



# HARDEE POWER PARTNERS

**RECEIVED**

MAR 10 1999

BUREAU OF  
AIR REGULATION

Via Federal Express

March 9, 1999

Scott M. Sheplak, P.E.  
Department of Environmental Protection  
Bureau of Air Regulation  
111 South Magnolia Dr., Suite 4  
Tallahassee, FL 32301

RE: Hardee Power Partners (HPP)  
Final Order Approving Certification  
Hardee Power Station Unit #3  
Conditions of Certification PA 89-25SA

Dear Mr. Sheplak:

Per our telephone conversation today, please find enclosed a copy of the Final Order Approving Certification for the Hardee Power Station Unit #3.

Please contact me at (813) 228-4858, if you have any questions or require additional information.

Sincerely,

Paul L. Carpinone  
Director Environmental

/gdb

Enclosure



11/27/96  
cc - Cindy Phillips  
Steve Welsh  
Lennon Anderson

Via Certified Mail - P 880 005 909

Hardee Power Partners  
General File

September 13, 1996

**RECEIVED**  
SEP 17 1996  
BUREAU OF  
AIR REGULATION

John C. Brown, Jr., P.E.  
Administrator  
Air Permitting and Standards  
Florida Department of  
Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

RE: Hardee Power station  
Source APIS ID 40TPA25001501  
Conditions of Certification PA 89-25 - Major Air Pollution Source  
Change of Assigned Agent

Dear Mr. Brown:

This letter will act as notification that John T. Duff, Director Operations for Hardee Power Station, will become the assigned agent and assume the responsibilities associated with this position, including signing future environmental reports.

Michael Schuyler, the current assigned agent, is assuming other responsibilities within TECO Power Services.

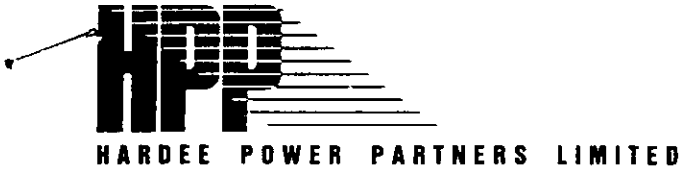
If you have questions regarding this information, please call John Duff at (813) 228-1381 or Paul Carpinone at (813) 228-4858.

Sincerely,

A handwritten signature in black ink that reads 'George D. Jennings'. The signature is written in a cursive style with a large initial 'G'.

George D. Jennings  
Vice President

cc: L. N. Curtin



December 7, 1995

Mr. John C. Brown (MS 5505)  
Florida Department of  
Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 34399-2400

RE: Hardee Power Station  
PA89-25, PSD-FL-140  
Acid Rain Program

**RECEIVED**

**DEC 11 1995**

**BUREAU OF  
AIR REGULATION**

Dear Mr. Brown:

In response to your letter dated November 30, 1995, please be advised that the Hardee Power Station is not subject to the Acid Rain Program pursuant to the exemption contained in § 72.6(b)(5). Specifically, the Hardee Power Station meets the following requirements of a "qualifying facility" as specified in § 72.6(b)(5):

- (I) Has, as of November 15, 1990, one or more qualifying power purchase commitments to sell at least 15 percent of its total planned net output capacity; and
- (ii) Consists of one or more units designated by the owner or operator with total installed net output capacity not exceeding 130 percent of its total planned net output capacity.

Please contact me at (813) 228-4493 or Paul Carpinone at (813) 228-4858 if you have any questions concerning this response.

Sincerely,

A handwritten signature in black ink that reads 'M.R. Schuyler'. The signature is written in a cursive, flowing style.

Michael R. Schuyler  
Director, Project Services

PLC/gdb

12/06/90

State of Florida Department of Environmental Regulation  
TECO Power Services/Seminole Electric Cooperative, Inc.  
Hardee Power Station  
PA 89-25

CONDITIONS OF CERTIFICATION

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In general, where a specific condition is intended to apply solely to one of the Permittees, this shall be indicated in the title for that specific condition by the following abbreviations:

TPS - TECO Power Services Corporation  
TEC - Tampa Electric Company  
SECI - Seminole Electric Cooperative, Inc.

Similarly, where a specific condition is intended to apply to any two of the Permittees, this shall be indicated by listing in the title the respective abbreviations. Where a specific condition is intended to apply to TPS, TEC, and SECI, the designation "HPS" (for "Hardee Power Station") shall appear.

### C. Applicable Rules

The construction and operation of the HPS shall be in accordance with all applicable provisions of at least the following regulations of the Department: Chapters 17-2, 17-3, 17-4, 17-5, 17-6, 17-7, 17-12, 17-21, 17-22, 17-25, 17-274, 17-302, and 17-610, Florida Administrative Code (F.A.C.) or their successors as they are renumbered.

## II. AIR (TPS)

### A. Emission Limitations for HPS

The construction and operation of HPS shall be in accordance with all applicable provisions of Chapters 17-2, F.A.C. In addition to the foregoing, HPS shall comply with the following conditions of certification as indicated.

1. On or before April 1 of each year, the Permittee shall submit to the Division of Air Resource Management and the Air Section, 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.

2. 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 NOx 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.

3. Only natural gas or No. 2 fuel oil shall be fired in the turbine.

4. 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 be continuously measured and recorded.

5. The maximum allowable emissions from each CT in accordance with the BACT determination, shall not exceed the following:

Pollutant	Fuel	Emission Limitations	
		concentration	lb/hr/CT
NOx	Gas	42 ppmvd @ 15% O <sub>2</sub>	215.9
	Oil	65 ppmvd "	383.8
VOC	Gas	2 ppmvd	3.6
	Oil	5 ppmvd	10.3
CO	Gas	10 ppmvd	31.3
	Oil	26 ppmvd	93.4
PM/PM <sub>10</sub>	Gas	--	5.0
	Oil	--	10.0
SO <sub>2</sub>	Gas	--	35.8
	Oil	0.3% S oil	734.4

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

*not  
allowables*

Pollutant	Fuel	Maximum Allowable Emission (@ 32°F)	
		<u>concentration lb/hr/CT</u>	
H <sub>2</sub> SO <sub>4</sub> Acid Mist	Gas	---	1.6
	Oil	---	22.0 (avg)/33.7 (max)
Mercury	Gas	---	0.0144
	Oil	---	0.0039
Fluoride	Oil	---	0.0427
<u>Beryllium</u>	<u>Oil</u>	---	<u>0.0333</u>

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.

7. Visible emissions shall neither exceed 10% opacity while burning natural gas, nor 20% opacity while burning distillate oil.

8. Initial (I) compliance tests shall be performed on each Combustion Turbine using both fuels. The stack test for each turbine shall be performed within 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:

- a. 5 for PM (I,A)
- ~~b. 8 for sulfuric acid mist (I, for oil only)~~
- c. 9 for VE (I,A)
- d. 10 for CO (I,A)
- e. 20 for NO<sub>x</sub> (I,A)
- f. 25A for VOC (I,A)
- g. 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.
- h. ASTM D 2880-71 for sulfur content of distillate oil (I,A)
- i. 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)

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 NOx 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 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 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 NOx emissions and water injection, and also another of ambient temperature and heat inputs to the CT shall be submitted



03	PEAKING UNIT NO. 3, NO. 2 OIL	A	-	00/00/00	00/00/00	A025-154881	10/28/88	10/28/88
04	PEAKING UNIT NO. 4, NO. 2 OIL	A	-	00/00/00	00/00/00	A025-154880	10/28/88	10/28/88
05	PEAKING UNIT NO. 5, NO. 2 OIL	A	-	00/00/00	00/00/00	A025-154879	10/28/88	10/28/88
06	PEAKING UNIT #5A, NO. 2 OIL	I	-	00/00/00	00/00/00	A025-65861	06/08/83	06/08/83

APIS#: 40-TPA-25-0010 FACIL-OWN: EWELL DBA JAHNA CONCRETE # OF SRC: 002 TYPE: 99 STATUS: A  
 N/L: 6TH MAGNOLIA

SRC#	SRC DESCRIPTION	STAT	CONST PERMIT	CONST ISS DATE	CONST EXP DATE	OPER PERMIT	OPER ISS DATE	OPER EXP DATE
01	DELETED - FORMER FLYASH SILO	I	-	00/00/00	00/00/00	A025-61349	02/01/83	01/04/83
02	CEMENT SILO WITH PORTEC MODEL DF-4 DUST COLLECTOR	A	-	00/00/00	00/00/00	A025-149664	09/23/88	09/23/88

APIS#: 40-TPA-25-0002 FACIL-OWN: FLORIDA FENCE POST CO # OF SRC: 001 TYPE: 99 STATUS: A  
 N/L: SR 64

SRC#	SRC DESCRIPTION	STAT	CONST PERMIT	CONST ISS DATE	CONST EXP DATE	OPER PERMIT	OPER ISS DATE	OPER EXP DATE
01	67 H.P. YORK SHIPLEY BOILER	A	-	00/00/00	00/00/00	A025-202243	11/22/91	09/17/96

APIS#: 40-TPA-25-0004 FACIL-OWN: HARDEE MEMORIAL HOSPITAL # OF SRC: 001 TYPE: 37 STATUS: A  
 N/L: 533 CARLTON ST

SRC#	SRC DESCRIPTION	STAT	CONST PERMIT	CONST ISS DATE	CONST EXP DATE	OPER PERMIT	OPER ISS DATE	OPER EXP DATE
01	INCINERATOR FOR TYPE 2 & 4 WASTES	I	-	00/00/00	00/00/00	A025-134832	08/04/87	08/04/92

