

# Memorandum

# Florida Department of Environmental Protection

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TO: Hamilton Owen, P.E. Administrator  
DEP, Power Plant Siting Office

FROM: Jeff Koerner, New Source Review Section *JK*  
DEP, DARM - Bureau of Air Regulation

DATE: September 16, 1999

SUBJECT: TECO Power Services  
Hardee Power Station, Unit 2B  
75 MW Simple Cycle Combustion Turbine Project (PSD-FL-140A)

I received and approved a request from the applicant to make some very minor changes to the following specific conditions in Section III of Draft Permit No. PSD-FL-140A.

#4. Revised to clarify that a revised BACT analysis is necessary which may require the submittal of a full PSD permit application. Also included the appropriate rule citation.

#10. Revised to clarify that maintenance and tuning of the unit is to be in accordance with the manufacturer's recommended schedule.

#16.(b) Added "corrected to 15% oxygen" for the CO limit which was inadvertently omitted.

#39. Added the capability of maintaining records in an electronic format that could be printed at the Department's request.

I have attached the complete revised pages so that they may be inserted into the original permit intact. The revisions are italicized and date of revision is included in the header. All of these changes are very minor and will be revised in the Department's Final Permit. The applicant published the PSD Public Notice in The Tampa Tribune on September 4, 1999. The 30-day PSD public comment period will expire on October 3, 1999. I have attached a copy of the Public Notice provided by the applicant.

Please contact me at 414-7268 if you have any questions.

JFK

Attachments

### SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS *(Revised 09/16/99)*

4. Simple Cycle Operation Only: *The combustion turbine shall operate only in simple cycle mode. This requirement is based on the permittee's request which formed the basis of the NOx BACT determination and resulted in the emission standards specified in this permit. Specifically, the NOx BACT determination eliminated several control alternatives based on technical considerations and costs due to the elevated temperatures of the exhaust gas. Any request to convert this unit to combined cycle operation by installing a new heat recovery steam generator or connecting this unit to an existing heat recovery steam generator shall require the permittee to perform a new, current NOx BACT analysis and the approval of the Department through a permit modification. The results of this analysis may validate the initial BACT determination or result in the submittal of a full PSD permit application, new control equipment, and new emissions standards. [Rule 62-212.400(6)(b), F.A.C.]*
5. Allowable Fuels: The combustion turbine shall be fired by pipeline natural gas containing no more than 2 grains of sulfur per 100 dry standard cubic feet of gas. As a backup fuel, the combustion turbine may be fired with No. 2 distillate oil (or a superior grade) containing no more than 0.05% sulfur by weight. Compliance with limits on fuel sulfur content shall be demonstrated by the record keeping requirements and/or the conditions of the Alternate Monitoring Plan specified in this permit. It is noted that these limitations are much more stringent than the NSPS sulfur dioxide limitation and assure compliance with 40 CFR 60.333 and 60.334. [Applicant Request, Rule 62-210.200, F.A.C. (Definition - Potential Emissions)]
6. Hours of Operation: The hours of operation of the combustion turbine are not limited when firing natural gas (8760 hours per year). The combustion turbine shall not fire low sulfur distillate oil for more than 876 hours during any consecutive 12 months. Operation below 50% of baseline operation shall be limited to two (2) hours per unit cycle (breaker open to breaker closed). The permittee shall install, calibrate, operate and maintain fuel flow meters to measure and accumulate the amount of each fuel fired in the combustion turbine. [Applicant Request; Rule 62-212.400, F.A.C. (BACT); Rule 62-210.200, F.A.C. (Definitions - Potential Emissions)]
7. Operating Procedures: The Best Available Control Technology (BACT) determinations established by this permit rely on "good operating practices" to minimize emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the combustion turbine and pollution control devices in accordance with the guidelines and procedures established by each equipment manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions. [Applicant Request; Rule 62-4.070(3); Rule 62-212.400, F.A.C. (BACT)]
8. Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the Compliance Authority as soon as possible, but at least within one (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]

#### EMISSIONS CONTROLS

9. Automated Control System: In accordance with the manufacturer's recommendations, the permittee shall install, calibrate, tune, operate, and maintain the General Electric Speedtronic™ Gas Turbine Control System. This system shall be designed and operated to monitor and control the gas turbine combustion process and operating parameters including, but not limited to: fuel distribution and staging, turbine speed, load conditions, combustion temperatures, water injection, and fully automated startup, shutdown, and cool-down. [Design; Rule 62-4.070(3); Rule 62-212.400, F.A.C. (BACT)]

**SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS** (Revised 09/16/99)

10. **Combustion Controls:** The owner and operators shall employ "good operating practices" in accordance with the manufacturer's recommended operating procedures to control CO, NOx, and VOC emissions. Prior to the required initial emissions performance testing, the combustion turbine, dry low-NOx (DLN) combustors, and Speedtronic™ control system shall be tuned to optimize the reduction of CO, NOx, and VOC emissions. Thereafter, these systems shall be maintained and tuned *in accordance with the manufacturer's recommendations*. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]
11. **DLN Combustion Technology:** To control NOx emissions when firing natural gas, the permittee shall install, tune, operate and maintain dry low-NOx (DLN) combustors on the combustion turbine. The permittee shall provide manufacturer's emissions performance versus load diagrams for the specific DLN system prior to commencement of operation. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]
12. **Water Injection:** To control NOx emissions when firing low sulfur distillate oil, the permittee shall install, calibrate and operate an automated water injection system. This system shall be maintained and adjusted to provide the minimum NOx emissions possible by water injection. The permittee shall provide manufacturer's emissions performance versus load diagrams for the specific water injection system prior to commencement of operation. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]
13. **Circumvention:** The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
14. **Unconfined Particulate Emissions:** During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

