



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

August 4, 1998

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue, Director
Environmental Services Department
Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33733

Re: DEP File PSD-FL-195A
Hines Energy Complex

Dear Mr. Pardue:

Enclosed is one copy of the Draft PSD Permit Modification for the Hines Energy Complex Combined Cycle facility located near Fort Meade, Polk County. The Department's Intent to Issue PSD Permit Modification and the "PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION" are also included.

The "PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION" must be published in a newspaper of general circulation in Polk County. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within 7 (seven) days of publication. Failure to publish the notice and provide proof of publication within the allotted time may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to Bureau of Air Regulation at the above letterhead address. If you have any other questions, please call Mr. Marty Costello at 850/921-9511.

Sincerely,

C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CHF/mc

Enclosures

In the Matter of an
Application for Permit Modification by:

Mr. W. Jeffrey Pardue, CEP, Director
Environmental Services Department
Florida Power Corporation
3201 34th Street South
St. Petersburg, Florida 33733

DEP File PSD-FL-195A
Hines Energy Complex
Polk County

INTENT TO ISSUE PSD PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue a permit modification (copy of DRAFT Permit Modification attached) for the proposed action, as detailed in the application specified above, for the reasons stated below.

The applicant, Florida Power Corporation, applied on July 6, 1998 to the Department for a permit modification to install a Selective Catalytic Reduction System and to reflect the technical specifications of the combustion turbines actually installed this summer at the Hines Energy Complex Combined Cycle Facility located near Fort Meade, Polk County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212, and 40CFR§2.21(u). The above actions are not exempt from permitting procedures. The Department has determined that a modification of the permit issued pursuant to the Prevention of Significant Deterioration (PSD Permit) is required to modify the permit as requested.

The Department intends to issue this PSD Permit modification based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed "Public Notice of Intent to Issue PSD Permit Modification." The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. Where there is more than one newspaper of general circulation in the county, the newspaper used must be one with significant circulation in the area that may be affected by the permit modification. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station 5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). The Department suggests that you publish the notice within thirty days of receipt of this letter. You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in Section 50.051, F.S. to the office of the Department issuing the permit modification or other authorization. Failure to publish the notice and provide proof of publication may result in the denial of the permit modification pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit modification 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 concerning the proposed permit modification issuance action for a period of 30 (thirty) days from the date of publication of "Public Notice of Intent to Issue PSD Permit Modification." Written comments 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 modification and require, if applicable, another Public Notice.

The Department will issue the permit modification 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, 32399-3000. 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 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, 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.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

Executed in Tallahassee, Florida.



C. H. Fancy, P.E., Chief
Bureau of Air Regulation


CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this INTENT TO ISSUE PSD PERMIT MODIFICATION (including the PUBLIC NOTICE, and DRAFT permit modification) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 8-6-98 to the person(s) listed:

- Mr. W. Jeffrey Pardue, CEP, Director*
- Mr. Doug Neely, EPA
- Mr. John Bunyak, NPS
- Mr. Bill Thomas, DEP SWD
- Mr. Buck Oven, DEP PPS
- Mr. Joe King, Polk County

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to §120.52, Florida Statutes,
with the designated Department Clerk, receipt of
which is hereby acknowledged.


(Clerk)

8-6-98
(Date)

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- 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:
 W. Jeffrey Pardue, Director
 Env. Services Dept.
 Fla. Power Corp.
 3201 34th St. South
 St. Petersburg, FL 33733

4a. Article Number
 P 265 659 404

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

7. Date of Delivery
 AUG 10 1998

5. Received By: (Print Name)

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

6. Signature (Addressee or Agent)

X

Use only for using Return Receipt Service.

P 265 659 404

US Postal Service

Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to		W. Jeff. Pardue	
Street & Number		Fla. Power Corp	
Post Office, State & ZIP Code		St. Pete, FL	
Postage	\$		
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date, & Addressee's Address			
TOTAL Postage & Fees	\$		
Postmark or Date		3-6-95	
		PSDF-195A	

PS Form 3800, April 1995

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File PSD-FL-195A/ PA-92-33

Hines Energy Complex Combined Cycle Project
Polk County

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD Permit Modification to Florida Power Corporation (FPC) to install a Selective Catalytic Reduction (SCR) system and reflect the technical specifications of the combustion turbines actually installed at its Combined Cycle Facility located near Fort Meade, Polk County. A Best Available Control Technology determination was not required pursuant to Rule 62-212.400, F.A.C. or 40CFR52.21, Prevention of Significant Deterioration (PSD). The applicant's name and address are: Florida Power Corporation, 3201 34th Street South, St. Petersburg, Florida 33733.