APIS#: 40-TPA-25-0015 FACIL-OWN: TECO POWER SERVICES CORP. # OF SRC: 004 TYPE: 02 STATUS: A  
 N/L: HARDEE POWER STATION

SRC#	SRC DESCRIPTION	STAT	CONST PERMIT	CONST ISS DATE	CONST EXP DATE	OPER PERMIT	OPER ISS DATE	OPER EXP DATE
01	COMBUSTION TURBINE 1A	A	PA89-25	01/07/91	00/00/00	-	00/00/00	00/00/00
02	COMBUSTION TURBINE 1B	A	PA89-25	01/07/91	00/00/00	-	00/00/00	00/00/00
03	COMBUSTION TURBINE 2A	A	PA89-25	01/07/91	00/00/00	-	00/00/00	00/00/00
04	70 MW HEAT RECOVERY STEAM GENERATOR SYSTEM	A	PA89-25	01/07/91	00/00/00	-	00/00/00	00/00/00

APIS#: 40-TPA-25-0003 FACIL-OWN: THE MANCINI PACKING COMPANY # OF SRC: 003 TYPE: 99 STATUS: A  
 N/L: MAGNOLIA & 7 TH AV

SRC#	SRC DESCRIPTION	STAT	CONST PERMIT	CONST ISS DATE	CONST EXP DATE	OPER PERMIT	OPER ISS DATE	OPER EXP DATE
01	PROCESS STEAM BOILER USING PROPANE FUEL	I	-	00/00/00	00/00/00	A025-139376	12/07/87	12/07/92



# Department of Environmental Protection

Lawton Chiles  
Governor

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

Virginia B. Wetherell  
Secretary

September 22, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Gordon L. Gillette  
Hardee Power Partners Limited  
Post Office Box 111  
Tampa, Florida 33601-0111

Re: Hardee Power Station  
Amendment to PSD-FL-140(A)

Dear Mr. Gillette:

The Department received your request for an amendment of the subject permit. The permit is amended as shown:

Permit No. PSD-FL-140(A)

Specific Condition 8.a.

FROM:

a. 5 for PM (I,A).

TO:

a. 5 or 17 for PM (I,A, for oil only).

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition

Mr. Gordon L. Gillette  
PSD-FL-140(A)  
Permit Amendment  
September 22, 1994  
Page 2 of 3

within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

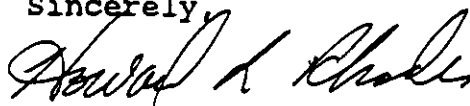
- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the amendment request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

Mr. Gordon L. Gillette  
PSD-FL-140(A)  
Permit Amendment  
September 22, 1994  
Page 3 of 3

This letter amendment shall become an attachment to this permit,  
No. PSD-FL-140(A), and shall become a part of the permit.

Sincerely,



Howard L. Rhodes  
Director  
Division of Air Resources  
Management

HLR/SA/bjb

cc: B. Thomas, SW District  
T. Davis, ECT  
J. Harper, EPA  
J. Bunyak, NPS

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that  
this AMENDMENT and all copies were mailed by certified mail before  
the close of business on 9/23/94 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,  
on this date, pursuant to  
120.52(11), Florida Statutes,  
with the designated Department  
Clerk, receipt of which is  
hereby acknowledged.

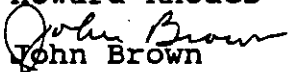
  
Clerk

9/23/94  
Date

Memorandum

Florida Department of  
Environmental Protection

---

TO: Howard Rhodes  
FROM:   
John Brown  
DATE: September 21, 1994  
SUBJECT: Hardee Power Station  
Amendment to PSD-FL-140(A)

Attached for your approval and signature is the PSD permit amendment as requested by Hardee Power Station for their combined cycle electrical power plant in Hardee County, Florida.

The conditions of certification were modified by Buck Oven at an earlier date. This amendment to the PSD permit will conform with the changes to the conditions of certification.

I recommend your approval and signature.

JB/SA/bjb

Attachment

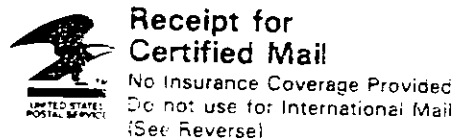
Is your RETURN ADDRESS completed on the reverse side?

<b>SENDER:</b> • Complete items 1 and/or 2 for additional services. • Complete items 3, and 4a & b. • Print your name and address on the reverse of this form so that we can return this card to you. • Attach this form to the front of the mailpiece, or on the back if space does not permit. • Write "Return Receipt Requested" on the mailpiece below the article number. • The Return Receipt will show to whom the article was delivered and the date delivered.		I also wish to receive the following services (for an extra fee): 1. <input type="checkbox"/> Addressee's Address 2. <input type="checkbox"/> Restricted Delivery Consult postmaster for fee.	
3. Article Addressed to: Mr. Gordon L. Gillette Hardee Power Partners Limited Post Office Box 111 Tampa, FL 33601-0111		4a. Article Number Z 751 859 982	
		4b. Service Type <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise	
		7. Date of Delivery <b>SEP 28 1994</b>	
5. Signature (Addressee) <i>R. Clark</i>		8. Addressee's Address (Only if requested and fee is paid)	
6. Signature (Agent) <i>R. Clark</i>			

Thank you for using Return Receipt Service.

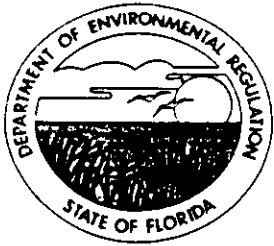
PS Form 3811, December 1991 U.S. GPO: 1992-323-402 DOMESTIC RETURN RECEIPT

Z 751 859 982



Sent to	
Mr. Gordon L. Gillette	
P. O. Box 111	
P.O., State, and ZIP Code	
Tampa, FL 33601-0111	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	
Mailed: 9-23-94	
Permit: PSD-FL-140(A)	

PS Form 3800, March 1993



# 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.

**SENDER:**

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

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

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

Consult postmaster for fee.

3. Article Addressed to:  
 Mr. G. D. Jennings, Jr., V.P.  
 Hardee Power Partners, Ltd.  
 702 W. Franklin St.  
 Tampa, FL 33602

4a. Article Number

P 617 884 148

4b. Service Type

- Registered  Insured
- Certified  COD
- Express Mail  Return Receipt for Merchandise

7. Date of Delivery

MAR 2 1992

5. Signature (Addressee)

6. Signature (Agent)

*Paul Stupis*

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

PS Form 3811, November 1990 \* U.S. GPO: 1991-287-066

**DOMESTIC RETURN RECEIPT**

P 617 884 148



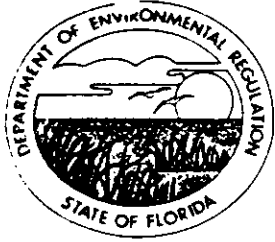
**Certified Mail Receipt**

No Insurance Coverage Provided  
Do not use for International Mail  
(See Reverse)

Sent to	
G. D. Jennings	
Street & No.	
Hardee Power Partners Ltd	
P.O., State & ZIP Code	
Tampa FL 33602	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	3/26/92 PBD-FL-148

PS Form 3800, June 1990





# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

January 7, 1991

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Jerry L. Williams  
Director, Environmental  
Tampa Electric Company  
P. O. Box 111  
Tampa, Florida 33601-0111

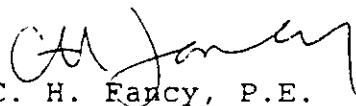
Dear Mr. Williams:

Re: TECO/Seminole Electric  
Hardee Power Station, PSD-FL-140

Please find enclosed the above referenced permit. You have the right to petition for an administrative hearing pursuant to Section 120.57, Florida Statutes, within 14 days of receipt of this permit or file a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, within 30 days from the date this permit is filed with the Clerk of the Department. Further, you may request a public hearing. Such request must be submitted within 30 days of receipt of this permit.

If you have any questions, please call Barry Andrews at 904-488-1344 or write to me at the above address.

Sincerely,

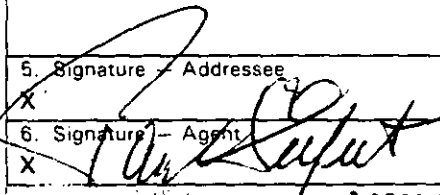
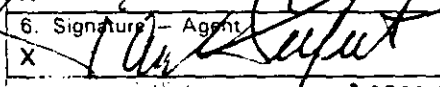
  
C. H. Fancy, P.E.  
Chief  
Bureau of Air Regulation

CHF/plm

Enclosure

c: Jewell A. Harper, EPA  
William C. Thomas, SW District  
Larry Curtin, Holland & Knight

3 and 4.  
 Put your address in the "RETURN TO" Space on the reverse side. Failure to do this will result in this mail from being returned to you. The return receipt fee will provide you the name of the person delivered to and the date of delivery. For additional fees the following services are available. Consult postmaster for fees and check box(es) for additional service(s) requested.  
 1.  Show to whom delivered, date, and addressee's address. (Extra charge)  
 2.  Restricted Delivery (Extra charge)

3. Article Addressed to: <i>Mr. Jerry L. Williams</i> <i>Tampa Electric Co.</i> <i>P.O. Box 111</i> <i>Tampa, FL 33601-0111</i>	4. Article Number <i>P 407 852 911</i> Type of Service: <input type="checkbox"/> Registered <input type="checkbox"/> Insured <input checked="" type="checkbox"/> Certified <input type="checkbox"/> COD <input type="checkbox"/> Express Mail <input type="checkbox"/> Return Receipt for Merchandise
Always obtain signature of addressee or agent and DATE DELIVERED.	
5. Signature - Addressee <i>X</i> 	8. Addressee's Address (ONLY if requested and fee paid)
6. Signature - Agent <i>X</i> 	

JAN 10 1991

P 407 852 911  
 RECEIPT FOR CERTIFIED MAIL  
NO INSURANCE COVERAGE PROVIDED  
 NOT FOR INTERNATIONAL MAIL  
 (See Reverse)

PS Form 3800, June 1985	Sent to <i>Jerry Williams</i>
	Street and <i>TECC</i>
	P.O. Box or ZIP Code <i>PO BOX 111</i>
	City, State, and ZIP Code <i>Tampa, FL</i>
	Certified Fee
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Postmark or Date <i>1-7-91</i> <i>PSD-FL-140</i>	

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this notice of permit and all copies were mailed before the close of buisness on 1-7-91.