**EMISSIONS STANDARDS**

15. **Emissions Standards Summary:** The following table summarizes the emissions standards determined by the Department. These standards or the equivalents are provided in the specific permit conditions.

| EU-004: GE Model 7EA Combustion Turbine |   |  |
|---|---|--|
| Pollutant                               | Controls <sup>b</sup>   | Emission Standard  |
| CO                                      | Gas Firing W/DLN, First 12 Months After Initial Startup       | 25.0 ppmvd @ 15% oxygen<br>54.0 pounds per hour                        |
|   | Gas Firing W/DLN, After First 12 Months After Initial Startup | 20.0 ppmvd @ 15% oxygen<br>43.0 pounds per hour                        |
|   | Oil Firing W/Wet Injection                                    | 20.0 ppmvd @ 15% oxygen<br>43.0 pounds per hour                        |
| NOx                                     | Gas Firing W/DLN  | 9.0 ppmvd @ 15% oxygen<br>32.0 pounds per hour                         |
|   | Oil Firing W/Wet Injection                                    | 42.0 ppmvd @ 15% oxygen<br>167.0 pounds per hour                       |
| PM/PM10                                 | Fuel Sulfur Specifications and Combustion Design              | Visible emissions ≤ 10% opacity<br>(PM estimated at 0.002 grains/dscf) |
| SAM <sup>a</sup> /SO2                   | Natural Gas Sulfur Specification                              | 2 grain per 100 SCF of gas   |
|   | Low Sulfur Distillate Oil Sulfur Specification                | 0.05% sulfur by weight   |
| VOC <sup>a</sup>                        | Gas Firing W/Combustion Design                                | 2.0 ppmvd as methane<br>2.0 pounds per hour                            |
|   | Oil Firing W/Combustion Design                                | 4.0 ppmvd as methane<br>5.0 pounds per hour                            |

<sup>a</sup> The VOC and SAM standards are synthetic (PSD) minor limits - not BACT limits.

<sup>b</sup> DLN means dry low-NOx controls. Oil firing is limited to 876 hours during any consecutive 12 months.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (Revised 09/16/99)

16. Carbon Monoxide (CO)

- (a) **Gas Firing:** During the first 12 months after initial startup, CO emissions shall not exceed 54.0 pounds per hour nor 25.0 ppmvd corrected to 15% oxygen based on a 3-hour test average when firing natural gas in the combustion turbine. Thereafter, CO emissions shall not exceed 43.0 pounds per hour nor 20.0 ppmvd corrected to 15% oxygen based on a 3-hour test average when firing natural gas in the combustion turbine.
- (b) **Oil Firing:** When firing low sulfur distillate oil in the combustion turbine, CO emissions shall not exceed 43.0 pounds per hour nor 20.0 ppmvd *corrected to 15% oxygen* based on a 3-hour test average.

The permittee shall demonstrate compliance with these standards by conducting tests in accordance with EPA Method 10 and the performance testing requirements of this permit. [Rule 62-212.400, F.A.C. (BACT)]

17. Nitrogen Oxides (NO<sub>x</sub>)

- (a) **Gas Firing:** When firing natural gas in the combustion turbine, NO<sub>x</sub> emissions shall not exceed 32.0 pounds per hour nor 9.0 ppmvd corrected to 15% oxygen based on a 3-hour test average. In addition, NO<sub>x</sub> emissions shall not exceed 9.0 ppmvd corrected to 15% oxygen based on a 24-hour block average for data collected from the continuous emissions monitor.
- (b) **Oil Firing:** When firing low sulfur distillate oil in the combustion turbine, NO<sub>x</sub> emissions shall not exceed 167.0 pounds per hour nor 42.0 ppmvd corrected to 15% oxygen based on a 3-hour test average. In addition, NO<sub>x</sub> emissions shall not exceed 42.0 ppmvd corrected to 15% oxygen based on a 3-hour block average for data collected from the continuous emissions monitor.

NO<sub>x</sub> emissions are defined as emissions of oxides of nitrogen measured as NO<sub>2</sub>. The permittee shall demonstrate compliance by conducting tests in accordance with EPA Methods 7E, 20 and the performance testing requirements of this permit. Compliance with the 3-hour and 24-hour block averages shall be demonstrated by collecting and reporting data in accordance with the conditions for the NO<sub>x</sub> continuous emissions monitor specified by this permit. [Rule 62-212.400, F.A.C. (BACT)]

18. Particulate Matter (PM/PM<sub>10</sub>), Sulfuric Acid Mist (SAM) and Sulfur Dioxides (SO<sub>2</sub>)

- (a) **Fuel Specifications:** Emissions of PM, PM<sub>10</sub>, SAM, and SO<sub>2</sub> shall be limited by the good combustion techniques and the fuel sulfur limitations specified in this permit. The permittee shall demonstrate compliance with the fuel sulfur limits by maintaining records of the sampling and analysis required by this permit and/or as specified in the provisions of the Alternate Monitoring Plan. [Rule 62-212.400, F.A.C. (BACT)]
- (b) **VE Standard:** As a surrogate for PM/PM<sub>10</sub> emissions, visible emissions from the operation of the combustion turbine shall not exceed 10% opacity, based on a 6-minute average. The permittee shall demonstrate compliance with this standard shall by conducting tests in accordance with EPA Method 9 and the performance testing requirements of this permit. [Rule 62-212.400, F.A.C. (BACT)]