The facility was originally permitted in 1994 as a 470 megawatt power plant consisting of two General Electric 7FA (or equivalent) gas or oil-fired combustion turbines and a heat recovery steam generator. The actual equipment installed this summer has a power capability of 485 MW and is powered by two Westinghouse 501FC combustion turbines. The current permit requires that nitrogen oxides (NO_x) emissions be controlled through Dry Low NO_x (DLN) combustion technology. The DLN combustors installed will not be able to achieve the permit limit of 73 pounds per hour per turbine at 59° F. Westinghouse and FPC have decided to install Selective Catalytic Reduction (SCR) in addition to Westinghouse's present generation of DLN combustors in order to comply with the permitted limit. If Westinghouse's Piloted Ring Combustor or a more advanced DLN technology is developed and can be installed by November 1, 2000 to meet the original BACT for NO_x, the SCR may be replaced with this new DLN control system.

The specifications to be included or adjusted to reflect the capabilities of the Westinghouse 501FC turbines include the heat input rate curves, particulate and volatile organic compound emissions and the sulfur dioxide (SO₂) emissions while burning natural gas. Adjustments to emission limits due to the change in turbine vendors have been less than PSD significant amounts. These changes will not cause or contribute to a violation of the National Ambient Air quality Standards or Allowable Increments under the requirements for Prevention of Significant Deterioration of air Quality.

The Department will accept written comments concerning the proposed permit modification issuance action for a period of 30 (thirty) days from the date of publication of "Public Notice of Intent to Issue PSD Permit Modification." Written comments 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 modification and require, if applicable, another Public Notice.

The Department will issue the permit modification 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, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within

**NOTICE TO BE PUBLISHED
IN THE NEWSPAPER**

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 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, 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.

Pursuant to Condition of Certification XI.B of the separate Power Plant Site (PPSA) Certification Order, PA 92-33, for the FPC Hines Energy Complex, the PPSA certification will be automatically modified to conform to amendments to the facility's PSD permit. Upon issuance of any amended PSD permit, the Department will also modify the parallel PPSA conditions of certification to conform to the amended conditions of the PSD permit.

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:

Polk County Public Works Department - Air Program 4189 Ben Durrance Road Bartow, Florida 33830 Telephone: 941/534-7377 Fax: 941/534-7374	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 Southwest District 3804 Coconut Palm Drive Tampa, Florida 33619-8218 Telephone: 813/744-6100 Fax: 813/744-6084
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The complete project file includes the Draft Permit Modification, the application, and the information submitted by the applicant or responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Bureau of Air Regulation at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114 for additional information.

**TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION**

Florida Power Corporation

**Hines Energy Complex
Combined Cycle Project
Power Block 1
Polk County**

Construction Permit No. PSD-FL-195 / PA-92-33

Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

August 4, 1998

TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

Florida Power Corporation submitted an application to modify permit No. PSD-FL-195 to install a Selective Catalytic Reduction (SCR) system and to reflect the technical specifications of the combustion turbines actually installed at its Combined Cycle Facility located near Fort Meade, Polk County.

The facility was originally permitted in 1994 as a 470 megawatt power plant consisting of two General Electric 7FA (or equivalent) gas or oil-fired combustion turbines and a heat recovery steam generator. The actual equipment installed this summer has a power capability of 485 MW and is powered by two Westinghouse 501FC combustion turbines. The permit requires that nitrogen oxides (NO_x) emissions be controlled through Dry Low NO_x (DLN) combustion technology. The DLN combustors installed will not be able to achieve the permit limit of 73 pounds per hour per turbine at 59° F. Westinghouse and FPC have decided to install Selective Catalytic Reduction (SCR) in addition to Westinghouse's present generation of DLN combustors in order to comply with the permitted limit. If Westinghouse's Piloted Ring Combustor or a more advanced DLN technology is developed and can be installed by November 1, 2000 to meet the original BACT for NO_x, the SCR may be replaced with this new DLN control system.

The specifications to be included or adjusted to reflect the capabilities of the Westinghouse 501FC turbines include the heat input rate curves, particulate and volatile organic compound emissions and the sulfur dioxide (SO₂) emissions while burning natural gas. Adjustments to emission limits due to the change in turbine vendors have been less than PSD significant amounts. These changes will not cause or contribute to a violation of the National Ambient Air quality Standards or Allowable Increments under the requirements for Prevention of Significant Deterioration of air Quality.

Based on the foregoing technical evaluation of the application and additional information submitted by the applicant, the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations provided that vendor guarantees for emissions rates are verified and certain conditions are met. The proposed revisions to the original construction permit conditions are attached.

Engineer: Martin Costello, P.E.