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to  
§120.52(9), Florida Statutes, with  
the designated Department Clerk,  
receipt of which is hereby  
acknowledged.

Kym Daber  
Clerk

1-7-91  
Date

RECEIVED

NOV 13 1995

STATE OF FLORIDA  
DIVISION OF ADMINISTRATIVE HEARINGS  
TECO Power Services

CC: GDT  
GMN  
LNC  
MRS  
SMM  
WTW  
PLC  
VMB  
File HPS#3

IN RE: SEMINOLE ELECTRIC )  
COOPERATIVE, INC., POWER PLANT )  
SITING APPLICATION NO. 89-25SA )

DOAH CASE NO. 94-2765EPP  
OGC CASE NO. 94-0522

FINAL ORDER APPROVING CERTIFICATION

On August 8, 1995, this matter came before the Governor and Cabinet, sitting as the Siting Board, pursuant to the Florida Electrical Power Plant Siting Act (PPSA), Section 403.501 et seq., Florida Statutes (1993), for final agency action concerning a recommended order dated June 30, 1995, attached as Exhibit 1, which recommends site certification for the Seminole Electric Power Plant Hardee County site. By order dated January 6, 1995, the Board found the Seminole site to be consistent and in compliance with existing land use plans and zoning ordinances. On June 21, 1994, the Public Service Commission certified the need for 440 MW of natural gas and oil-fired generating capacity at the site.

No party has filed exceptions to the Recommended Order.

Having reviewed the recommended order and otherwise being fully advised, it is ORDERED:

1. Pursuant to Section 120.57(1)(b)(10), Florida Statutes (1993), the Recommended Order dated June 30, 1995 (Exhibit 1), is APPROVED and ADOPTED by the Board.

2. The Board APPROVES certification for the location, construction and operation of Hardee Unit 3, a 440 MW natural gas and oil-fired, combined cycle generating plant at the Seminole

Hardee County Site as proposed in the Site Certification Application, subject to the Conditions of Certification contained in Appendix I to Exhibit 1.

3. The Board certifies the Hardee Power Station Site for an increase in the ultimate site capacity from 660 MW to 880 MW, fueled by natural gas and fuel oil, subject to supplemental application proceedings required by Section 403.517, Florida Statutes, and the previous site certification order for the Hardee Power Station.

4. The Board DELEGATES to the Department of Environmental Protection the authority to assure and enforce compliance by Seminole Electric Cooperative, Inc., and its agents with all of the Conditions of Certification imposed by this Order.

#### NOTICE OF RIGHTS

Any party to this certification proceeding has the right to seek judicial review of this Order under Section 120.68, Florida Statutes, by the filing of a notice of appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, 3900 Commonwealth Blvd., Tallahassee, FL 32399-3000; and by filing a copy with the appropriate District Court of Appeal. The notice of appeal must be filed within 30 days from the date this Order is filed with the Clerk of the Department.

DONE and ORDERED this            day of August, 1995, at Tallahassee, Florida, pursuant to a vote of the Governor and Cabinet sitting as the Siting Board, at a duly-noticed and constituted Cabinet meeting on August 8, 1995.

THE GOVERNOR AND CABINET  
SITTING AS THE SITING BOARD

FILING AND ACKNOWLEDGEMENT  
FILED, on this date, pursuant to S120.52  
Florida Statutes, with the designated  
Department Clerk, receipt of which  
is hereby acknowledged.

BY: Lawton Chiles  
THE HONORABLE LAWTON CHILES

Randy C. Carter      8/15/95  
Clerk                      /Date

CERTIFICATE OF SERVICE

I hereby certify this 16<sup>th</sup> day of August 1995, that true and correct copies of the foregoing have been served by U.S. Mail upon the following:

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Assistant General Counsel  
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Tallahassee, FL 32399-0863

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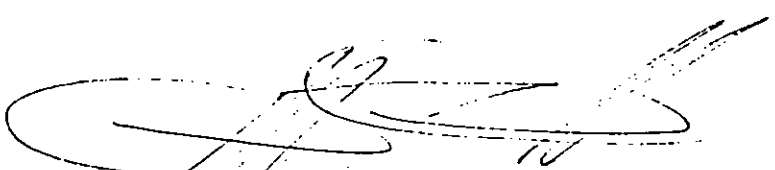
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Holland & Knight  
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Tallahassee, FL 32302-0810



CHARLES T. "CHIP" COLLETTE

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State of Florida Department of Environmental Protection  
Seminole Electric Cooperative, Inc.  
Hardee Power Station Unit #3  
PA 89-25SA

CONDITIONS OF CERTIFICATION

April 18, 1995

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STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SEMINOLE ELECTRIC COOPERATIVE, INC.  
HARDEE POWER STATION UNIT#3  
PA 89-25SA

CONDITIONS OF CERTIFICATION

I. GENERAL

A. Definitions

The meaning of the terms used herein shall be governed by the definitions contained in Chapters 403, 378, 373, 372, and 253, Florida Statutes, and any regulation adopted pursuant thereto and the statutes and regulations of any agency. In the event of any dispute over the meaning of a term used in these conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning as determined by the department. As used herein:

1. "Application" shall mean the Site Certification Application for the Hardee Power Station Unit 3, as supplemented.
2. "CFRPC" shall mean the Central Florida Regional Planning Council.
3. "DEP" shall mean the Florida Department of Environmental Protection.
4. "DHR" shall mean the Florida Department of State, Division of Historical Resources.
5. "Emergency conditions" shall mean urgent circumstances involving potential adverse consequences to human life or property as a result of weather conditions or other calamity, and necessitating new or replacement gas pipeline, transmission lines, or access facilities.
6. "Feasible" or "practicable" shall mean reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.
7. "GFWFC" shall mean the Florida Game and Freshwater Fish Commission.
8. "HPPL" shall mean Hardee Power Partners Limited.

9. "HPS" shall mean the Hardee Power Station Site within which the project will be located. HPS is also the site of existing generating units operated by Hardee Power Partners Limited.
10. "M/C" shall mean mitigation/compensation.
11. "Permittee" shall mean Seminole Electric Cooperative, Inc. (SECI).
12. "Power plant" shall mean the electric power generating equipment and appurtenances to be constructed on a site in Hardee County and Polk County, as generally depicted in the Application.
13. "Project" shall mean the Hardee Power Station Unit 3 and all associated facilities, including: The power plant and related facilities; the cooling reservoir and related facilities
14. "SWFRPC" shall mean the Southwest Florida Regional Planning Council.
15. "SWFWMD" shall mean the Southwest Florida Water Management District.
16. "USFWS" shall mean the United States Fish and Wildlife Service.
17. "WMD" shall mean water management district.
18. "ISO" shall mean International Organization for Standardization, ISO 3977-1978(E) standard conditions for gas turbines = 14.7 psia, 15°C, relative humidity 60%.

**B. Identification of Permittee Responsible for Compliance**

These conditions are intended to apply to Seminole Electric Cooperative Incorporated (SECI) as the owner and operator of Hardee Power Station Unit 3. However, these conditions do not relieve SECI of obligations imposed by Conditions of Certification for certification PA 89-25 unless these conditions are specific to Phase 3 construction and operation.

**C. Applicable Rules**

The construction and operation of the Hardee Unit 3 shall be in accordance with all applicable provisions of at least the following regulations of the Department: Chapters 62-3, 62-4, 62-6, 62-12, 62-21, 62-22, 62-25, 62-210 through 62-297, 62-302, 62-650, and 62-660, Florida Administrative Code (F.A.C.) or their successors as they are renumbered.

## II. AIR

The construction and operation of the project shall be in accordance with all applicable provisions of Chapters 62-210 thru 62-297 and 62-4, Florida Administrative Code (F.A.C.), and 40 CFR 60, Subpart GG, Appendix A, Appendix B, and Appendix F (1994 version). The following emission limitations and conditions reflect the BACT determinations for the 300 megawatts (MW; two 150 MW combined cycle combustion turbines) of generating capacity. Each combustion turbine (CT) will be connected to a heat recovery steam generator (HRSG), which will recover the waste heat to produce steam for utilization in a single 140 MW (net) steam generator. There is no fuel firing in the associated HRSG. The facility will have a total nominal generating capacity of 440 MW (net). In addition to the foregoing, the project shall comply with the following conditions of certification as indicated.

### A. General Requirements

1. Pursuant to Rule 62-212.200(56), F.A.C., Potential to Emit (PTE), the maximum heat input to each combustion turbine at an ambient temperature of 32°F, shall neither exceed 1,862 MMBtu/hr while firing natural gas nor 1,965 MMBtu/hr while firing fuel oil.
2. Pursuant to Rule 62-212.200(56), F.A.C., PTE, the CTs may operate continuously, i.e., 8,760 hrs/year.
3. Pursuant to Rule 62-212.200(56), F.A.C., PTE, only natural gas or No. 2 fuel oil is allowed to be fired in the CTs. The maximum sulfur content limit of the No. 2 fuel oil shall not exceed 0.05 percent, by weight.
4. Pursuant to Rule 62-212.200(56), F.A.C., PTE, the maximum No. 2 fuel oil consumption allowed to be burned is 41,751,000 gallons per year, which is equivalent to 1500 hours per CT per year of operation at full-load (not to exceed 3,000 hrs/yr between the two CTs). The No. 2 fuel oil is to be used as a back-up fuel only.
5. Pursuant to Rule 62-296.310(3), F.A.C., Unconfined Emissions of Particulate Matter (PM), the emissions of unconfined PM shall be minimized during the construction period by covering or watering dust generating areas.