19. Volatile Organic Compounds (VOC)

- (a) **Gas Firing:** When firing natural gas in the combustion turbine, VOC emissions shall not exceed 2.0 pounds per hour nor 2.0 ppmvd based on a 3-hour test average.
- (b) **Oil Firing:** When firing low sulfur distillate oil in the combustion turbine, VOC emissions shall not exceed 5.0 pounds per hour nor 4.0 ppmvd based on a 3-hour test average.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (Revised 09/16/99)

- (a) The NO<sub>x</sub> CEM data may be used in lieu of the monitoring system for water-to-fuel ratio and the reporting of excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG. Subject to EPA approval, the calibration of the water-to-fuel ratio-monitoring device required in 40 CFR 60.335(c)(2) will be replaced by the 40 CFR 75 certification tests of the NO<sub>x</sub> CEMS.
- (b) The NO<sub>x</sub> CEM data shall be used in lieu of the requirement for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG.
- (c) When requested by the Department, the CEMS emission rates for NO<sub>x</sub> on this unit shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>x</sub> standard established in 40 CFR 60.332.
- (d) A **custom fuel monitoring schedule** pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following conditions are met.
  - (1) The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
  - (2) The permittee shall submit a monitoring plan, certified by signature of the Authorized Representative, that commits to using a primary fuel of pipeline supplied natural gas containing no more than 2 grains of sulfur per 100 SCF of gas pursuant to 40 CFR 75.11(d)(2);
  - (3) Each unit shall be monitored for SO<sub>2</sub> emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.

This custom fuel-monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO<sub>2</sub> emissions must be accounted for as required pursuant to 40 CFR 75.11(d).

[40 CFR 60, Subpart GG, Applicant Request]

39. **Monthly Operations Summary:** By the fifth calendar day of each month, the owner or operator shall record the following information in a written (*or electronic*) log for the previous month of operation: the amount of hours each fuel was fired; the quantity of each fuel fired; the calculated average heat input of each fuel fired in mmBTU per hour, based on the lower heating value; and the average sulfur content of each fuel. In addition, the owner or operator shall record the hours of oil firing for the previous 12 months of operation. The Monthly Operations Summary shall be maintained on site in a legible format available for inspection *or printed* at the Department's request. [Rule 62-4.160(15), F.A.C.]

**REPORTS**

40. **Emissions Performance Test Reports:** A report indicating the results of the required emissions performance tests shall be submitted to the Compliance Authority no later than 45 days after completion of the last test run. The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8)(c), F.A.C. [Rule 62-297.310(8), F.A.C.].
41. **Excess Emissions Reporting:** If excess emissions occur due to malfunction, the owner or operator shall notify the Compliance Authority within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In

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SEP 07 1999

TECO Power Services

THE TAMPA TRIBUNE

Published Daily

Tampa, Hillsborough County, Florida

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SEP 09 1999

BUREAU OF AIR REGULATION

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 \_\_\_\_\_

SEPTEMBER 4, 1999

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.

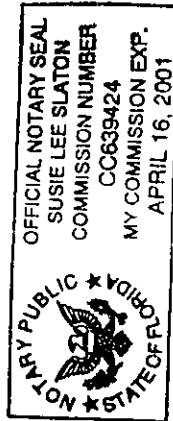
*J. Rosenthal*

Sworn to and subscribed before me, this \_\_\_\_\_ day  
of \_\_\_\_\_ SEPTEMBER \_\_\_\_\_ 99  
A.D. 19\_\_\_\_

Personally Known \_\_\_\_\_ or Product Identification \_\_\_\_\_  
Type of Identification Produced \_\_\_\_\_

(SEAL)

*Susie Lee Slaton*



PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. PSD-FL-140(A) PPS No. PA89-25 TECO Power Services Hardee Power Station Unit 2B Hardee County

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit under the requirements for the Prevention of Significant Deterioration (PSD) of Air Quality to TECO Power Services. The permit is to install one General Electric Model No. PG7121 7EA dual-fuel simple cycle combustion turbine with electrical generator set having a nominal power production of 75 MW. The new unit will use the existing infrastructure including all storage and support equipment. Pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, a Best Available Control Technology (BACT) determination was required for carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfur dioxide (SO2). Dry low-NOx (DLN) combustion technology will be used to control nitrogen oxide emissions when firing the primary fuel of pipeline natural gas. Water injection will be used to control nitrogen oxide emissions when firing low sulfur distillate oil as a backup fuel for up to 876 hours per year. Combustion design and clean fuels will be used to minimize emissions of carbon monoxide, particulate matter, sulfuric acid mist, sulfur dioxide, and volatile organic compounds. The applicant's name and address are: Richard E. Ludwig, President and Authorized Representative, TECO Power Services; 702 North Franklin Street, Tampa, FL 33602. Based on the permit application and Department's BACT determination, the maximum pollutant emissions from the combustion turbine (in tons per year) are summarized below.

| Pollutant | Project Potential Emissions | PSD Significant Emissions Rate |
|-----------|-----------------------------|--------------------------------|
| CO        | 237                         | 100                            |
| CO        | 188                         | 100                            |
| NOx       | 199                         | 40                             |
| PM10      | 50                          | 15                             |
| SO2       | 44                          | 40                             |
| VOC       | 10                          | 40                             |

An air quality impact analysis was conducted. Maximum predicted impacts due to proposed emissions from the project are less than the applicable PSD Class I and Class II significance impact levels.

