO emissions and 2) AP-42 emission factors reasonably represent CO emissions from a coal fired boiler using lean combustion to control NO_x emissions.

Technical Evaluation and Preliminary Determination, Paragraph 4.2

Please see the comment addressing Section III.A, Condition 14.c

Technical Evaluation and Preliminary Determination, Table 4.1

Table 4.1 identifies several recently permitted natural gas fired combined cycle combustion turbines and provides a detailed description of each including limits for CO, NO_x, PM, Sulfuric Acid Mist, and VOC. However, this list does not include the associated ammonia slip limit for each project. TEC requests that FDEP modify this table to include the ammonia slip limits associated with each project.

Technical Evaluation and Preliminary Determination, Paragraph 5

In Paragraph 5, FDEP refutes TEC's claim that emissions from the combustion turbines serving Bayside Unit 1 and Bayside Unit 2 should be considered separately when determining MACT applicability. Instead, it is the Department's position that emissions from every combustion turbine must be aggregated when determining MACT applicability. In previous correspondence, TEC submitted a detailed legal analysis including rule citations that concluded that when considering MACT applicability, emissions from separate processes or production units must be considered independently. TEC requests that the Department present TEC's argument in the Technical Evaluation and Preliminary Determination.

Technical Evaluation and Preliminary Determination, Paragraph 7.3

This paragraph assumes that future operation of any remaining coal fired generation at Gannon Station will be greatly reduced or ceased in 2003 or 2004. Specifically, the paragraph states, in part: "Because the settlement agreements require the shutdowns and repowering the Gannon plant with natural gas, "normal operations" for Gannon Units 1-4 are expected to be greatly reduced in 2003 with little or no operation in 2004." This is an assumption that, at this time, cannot be made. TEC is required to cease all coal fired operation at Gannon Station by January 1, 2005, and this requirement is established elsewhere in the permit. Paragraph 7.3 makes an unnecessary assumption about the operation of Gannon Station three to four years from now, and TEC requests that this condition be removed from the permit.

TEC appreciates the opportunity to provide the Department with comments on the remaining issues associated with the permitting of Bayside Units 1 and 2, and looks forward to discussing these issues in person on Wednesday, March 14, 2001 at 9:00 a.m. in Tallahassee. If you have any questions, please call Shannon Todd or me at (813) 641-5125.

Sincerely,

Gregory M. Nelson, P.E.
Director
Environmental Affairs

EP\gm\SKT244

c: Mr. Howard Rhodes, FDEP
Mr. Jerry Kissel, FDEP - SWD
Mr. Jerry Campbell, EPCHC
C. Halladay
EPA
NPS

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BUREAU OF AIR REGULATION

February 14, 2001

Mr. Clair Fancy
Florida Department of Environmental Protection
111 South Magnolia Drive, Suite 4
Tallahassee, Florida 32301

Via Fed Ex
Airbill No. 7904 7198 6300

Re: Tampa Electric Company (TEC) – Bayside Power Station
Air Construction Permit
DEP File No. 0570040-013-AC (PSD-FL-301)

Dear Mr. Sheplak:

Please find enclosed the original Affidavit of Publication from the Tampa Tribune, as required by 62-110.106(5), F.A.C. This public notice was published in the legal section of the Tampa Tribune on Saturday, February 10, 2001. If you have any questions, please feel free to telephone Shannon Todd or me at (813) 641-5125.

Sincerely,

Shannon K Todd
for

Patrick L. Shell
Administrator-Air Programs
Environmental Affairs

EP\gm\SKT236

Enclosure

c: Mr. Tom Davis - ECT
Mr. Jerry Campbell, EPCHC
Mr. Buck Oven, FDEP
Mr. Scott Sheplak, FDEP
Mr. Jerry Kissel - FDEP SW
Mr. John Bunyak - NPS
Q. Kaerner
C. Halladay
B. Worley, EPA

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THE TAMPA TRIBUNE
Published Daily
Tampa, Hillsborough County, Florida

State of Florida }
County of Hillsborough } ss.

Before the undersigned authority personally appeared J. Rosenthal, who on oath says that she is Classified Billing Manager of The Tampa Tribune, a daily newspaper published at Tampa in Hillsborough County, Florida; that the attached copy of advertisement being a

LEGAL NOTICE

in the matter of

PUBLIC NOTICE OF INTENT

was published in said newspaper in the issues of

FEBRUARY 10, 2001

Affiant further says that the said The Tampa Tribune is a newspaper published at Tampa in said Hillsborough County, Florida, and that the said newspaper has heretofore been continuously published in said Hillsborough County, Florida, each day and has been entered as second class mail matter at the post office in Tampa, in said Hillsborough County, Florida for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, this advertisement for publication in the said newspaper.