### B. Emission Limits

1. Pursuant to Rule 62-212.410, F.A.C., BACT, the maximum allowable emission limitations from two CTs, when firing natural gas or No. 2 fuel oil, shall not exceed the following:



MAXIMUM ALLOWABLE EMISSION LIMITATIONS					
POLLUTANT	FUEL	CONCENTRATION	lbs/hr <sup>a</sup>	TPY <sup>b</sup>	TPY(TOTAL) <sup>c</sup>
NOx	Gas	15 ppmvd <sup>d</sup>	106	931	1212
	Oil	42 ppmvd <sup>e</sup>	336	504	
CO	Gas	20 ppmvd	71	622	618
	Oil	25 ppmvd	91	136	
PM/PM <sub>10</sub>	Gas		7	65	147
	Oil		67	100	
SO <sub>2</sub>	Gas		5	47	182
	Oil		101	152	
VOC	Gas	5 ppmvd	10	88	99
	Oil	10 ppmvd	21	31	
Sulfuric Acid Mist	Gas		1	6	39
	Oil		22	34	
Beryllium	Oil		0.0049	0.007	0.007
Arsenic	Oil		0.0097	0.014	0.014
Visible Emissions	Gas	≤ 10 percent opacity			
	Oil	≤ 10 percent opacity			

- (a) The emission limitations in lbs/hr/CT are a 1-hour average as determined pursuant to the Performance Testing conducted pursuant to Condition II.C below.
- (b) The annual emission limitations (TPY) for natural gas are based on two CTs operating at full load for 8,760 hours per year. The annual emission limitations (TPY) for fuel oil are based on the equivalent of full-load operation for a maximum of 1500 hours per year for each of the two CTs (not to exceed 3,000 hrs/yr between the two CTs). The emission calculations are also based at a worst case ambient temperature of 32°F.
- (c) Maximum allowable emissions from two CTs if any fuel oil is burned at the facility during the year. The emission calculations are also based at an ambient temperature of 59°F.
- (d) The natural gas NOx allowable emission limitation of 15 ppmvd is corrected to 15 percent O<sub>2</sub>. Compliance shall be determined through the initial and annual compliance tests.
- (e) The fuel oil NOx allowable emission limitation of 42 ppmvd is corrected to 15 percent oxygen. Compliance shall be determined through the initial and annual compliance tests. The annual compliance test will be required if the fuel

oil is fired for more than 400 hours in the preceding 12-months.

For fuel oil firing, NOx emissions of 42 ppmvd @ 15 percent O<sub>2</sub> are based on fuel bound nitrogen (FBN) content of 0.015 percent by weight or less. When FBN levels are above this percentage, the combustion turbines may produce higher NOx concentrations due to increased fuel NOx formation. When FBN levels are above 0.015 percent, the operator shall employ all reasonable measures to maintain the NOx concentrations below 42 ppmvd. However, NOx emissions (ppmvd and lb/hr), as calculated from the formula below, shall be allowed if the permittee submits data (FBN levels from most recent fuel shipment or as fired fuel sampling and hourly averages of: fuel rate, heat rate, ambient conditions, and NOx control system parameters) which demonstrates that emissions (hourly averages) above 42 ppmvd are due solely to FBN levels above 0.015 percent.

The emission level for NOx is adjusted for higher fuel nitrogen contents up to a maximum of 0.030 percent by weight as follows,

FUEL BOUND NITROGEN (% by weight)	NOx LEVELS (ppmvd @ 15% O <sub>2</sub> )	NOx EMISSIONS (lb / hr / CT) <sup>1</sup>	NOx EMISSIONS INCREASE (TPY) <sup>1</sup>
0.015 or less	42	336.2	0.
0.020	44	352.1	0.
0.025	46	368.2	0.
0.030	48	384.2	0.

(1) From 336.2 lb/hr/CT at 32°F basis.

For intermediate values of FBN use the formula:

$$STD = 0.0042 + F$$

where,

STD = allowable NOx emissions (ppmvd @ 15% O<sub>2</sub>)  
 F = NOx emission allowance for fuel bound nitrogen

and

N (fuel bound nitrogen), is defined as follows;

N (% by weight)	F (NOx % by volume)
$0 < N \leq 0.015$	0
$0.015 < N \leq 0.030$	0.04 (N - 0.015)
$0.030 < N$	0.0006

2. The following estimated CT emissions are tabulated for PSD tracking purposes only:

ESTIMATED EMISSIONS		
POLLUTANT	FUEL	TPY
Lead	Oil <sup>a,b</sup>	0.16
Fluoride	Oil <sup>a,b</sup>	0.090
Mercury	Gas <sup>c</sup>	0.0003
	Oil <sup>a,b</sup>	0.024

(a) The annual emission limitations (TPY) for fuel oil are based on full-load operation for a total of 3,000 hours per year between the two CTs at an ambient temperature of 59°F.

(b) The No. 2 fuel oil shall have a maximum sulfur content limit of 0.05 percent, by weight.

(c) The annual emission limitation (TPY) for natural gas is based on two CTs operating at full-load for 8,760 hours per year at an ambient temperature of 59°F.

3. The permittee will install a dry low-NOx combustor system or an equivalent system on each CT. The permittee shall make every practicable effort to achieve the lowest possible NOx emission rate, but must not exceed 15 ppmvd at 15 percent O<sub>2</sub> per CT on a continuous basis when firing natural gas.
4. After the initial compliance tests on the CTs, the permittee shall operate a certified continuous emissions monitor for NOx emissions and collect 12 months of monitoring data. The monitor will, at a minimum, meet the requirements of 40 CFR 60, Appendix F's quality assurance procedures. Within 18 months after the initial compliance test, the permittee 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 NOx emission rate that 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 40 CFR 60, Appendix F or 40 CFR 75 quality assurance procedures and the actual CEMS data for the period of the

study in an acceptable format.

5. The Department will make a determination as to whether to seek to revise the permitted NOx emission limitation and will base it on the engineering data report submitted by the permittee. If the data demonstrate that a NOx emission rate of less than 15 ppmvd at 15 percent O2 is consistently achievable, the NOx emission limit may be adjusted accordingly, but not lower than 9 ppmvd at 15 percent O2.
6. Excess emissions from a turbine resulting from start up, shutdown, malfunction, fuel switch, or load change shall be reported in accordance with 40 CFR 60.334(c) and accepted 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, fuel switch, 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.
7. Excess emissions from fuel switching shall not exceed 15 minutes.
8. Excess emissions due to fuel bound nitrogen levels above 0.015 percent are allowed pursuant to condition B.1 foot note (e) of the emissions limitation table.

C. Performance Testing

1. Initial (I) compliance tests shall be performed on each CT using both fuels. Testing of emissions shall be conducted at 95-100% of the manufacturer's rated heat input based on the average ambient air temperature for the CT during the test. Annual (A) compliance tests shall be performed on the CT with the fuel(s) used for more than 400 hours in the preceding 12-month period. Tests at permit renewal shall also be performed on the non-PSD pollutants in condition B above. Tests and procedures shall be in accordance with 40 CFR 60.335. Tests shall be conducted using EPA reference methods in accordance with 40 CFR 60, Appendix A, as adopted by reference in Chapter 62-297, F.A.C., and follows:
  - a. Reference Method 5B for PM (I, A: for oil only; assumption is

- that all PM is  $PM_{10}$ ).
- b. Reference Method 9 for VE (I, A).
  - c. Reference Method 10 for CO (I, A).
  - d. Reference Method 20 for NO<sub>x</sub> (I, A) or Method 7E if sampling downstream of the heat recovery steam generator.
  - e. Reference Method 18 or 25A for VOC (I, A).
  - f. Reference Method 8 for H<sub>2</sub>SO<sub>4</sub> Mist (I).
  - g. Trace elements of Beryllium (Be) and Arsenic (As) shall be tested (I, for oil only) using EMTIC Interim Test Methods. As an alternative, EPA Method 104 for Be may be used; or, Be and As 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 5W 846.
  - h. ASTM D4294 (or equivalent) for sulfur content of distillate oil (I and A), which can be used for determining SO<sub>2</sub> emissions annually.
  - i. ASTM D1072-80, D3031-81, D4084-82, or D3246-81 (or equivalent) for sulfur content of natural gas (I; and, A).
  - j. Other USEPA or DEP approved test methods for the certified facilities may be used for compliance testing after departmental approval. Unless the permittee requests to modify a reference method for applications for which the method was not designed, such approval shall not constitute an alternate test procedure under Section 62-297.620, F.A.C., or otherwise require modification of this certification.
2. The maximum sulfur content of the fuel oil shall not exceed 0.05 percent, by weight. Compliance shall be demonstrated in accordance with the requirements of 40 CFR 60.334(b).
3. As an alternate to condition C.1.i above, natural gas supplier data for sulfur content may be submitted. However, the applicant is responsible for ensuring that the procedures above are used for determination of fuel sulfur content. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e) (1993 version). Any request for a

future custom monitoring schedule shall be made in writing to the Department's Bureau of Air Regulation. Any custom schedule approved by the USEPA pursuant to 40 CFR 60.334(b) (1993 version) will be recognized as enforceable provisions of the certification.

**D. Monitoring Requirements**

Monitoring of operations shall be in accordance with 40 CFR 60.334. Also, and for each CT, the permittee shall install, operate, and maintain a continuous emission monitoring system (CEMS) to monitor nitrogen oxides in accordance with 40 CFR 60, Appendix F, and, if necessary, a diluent gas (CO<sub>2</sub> or O<sub>2</sub>). The Federal Acid Rain Program requirements of 40 CFR 75 shall apply when those requirements are adopted and if applicable.