The Department will accept written comments and requests for a public hearing (meeting) concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of Public Notice of Intent to Issue PSD Permit.

# INTEROFFICE MEMORANDUM

**Sensitivity:** COMPANY CONFIDENTIAL

**Date:** 14-Sep-1999 03:32pm

**From:** Jeff Koerner TAL  
KOERNER\_J

**Dept:**

**Tel No:**

**To:** Paul Carpinone

( carpin@ix.netcom.com )

**To:** Tom Davis

( tdavis@ectinc.com )

**To:** Alvaro Linero TAL

( LINERO\_A )

**Subject:** Response to Requested Changes

Attached is the Department's response.

Paul Carpione, Hardee Power Partners  
Draft Permit No. PSD-FL-140(a)  
Response to Requested Changes  
Page 2

**By Email**

September 14, 1999

**To:** Paul Carpione, Director – Environmental  
Hardee Power Partners

**From:** Jeff Koerner, New Source Review Section  
Florida Department of Environmental Protection  
Jeff.Koerner@dep.state.fl.us

**Re:** TECO Power Services, Hardee Power Station – Unit 2B  
Draft Permit No. PSD-FL-140(a)

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The Department received your faxed comments on the Draft Permit for Unit 2B at the Hardee Power Station. The following comments are in response to your requested changes.

**Section II, Permit Condition No. 11 and Section III, Permit Condition No. 38(d)(1):** The requirement to submit a Title IV application is a federal requirement pursuant to 40 CFR 72. The Department has no discretion to waive this federal requirement. I would recommend submittal of the Title IV application as soon as possible and discussing this issue with the EPA Region 4 office in Atlanta. If the Title IV application is submitted prior to issuance of the Final PSD Permit, the Department will include language in the permit to indicate that the requirement to submit a Title IV application has been met without commenting on the timeliness.

**Section III, Permit Condition No. 4:** The Department included this condition as a reminder that the Best Available Control Technology (BACT) determination relied upon specific information provided by the applicant regarding the intended plans for this unit. The purpose is to ensure that the integrity of the BACT process is maintained. For this project, conventional SCR was eliminated as not being technically feasible because the elevated temperature of the combustion turbine operating in simple cycle mode was beyond the acceptable operating range. In its place, hot SCR was evaluated – a much more costly option. Hot SCR was rejected due to unreasonable costs. The applicant indicated that there are no plans to operate this unit in combined cycle mode. The Department considers this statement at face value, but intends to obligate the applicant.

In addition, the current facility consists of several similar combustion turbines, some of which are combined cycle units. It is reasonable to anticipate that future demands may necessitate converting Unit 2B to combined cycle operation by connecting to an existing heat recovery steam generator (HRSG) or installing a new HRSG for this unit. Although no new emissions would result, the BACT determination must be revisited because of the substantial change to the original basis of the BACT determination. The condition *may not* result in any new controls, only that the BACT review process be properly followed. By including this condition, the Department intends to clarify this potential situation and clearly notify the applicant of this obligation. The purpose is to avoid confusion in order to streamline such a request for a modification. As you indicated, the rule citation was inadvertently omitted. This condition is based upon the following rule:

**Rule 62-212.400(6)(b), F.A.C.:** “Phased Construction Projects - For phased construction projects, the determination of BACT shall be reviewed and modified in accordance with 40 CFR 51.166(j)(4), adopted and incorporated by reference in Rule 62-204.800, F.A.C.”



The Department is considering the following changes to this permit condition.

4. **Simple Cycle Operation Only:** The combustion turbine shall operate only in simple cycle mode. This requirement is based on the permittee's request which formed the basis of the NOx BACT determination and resulted in the emission standards specified in this permit. Specifically, the NOx BACT determination eliminated several control alternatives based on technical considerations and costs due to the elevated temperatures of the exhaust gas. Any request to convert this unit to combined cycle operation by installing a new heat recovery steam generator or connecting this unit to an existing heat recovery steam generator shall require the permittee to perform a new, current NOx BACT analysis and the approval of the Department through a permit modification. The results of this analysis may validate the initial BACT determination or result in the submittal of a full PSD permit application, new control equipment, and new emissions standards. [Rule 62-212.400(6)(b), F.A.C.]

Note that this condition only prevents simple cycle operation until a new BACT analysis is performed and a corresponding permit modification is obtained. If the intent to operate this unit only in simple cycle mode has changed, please modify your PSD permit application accordingly.

**Section III, Permit Condition No. 10:** The Department fully expects the combustion turbine to operate at emissions levels below the permit limits. In fact, the permit limits contain a substantial margin above the actual expected emissions. However, as control systems age, they may degrade or require tuning to achieve optimal performance of the equipment. In addition, the poor operation of a unit may result in increased pollutant emissions. The Department believes that it is important properly maintain and operate the control equipment *in accordance with the manufacturer's recommendations*. The result will be reduced pollutant emissions and more successful compliance with the permit limits. This condition will remain unchanged.

If you have any further comments or questions, please contact me at 850/414-7268.

OR 14-1

Is your RETURN ADDRESS completed on the reverse side?

**SENDER:**

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

- 1.  Addressee's Address
- 2.  Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
 MR. Jeff Koerner, P.E.  
 Bureau of Air Regulation  
 New Source Review Section  
 Florida Department of Environmental  
 Protection  
 Suite 4  
 111 South Magnolia Drive  
 Tallahassee, Florida 32301

5. Signature (Addressee)

6. Signature (Agent)

4a. Article Number  
 Z 511 343 793

4b. Service Type  
 Registered     Insured  
 Certified     COD  
 Express Mail     Return Receipt for Merchandise

7. Date of Delivery

8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.