PERMITTEE:

Florida Power Corporation
3201 34th Street South
St. Petersburg, FL 33733

Permit Number: PSD-FL-195/PA-92-33

Issued: 3/1/94 Revised: 8/xx/98

Expiration Date: November 1, 2000

County: Polk

Latitude/Longitude: 27°47'19"N
81°52'10"W

Project: ~~48570~~ MW Combined Cycle
Combustion Turbines

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters ~~6217~~-212 and ~~6217~~-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and specifically described as follows:

For two ~~235~~ MW combined cycle combustion turbines (CTs) with maximum heat input based on the higher heating value (HHV) at 59°F of ~~1,5101,757~~ MMBtu/hr/unit (natural gas) and ~~1,7301,846~~ MMBtu/hr/unit (oil) to be located at the Hines Energy Complex Polk County site near Fort Meade, Florida. ~~Phase IA would consist~~ Power Block 1 consists of two combined cycle combustion turbines for a total of ~~470485~~ MW, a ~~99~~ MMBtu/hr auxiliary boiler (Subpart Dc), a 1,300 KW diesel generator and a 97,570 barrel fuel oil storage tank (Subpart Kb). The combustion turbines are ~~to be GE PG7111FA~~ Westinghouse Model 501FC or equivalent and rated at approximately 165 MW in simple cycle and equipped with dry low NO_x combustors and/or Selective Catalytic Reduction (SCR) for natural gas firing and wet injection for fuel oil firing. Each combustion turbine will incorporate an unfired heat recovery steam generator.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

Howard L. Rhodes, Director
Division of Air Resources
Management

PERMITTEE:
Florida Power Corporation

Permit Number: PA-92-33; PSD-FL-195
Expiration Date: November 1, 2000

Relevant documents Attachments are listed below:

1. Florida Power Corporation (FPC) application received August 4, 1992.
2. Department's letters dated August 31 and November 13, 1992.
3. FPC's letters dated October 13, 1992 and November 30, 1992, and June 27, 1996 and September 9, 1996 and February 18, 1998 and June 30, 1998 and the SCR Technical Specification received August 3, 1998.
4. Westinghouse 501FC tables or curves showing Heat Input vs. Compressor Inlet Temperature and Nitrogen Oxide Emissions vs Compressor Inlet Temperature shall be attachments to and are part of this permit.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or ~~acknowledgment~~ acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold

PERMITTEE:
Florida Power Corporation

Permit Number: PA-92-33; PSD-FL-195
Expiration Date: November 1, 2000

interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

PERMITTEE:
Florida Power Corporation

Permit Number: PA-92-33; PSD-FL-195
Expiration Date: November 1, 2000

- a. A description of and cause of non-compliance; and
- b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 6217-4.120 and 6217-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- (X) Determination of Best Available Control Technology (BACT)
- (X) Determination of Prevention of Significant Deterioration (PSD)
- (X) Compliance with New Source Performance Standards (NSPS)

PERMITTEE:
Florida Power Corporation

Permit Number: PA-92-33; PSD-FL-195
Expiration Date: November 1, 2000

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
- b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
- c. Records of monitoring information shall include:
 - the date, exact place, and time of sampling or measurements;
 - the person responsible for performing the sampling or measurements;
 - the dates analyses were performed;
 - the person responsible for performing the analyses;
 - the analytical techniques or methods used; and
 - the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

16. Circumvention. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly pursuant to Rule 62-210.650 F.A.C.

PERMITTEE:
Florida Power Corporation

Permit Number: PA-92-33; PSD-FL-195
Expiration Date: November 1, 2000

SPECIFIC CONDITIONS:

The construction and operation of the Hines Energy Complex (Project) shall be in accordance with all applicable provisions of Chapters ~~6217~~-210 to 297, F.A.C. and NSPS Subparts GG, Dc, and Kb. The following emission limitations and conditions reflect BACT determinations for the Phase IA ~~470~~ Power Block 1- ~~485~~ MW (two combined cycle combustion turbines and auxiliary equipment) of generating capacity for which the need has been determined. BACT determinations for the remaining phases will be made upon review of supplemental applications. In addition to the foregoing, the Project shall comply with the following conditions of certification as indicated.

A. General Requirements

1. The maximum heat input (HHV) to each combustion turbine (CT) at an ambient temperature of 59° F shall neither exceed ~~1,510~~ 1,757 MMBtu/hr while firing natural gas, nor ~~1,730~~ 1,846 MMBtu/hr while firing fuel oil. Heat input may vary depending on ambient conditions and the CT characteristics. Manufacturer's curves or equations for correction to other temperatures shall be provided to DEP for review 90 days after selection of the CT. Subject to approval by the Department for technical validity applying sound engineering principles, the manufacturer's curves shall be used to establish heat input rates over a range of temperatures for the purpose of compliance determination.

2. Each of the two CTs in Power Block 1 Phase IA may operate continuously, i.e., 8,760 hrs/year.

3. Only natural gas (NG) or low sulfur fuel oil shall be fired in each combustion turbine ~~and the auxiliary boiler~~. Only low sulfur fuel oil shall be fired in the diesel generator. The maximum sulfur content of the low sulfur fuel oil shall not exceed 0.05 percent, by weight. Only natural gas shall be fired in the auxiliary boiler.