1. Each CEMS shall meet performance specifications of 40 CFR 60, Appendix B.
2. CEMS data shall be recorded and reported in accordance with Rule 62-297.500, F.A.C.; 40 CFR 60; and, 40 CFR 75, if it becomes applicable. The record shall include periods of start up, shutdown, load change, fuel switch, high fuel bound nitrogen, and malfunction.
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 shall be followed for installation, evaluation, and operation of all CEMS. If applicable, 40 CFR 75 shall apply when the Federal Acid Rain Program is adopted.
5. For purposes of the reports required under this permit, excess emissions, as determined pursuant to Condition B.6 herein, are defined as any calculated average emission rate which exceeds the applicable emission limitation in Condition B.1.

**E. Notification, Reporting and Record Keeping**

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 provide the heating value for each fuel during the compliance test. 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.

2. The project shall comply with all the applicable requirements of Chapters 62-210 through 62-297 and 62-4, F.A.C., and 40 CFR 60, Subparts A and GG. The requirements shall include:
  - a. 40 CFR 60.7(a)(1) - By postmarking or delivering 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 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 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 capacity observations no less than 30 days prior to such date.
  - f. 40 CFR 60.7(b) - By initiating a record keeping system to record the occurrence and duration of any start up, shutdown, load change, fuel switch, high fuel bound nitrogen, and malfunction of a turbine, 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).
  - 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.
  - 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. Rule 62-297.345 - By providing stack sampling facilities for each turbine.
  - k. All notifications and reports required by this specific condition shall be submitted to the Department's 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 the permittee has made the selection of the following:
- a. Description of the final selection of the turbines for installation at the facility. The descriptions shall include the specific make and model numbers and any changes in the proposed method of operation, fuels, emissions or equipment.
  - b. Description of the CEMS selected. The description shall include the type of sensors and the manufacturer and model numbers of the equipment.
4. The following protocols shall be submitted to the Department's Southwest District office for approval:
- a. CEMS Protocol - Within 120 days after selection of the CEMS, but 180 days 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, Appendix B and Appendix F or 40 CFR 75, and be approved within 60 days.
  - b. Performance Test Protocol - At least 90 days prior to conducting the initial performance tests required by this permit, the permittee shall submit to the Department's Southwest District office a protocol outlining the procedures to be followed, the test methods and any differences between the 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 within 60 days provided that it meets the requirements of this certification.
  - c. Heat Input Curves - Within 120 days after final selection, but 180 days prior to initial startup of the turbine, manufacturer's curves or equations of heat input corrections to other temperatures shall be



provided to the Department. Subject to the approval by the Department for technical validity while applying sound engineering principles, the manufacturer's curves shall be used to establish the heat input rates over a range of temperatures for the purposes of compliance determination.

F. Modifications

The permittee shall give written notification to the Department when there is any modification to this facility pursuant to Rule 62-212.200, F.A.C., Definitions - Modifications. 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.

G. No. 2 Fuel Oil Storage Tank

The permittee shall be in compliance with the monitoring requirements of 40 CFR 60.116b(a) and (b).

III. SURFACE WATER DISCHARGES

The outfall from the cooling reservoir to waters of the state (OSN 001) shall be used in common by all power generating facilities certified under certification Order No. 89-25 and this certification. Discharges from OSN 001 are regulated by these certifications and by separate NPDES Permits issued to SECI for Unit 3 and to HPPL (NPDES Permit No. FL0041571). Both permittees (SECI and HPPL) are authorized to discharge from the cooling reservoir to Payne Creek via OSN 001. Both permittees are joint operators of the cooling reservoir with respect to discharges from OSN 001. In any civil action (judicial or administrative), EPA or DEP may allege that the joint operators are jointly and severally liable for penalties, damages, costs and expenses, or corrective actions for violations at OSN 001, and neither permittee shall assert as an affirmative defense any violations at OSN 001 were caused by the conduct of the other permittee. This provision shall not limit or affect the rights, liability, claims, or defenses that the separate permittees may have in actions between themselves or with other parties, or in any criminal action arising out of the separate permits.

Discharges into surface waters of the state during construction and operation of the project shall be in accordance with applicable provisions of Chapters 62-3, 62-4, 62-302, 62-650, and 62-660, Florida Administrative Code, and the following conditions of certification:

A. Plant Effluents and Receiving Body of Water

For discharges made from the Hardee Unit 3 the following conditions shall apply:

1. Receiving Body of Water (RBW) - The receiving bodies of water have been determined by the Department to be those waters of Payne Creek and an unnamed tributary to Payne Creek which are considered to be waters of the State within the definition of Chapter 403, Florida Statutes.
2. Point of Discharge (POD) - The point of discharge has been determined by the Department to be where the effluent physically enters the waters of the State in Payne Creek and the unnamed tributary from either the storm water runoff detention pond or the cooling reservoir; however, compliance monitoring will be required at the cooling pond overflow weir (OSN 001) and the stormwater detention pond discharge pipes (OSN 003).
3. Thermal Mixing Zones - The instantaneous zone of thermal mixing for the HPS cooling system shall not exceed a distance of 75 feet from the POD. The temperature at the POD into Payne Creek shall not be greater than 95.7 degrees F during discharge. The temperature of the water at the edge of the mixing zone shall not exceed the limitations of Section 62-302.520(5)(b), F.A.C.
4. Chemical Wastes from Hardee Unit 3 - All discharges of low volume wastes (demineralizer regeneration, floor drainage, labs drains, and similar wastes) shall be treated in an adequately sized and constructed treatment facility prior to discharge into the cooling reservoir.
5. pH - The pH of the combined discharges to the cooling reservoir from outfall OSN 002 shall be such that the pH will fall within the range of 6.0 to 9.0 and any discharge from the reservoir at OSN 001 to Payne Creek shall not fall outside the 6.0 to 8.5 range.
6. Polychlorinated Biphenyl Compounds - There shall be no discharge of polychlorinated biphenyl compounds.
7. Discharge Limitations
  - a. Discharge from OSN 001 shall not exceed the effluent limitations and shall be monitored by the permittee as specified below. The sample shall be taken at the cooling pond overflow weir (OSN 001).

EFFLUENT LIMITATIONS/WATER QUALITY STANDARDS

MONITORING REQUIREMENTS

EFFLUENT PARAMETER	EFFLUENT LIMITS <sup>(1)</sup>	FREQUENCY	TYPE
Flow (mgd)	report	1/day	calculation
Temperature (°F)	95.7	2/day	grab
Gross Alpha (pCi/l)	22.2	[2]	grab
Beryllium <i>ug/l</i>	1.6	[2]	grab
BOD <sub>5</sub> (mg/l)	report	[2]	grab
Cadmium, Total (µg/l)	1.0	[2]	grab
Coliform, Total (MPN)	report	[2]	grab
Coliform, Fecal (MPN)	report	[2]	grab
Copper, Total (µg/l)	9.95	[2]	grab
Cyanide (mg/l)	0.01	[2]	grab
Dissolved Oxygen (mg/l)	report	[2]	grab
Fluoride (mg/l)	10.0	[2]	grab
Hardness (mg/l as CaCO <sub>3</sub> ) <sup>(3)</sup>	report	[2]	grab
Iron, Total (mg/l)	1.0	[2]	grab
Lead, Total (µg/l)	6.8	[2]	grab
Mercury, Total (µg/l)	0.097	[2]	grab
Nitrogen, Total (mg/l)	report	[2]	grab
Oil and Grease (mg/l)	report	[2]	grab
pH (s.u.)	6.0 to 8.5	[2]	grab
Phosphorous, Total (mg/l)	report	[2]	grab
Radium 226 and 228 (pCi/l)	7.9	[2]	grab
Selenium, Total (µg/l)	40.	[2]	grab
Silver, Total (µg/l)	0.14	[2]	grab
Specific Conductance (µmho/cm)	[4]	[2]	grab
Turbidity (NTU)	29 above background	[2]	grab
Total Dissolved Solids (mg/l)	report	[2]	grab
Total Residual Chlorine (mg/l)	0.01	[2]	grab
Zinc, Total (µg/l)	370	[2]	grab
Additional Monitoring <sup>(5)</sup>	report	1/six months	grab

- [1] Notwithstanding the limitations in this Table, effluent from OSN 001 shall not cause an exceedance of water quality standards or criteria contained in Section 62-302, F.A.C., at the downstream edge of the mixing zone. The mixing zone applies to radioactivity (gross alpha, and radium 226 and 228), beryllium, cadmium, copper, cyanide, iron, lead, mercury, selenium, silver, and zinc. A separate mixing zone applies to temperature.

The mixing zone applicable to constituents other than temperature extends fifty feet downstream from the point at which the effluent first enters the flow of Payne Creek. The mixing zone applicable to temperature extends seventy-five feet downstream from the point at which the effluent first enters the flow of Payne Creek.

- [2] Sampling shall be once per discharge or once per week if the discharge is continuous for more than one week.
- [3] The total hardness sample shall be taken in Payne Creek concurrently with the total recoverable metals sample s. If the analysis of the hardness reveals a total hardness less than 25 mg/l as CaCO<sub>3</sub>, use 25 mg/l for the total hardness in the equations for for the parameters indicated by this footnote and given in Section 62-302.530. If the total hardness in Payne Creek is greater than 400 mg/l as CaCO<sub>3</sub>, use 400 mg/l. If the measured value(s) is/are greater than the calculated value(s), the permittee will be considered in violation of the total recoverable metal(s) limitation(s). The measured and calculated values shall be reported on the DMR.
- [4] Specific conductance shall not be increased more than 50% above background levels or to 1275 micromhos per centimeter, whichever is greater. [Section 62-302.530(23), F.A.C.]
- [5] Parameters for "Additional monitoring " shall include:

chlorophyll-a,	total nitrogen,	organic nitrogen,	ammonia (total, un-ionized ),
total Kjeldahl nitrogen,	pH	total phosphorous,	ortho-phosphate,
temperature,	beryllium,	cadmium,	copper,
iron,	lead,	mercury,	selenium,
silver,	zinc,	total dissolved solids,	turbidity (NTU)

This monitoring shall commence with the commercial operation date of unit 3, with a frequency of every six months. If any of the above parameters (except pH and temperature) in the reservoir should reach 80% of the water quality criteria as contained in Section 62-302, F.A.C., the permittee shall notify the Department. Upon such notification, the Secretary of the Department may modify this certification to require increased sampling and may approve mixing zones for parameters that exceed criteria. Monitoring upstream and downstream of the cooling reservoir may be required.