# HARDEE POWER PARTNERS

By Fax

September 13, 1999

Mr. Jeff Koerner, P.E.  
Bureau of Air Regulation  
New Source Review Section  
Florida Department of Environmental Protection  
Suite 4  
111 South Magnolia Drive  
Tallahassee, Florida 32301

Re: TECO Power Services, Hardee Power Station – Unit 2B  
FDEP File No. PSD-FL-140(a);

Dear Mr. Koerner:

We have received and reviewed the materials that you forwarded concerning the proposed Unit 2B addition at the Hardee Power Station. We appreciate the opportunity to provide comments on the permit conditions for the project and appreciate your willingness to share that material with us and to discuss our concerns. With a few exceptions, we are in agreement with the proposed permit documents and the specific conditions that relate to this project. We do have some comments on several conditions that we hope the Department will be in a position to address as their inclusion in the final permit will create significant problems for the project. These comments are addressed below.

General and Administrative Requirements -- Paragraph No. 11 of this section of the permit draft requires that a Title IV permit application for the project be filed at least 24 months prior to the date on which the new unit begins serving an electrical generator greater than 25 megawatts. We recognize that this requirement is contained in the Department's rules, and in the Environmental Protection Agency (EPA) regulations on this issue. For this project, however, the 24 month time frame is not applicable. Due to the shorter construction period for the type of facility that we are proposing, and based on the schedule that we are operating under presently, we would have to have submitted the Title IV permit application in May of this year in order to comply with this condition. This, of

course, would have been prior to the time that we submitted the permit application that is presently under review.

We suggest that this condition be modified to reflect the construction schedule and the operation schedule under which we are proceeding. It would be reasonable to require that the Title IV permit application be submitted not later than January 1, 2000.

Performance Restriction – Paragraph No. 4 under this section provides that the permittee may request that the unit be operated in a combined cycle mode by installing a heat recovery steam generator, but that such a request would require modification of the permit, a full PSD permit application, and a new BACT review, apparently without regard to whether the proposed change in the method of operation would constitute a modification that would be subject to PSD review. This particular condition does not contain any citations to the regulations that would authorize its inclusion in the permit. We object to this condition and request that it be removed completely from the permit. Although we have no current firm plans for converting the facility into a combined cycle unit in the future, should the determination be made to do so, the proposal would be subjected to the regulatory analysis that is applicable and in place at the time. We see no need to prejudge the operation or to impose requirements now that may not be authorized, based upon the facts that are developed at the time any request to modify the facility is made. If a change is proposed and it does not trigger PSD review, there would be no basis for requiring the changed facility to undergo a new BACT analysis, as we understand it. This condition, therefore, appears not to be authorize by applicable regulations.

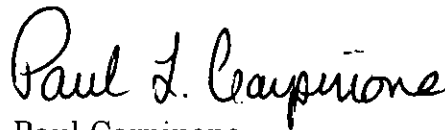
Emissions Controls – Paragraph No. 10 of this section contains a requirement that the operator employ good operating practices for the facility and that the system be tuned to optimize the reduction of certain pollutants and be maintained and tuned to minimize pollutant emissions. We certainly intend to operate the facility in a manner that ensures compliance with the emission limitations that are contained in the permit at all times. However, we believe that inclusion of such terms as "optimize" and "minimize" could lead to interpretational difficulties in the future. These terms could be construed to require that the facility be operated at levels below the emission limitations contained in the permit documents. We do not believe that this is the intent of the Department, and we request that these terms be deleted and that the condition be rewritten to refer to the emission limitations. We certainly have no objection to a requirement that the system be operated in such a manner as to ensure compliance with specified emission limitations contained in the permit.

Mr. Koerner  
September 13, 1999  
Page 3

Continuous Monitoring Requirements – Condition 38(d)(1) repeats the requirement that an acid rain permit be applied for 24 months before the beginning of commercial operation. As noted above, this time limit is not feasible based upon the construction and operation schedule for this unit. We request that it be changed to reflect the schedule for the project and further suggest that the application be required to be submitted prior to January 1, 2000.

We appreciate the opportunity to provide these comments and look forward to working with you to resolve these issues. We will be in contact with you to discuss the matter in more detail. In the meantime, if you have any questions, please give me a call.

Sincerely,



Paul Carpinone  
Director, Environmental

Cc: L.N. Curtin (H&K)  
T. Davis (ECT)

## FACSIMILE TRANSMITTAL



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Tampa, FL 33602

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Phone: (813) 228-1675

Fax: (813) 228-1360

**PLEASE DELIVER IMMEDIATELY**

TO: Mr. Jeff Koerner, P.E. 850-922-6979

FROM: Justino Morales

DATE: September 13, 1999

RE:

MESSAGE:

NUMBER OF PAGES (Including this cover page): 2  
HARD COPY TO FOLLOW: YES  
IF ANY PROBLEMS, CALL (813) 228-1675

### CONFIDENTIALITY NOTE:

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# HARDEE POWER PARTNERS

By Fax

September 13, 1999

Mr. Jeff Koerner, P.E.  
Bureau of Air Regulation  
New Source Review Section  
Florida Department of Environmental Protection  
Suite 4  
111 South Magnolia Drive  
Tallahassee, Florida 32301

Re: TECO Power Services, Hardee Power Station - Unit 2B  
FDEP File No. PSD-FL-140(a);

Dear Mr. Koerner:

We have received and reviewed the materials that you forwarded concerning the proposed Unit 2B addition at the Hardee Power Station. We appreciate the opportunity to provide comments on the permit conditions for the project and appreciate your willingness to share that material with us and to discuss our concerns. With a few exceptions, we are in agreement with the proposed permit documents and the specific conditions that relate to this project. We do have some comments on several conditions that we hope the Department will be in a position to address as their inclusion in the final permit will create significant problems for the project. These comments are addressed below.

