

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit by:


Florida Power Corporation
One Power Plaza
263 13th Avenue South
St. Petersburg, Florida 33701

DEP File No. 1050234-002-AC, PSD-FL-195A ^B
Hines Energy Complex Power Block 1
Polk County

Enclosed is Final Permit Number 1050234-002-AC. This permit authorizes Florida Power Corporation to operate the Hines Energy Complex with increased heat inputs, megawatt ratings and startup times. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

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 Notice of Final Permit (including the Final permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 5-27-99 to the person(s) listed:

- Mr. Jeffrey Pardue, Florida Power Corporation *
- Ms. Jennifer Tillman, P.E., Florida Power Corporation *
- Bill Thomas, P.E., DEP-SWD
- Mr. Gregg Worley, EPA
- Mr. John Bunyak, NPS

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) 5-27-99
(Date)

FINAL DETERMINATION

Florida Power Corporation
Hines Energy Complex
DEP File No. 1050234-002-AC, PSD-FL-195A

The Department distributed a public notice package on May 10, 1999 to allow the applicant to modify its permit at the Hines Energy Complex located in Polk County. The Public Notice of Intent to Issue was published in the Lakeland Ledger on May 12, 1999.

COMMENTS/CHANGES

No comments were received by the Department from the public.

No comments were received from the EPA.

Comments were received from the applicant by electronic correspondence dated May 25, 1999.

A meeting was held on May 26, 1999 between the Department, the applicant's representatives to discuss the comments. These comments were minor in nature, representing only a clarification of the applicant's request.

The Department determined that minor corrections or changes must be made to the draft permit text to clarify the original requirements. The corrections or changes are summarized below.

Specific Condition B.3.: A description was provided for a warm start along with the corresponding startup requirements.

CONCLUSION

The final action of the Department is to issue the permit with the changes described above.

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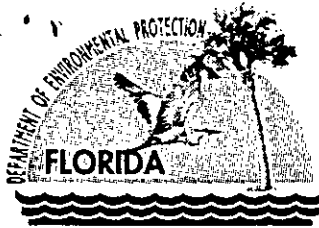
US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to	Jeff Pardue
Street & Number	FPC - Hines
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	1050234-002-AC 5-27-99 PSD-FI-195A

PS Form 3800, April 1995

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. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.
	3. Article Addressed to: Jeffrey Pardue, Director FPC - Hines One Power Plaza 263 13th Ave South St. Pete, FL 33701	4a. Article Number Z 333 618 157
	4b. Service Type <input type="checkbox"/> Registered <input checked="" type="checkbox"/> Certified <input type="checkbox"/> Express Mail <input type="checkbox"/> Insured <input type="checkbox"/> Return Receipt for Merchandise <input type="checkbox"/> COD	
	5. Received By: (Print Name) X Dana Clark	7. Date of Delivery 6-1-99
	6. Signature: (Addressee or Agent)	8. Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

May 27, 1999

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. W. Jeffrey Pardue
Director, Environmental Services
FPC -Hines Energy Complex
One Power Plaza
263 13th Avenue South
St. Petersburg, Florida 33701

Re: DEP File No. PSD-FL-195A; Modification of Permit No. PSD-FL-195A^B
Hines Energy Complex / Polk County

The applicant, Florida Power Corporation, applied on May 4, 1999, to the Department for a modification to air construction permit number PSD-FL-195A for its Hines Energy Complex located in Polk, County. The modification is to allow the facility to utilize the fully installed capacity of the combined cycle units by modifying the maximum heat input ratings and maximum megawatt ratings. Additionally, testing has shown that the allotted startup time of 2 hours is inadequate for warm and cold starts and increased times are requested. The Department has reviewed the modification request. The referenced permit is hereby modified as follows:

Permit Cover Letter: Multiple changes. A revised cover letter is included for clarity following the Specific Condition changes below.

Specific Condition Introductory text changes as follow:

From: The construction and operation of the Hines Energy Complex (Project) shall be in accordance with all applicable provisions of Chapters 62-210 to 297, F.A.C. and NSPS Subparts GG, Dc, and Kb. The following emission limitations and conditions reflect BACT determinations for the 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.

To: The construction and operation of the Hines Energy Complex (Project) shall be in accordance with all applicable provisions of Chapters 62-210 to 297, F.A.C. and NSPS Subparts GG, Dc, and Kb. The following emission limitations and conditions reflect BACT determinations for the Power Block 1- 500 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.

Specific Condition A.1.

From: The maximum heat input (HHV) to each combustion turbine (CT) at an ambient temperature of 59° F shall neither exceed 1,757 MMBtu/hr while firing natural gas, nor 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.

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

To: The maximum heat input (HHV) to each combustion turbine (CT) at an ambient temperature of 59° F shall neither exceed 1,866 MMBtu/hr while firing natural gas, nor 1,999 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.

Specific Condition A.8.

From: If site construction does not commence on 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.

To: If site construction does not commence on Power Block 1 (500 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.

Specific Condition B.3.

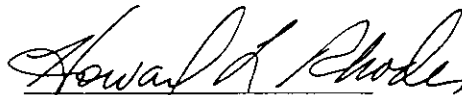
From: Excess emissions from a turbine resulting from start up, shutdown, malfunction, or load change shall be acceptable providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 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.

To: Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period except in the event that the steam turbine has been shut down for 8 hours or more. During a cold start-up to combined cycle operation, up to four hours of excess emissions are allowed in a 24-hour period. Cold start-up is defined as a startup to combined cycle operation following a steam turbine shutdown lasting at least 48 hours. During a warm start-up to combined cycle operation, up to three hours of excess emissions are allowed in a 24-hour period. Warm start-up is defined as a startup to combined cycle operation following a steam turbine shutdown lasting at least 8 hours. [Applicant Request, Vendor Combined Cycle Startup Curves Data and Rule 62-210.700, F.A.C.].

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Howard L. Rhodes, Director
Division of Air Resources
Management

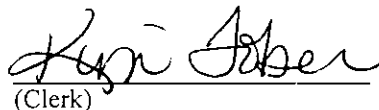
CERTIFICATE OF SERVICE

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- W. Jeffrey Pardue, Florida Power Corporation *
- Jennifer Tillman, P.E., Florida Power Corporation *
- Doug Neely, EPA
- John Bunyak, NPS
- Bill Thomas, P.E., DEP-SWD
- Mr. Gregg Worley, EPA

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)

5-27-99
(Date)


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

Permit Number: PSD-FL-195A/PA-92-33
Issued: 3/1/94 Revised: 5/11/99
Expiration Date: November 1, 2000
County: Polk
Latitude/Longitude: 27°47'19"N/81°52'10"W
Project: 500 MW Combined Cycle

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-212 and 62-4. 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 combined cycle combustion turbines (CTs) with maximum allowable heat input based on the higher heating value (HHV) at 59°F of 1,866 MMBtu/hr/unit (natural gas) and 1,999 MMBtu/hr/unit (oil) to be located at the Hines Energy Complex near Fort Meade, Florida. Power Block 1 consists of two combined cycle combustion turbines for a total of 500 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 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

Relevant documents are listed below:

1. FPC application received August 4, 1992 and revision received May 4, 1999.
2. The Department's letters dated August 31 and November 13, 1992.
3. FPC's letters dated October 13 and November 30, 1992; June 27 and September 9, 1996; February 18 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.