- b. Discharge of toe-ditch seepage water from the cooling reservoir as a point source into waters of the state is not authorized by this certification.
- c. There shall be no discharge of floating solids or visible foam in other than trace amounts.
- d. Monitoring of the overflow is only required during periods of discharge.
- e. Samples collected in compliance with the monitoring requirements specified above shall be taken at the following locations: OSN 001 prior to mixing with any other waters, except samples for "Additional Monitoring" shall be collected within the cooling reservoir at the cooling water intake.

10. In order to provide the Department with reasonable assurance that the discharge from Outfall 001 does not violate the acute toxicity requirements of Section 62-302.500(d), Florida Administrative Code (F.A.C.), SECI shall perform the toxicity tests as specified below and submit the results to the Department for review.
  - a. Upon discharge from OSN 001, SECI shall initiate a series of bioassay tests as described below to evaluate whole effluent toxicity of the discharge. Such routine test shall be performed when a discharge occurs but not more frequently than once per year. All test species, procedures, and quality assurance criteria used shall be in accordance with Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms, EPA/600/4-90/27. SECI shall conduct 96-hour static definitive, renewed every 48-hours, acute toxicity tests on the test species, Ceriodaphnia dubia and Cyprinella leedsii, using 100%, 50%, 25%, 12.5%, and 6.25% effluent concentrations. Such static definitive tests shall be conducted using a single grab sample of effluent collected from the cooling pond overflow weir (OSN 001) on the first day of discharge. The tests shall include the determination of 96-hour LC50 values with 95% confidence limits. A second grab sample shall be preserved for further analysis for the Primary and Secondary Drinking Water Parameters, should the acute definitive tests demonstrate unacceptable toxicity. A Standard reference toxicant test shall be conducted -concurrently with each species used in the toxicity test and all the test reports shall be submitted along with the concomitant monthly operation report.
  - b. If control mortality exceeds 10% of either species in any test, the test(s) for that species (including the control) shall be repeated. A test will be considered valid only if control mortality does not exceed 10% for either species. If, in any separate grab sample test, 100% mortality occurs prior to the end of the test, and control mortality is less than 10% at that time, that test (including the control) shall be terminated with the conclusion that the sample demonstrates unacceptable acute toxicity.
  - c. If any such definitive test indicates unacceptable acute toxicity, additional persistence definitive acute static toxicity testing involving the determination of 96-hour LC50 values with 95% confidence limits shall be required. If the discharge persists, a minimum of two such 96-hour tests are required to be conducted within 30 days from the date that any definitive test indicates the presence of toxicity. Preferably, the first of these persistence tests shall be initiated within

seven days of a failed definitive test. The second persistence test shall be initiated at least seven days after completion of the first persistence test. Such tests shall be conducted using that test species which exhibited the most toxic response in the routine definitive tests.

The results of each persistence toxicity test shall be submitted to the Department concurrently with monthly discharge monitoring reports.

11. Chemical Metal Cleaning - There shall be no discharge of metal cleaning wastes to the cooling reservoir. SECI shall arrange for a contractor to remove the wastes from site before or after treatment for disposal in a licensed facility.
12. Storm Water Runoff and Construction Dewatering - During construction and operation discharge from the storm water runoff collection system, including dewatering effluent during construction, from a storm event less than the once in ten-year, twenty-four hour storm shall meet the following limits and shall be monitored at OSN 003 by a grab sample once per discharge, but not more often than once per week:

003 Effluent Characteristic	Discharge Limits Instantaneous Maximum
Flow (MGD)	Report
TSS (mg/l)	50 50 <del>100</del>
pH (s.u.)	6.0-8.5
Turbidity (NTU)	29 units above background

- a. During plant operation, necessary measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden storm water runoff to limit the suspended solids to 50 mg/l or less at OSN 003 during rainfall periods less than the 10-year, 24-hour rainfall.
- b. Control measures shall consist at the minimum of filters, sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt, and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 8.5 in the discharge to the unnamed tributary to Payne Creek.

- c. Special consideration must be given to the control of sediment laden runoff resulting from storm events during the construction phase. Best management practices erosion controls should be installed early during the construction period so as to prevent the transport of sediment into surface waters which could result in water quality violations and Departmental enforcement action. Revegetation and stabilization of disturbed areas should be accomplished as soon as possible to reduce the potential for further soil erosion. Should construction phase runoff pose a threat to the water quality of state waters, additional measures such as treatment of impounded runoff or the use of turbidity curtains (screens) in on-site impoundments shall be immediately implemented with any releases to state waters to be controlled.
  - d. Dewatering water, via OSN 001 and OSN 003, includes all surficial groundwater extracted during all excavation construction on site for the purpose of installing structures, equipment, etc. Final discharge after treatment is to Payne Creek or the unnamed tributary to Payne Creek. Discharge of construction dewatering water via OSN 001 shall be limited and monitored in accordance with paragraph 7. above. SECI shall report to DEP the date that construction dewatering is expected to begin at least one week prior to commencement of dewatering.
  - e. Correctional action or modification of the system will be necessary should mosquito problems occur.
  - f. All swale and retention basin side slopes shall be seeded and mulched within thirty days following their completion and a substantial vegetative cover must be established within ninety days of seeding.
13. Low Volume Waste - Treated low volume waste and treated domestic wastewater discharged via OSN 002 to the cooling reservoir shall be limited and monitored as specified below:

Effluent Characteristic	Discharge Limits (mg/l)		Monitoring Requirements	
	Daily Average	Daily Maximum	Sample Type	Measurement Frequency
002 TSS	30.0	100.0	grab	1/month
Oil & Grease	15.0	20.0	grab	1/month
Flow	Report	---	Calculation	1/month
pH	6.0	9.0	grab	1/month

15. Sanitary wastes from the Unit 3 project shall be collected and treated in an appropriately designed domestic wastewater treatment plant.

B. Water Monitoring Programs

The necessity and extent of continuation for any water monitoring program may be modified in accordance with Condition No. XXVIII, Modification of Conditions.

IV. GROUND WATER

A. This certificate is issued based on information provided by SECI demonstrating that the use of water is reasonable and beneficial, consistent with the public interest, and will not interfere with any existing legal use of water. If it is determined by the SWFWMD that the use is not reasonable and beneficial, in the public interest, or does impact an existing legal use of water, the SWFWMD may initiate action for modification, suspension or revocation of Certification.

B. Water Well Construction

Prior to the construction, modification, or abandonment of a production well for Unit 3, SECI must notify the SWFWMD pursuant to Chapter 40D-3, Florida Administrative Code. Construction, modification, or abandonment of a production well will require modification of the Unit 3 consumptive use conditions when such construction, modification or abandonment is other than that specified and described on Unit 3 consumptive use information as addressed in the application. The construction, modification, or abandonment of a monitor well specified in Condition



IV.I. will require the prior approval of the Department.

C. Well Criteria, Tagging and Wellfield Operating Plan

Leaking or inoperative well casings, valves, or controls must be repaired or replaced as required to put the system back in an operative condition acceptable to the SWFWMD. Failure to make such repairs will be cause for deeming the well abandoned in accordance with Chapter 62-532.200, Florida Administrative Code, Chapter 373.309, Florida Statutes. Wells deemed abandoned will require plugging according to applicable regulations.

A SWFWMD-issued identification tag must be prominently displayed at each withdrawal site by permanently affixing such tag to the pump, headgate, valve or other withdrawal facility as provided by Section 40D-2, Florida Administrative Code. SECI must notify the SWFWMD in the event that a replacement tag is needed.

D. Maximum Annual Withdrawals

The combined use of groundwater for all power generating facilities at the HPS site from the wellfield shall not exceed 3.8 million gallons per day (mgd) annual average daily and 8.64 mgd peak month daily.

The use of the Floridan aquifer potable water for control of fugitive dust emissions is prohibited when alternatives are available, such as treated discharges, shallow aquifer wells, or stormwater. The use of Floridan aquifer potable water for the sole purpose of waste stream dilution is prohibited.

E. Water Use Transfer

The SWFWMD must be notified, in writing, within 90 days of the transfer of this certification. All transfers are subject to the provisions of Chapter 40D-2, Florida Administrative Code, which state that all terms and conditions of the permit shall be binding of the transferee.

F. Emergency Shortages

Nothing in this certification is to be construed to limit the authority of the SWFWMD to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes, or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. In the event of a water shortage, as declared by the District Governing Board, Unit 3 shall adhere to reductions in water withdrawals as specified by the SWFWMD.

In the event SWFWMD declares that a water shortage exists pursuant to Chapter 40D-21, F.A.C., SWFWMD may alter, modify, or declare inactive all or parts of this certification as necessary to address the water shortage, after notice and a reasonable opportunity for compliance.

G. Monitoring and Reporting

1. Report Submission

All required reports of data shall be submitted to SWFWMD on or before the tenth day of each month and shall be addressed to:

Permits Data Section  
Southwest Florida Water Management District  
2379 Broad Street  
Brooksville, Florida 34609-6899

Unless otherwise indicated, three copies of each plan or report, with the exception of pumpage, rainfall, evapotranspiration, water level or water quality data which require one copy, are required by the permit.

2. Flow Meters

The Permittee shall continue to maintain and operate the existing non-resettable, totalizing flow meter(s), or other flow measuring device(s) as approved by the Permitting Department Director, Resource Regulation, for SWFWMD ID Nos. 1, 2, & 3, Permittee ID Nos. 1, 2, & 3. Such devices shall maintain an accuracy within five percent of the actual flow as installed.