General and Administrative Requirements -- Paragraph No. 11 of this section of the permit draft requires that a Title IV permit application for the project be filed at least 24 months prior to the date on which the new unit begins serving an electrical generator greater than 25 megawatts. We recognize that this requirement is contained in the Department's rules, and in the Environmental Protection Agency (EPA) regulations on this issue. For this project, however, the 24 month time frame is not applicable. Due to the shorter construction period for the type of facility that we are proposing, and based on the schedule that we are operating under presently, we would have to have submitted the Title IV permit application in May of this year in order to comply with this condition. This, of

Mr. Koerner  
September 13, 1999  
Page 2

course, would have been prior to the time that we submitted the permit application that is presently under review.

We suggest that this condition be modified to reflect the construction schedule and the operation schedule under which we are proceeding. It would be reasonable to require that the Title IV permit application be submitted not later than January 1, 2000.

Performance Restriction – Paragraph No. 4 under this section provides that the permittee may request that the unit be operated in a combined cycle mode by installing a heat recovery steam generator, but that such a request would require modification of the permit, a full PSD permit application, and a new BACT review, apparently without regard to whether the proposed change in the method of operation would constitute a modification that would be subject to PSD review. This particular condition does not contain any citations to the regulations that would authorize its inclusion in the permit. We object to this condition and request that it be removed completely from the permit. Although we have no current firm plans for converting the facility into a combined cycle unit in the future, should the determination be made to do so, the proposal would be subjected to the regulatory analysis that is applicable and in place at the time. We see no need to prejudge the operation or to impose requirements now that may not be authorized, based upon the facts that are developed at the time any request to modify the facility is made. If a change is proposed and it does not trigger PSD review, there would be no basis for requiring the changed facility to undergo a new BACT analysis, as we understand it. This condition, therefore, appears not to be authorized by applicable regulations.

Emissions Controls – Paragraph No. 10 of this section contains a requirement that the operator employ good operating practices for the facility and that the system be tuned to optimize the reduction of certain pollutants and be maintained and tuned to minimize pollutant emissions. We certainly intend to operate the facility in a manner that ensures compliance with the emission limitations that are contained in the permit at all times. However, we believe that inclusion of such terms as "optimize" and "minimize" could lead to interpretational difficulties in the future. These terms could be construed to require that the facility be operated at levels below the emission limitations contained in the permit documents. We do not believe that this is the intent of the Department, and we request that these terms be deleted and that the condition be rewritten to refer to the emission limitations. We certainly have no objection to a requirement that the system be operated in such a manner as to ensure compliance with specified emission limitations contained in the permit.

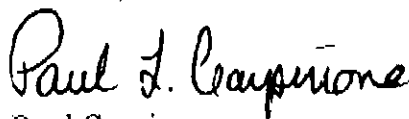


Mr. Koerner  
September 13, 1999  
Page 3

Continuous Monitoring Requirements - Condition 38(d)(1) repeats the requirement that an acid rain permit be applied for 24 months before the beginning of commercial operation. As noted above, this time limit is not feasible based upon the construction and operation schedule for this unit. We request that it be changed to reflect the schedule for the project and further suggest that the application be required to be submitted prior to January 1, 2000.

We appreciate the opportunity to provide these comments and look forward to working with you to resolve these issues. We will be in contact with you to discuss the matter in more detail. In the meantime, if you have any questions, please give me a call.

Sincerely,



Paul Carpinone  
Director, Environmental

Cc: L.N. Curtin (H&K)  
T. Davis (ECT)

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| Post Office, State, & ZIP Code                              |    | Atlanta GA            |  |
| Postage   | \$ |                       |  |
| Certified Fee   |    |                       |  |
| Special Delivery Fee  |    |                       |  |
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|   |    | Hardce P.S.           |  |
|   |    | P5D-EI-1401a 20-89-25 |  |

PS Form 3800 April 1995

| Pollutant               | Project Potential Emissions PSD Significant Emissions Rate |
|-------------------------|--|
| CO                      | 237  |
| (First 12 months)       | 100  |
| CO                      | 188  |
| (After First 12 Months) | 40   |
| NOx                     | 199  |
| PM10                    | 50   |
| SO2                     | 44   |
| VOC                     | 10   |

An air quality impact analysis was conducted. Maximum predicted impacts due to proposed emissions from the project are less than the applicable PSD Class I and Class II significance impact levels.

The Department will accept written comments and requests for a public hearing (meeting) concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of "Public Notice of Intent to Issue PSD Permit." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station # 505, 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.

This PSD permitting action is being coordinated with a certification under the Power Plant Siting Act (Sections 403.501-519, F.S.). If a petition for an administrative hearing on the Department's intent to issue is filed by a substantially affected person, that hearing shall be consolidated with the certification hearing, as provided under Section 403.507(3). 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 of the Florida Statutes. 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, 32309-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen 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) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), 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 of the Florida Administrative Code.

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 interest 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, as well as the rules and statutes which entitle the petitioner to relief; and (f) A demand for relief.

