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 the return this card to you. • Attach this form to the front of the mailpiece, or on the back it does not permit. • Write "Return Receipt Requested" on the mailpiece below the artient of the Return Receipt Fee will provide you the signature of the personal the date of delivery. 3. Article Addressed to: M. G.D. Jennings, Jr., V.P. Itandee Pawer Partners, Ltd. 702 M. Jranklin St.	f space 1. Addressee's Address
5 6:	MR + C 18:52
5. Signature (Addressee) 6. Signature (Agent)	Addressee's Address (Only if requested and fee is paid)
PS Form 3811 , November 199€ ± U.S. GPO: 1991—287	OS DOMESTIC RETURN RECEIPT

P 617 884 148

	No Insurance Coverage Provided Do not use for International Mail (See Reverse)	t
	Sem to	
	Street & No.	-t/
	P.O. State & ZIP Code Viry DCL - 3366 C	-
	Postage / \$	
	Certified Fee	
	Special Delivery Fee	
	Restricted Delivery Fee	
200	Return Receipt Showing to Whom & Date Delivered	
Jurie 1990	Return Receipt Showing to Whom. Date. & Address of Delivery	
2	TOTAL Postage & Fees \$	
2000	Postmark or Date 2 36 92	
2.011	PSD-FL-140	
۱-		



State of Florida DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee		
То	Location:	
To	Location:	
ъ	Location:	
From	Date.	

Interoffice Memorandum

TO: Carol M. Browner

FROM: Steve Smallwood

DATE: January 31, 1991

SUBJ: Approval of Permit No. PSD-FL-140

TECO Power Services Corporation - Hardee Power Station

Attached for your approval and signature is a permit prepared by the Bureau of Air Regulation for the above mentioned company to construct a combined cycle power plant directly associated facilities with an ultimate capacity of 660 MW (nominal net). The permit is being reissued based on a court order in which the First District Court of Appeal has directed the Department to issue a permit which conforms to the conditions of the Power Plant Siting Certification. It is expected that EPA will be upset over this reissuance since the original PSD permit contained several conditions which were more stringent than those contained in the site certification.

I recommend your approval and signature.

SS/BA/plm

Attachments



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Carol M. Browner, Secretary

February 26, 1992

CERTIFIED MAIL-RETURN RECEIPT REQUESTED

Mr. G. D. Jennings, Jr. Vice President Hardee Power Partners, Limited A Florida Limited Partnership 702 N. Franklin Street Tampa, FL 33602

Dear Mr. Jennings:

RE: Hardee Power Station

PSD-FL-140

Please find enclosed the above referenced revised permit. It replaces the one issued on January 7, 1991. If you have any questions, please call Mr. Richard Donelan at (904)488-9730 or write to me at the above address.

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/pa

Enclosure

cc: B. Thomas, SW District

J. Harper, EPA

C. Shaver, NPS

R. Donelan, OGC

B. Oven, Siting Office

L. Curtin, Esq.

Revised Final Determination

TECO Power Services Corporation Hardee Power Station Hardee/Polk County Tampa, Florida

Permit No. PSD-FL-140

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

January 31, 1991

Acheally

Jan 31, 1992

Revised Final Determination

On January 7, 1991, TECO Power Services was issued a federally enforceable PSD permit authorizing construction of the Hardee Power Station, a 660 MW combined cycle power plant which had been certified under the Florida Electrical Power Plant Siting Act on November 27, 1991. Certain federally enforceable conditions of the PSD permit differed from conditions contained in the State certification.

Following an appeal by TECO Power Services Corporation, on December 20, 1991, the Florida First District Court of Appeal entered an order which invalidated the federally enforceable PSD permit issued by the Department because its conditions did not exactly correspond to the conditions included in the State certification. The court directed the Department to issue a PSD permit which conforms to the conditions of the State certification without regard to the federal enforceability of the conditions at issue.

In accordance with the court's order, the Department is issuing this revised permit. The Department recognizes that Specific Conditions 1 and 2 of the permit are not considered to be federally enforceable by EPA.

The Department intends to obtain an appropriate modification to the State certification as soon as possible to eliminate conflicting conditions found therein, as authorized by the court's order. The Department will then reissue its January 7, 1991, final permit to establish all federally enforceable conditions necessary for construction of this source in accordance with the State Implementation Plan for Florida.