10

Sworn to and subscribed by me, this day of FEBRUARY, A.D. 20 '01

Personally Known ✓ or Produced Identification
Type of Identification Produced

OFFICIAL NOTARY SEAL
SUSIE LEE SLATON
COMMISSION NUMBER
CC828424
MY COMMISSION EXP.
APRIL 16, 2001

The applicant performed an air quality analysis in accordance with the Department's PSD requirements in Rule 62-212.400, F.A.C. Significant net increases in actual emissions were predicted for carbon monoxide and volatile organic compounds. The Department reviewed the applicant's analysis and modeling files. The ambient impact analysis predicted that emissions from the project would have an insignificant impact on Class II areas. Except for six national parks and wilderness areas, all of Florida is designated as a Class II area. No Class I significant impact levels have been defined for carbon monoxide or volatile organic compounds (ozone). The analysis also indicated that emissions from the project will not significantly contribute to or cause a violation of any state or federal ambient air quality standard when evaluated independently.

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
Tampa Electric Company
Bayside Power Station
(Gannon Re-Powering Project)
Project No. 0570040-013-AC
Draft Permit PSD-FL-301

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to the Tampa Electric Company to re-power the existing F. J. Gannon power plant on Tampa's Port Sutton Road in Hillsborough County, Florida. The re-powered plant will be renamed the Bayside Power Station and will have an electrical production capacity of approximately 1740 MW. The applicant's authorized representative is Ms. Karen Sheffield, the General Manager of the Bayside Power Station. The applicant's mailing address is Bayside Power Station, Port Sutton Road, Tampa, FL 33619.

In accordance with state and federal settlement agreements, the applicant proposes to re-power the existing Gannon Station with seven new combined cycle General Electric Model PG7241(FA) gas turbines. All existing coal-fired boilers will be shut down before January 1, 2005. The overall thermal efficiency of the plant is predicted to increase from approximately 30% to 55%. It is estimated that the Bayside project will reduce actual emissions of nitrogen oxides (NOx) by more than 28,000 tons per year, particulate matter by more than 1000 tons per year, and sulfur dioxide by more than 60,000 tons per year. Although not specifically required by rule for each pollutant, the proposed permit represents current Best Available Control Technology (BACT) measures for combined cycle gas turbines to control emissions of carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfur dioxide (SO2), and volatile organic compounds (VOC). The proposed permit also requires the continuous monitoring of CO and NOx emissions.

The project results in smaller, but significant increases in emissions of CO and VOC. Based on EPA Region 4's interpretation of netting for this project, it is also significant for emissions of PM/PM10. Therefore, the project is subject to review in accordance with Rule 62-212.400, F.A.C., the requirements for the Prevention of Significant Deterioration (PSD) of Air Quality, and BACT determinations are required for each significant pollutant. The Department determined BACT controls for the emissions of CO, PM/PM10, and VOC to be the efficient combustion of clean fuels. Pipeline-quality natural gas is the primary fuel and very low sulfur distillate oil (less than 0.05% sulfur by weight) is the backup fuel. Each unit may fire up to 875 hours of distillate oil per year, but only if natural gas cannot be fired. To reduce emissions of nitrogen oxides (NOx), each combined cycle unit incorporates dry low-NOx combustion technology when firing natural gas and water injection when firing oil. Pursuant to the state and federal settlement agreements, a Selective Catalytic Reduction (SCR) system for each unit is required to further reduce NOx emissions. As agreed to by the applicant, the proposed permit defers the determination of the Maximum Available Control Technology (MACT) for hazardous air pollutants (HAP) until after a unit is tested for HAP emissions.

The Department will issue the Final Permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions. The Department will accept written comments and requests for public meetings concerning the proposed permit issuance action for a period of thirty (30) days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written comments and requests for public meetings should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57, F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen (14) days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3), F.S. must be filed within fourteen (14) days of publication of the public notice or within fourteen (14) days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), F.S., however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Dept. of Environmental Protection
Bureau of Air Regulation
New Source Review Section
111 S. Magnolia Drive, Suite 4
Tallahassee, FL 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Dept. of Environmental Protection
Southwest District Office
Air Resources
3804 Coconut Palm Drive
Tampa, FL 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

Hillsborough County Environmental Protection Commission
Air Management Division
1410 North 21 Street
Tampa, FL 33605
Telephone: 813/272-5530
Fax: 813/272-5605

The complete project file includes the application, Technical Evaluation and Preliminary Determination, Draft Permit, and the information submitted by the responsible official, exclusive of confidential records under section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project, Jeff Koerner, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information. Key documents may be viewed at

www.dep.state.fl.us/air/permitting

and clicking on TEC Bayside.

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