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. 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  
111 S. Magnolia Drive, Suite 4  
Tallahassee, Florida 32301  
Telephone: 850/488-0114  
Fax: 850/922-6979  
Dept. of Environmental Protection  
South District Office  
3804 Coconut Palm Drive  
Tampa, Florida 33619-8318  
Telephone: (813) 744-6100  
Fax: (813) 744-6084  
TECO Power Services  
702 North Franklin Street  
Tampa, FL 33602  
Telephone: 813/228-1311  
Fax: 813/228-1360

The complete project file includes the Draft Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

4928 9/4/99

RECEIVED  
SEP 07 1999  
TECO Power Services

THE TAMPA TRIBUNE  
Published Daily  
Tampa, Hillsborough County, Florida  
RECEIVED  
SEP 09 1999

State of Florida }  
County of Hillsborough } ss.

BUREAU OF AIR REGULATION

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 \_\_\_\_\_  
SEPTEMBER 4, 1999

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.

*J. Rosenthal*  
7

Sworn to and subscribed before me, this \_\_\_\_\_ day  
of \_\_\_\_\_ SEPTEMBER \_\_\_\_\_, A.D. 19 99

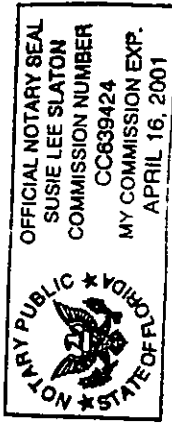
Personally Known \_\_\_\_\_ or Product Identification \_\_\_\_\_  
Type of Identification Produced \_\_\_\_\_

(SEAL)

*Susie Lee Slaton*

CC:

PUBLIC NOTICE OF INTENT  
TO ISSUE PSD PERMIT  
STATE OF FLORIDA  
DEPARTMENT OF  
ENVIRONMENTAL PROTECTION  
DEP File No. PSD-FL-140(A)  
PPS No. PA89-25  
TECO Power Services  
Hardee Power Station Unit 2E  
Hardee County  
The Department of Environmental Protection (Department) gives notice of its intent to issue a permit under the requirements for the Prevention of Significant Deterioration (PSD) of Air Quality to TECO Power Services. The permit is to install one General Electric Model No. PG7121 7EA dual-fuel simple cycle combustion turbine with electrical generator set having a nominal power production of 75 MW. The new unit will use the existing infrastructure including oil storage and support equipment. Pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, a Best Available Control Technology (BACT) determination was required for carbon monoxide (CO), nitrogen oxides (NOx), particulate matter (PM/PM10), sulfur dioxide (SO2), Dry low-NOx (DLN) combustion technology will be used to control nitrogen oxide emissions when firing the primary fuel of pipeline natural gas. Water injection will be used to control nitrogen oxide emissions when firing low sulfur distillate oil as a backup fuel for up to 876 hours per year. Combustion design and clean fuels will be used to minimize emissions of carbon monoxide, particulate matter, sulfuric acid mist, sulfur dioxide, and volatile organic compounds. The applicant's name and address are: Richard E. Ludwig, President and Authorized Representative, TECO Power Services, 702 North Franklin Street, Tampa, FL 33602. Based on the permit application and Department's BACT determination, the maximum pollutant emissions from the combustion turbine (in tons per year) are summarized below.



| Pollutant               | Project Potential Emissions Rate | PSD Significant Emissions Rate |
|-------------------------|----------------------------------|--------------------------------|
| CO                      | 237                              | 100                            |
| (First 12 months)       |                                  |                                |
| CO                      | 188                              | 100                            |
| (After First 12 Months) |                                  |                                |
| NOx                     | 199                              | 40                             |
| PM10                    | 50                               | 15                             |
| SO2                     | 44                               | 40                             |
| VOC                     | 10                               | 40                             |

An air quality impact analysis was conducted. Maximum predicted impacts due to proposed emissions from the project are less than the applicable PSD Class I and Class II, significance impact levels.

The Department will accept written comments and requests for a public hearing (meeting) concerning the proposed permit issuance action for a period of 30 (thirty) days from the date of publication of "Public Notice of Intent to Issue PSD Permit." Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5305, Tallahassee, FL 32309-2400. 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.

This PSD permitting action is being coordinated with a certification under the Power Plant Siting Act (Sections 403.501-519, F.S.). If a petition for an administrative hearing on the Department's intent to issue is filed by a substantially affected person, that hearing shall be consolidated with the certification hearing, as provided under Section 403.507(3). 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 of the Florida Statutes. 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, 32309-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under Section 120.60(2) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under Section 120.60(3), 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 of 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 of the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

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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.

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.

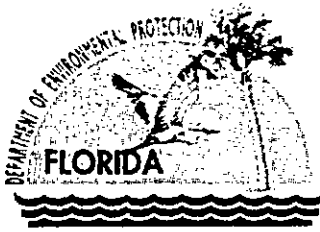
A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

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

Dept. of Environmental Protection  
South District Office  
3804 Coconut Palm Drive  
Tampa, Florida 33619-8318  
Telephone: (813) 744-6100  
Fax: (813) 744-6084

TECO Power Services  
702 North Franklin Street  
Tampa, FL 33602  
Telephone: 813/228-1311  
Fax: 813/228-1360

The complete project file includes the Draft Permit, the application, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the New Resource Review Section at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.