4. The maximum heat input to the auxiliary boiler shall not exceed 99 MMBtu/hr ~~when firing NG or No. 2 fuel oil with 0.05 percent maximum sulfur content (by weight)~~. All fuel consumption must be continuously measured and recorded for the auxiliary boiler.

PERMITTEE:
Florida Power Corporation

Permit Number: PA-92-33; PSD-FL-195
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5. The maximum allowable fuel oil consumption for the two turbines is 13,762,806 gallons per year, which is equivalent to an aggregate of 1,000 hours per year of operation at full load.

6. The permittee shall have the option of installing duct module(s) suitable for possible future installation of an oxidation catalyst and/or SCR equipment on each combined cycle generating unit. In the event that the module(s) are not installed in the Heat Recovery Steam Generator (HRSG), the retrofit costs associated with not making provisions for such technology (initially) shall not be considered in any future economic evaluation to justify not installing SCR or an oxidation catalyst.

7. Fugitive dust emissions during the construction period shall be minimized by covering or watering dust generation areas.

8. If site construction does not commence on ~~Phase IA (470 MW) Power Block 1 (485 MW)~~ within 18 months of issuance of this permit, then FPC may request an extension of the 18-month period, provided that such request is received by the Department's Bureau of Air Regulation at least 90 days prior to the expiration date. Such a request shall identify the progress made toward commencement of the construction of the site and the expected time required to start and complete construction of the initial phase. The Department may grant the extension upon a satisfactory showing that the extension is justified.

Units to be constructed or modified in later phases of the project will be reviewed under the supplementary review process of the Power Plant Siting Act. If site construction has not commenced within 18 months of issuance of this certification, then FPC shall obtain from DEP a review and, if necessary, a modification of the BACT determination and allowable emissions for the unit(s) on which construction has not commenced [40 CFR 52.21(r)(2)].

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SPECIFIC CONDITIONS:

B. Emission Limits

1. The maximum allowable emissions from each of the two CTs, when firing natural gas or low sulfur fuel oil, in accordance with the BACT determination and subsequent data from Westinghouse, shall not exceed the following—(at 59° F reference temperature for NOx emissions) (except during periods of start up, shutdown, malfunction and load change):

EMISSIONS LIMITATIONS

<u>POLLUTANT</u>	<u>FUEL</u>	<u>BASIS (g)</u>	<u>LB/HR/CT</u>	<u>TPY (b)</u>
NO _x (a)	Gas	12 ppmvd (h)	73 (i)	639
	Oil	42 ppmvd (c) (h)	305	153
VOC (d)	Gas	7 ppmvw	10.4	91
	Oil	10.7 ppmvw	19.0	11.2 - 5.6
CO	Gas	25 ppmvd	77	675
	Oil	30 ppmvd	93	47
PM/PM ₁₀	Gas		15.6	9
	Oil (e)		44.8	17
SO ₂	Gas (f)		4.7	0.99
	Oil (f)		94	44
Visible Emissions	Gas	10 percent opacity		
	Oil	20 percent opacity		

a. Pollutant emission rates may vary depending on ambient conditions (compressor inlet temperatures) and the CT characteristics. Manufacturer's curves for the NOx emission rate correction to other temperatures at different loads shall be provided to DEP for review 90 days after selection of the CT. Subject to approval by the Department for technical validity applying sound engineering principles, the manufacturer's curves shall be used to establish pollutant emission rates over a range of temperatures for the purpose of compliance determination. Emission limitations in LB/HR/CT of NOx are blocked 24-hour averages (midnight to midnight) and are calculated as follows:

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NO_x emissions shall be determined continuously by a Continuous Emissions Monitoring System (CEMS). A CEMS operated and maintained in accordance with 40 CFR 75 shall be used. Compliance with the NO_x emissions standards in the above table shall be demonstrated with this CEMS system based on a 24-hour block average. Based on CEMS data at the end of each operating day, a new 24-hour average emission rates, both actual and allowable (based on compressor inlet temperatures) are ~~is~~ calculated from the arithmetic average of all valid hourly emission rates during the previous 24 operating hours. Valid hourly emission rates shall not include periods of startup (including fuel switching), shutdown, or malfunction as defined in Rule 62-210.200 where emissions exceed the NO_x standard. These excess emission periods shall be reported as required in Specific Condition E.2.f. A valid hourly emission rate shall be calculated for each hour in which two NO_x and oxygen concentrations are obtained at least 15 minutes apart. When monitoring data is not available, substitution for missing data shall be handled as required by Title IV (40 CFR 75) to calculate the 24-hour block average.