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Carol M. Browner, Secretary

PERMITTEE:

TECO Power Services Corporation c/o Tampa Electric Company P. O. Box 111 Tampa, Florida 33601-0111 Permit Number: PSD-FL-140

County: Hardee/Polk

Latitude/Longitude: 22°38'02"N

81°38'02"W

Project: Hardee Power Station

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. 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 made a part hereof and specifically described as follows:

For the construction of a combined cycle power plant and directly associated facilities with an ultimate capacity of 660 MW (nominal net) to be constructed in 3 phases. Phase 1-A will consist of a nominal 220 MW combined cycle unit and a 75 MW stand-alone combustion turbine. Phase 1-B will add 145 MW of generating capacity through the addition of a combustion turbine, two HRSG's and one steam electric generator, resulting in two 220 MW combined cycle units. Phase 2 will consist of a third 220 MW unit to be added at an unspecified future date. The combustion turbines will be capable of both combined cycle and simple cycle operation. It is anticipated that the combustion turbines will use natural gas as the primary fuel and distillate oil as the backup fuel.

Nitrogen oxides will be controlled by water injection unless the cumulative lifetime average capacity factor exceeds 60 percent. Should any annual report demonstrate that the cumulative lifetime average capacity factor exceeds 60 percent at any time, the Permittee shall install SCR or another technology of equal or greater NO_X reduction capability. The power plant site certification number for this project is PA 89-25.

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.

Attachments are listed below:

1. Power Plant Site Certification Package PA 89-25 and its associated attachments, dated June 14, 1990.

2. Letter from EPA dated December 21, 1990.

- 3. DER's Final Determination dated January 4, 1991.
- 4. First District Court of Appeal Court Order dated December 20, 1991.
- 5. DER's Revised Final Determination dated January 22, 1991.

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 acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold 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.

GENERAL CONDITIONS:

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:
 - 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.

1

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

GENERAL CONDITIONS:

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 17-4.120 and 17-30.300, 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 Prevention of Significant Deterioration (PSD)
 - (x) Compliance with New Source Performance Standards (NSPS)
- 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,

GENERAL CONDITIONS:

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.

SPECIFIC CONDITIONS:

- 1. On or before April 1 of each year, the Permittee shall submit to the Division of Air Resources Management and the Air Section of the Southwest District Office an annual report for the previous calendar year showing:
 - (a) The annual average capacity factor for each individual generating unit;
 - (b) The cumulative lifetime average capacity factor for each individual generating unit;
 - (c) The annual average capacity factor for the Hardee Power Station; and,
 - (d) The cumulative lifetime average capacity factor for the Hardee Power Station.

The annual average capacity factor shall be calculated by dividing each unit's megawatt hours output of generation by the product of the official megawatt rating of the unit and the number of hours in a year. Cumulative lifetime average capacity factor shall be calculated by dividing the cumulative total of megawatt hours output of generation by the product of the official combined cycle megawatt rating and the cumulative period of hours since commercial operation.

PERMITTEE:

Permit Number: PSD-FL-140 TECO Power Services Corporation Project: Hardee Power Station

SPECIFIC CONDITIONS:

- The Permittee shall install duct module(s) suitable for later installation of SCR equipment when constructing any combined cycle generating unit at the Hardee Power Station. Should any annual report demonstrate that the cumulative lifetime average capacity factor for the Hardee Power Station exceeds 60% at any time, the Permittee shall install SCR or another technology of equal or greater NO_X reduction capability. In no event shall any such SCR or equivalent NOx control technology installation and compliance testing occur later than 30 months from the date that the Permittee requested or the facility exceeded the 60% cumulative lifetime average capacity factor.
- Only natural gas or No. 2 fuel oil shall be fired in the turbine.
- The maximum heat input to each CT shall neither exceed 1268.4 MMBtu/hr while firing natural gas, nor 1312.3 MMBtu/hr while firing fuel oil (@ 32°F). Each CT's fuel consumption shall continuously measured and recorded.
- The maximum allowable emissions from each CT in accordance with the BACT determination, shall not exceed the following:

Pollutant	Fuel	Concentration	Emission Limitations lbs/hr/CT
NO _X	Gas	42 ppmvd @ 15% O ₂	215.9
	Oil	65 ppmvd @ 15% O ₂	383.8
voc	Gas	2 ppmvd	3.6
	Oil	5 ppmvd	10.3
СО	Gas	10 ppmvd	31.3
	Oil	26 ppmvd	93.4
PM/PM ₁₀	Gas Oil		5.0 10.0
so ₂	Gas		35.8
	Oil	0.3% S Oil	734.4