Jeb Bush  
Governor

# Department of Environmental Protection

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
August 30, 1999

David B. Struhs  
Secretary

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. R. Douglas Neeley, Chief  
Air, Radiation Technology Branch  
US EPA Region IV  
61 Forsyth Street  
Atlanta, GA 30303

Re: PSD Review and Custom Fuel Monitoring Schedule  
TECO Power Services' Hardee Power Station Unit 2B  
PSD-FL-140(A) / PA89-25

Dear Mr. Neeley:

Enclosed is a copy of the Department's draft permit to construct Unit 2B for the Hardee Power Station in Hardee County, Florida. The Department's Intent to Issue package was already mailed to Mr. Gregg Worley of Region 4. This project consists of adding one General Electric Model No. PG7121 7EA dual-fuel simple cycle combustion turbine with electrical generator set having a nominal power production of 75 MW. TECO Power Services identifies the new combustion turbine as "Unit 2B". The new unit will use the existing infrastructure including oil storage and support equipment. Dry low-NOx (DLN) combustion technology will be used to control nitrogen oxide emissions when firing the primary fuel of pipeline natural gas. Water injection will be used to control nitrogen oxide emissions when firing low sulfur distillate oil as a backup fuel for up to 876 hours per year. Combustion design and clean fuels will be used to minimize emissions of carbon monoxide, particulate matter, sulfuric acid mist, sulfur dioxide, and volatile organic compounds.

The project is subject to the Florida's Power Plant Siting procedure and will be a modification of PPS certification No. PA89-25.

Please send your written comments on or approval of the applicant's proposed custom fuel monitoring schedule. The plan is based on the letter dated January 16, 1996 from Region V to Dayton Power and Light. The Subpart GG limit on SO<sub>2</sub> emissions is 150 ppmvd @ 15% O<sub>2</sub> or a fuel sulfur limit of 0.8% sulfur. Neither of these limits could conceivably be violated by the use of pipeline quality natural gas which has a maximum SO<sub>2</sub> emission rate of 0.0006 lb/MMBtu (40 CFR 75 Appendix D Section 2.3.1.4). The sulfur content of pipeline quality natural gas in Florida has been estimated at a maximum of 0.003 % sulfur. Fuel oil will with a 0.05% sulfur content will be used. The requirements have been incorporated into the enclosed draft permit as Specific Conditions 37 and 38 and read as follows:

37. Fuel Records

- (a) Natural Gas: The permittee shall demonstrate compliance with the fuel sulfur limit for natural gas specified in this permit by maintaining records of the sulfur content of the natural gas being supplied for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or

*"Protect, Conserve and Manage Florida's Environment and Natural Resources"*

equivalent methods. These methods shall be used to determine the sulfur content of the natural gas fired in accordance with any EPA-approved custom fuel monitoring schedule (see Alternate Monitoring Plan) or natural gas supplier data or the natural gas sulfur content referenced in 40 CFR 75 Appendix D. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e). However, the permittee is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used to determine the fuel sulfur content for compliance with the 40 CFR 60.333 SO<sub>2</sub> standard.

- (b) Low Sulfur Distillate Oil: For all bulk shipments of low sulfur distillate oil received at this facility, the permittee shall obtain from the fuel vendor an analysis identifying the sulfur content. Methods for determining the sulfur content of the distillate oil shall be ASTM D129-91, D2622-94, or D4294-90 or equivalent methods. Records shall specify the test method used and shall comply with the requirements of 40 CFR 60.335(d).

[Rules 62-4.070(3) and 62-4.160(15), F.A.C.]

38. Alternate Monitoring Plan: Subject to EPA approval, the following alternate monitoring may be used to demonstrate compliance.

- (a) The NO<sub>x</sub> CEM data may be used in lieu of the monitoring system for water-to-fuel ratio and the reporting of excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG. Subject to EPA approval, the calibration of the water-to-fuel ratio-monitoring device required in 40 CFR 60.335(c)(2) will be replaced by the 40 CFR 75 certification tests of the NO<sub>x</sub> CEMS.
- (b) The NO<sub>x</sub> CEM data shall be used in lieu of the requirement for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG.
- (c) When requested by the Department, the CEMS emission rates for NO<sub>x</sub> on this unit shall be corrected to ISO conditions to demonstrate compliance with the NO<sub>x</sub> standard established in 40 CFR 60.332.
- (d) *A custom fuel monitoring schedule* pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following conditions are met.
- (1) The permittee shall apply for an Acid Rain permit within the deadlines specified in 40 CFR 72.30.
  - (2) The permittee shall submit a monitoring plan, certified by signature of the Authorized Representative, that commits to using a primary fuel of pipeline supplied natural gas containing no more than 2 grains of sulfur per 100 SCF of gas pursuant to 40 CFR 75.11(d)(2);
  - (3) Each unit shall be monitored for SO<sub>2</sub> emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.

This custom fuel-monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO<sub>2</sub> emissions must be accounted for as required pursuant to 40 CFR 75.11(d).

Mr. R. Douglas Neeley  
Page 2  
August 30, 1999

[40 CFR 60, Subpart GG, Applicant Request]

Also, please comment on these conditions with respect to the use of the acid rain NO<sub>x</sub> CEMS for demonstrating compliance as well as reporting excess emissions. Typically NO<sub>x</sub> emissions will be less than 9 ppmvd @15% O<sub>2</sub> (gas) which is less than one-tenth of the applicable Subpart GG limit based on the efficiency of the unit. A CEMS requirement is stricter and more accurate than any Subpart GG requirement for determining excess emissions.

The Department recommends your approval of the custom fuel monitoring schedules and these NO<sub>x</sub> monitoring provisions. We also request your comments on the Intent to Issue. If you have any questions on these matters please contact Jeff Koerner at 850/414-7268.

Sincerely,



for

A. A. Linero, P.E., Administrator  
New Source Review Section

AAL/jfk

Enclosures