b. Annual emission limits (TPY) for natural gas are based on a total of two CTs operating at full load 8,760 hours per year (i.e., NO_x - 73 lbs/hr X 2 CTs X 8,760 hrs/yr X 1 ton/2,000 lbs = 639 TPY). Annual emission limits (TPY) for fuel oil are based on full load operation for a total of 1,000 hours per year for the two CTs (i.e., NO_x - 305 lbs/hr X 1,000 hrs/yr X 1 ton/2,000 lbs = 153 TPY).

c. Fuel oil NO_x emissions are based on full load operation at ~~ISO conditions~~ and 15 percent oxygen. For fuel oil firing, NO_x levels of 42 ppmvd @ 15 percent O₂ are based on a fuel bound nitrogen content of 0.015 percent or less. The emission limit for NO_x is adjusted as follows for higher fuel nitrogen contents up to a maximum of 0.030 percent by weight:

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<u>FUEL BOUND NITROGEN</u> <u>(% BY WEIGHT)</u>	<u>NO_x LEVELS</u> <u>(PPMVD @ 15%O₂)</u>	<u>NO_x EMISSIONS</u> <u>LB/HR/CT</u>	<u>NO_x EMISSIONS</u> <u>TPY</u>
0.015 or less	42	305	153
0.020	44	320	160
0.025	46	334	167
0.030	48	349	175

using the formula $STD = 0.0042 + F$ where:

STD = allowable NO_x emissions (percent by volume at 15 percent O₂ and on a dry basis).

F = NO_x emission allowance for fuel-bound nitrogen defined by the following table:

<u>FUEL-BOUND NITROGEN (% BY WEIGHT)</u>	<u>F (NO_x % BY VOLUME)</u>
0 < N < 0.015	0
0.015 < N < 0.03	0.04(N - 0.015)

where: N = the nitrogen content of the fuel (% by weight).

NO_x emissions limits are preliminary for the fuel oil specified in Specific Condition No. A.3. FPC shall maintain ~~submit~~ fuel bound nitrogen content data for the low sulfur fuel oil prior to commercial operation. Adjustments of the NO_x standard (up and down) shall be calculated and recorded based upon a volume weighted average of the nitrogen content of each bulk fuel oil shipment and the nitrogen content of the existing fuel in the storage tank. The NO_x standard for fuel oil shall not be adjusted between fuel oil shipments. Records for these adjusted standards shall be kept on site for a minimum of 5 years.

d. Exclusive of background concentrations.

e. PM/PM₁₀ emission limitations ~~are exclusive of~~ include sulfuric acid mist.

f. SO₂ emissions are based on a maximum of 1 grain of S/100cf of natural gas and 0.05 percent sulfur in the fuel oil.

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g. The values are the computational basis for the lb/hr numbers, which are the actual emission limitations. Once a combustion turbine manufacturer has been selected, it may be necessary to modify this basis. If this basis is to be modified, a professional engineer-certified equivalency analysis by the manufacturer must be submitted to the Department. The equivalency analysis will recommend an emissions normalizing basis (i.e., lb/hr, lb/MMBtu, lb/MWh, or ppmvd) and associated emissions appropriate for the specific manufacturer's equipment. If the equivalency analysis demonstrates an impact equal to or less than the current lb/hr limit, the Department shall amend the conditions to reflect the alternate basis. The characteristics and parameters of the CT selected will be reflected in other permit conditions, where appropriate.

~~h. 12 ppmvd at 15 percent O₂, not ISO corrected. The ISO corrected value is 15 ppmvd at 15 percent O₂. Compliance will be determined through the initial and annual compliance tests required in Condition C.1.~~

i. Control of nitrogen oxides from each CT while firing natural gas shall be accomplished using dry low NOx burners (DLN) and SCR. Ammonia slip shall not exceed 10 ppm. If the Westinghouse Piloted Ring Combustor (PRC) or a more advanced DLN burner is developed which is able to comply with the emission limits (listed in the above table) and is installed by November 1, 2000 the SCR system may be removed and replaced with these new burners upon 30 days prior notice to DEP. This action would implement the original BACT for NOx and would not be subject to PSD review. This notice shall include information on the new burners which provides reasonable assurance and PE certification that these DLN burners can consistently meet the NOx emission limits. In this case the new dry low NOx burners shall be tested in accordance with the initial performance test as described in Section C.1 within 180 days of startup with the new burners.

2. The following CT emissions, determined by BACT, are tabulated for PSD purposes:

ESTIMATED EMISSIONS

<u>POLLUTANT</u>	<u>METHOD OF CONTROL</u>	<u>Basis(b)</u>
Benzene	Natural Gas	BACT
Inorganic Arsenic	No. 2 Fuel Oil(a)	BACT
Beryllium	No. 2 Fuel Oil(a)	BACT
Mercury	No. 2 Fuel Oil(a)	(c)
Pb	No. 2 Fuel Oil(a)	(c)

a. The No. 2 fuel oil shall have a maximum sulfur content of 0.05 percent.

b. Since these pollutants are inherent constituents in the fuel, the basis for control will be by specifying that only natural gas and No. 2 fuel oil can be fired at the facility.

c. Below PSD significant emission levels.