3. Withdrawal Records

Total withdrawal and meter readings from each metered withdrawal shall be recorded on a monthly basis and reported to the Permits Data Section (using District forms) on or before the tenth day of the following month. If a metered withdrawal is not utilized during a given month, a report shall be submitted to the Permits Data Section indicating zero gallons.

H. Sampling and Analysis Report

Water quality samples shall be collected and analyzed, for parameter(s), and frequency(ies) specified below. Water quality samples from production wells shall be collected whether or not the well is being used, unless infeasible. If sampling is infeasible SECI shall indicate the reason for not sampling on the water quality data

form. Water quality samples shall be analyzed by a Department of Health and Rehabilitative Services (DHRS) certified laboratory under Environmental Laboratory Certification General Category "1". At a minimum, water quality samples shall be collected after pumping the well at its normal rate for a pumping time specified in the table below, or to a constant temperature, pH, and conductivity. In addition, SECI's sampling procedure shall follow the handling and chain of custody procedures designated by the certified laboratory which will undertake the analysis. Any variance in sampling and/or analytical methods shall have prior approval of the Permitting Department Director, Resource Regulation. Reports of the analyses shall be submitted to the Permits Data Section (using District forms) on or before the tenth day of the following month, and shall include the signature of an authorized representative and certification number of the certified laboratory which undertook the analysis. The parameters and frequency of sampling and analysis may be modified by the Permitting Department Director, Resource Regulation, as necessary to ensure the protection of the resource.

SWFWMD ID No.	SECI ID No.	Minimum Pumping Time (minutes)	Parameter	Sampling Frequency
1	1	45 minutes	Chlorides, Sulfates, TDS	Feb., May, Aug, & Nov.

Water quality samples shall be collected during the same week of the months specified.

Analyses shall be performed according to procedures outlined in the current edition of Standard Methods for the Examination of Water and Wastewater by the American Public Health Association-American Water Works Association- Water Pollution Control Federation (APHA-AWWA-WPCF) or Methods for Chemical Analyses of Water and Wastes by the U.S. Environmental Protection Agency (EPA)

I. Ground Water Monitoring Requirements

1. In accordance with Section 62-5222.600(3), F.A.C., the groundwater monitoring system shall be constructed by SECI no later than 60 days prior

to commercial operation.

2. The groundwater monitoring system shall be constructed by SECI in accordance with the plans submitted pursuant to this certification.
3. The Ground Water Monitoring System for Hardee Unit 3 shall consist of 4 monitoring wells and shall be tentatively located as listed below. All wells are to be clearly labeled and easily visible at all times.

WELL NUMBER	AQUIFER	LOCATION
HU 3-1 shallow	unconfined	Per SCA 10.5.2, Figure 1
HU 3-2 shallow	unconfined	Per SCA 10.5.2, Figure 1
HU 3-3 shallow	unconfined	Per SCA 10.5.2, Figure 1
HU 3-4 shallow	unconfined	Per SCA 10.5.2, Figure 1

4. A surveyed drawing shall be submitted showing the location of all monitoring wells (active and abandoned) which will be horizontally located by metes and bounds or equivalent surveying techniques. The surveyed drawing shall include the monitor well identification number as well as location and elevation of all permanent benchmark(s) and/or corner monument marker(s) at the site. The survey shall be conducted by a Florida Registered Surveyor.
5. Within 30 days of completion of construction of the ground water monitor wells, the permittee shall submit the following information for each monitor well:
  - a. A complete FDEP Monitor Well Completion Report;
  - b. A copy of the Southwest Florida Water Management District (SWFWMD) Application to Construct a Well, SWFWMD Form SF 306(3) Rev. 9/92; or other SWFWMD approval, and
  - c. A copy of the SWFWMD Well Completion Report, SWFWMD Form 25-18-3/90.

The information shall be sent to the Technical Services Section Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida

33619-8318.

6. Within 60 days of startup of the new facility the Ground Water Monitoring System and every 5 years thereafter, the SECI shall sample all ground water monitor wells for the Primary and Secondary Drinking Water parameters included in Chapter 62-550, F.A.C., Public Drinking Water Systems (excluding asbestos, acrylamide and epichlorohydrin). The results shall be sent to the Industrial Wastewater Section, Southwest District Office, Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318.
7. Within 6 months of startup for new facilities, and every 5 years thereafter, the SECI shall provide a waste stream characterizations for the discharges to the Cooling Water Pond. The waste streams shall be analyzed for the Primary and Secondary Drinking Water Standards (Chapter 62-550, F.A.C. excluding asbestos, acrylamide and epichlorohydrin). The results shall be sent to the Industrial Wastewater Section, Southwest District office.
8. The wells shall be sampled QUARTERLY for the parameters listed below. Additional samples, wells and parameters may be required based upon subsequent analyses.

PARAMETER	UNITS
Total Dissolved Solids	mg/L
Redox	volts
Sulfates	mg/L
Sulfites	mg/L
Color	c.u.
Chlorides	mg/L
Iron	mg/L
Aluminum	mg/L
Cadmium	mg/L
Zinc	mg/L
Copper	mg/L

Nickel	mg/L
Selenium	mg/L
Chromium	mg/L
Arsenic	mg/L
Beryllium	mg/L
Mercury	mg/L
Lead	mg/L
Gross Alpha	pC/L
Specific Conductance*	µmho/cm
pH*	s.u.
Water Level*	feet related to MSL
Temperature*	°C

[\*] Field measurement.

The results shall be sent to Industrial Wastewater Section, Southwest District office.

9. After eight consecutive quarters of data (after the startup of Unit 3) the SECI may request a reduction in sampling frequency or specific parameters of the ground water monitoring program. The request shall be considered reasonable when a trend analysis of the parameter indicates no significant or substantial change in the parameter. Specific parameters that are key indicators of the domestic or industrial processes or field measured parameters may not be reduced or eliminated from the ground water monitoring plan.
10. Following the initial analysis of the ground water monitor wells, all monitoring wells shall be sampled, analyzed and results reported in accordance with the following schedule:

SAMPLE PERIOD	REPORT DUE DATE
1st Quarter (January-March)	April 15
2nd Quarter (April-June)	July 15
3rd Quarter (July-September)	October 15
4th Quarter (October-December)	January 15

The SECI shall submit the results of the water quality analyses no later than the 15th day of the month immediately following the end of the sampling period. The results shall be sent to the Industrial Wastewater Section, Southwest District office.

11. Ground water sampling shall be reported on the Monitoring Report Forms (DER Form 17-1.216(2)). In order to facilitate entry of this data into the State computer system, these forms or an exact replica must be used and must not be altered as to content. The original copies should be retained so that the necessary information is available to properly complete future reports. The report forms received from the laboratory must be submitted along with the DER Parameter Monitoring Report Forms described above.
12. If, at any time, background ground water standards are exceeded at the edge of the zone of discharge, the SECI will have 15 days from receipt of the laboratory analyses in which to resample the monitor well(s) to verify the original analyses. The monitoring test results must be submitted to the Department within 15 days of receipt of the reanalyses from the laboratory. Should the SECI choose not to resample, the Department will, then, consider the water quality analysis as representative of current ground water conditions at the facility.
13. The field testing, sample collection, preservation and laboratory testing, including quality control procedures, shall be in accordance with methods approved by the Department in accordance with F.A.C. Chapter 62-160, and Rules 62-4.246 and 62-520.300, F.A.C. Approved methods for chemical analyses are summarized in the Federal Register, December 1, 1976 (41FR52780) except that turbidity shall be measured by the Nephelometric Method.
14. If any monitor well becomes damaged or inoperable, the SECI shall notify the Department immediately and a detailed written report shall follow within 7 days. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent the recurrence. All monitoring well design and replacement shall be approved by the Technical Services Section of the Southwest District prior to installation of the replacement well.
15. Within 60 days of certification, all piezometers and wells not a part of the approved Ground Water Monitoring Plan or monitoring wells required by SWFWMD are to be plugged and abandoned in accordance with Rule 62-532.500(4), F.A.C. and the SWFWMD. The SECI shall submit a written report to the Department providing verification of the plugging program. A

written request for exemption to the plugging of a well must be submitted to the Department's Southwest District Technical Services Section for prior approval.

16. The SECI shall ensure that only properly decontaminated sampling or measuring devices will be introduced into any ground water monitoring wells that are incorporated in this ground water monitoring system. Any deviation from this accepted method shall have prior written authorization from the Department. At no time shall any fluids be introduced into a ground water monitoring well, otherwise it will be considered a violation of this certification.

J. Zone of Discharge

The HPS shall meet the groundwater criteria of Chapter 62-250, F.A.C., at the boundary of a zone of discharge extending 100 feet from the outside toe of the cooling reservoir. A ground water monitoring program as described in Condition IV.L. shall be implemented to verify compliance with these requirements.

K. Water Samples

SWFWMD may collect water samples from any withdrawal point listed in the certificate or may require SECI to submit water samples when SWFWMD determines there is a potential for adverse impacts to water quality.

L. SWFWMD Access

SECI shall provide access to an authorized SWFWMD representative to enter the property at any reasonable time to inspect the facility and make environmental or hydrologic assessments. SECI shall either accompany SWFWMD staff onto the property or make provision for access onto the property.

M. Conservation

1. SECI shall cease or reduce withdrawal as directed by SWFWMD if water levels in aquifers fall below the minimum levels established by the SWFWMD Governing Board.

SECI shall practice water conservation to increase the efficiency of transport, application, and use, as well as to decrease waste and to minimize runoff from the property. At such time as the SWFWMD Governing Board adopts specific conservation requirements for SECI's water use classification, SECI shall be subject to those requirements upon notice and after a reasonable



period for compliance.