Permit Number: PSD-FL-140 PERMITTEE: Project: Hardee Power Station TECO Power Services Corporation

SPECIFIC CONDITIONS:

6. The following allowable emissions, most determined by BACT, are tabulated for PSD and inventory purposes:

•			Maximum Allowable Emission (@ 32°F)
<u>Pollutant</u>	Fuel	Concentration	lbs/hr/CT
H ₂ SO ₄ Acid Mist	Gas	,000 too too	1.6
	Oil		22.0 (avg)/33.7 (max)
Mercury	Gas		0.0144
	Oil		0.0039
Fluoride	Oil	·	0.0427
Beryllium	Oil		0.0333

NOTE: Sulfur dioxide emissions assume a maximum of 0.5 percent sulfur in fuel oil for hourly emissions and an average sulfur content of 0.3 percent for annual emissions.

- Visible emissions shall neither exceed 10% opacity while burning natural gas, nor 20% opacity while burning distillate oil.
- Initial (I) compliance tests shall be performed using both The stack test for each turbine shall be performed within fuels. 10% of the maximum heat rate input for the tested operating temperature. Annual (A) compliance tests shall be performed on each Combustion Turbine with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests shall be conducted using EPA reference methods in accordance with the July 1, 1988, version of 40 CFR 60 Appendix A:
 - 5 for PM (I,A).
 - b. 8 for sulfuric acid mist (I, for oil only).
 - 9 for VE (I,A).
 - 10 for CO (I,A). d.
 - e.
 - 20 for NO_X (I,A). 25A for VOC (I,A).
 - 104 for Beryllium (I, for distillate oil only). A fuel analysis for Be using either Method 7090 or 7091, and sample extraction using Method 3040, as described in the EPA solid waste regulations SW 846, is also acceptable.
 - ASTM D 2880-71 for sulfur content of distillate oil (I,A).
 - ASTM D 1072-80, D 3031-81, D 4084-82 or D 3246-81 for sulfur content of natural gas (I, and A if deemed necessary by DER).

SPECIFIC CONDITIONS:

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

- 9. | The average annual sulfur content of the No. 2 fuel oil shall not exceed 0.3% by weight. The maximum sulfur content of the No. 2 fuel oil shall not exceed 0.5%. Compliance shall be demonstrated in accordance with the requirements of 40 CFR 60.334 by testing all oil | shipments for sulfur content using ASTM D 2880-71, and testing for nitrogen content.
- 10. For all generating units, water injection shall be utilized for NO_X control. The water to fuel ratio at which compliance is achieved shall be incorporated into the permit and shall be continuously monitored for all units.
- 11. To determine compliance with the capacity factor condition, the Permittee shall maintain daily records of power generation for each turbine. All records shall be maintained for a minimum of three years after the date of each record and shall be made available to representatives of the Department upon request.
- 12. The project shall comply with all the applicable requirements of Chapter 17-2, Florida Administrative Code (F.A.C.) and the July 1, 1988, version of 40 CFR 60 Subpart GG, Gas Turbines.
- 13. Any change in the method of operation, fuels, equipment, or phase design, shall be submitted for approval to DER's Bureau of Air Regulation.
- 14. | If start/black start capability for the CTs is provided by a combustion unit, the Department shall be notified of the type/model, output capacity, anticipated hours of operation, and air emissions of the unit.
- 15. The Permittee shall have required sampling tests of the emissions performed within 60 days after achieving the maximum turbine firing rate, but not later than 180 days from the start of operation. Thirty (30) days prior notice of the initial sampling test and fifteen (15) days notice before subsequent annual testing shall be provided to the Southwest District office. Written reports of the tests shall be submitted to the Southwest District office within 45 days of test completion.
- 16. | If construction does not commence on the first three units within 18 months of issuance of this certification/permit, then the Permittee shall obtain from DER a review and, if necessary, a

SPECIFIC CONDITIONS:

modification of the control technology and allowable emissions for the unit(s) on which construction has not commenced (40 CFR 52.21(r)(2). Units to be constructed in later phases of the project will be reviewed and limitations established under the supplementary review process of the Power Plant Siting Act.