~~4. After the initial compliance tests on the CTs (estimated to be in January, 1999), the permittee shall operate a certified continuous emissions monitor for NO_x emissions, and collect 12 months of monitoring data. The monitor will at a minimum meet the requirements of 40 CFR 60 Appendix F or 40 CFR 75 quality assurance procedures. Within 17 months after the initial compliance test FPC shall prepare and submit for the Department's review an engineering report regarding the collection and the analysis of the data gathered from the monitor. In addition, this report shall include a conclusion regarding the lowest NO_x emission rate which can be consistently achieved with a reasonable operating margin taking into account long term performance expectations and assuming good operating and maintenance practices. The report shall also include results of the testing requirements of Appendix F procedures and the actual CEM data for the period of the study in an acceptable format.~~

~~5. One month after submittal of the engineering report (estimated to be by June 2000), the Department will make a determination based on the engineering report submitted by FPC on the revised NO_x emission limits. If the data demonstrate that a~~

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~~NO_x emission rate of less than 73 lb/hr (based on 12 ppmvd at 15 percent O₂ and 59°F) is consistently achievable, the NO_x emission limits may be adjusted accordingly, but not lower than 55 lb/hr (based on 9 ppmvd at 15 percent O₂ and 59°F).~~

~~346.~~ Excess emissions from a turbine resulting from start up, shutdown, malfunction, or load change shall be acceptable providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for a longer duration. The permittee shall provide a general description of the procedures to be followed during periods of start up, shutdown, malfunction, or load change to ensure that the best operational practices to minimize emissions will be adhered to and the duration of any excess emissions will be minimized. The description should be submitted to the Department along with the initial compliance test data. The description may be updated as needed by submitting such update to the Department within thirty (30) days of implementation.

~~457.~~ Operation of the auxiliary steam boiler shall be limited to a maximum of 1000 hours per year and only during periods of cold CT startup or quick startup out of a short-term shutdown mode, when no other source of steam is available or during periodic testing. The following emission limitations shall apply:

a. NO_x emissions shall not exceed 0.1 lb/MMBtu for natural gas firing based on vendor-certified stack test data for the model of auxiliary boiler purchased.

b. Sulfur dioxide emissions shall be limited by firing natural gas.

c. Visible emissions shall not exceed 10 percent opacity while burning natural gas.

~~568.~~ Operation of the emergency diesel generator shall be limited to a maximum of 100 hours per year and only during periods of on site emergency power needs (when no other power source is available) or during periodic testing. The following emission limitations shall apply:

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a. The manufacturers design NO_x emission rate shall not exceed 9.82 grams/hp-hr based on vendor-certified stack test data (or equivalent) on the model of generator purchased. This test data shall be provided to the Department with the initial combustion turbine performance test report.

b. Sulfur dioxide emissions shall be limited by firing only low sulfur fuel oil with maximum sulfur content of 0.05 percent by weight.

c. Visible emissions shall not exceed 20 percent opacity.

C. Performance Testing

1. An initial (I) performance compliance tests shall be performed on each CT for each using both fuels. Testing of emissions shall be conducted with the source operating at capacity (maximum heat input rate for the tested operating temperature). Capacity is defined as 90 - 100 percent of permitted capacity. If it is impracticable to test at capacity, then sources may be tested at less than capacity; in this case subsequent source operation is limited to 110 percent of the test load until a new test is conducted. Once the unit is so limited, then operation at higher capacities is allowed for no more than fifteen consecutive days for purposes of additional compliance testing to regain the rated capacity in the permit with prior notification to the Department. Annual (A) compliance tests shall be performed on each CT with ~~the~~ the fuel(s) indicated below used for more than 400 hours in the preceding 12 month period. Tests shall be conducted using EPA reference methods in accordance with 40 CFR 60, Appendix A, as adopted by reference in Rule ~~6217-297~~, F.A.C.:

- a. Reference Method 5 for PM (I, A- only for oil and only if fuel oil is fired more than 400 hours per CT in the previous federal fiscal year).
- b. Reference Method 9 for VE (I, A- only for oil and only if fuel oil is fired more than 400 hours per CT in the previous federal fiscal year).
- c. Reference Method 10 for CO (I, A- for gas and annually for oil if fuel oil is fired more than 400 hours per CT in the previous federal fiscal year).

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d. Reference Method 20 for NOx (I, ~~only~~, for compliance with 40 CFR 60.332 and 40 CFR 60.335).

e. Reference Method 18 or Method 25A for VOC (I, ~~A~~).

~~f. Trace elements of Beryllium (Be) and Arsenic (As) shall be tested (I, for oil only) using EMTIC Interim Test Methods. As an alternative, Method 104 for Beryllium (Be) may be used; or Be and Arsenic may be determined from fuel analysis using either Method 7090 or 7091, and sample extraction using Method 3040 as described in the EPA solid waste regulations SW 846.~~

fg. ASTM D4294 (or equivalent) for sulfur content of distillate oil (I,A), which can be used for determining SO₂ emissions annually.

gh. ASTM D1072-80, D3031-81, D4084-82, or D3246-81 (or equivalent) for sulfur content of natural gas (I, and A if deemed necessary by DEP).

h. Ammonia (I) by EPA Method 26A and Ion Chromatography analysis or a test method approved by DEP prior to the initial performance test.

Other DEP approved methods may be used for compliance testing after prior Departmental approval.

2. The maximum sulfur content of the low sulfur fuel oil shall not exceed 0.05 percent by weight. Compliance shall be demonstrated in accordance with the requirements of 40 CFR 60.334 testing for sulfur content of the fuel oil in the storage tanks on each occasion that fuel is transferred to the storage tanks from any other source. Testing for fuel bound nitrogen content by ASTM D3431 or other ASTM method, and for fuel oil ~~lower~~ higher heating value, shall also be conducted on the same schedule.

D. Monitoring Requirements

For each combined cycle unit, the permittee shall install, operate, and maintain a continuous emission monitoring system (CEMS) (in accordance with 40 CFR 60, Appendix F or 40 CFR 75) or use other DEP approved alternate methods to monitor nitrogen oxides and, if necessary, a diluent gas (CO₂ or O₂). The Federal Acid

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Rain Program requirements of 40 CFR 75 shall apply when those requirements become effective for the CTs. ~~within the state.~~

1. Each CEMS shall meet performance specifications of 40 CFR 60, Appendix B or 40 CFR 75.

2. CEMS data shall be recorded and reported in accordance with Chapter ~~6217-297.500, F.A.C.,~~ 40 CFR 60 Appendix A and Subpart GG and 40 CFR 75. The record shall include periods of start up, shutdown, and malfunction. Compliance with condition B.1. for NO_x shall be determined by CEMS on a mass emission rate basis (LB/HR) using EPA Method 19 and hourly averaged heat inputs (MMBtu/hr).

3. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation or any other preventable upset condition or preventable equipment breakdown shall not be considered malfunctions.

4. The procedures under 40 CFR ~~60.13~~ and 40 CFR 75 shall be followed for installation, evaluation, and operation of all CEMS.

5. For purposes of the reports required under this permit, excess emissions are defined as any calculated average emission rate, as determined pursuant to Condition B.346 herein, which exceeds the applicable emission limits in Condition B.1.

E. Notification, Reporting and Recordkeeping

1. To determine compliance with the natural gas and fuel oil firing heat input limitation, the permittee shall maintain daily records of natural gas and fuel oil consumption for each turbine and the heating value for each fuel. All records shall be maintained for a minimum of two years after the date of each record and shall be made available to representatives of the Department upon request.

2. The project shall comply with all the applicable requirements of Chapter ~~6217,~~ F.A.C., and 40 CFR 60 Subparts A, and GG, Dc, and Kb. The requirements shall include:

- a. 40 CFR 60.7(a)(1) - By postmarking or delivering

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notification of the start of construction no more than 30 days after such date.

b. 40 CFR 60.7(a)(2) - By postmarking or delivering notification of the anticipated date of the initial start up of each CT and the auxiliary steam boiler not less than 30 days prior to such date.

c. 40 CFR 60.7(a)(3) - By postmarking or delivering notification of the actual start up of each turbine and the auxiliary steam boiler within 15 days after such date.

d. 40 CFR 60.7(a)(5) - By postmarking or delivering notification of the date for demonstrating the CEMS performance, no less than 30 days prior to such date.

e. 40 CFR 60.7(a)(6) - By postmarking or delivering notification of the anticipated date for conducting the opacity observations no less than 30 days prior to such date.

f. 40 CFR 60.7(b) - By initiating a recordkeeping system to record the occurrence and duration of any start up, shutdown or malfunction of a turbine and the auxiliary steam boiler, of any malfunction of the air pollution control equipment, and the periods when the CEMS is inoperable.

g. 40 CFR 60.7(c) - By postmarking or delivering a quarterly excess emissions and monitoring system performance report within 30 days after the end of each calendar quarter. This report shall contain the information specified in 40 CFR 60.7(c) and (d). (Pending EPA approval) When firing natural gas or fuel oil in the combustion turbines, the NO_x CEMS shall be used in lieu of the water/fuel monitoring system and fuel bound nitrogen (FBN) monitoring required for reporting excess emissions in 40 CFR 60.334(c)(1) (1997 version). The calibration of the water/fuel monitoring device required in 40 CFR 60.335 (c)(2) (1997 version) will be replaced by the 40 CFR 75 certification tests of the NO_x CEMS. Upon request from DEP, the CEMS emission rates for NO_x shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332.