- 17. Quarterly excess emission reports, in accordance with the July 1, 1988, version of 40 CFR 60.7 and 60.334 shall be submitted to DER's Southwest District office. Annual reports shall be submitted to the District office in accordance with F.A.C. Rule 17-2.700(7).
- 18. Literature of equipment selected shall be submitted as it becomes available. A CT-specific graph of the relationship between NO_{X} emissions and water injection, and also another of ambient temperature and heat inputs to the CT shall be submitted to DER's Southwest District office and the Bureau of Air Regulation.
- 19. Stack sampling facilities shall be provided for both the bypass stack (CT) and the main stack (HRSG).
- 20. Construction period fugitive dust emissions shall be minimized by covering or watering dust generation areas.

Issued this 24th day of February , 1992

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Carol M. Browner, Secretary



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400 Lawton Chiles, Governor Carol M. Browner, Secretary

August 9, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. R. E. Ludwig, President TECO Power Services Corporation Post Office Box 111 Tampa, Florida 33601

Dear Mr. Ludwing:

Re: Transfer of Construction Permit PSD-FL-140 Hardee Power Station

The Department is in receipt of your Application for Transfer of Permit requesting the permit to construct the referenced air pollution source be transferred from TECO Power Services Corporation to Hardee Power Partners, Limited. This request is acceptable and our records for construction permit No. PSD-FL-140 have been changed to show that the new owner/operator is:

Mr. G. D. Jennings, Jr., Vice President
Hardee Power Partners, Limited,
a Florida Limited Partnership
702 N. Franklin Street
Tampa, Florida 33602

Hardee Power Partners, Limited will be responsible for the operation of the referenced facility. A copy of this letter must be filed with the referenced construction permit and shall become a part of that permit.

Sincerely,

Carol M. Browner

Secretary

CMB/plm

Attachment: Application for Transfer of Permit

c: G. D. Jennings, Jr.
Jewell Harper, EPA
W. C. Thomas, SW Dist.
Farm Lurtur
Richard Correlan, 06 C



DEPARTMENT OF ENVIRONMENTAL REGULATION

APPLICATION FOR TRANSFER OF PERMIT

Permit No. PSD	Oste Issued January /, 1991	Date Expires
	NOTIFICATION OF SALE OR LEGAL TRAI	
Source Name:	Hardee Power Station	_ County: _ Polk/Hardee
Source Location:	Polk and Hardee County, Florida	_ Cirx:
emines Name:	TECO Power Services Corporation	_ Title:
lailing Address:	P.O. Box 111, Tampa, FL 33601	
,		
ights as beimittee	to the applicant in the event the department agrees to the parties of this of the applicant in the event the department agrees to the practice of the content of the parties of the partie	Offution source. He further agrees to assign his
OUNTY & MU	Usburush	Signature of Permittee
whoth	gard Pine 1991 President	/ Title
···	Jan Huffman Date: 61	1/2/91
	Notary Publis	
ly Commission E	xoires: 6/18/9/1	
	1 1	
	REQUEST FOR TRANSFER OF PERMI	τ
ource Name:	Hardee Power Station	<u>. </u>
oplicant Name: _	Hardee Power Partners, Limited, a Flo	rida limited partnership
	702 North Franklin St.	
	Tampa, FL 33602	Telephone: (813, 228-1301
		i elephone: .
oject Engineer. <i>I</i>	Name: Kevin E. Fleming	
iiling Aooress:	702 North Franklin St.	
·	Tampa, FL 33602	Telephone: (813 228-1301
		31.63
a nugetsigned pe	reby notifies the department of his having acquired title to this pol	llution source. He further states that he has ex-
is issued by the c ites that he is lan	ion and documents submitted by the current permittee the casis on viceoartment, and states that they accurately and completely describe miliar with the permit, agrees to comply with its terms and conditions. He also agrees to promptly notify the department of any future on its project.	the permitted activity or project. He number is and agrees to assume the rights and liabilities.
OF In and number	Tanga, Florida 1. D.	Janning on Da
om to and subset	Fired In Inch	Signature of Applicant
WAR GHL		dent, Operations & Develops
s	Nin Hatiman 15 11.	- G Time
	UNOTATIVE DATE: Date:	. 1 . 1
רבו הפועייחתם	DIES: 10 11 8 191	

"Arrach latter of authorization if other than owner or comporate officer,