(Pending EPA approval) The following custom monitoring schedule for natural gas is approved in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2):

1. Monitoring of natural gas nitrogen content shall not be required.
2. Analysis of the sulfur content of natural gas shall be conducted using one of the EPA-approved ASTM reference methods in Condition C.1.g for the measurement of sulfur in gaseous fuels, or an DEP approved alternative method. Monitoring of the sulfur content of the natural gas shall be conducted twice monthly for six months. If this monitoring shows little variability in the fuel sulfur content, and indicates consistent compliance with 40 CFR 60.333, then fuel sulfur monitoring shall be conducted once per quarter for six quarters and after that, semiannually.
3. Should any sulfur analysis indicate noncompliance with 40 CFR 60.333, the Permittee shall notify DEP of such excess emissions and the customized fuel monitoring schedule shall be reexamined. The sulfur content of the natural gas will be monitored weekly during the interim period while the monitoring schedule is reexamined.
4. The permittee shall notify DEP of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content variation of greater than 1 grain per 100 cubic foot of natural gas) shall be considered as a change in the natural gas supply. Sulfur content of the natural gas will be monitored weekly by the natural gas supplier or other qualified parties during the interim period when this monitoring schedule is being reexamined.
5. Records of sampling analysis and natural gas supply pertinent to this monitoring schedule shall be retained by the Permittee for a period of five years, and shall be made available for inspection by the appropriate regulatory personnel (DEP).
6. The Permittee may obtain the sulfur content of the natural gas from the fuel supplier or other qualified parties provided the test methods listed in Specific Condition C.1.g are used.

h. 40 CFR 60.8(a) - By conducting all performance tests within 60 days after achieving the maximum turbine and boiler firing rates, but not more than 180 days after the initial start up of each CT and the auxiliary boiler.

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i. 40 CFR 60.8(d) - By postmarking or delivering notification of the date of each performance test required by this permit at least 30 days prior to the test date; and,

j. ~~6217-297.345~~ - By providing stack sampling facilities where necessary ~~for each turbine and the auxiliary steam boiler.~~

All notifications and reports required by this specific condition shall be submitted to the Department's Air Program, within the Southwest District office. Performance test results shall be submitted within 45 days of completion of such test.

3. The following information shall be submitted to the Department's Bureau of Air Regulation within 90 days after selection of each, respectively:

a. Description of the final selection of the turbines, the auxiliary steam boiler and diesel generator for installation at the facility. Descriptions shall include the specific make and model numbers, any changes in the proposed method of operation, fuels, emissions or equipment.

b. Description of the CEMS selected. Description shall include the type of sensors, the manufacturer and model number of the equipment.

4. The following protocols shall be submitted to the Department's Air Program, within the Southwest District office for approval;

a. CEMS Protocol - Within 60 days after selection of the CEMS, but prior to the initial startup, a CEMS protocol describing the system, its installation, operating and maintenance characteristics and requirements. The protocol shall meet the requirements of 40 CFR 60.13, 40 CFR 60 Appendix B and Appendix F or 40 CFR 75. The Federal Acid Rain Program requirements of 40 CFR 75 shall apply when those requirements become effective within the state.

b. Performance Test Protocol - At least ~~30~~ days prior to conducting the initial performance tests required by this permit, the permittee shall submit to the Department's Air Program, within the Southwest District office, a protocol outlining the procedures to be followed, the test methods and any differences between the

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reference methods and the test methods proposed to be used to verify compliance with the conditions of this permit. The Department shall approve the testing protocol provided that it meets the requirements of this permit.

F. Modifications

The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change.

DRAFT

Florida Department of
Environmental Protection

Memorandum

TO: Clair Fancy
FROM: Martin Costello *MC 8/4/98*
DATE: August 4, 1998
SUBJECT: Florida Power Corporation Hines Energy Complex
PSD-FL-195A Combined Cycle Facility

Attached is the Public Notice and draft permit modification to install a Selective Catalytic Reduction (SCR) system and to reflect the specifications of the actual (Westinghouse 501FC) combustion turbines installed at the Hines Energy Complex.

The changes will allow FPC to meet its original NO_x commitment with SCR.

Other changes in the permit reflect the technical specifications of the Westinghouse 501 FC versus the General Electric 7FA units originally proposed at the site. These include a higher heat input rate and total power generation capability of 485 megawatts (MW) versus 470 MW. Other changes include higher particulate matter, VOC and SO₂ emission limits which are less than significant for purposes of PSD.

I recommend your approval and signature.

MC/t

Attachments