2. Any wells not in use, and in which pumping equipment is not installed shall be capped or valved in a water tight manner in accordance with Rule 62-532.500(3) (a)4, F.A.C.
3. By January 1, 2002, SECI shall submit for approval by the Permitting Department Director, Resource Regulation, a water conservation plan for the purposes of documenting the current groundwater use for Hardee Unit 3's water use operations, and the existing and proposed water conservation programs which are, or will be implemented to conserve groundwater at the plant. The plan shall address the following:
  - a. Current Plant Operation
    - 1) For groundwater and recycled surface water sources, document the processes which use water, and the magnitude of the use.
    - 2) For groundwater and recycled surface water sources, document the range in water use.
    - 3) Groundwater and recycled surface water sources, document the factors which contribute to fluctuations in water use.
    - 4) Describe the methods used to determine the water use and the methods used to determine the factors which contribute to the water use fluctuations.
  - b. Future Plant Operation
    - 1) Determine processes which can be modified to reduce groundwater dependency.
    - 2) Propose conservation measures for reducing groundwater use and provide implementation dates.
    - 3) Propose methods for calculating the effectiveness of water

conservation methods in item b.ii. above.

4. If the District finds that certain conservation measures are technically and economically feasible, and SECI refuses to implement them, then the District may seek to modify this certification to require SECI to undertake the conservation measures and to reduce its permitted water use quantities accordingly.

**N. Special Regulations**

SWFWMD may establish special regulations for Water-Use Caution Areas. At such time as the SWFWMD Governing Board adopts such provisions, SECI shall be subject to them upon notice and after a reasonable period for compliance.

**O. Legal Use Impacts Mitigation**

SECI shall mitigate, to the satisfaction of SWFWMD, any adverse impact to existing legal uses caused by withdrawals. When adverse impacts occur or are imminent, SWFWMD may require SECI to mitigate the impacts. Adverse impacts include:

1. A reduction in water levels which impairs the ability of a well to produce water;
2. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other watercourses; or
3. Significant inducement of natural or manmade contaminants into a water supply or into a usable portion of an aquifer or water body.

**P. Environmental Impact Mitigation**

1. SECI shall mitigate to the satisfaction of SWFWMD any adverse impact to environmental features or offsite land uses as a result of withdrawals. When adverse impacts occur or are imminent, SWFWMD may require SECI to mitigate the impacts. Adverse impacts include the following:
  - a. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams, or other watercourses;
  - b. Sinkholes or subsidence caused by reduction in water levels;
  - c. Damage to crops and other vegetation causing financial harm to the

owner; and

- d. Damage to the habitat of endangered or threatened species.
2. Prior to dewatering within 300 feet of a property boundary, SECI shall comply with one of the following two alternatives:
    - a. Secure written consent from all adjacent property users for lowering the water table below their lands. Three copies of the consent shall be submitted in writing to the Permitting Department Director, Resource Regulation prior to dewatering within the specified distance. This alternative cannot be used if adjacent lands contain wetlands or other water bodies within 300 feet of SECI's dewatering activity.
    - b. Implement a procedure to mitigate impacts by maintaining the water table at historic levels at the property boundary. SECI must obtain approval from the Permitting Department Director, Resource Regulation. The procedure shall include:
      - 1) A water table monitoring well network, approved by the Permitting Department Director, Resource Regulation, designed to demonstrate that water table drawdown does not exceed one foot under on-site wetlands that will not be disturbed.
      - 2) Collection of water table level data after construction of the approved monitoring well network for at least six months prior to the initiation of dewatering in the area, to obtain background data. During this time period, water level data shall be recorded on a weekly basis and submitted monthly.
      - 3) If a rim-ditch system is proposed to recharge the water table near on-site wetlands that will not be disturbed, design and operation details must be submitted to demonstrate that the water table will be maintained at appropriate levels based on the background data collected. Rim-ditch systems must also be accompanied by a monitoring well network to verify water table maintenance.
      - 4) At least one month prior to the anticipated date of dewatering an area within the setback distance, water level data shall be recorded and submitted on a weekly basis.

- 5) Data collection shall continue for six months following completion of dewatering and reclamation or until SWFWMD staff determine that background or steady-state levels are attained. During this time period, water level data shall be recorded on a weekly basis and reported monthly. Water levels shall be reported in feet relative to the National Geodetic Vertical Datum (N.G.V.D.)

Q. Alternative Source Investigation

SECI shall continue to investigate the feasibility of using reclaimed water as a water source and submit an updated report describing the feasibility to the Permits Data Section of the District by January 1, 2002. The report shall contain an analysis of reclaimed water sources for the area, including the relative location of these sources to SECI's property, the quantity of reclaimed water available, the projected date(s) of availability, costs associated with obtaining the reclaimed water, and an implementation schedule for reuse, if feasible. Infeasibility shall be supported with a detailed explanation.

If the use of reclaimed water as a water source is determined to be feasible by SECI and the District, SECI shall submit an implementation plan to the Permits Data Section for review and approval, within 30 days after the feasibility report is approved in writing by the Permitting Department Director, Resource Regulation. The District will require the implementation of the approved plan within a period of time agreed upon by the District and SECI. A modification of the water use quantities authorized in the certification may be required based upon the implementation plan.

V. WETLANDS

- A. Semi-annual narrative progress reports shall be submitted to the Siting Coordination Office, the Bureau of Submerged Lands and Environmental Resources, the Department's Southwest District office in Tampa, and the SWFWMD indicating the status of the project. The first semi-annual progress report is due six months from the date of certification. The cover page shall indicate the certification number, project name and SECI's name. The report shall include the following information:

1. Date permitted activity was begun; if work has not begun on-site, please so indicate.
2. Brief description and extent of work (dredge, fill, wetland

restoration/mitigation, and maintenance) completed since the previous report or since certification was issued. Indicate on copies of the certification drawings those areas where work has been completed. Also indicate any areas in which the actual impacts were less than the scope of the certified work.

3. Brief description and extent of work (dredge, fill, wetland restoration/mitigation, and maintenance) anticipated in the next six months. Indicate on copies of the certification drawings those areas where it is anticipated that work will be done.
  4. Reports detailing the progress of the restoration/mitigation program. The reports shall include: photographs taken from the same permanent stations (some of which must be in the vegetation sampling areas), a description of problems encountered and solutions undertaken, and anticipated work for the next six months.
  5. This report shall include on the first page, just below the title, the certification of the following statement by the individual who supervised preparation of the report: "This report represents a true and accurate description of the activities conducted during the six month period covered by this report."
- B. The construction and mitigation shall proceed in accordance with the final drawings and information approved during the certification process. Any alterations to the construction design that impacts wetlands or any alterations to the mitigation design shall require prior approval from the Department.
- C. Best management practices for erosion control shall be implemented and maintained at all times during construction to prevent siltation and turbid discharges in excess of State water quality standards pursuant to Rule 62-302, F.A.C. Methods shall include, but are not limited to the use of staked hay bales; staked filter cloth; sodding, seeding, and mulching; staged construction; and the deployment of turbidity screens around the immediate project site.

SECI shall be responsible for ensuring that erosion control devices and procedures are inspected and maintained daily during all phases of construction authorized by the certification until all areas that were disturbed during construction are sufficiently stabilized to prevent erosion, siltation, and turbid discharges.

The following measures shall be taken immediately by SECI whenever turbidity levels

within waters of the State surrounding the project site exceed State water quality standards established pursuant to Rule 62-302, F.A.C.:

1. Immediately cease all work contributing to the water quality violation.
  2. Stabilize all exposed soils contributing to the violation. Modify the work procedures that were responsible for the violation, and install more turbidity containment devices and repair any non-functioning turbidity containment devices.
  3. Notify the Siting Coordination Office, Bureau of Submerged Lands and Environmental Resources at (904)488-0130 and the DEP Southwest District office within 24 hrs. of the time the violation is first detected.
- D. The wetland mitigation program shall be conducted prior to or concurrent with the dredging/filling authorized by the certification and shall be completed, including the planting of tree species, within one year of the commencement of the dredging/filling. The mitigation program shall be conducted in accordance with the design details in the final approved construction drawings and plans submitted to the Department and SWFWMD during the certification proceedings. Subsequent field changes to wetland impacts shall be approved by the Department and SWFWMD prior to execution of the changes and shall be mitigated at the ratios for the approved mitigation plan.
- E. Organic soil deposits excavated on the construction site shall be transported to the mitigation area to mulch the mitigation area as practicable.
- F. Within 30 days of achieving final grade, the wetland restoration and creation areas shall be surveyed and a topographic map shall be prepared. A topographic map shall be submitted to the Siting Coordination Office, and the Department's Southwest District office in Tampa within 60 days of achievement of final grade. The topographic map shall meet the following criteria:
1. It shall clearly depict the wetland topography in such a way as to unambiguously show how the site will retain, detain, shed, or otherwise influence the flow and detention of water at the site;
  2. It shall show six in. contour intervals based on a 50 ft., or finer, resolution grid;
  3. It shall be certified by a registered land surveyor;

4. It shall show any hydrologic connections between the created and adjacent, existing wetlands; and
  5. It shall show the variations of topographic relief within the graded areas, which may require showing topographic intervals or spot elevations as finer than six in., in some portions of the site.
- G. The trees in the mitigation area shall be planted in staggered manner so as to avoid the establishment of straight rows of trees and to result in a more natural spatial distribution of the trees.
- H. Freshwater herbaceous species restoration of the pipeline construction area shall be considered successful when the following conditions are met:
1. Percent cover by non-nuisance, non-exotic wetland species shall be 80% or more. Percent covers for the aggregate of those wetland species, and of non-wetland species, bare ground and water shall be reported relative to the total area. A list of the wetland species included in the aggregate shall be included. Wetland species shall be those listed in Florida Administrative Code Rule 62-301.400;
  2. Nuisance species, such as Mikania scandens (climbing hempvine), Typha sp. (cattail) and Ludwigia peruviana (primrose willow), and exotic species are limited to 1% or less of the total cover;
  3. Not less than 0.06 ac. of freshwater herbaceous wetlands are determined by Department staff to be jurisdictional pursuant to Section 403.817, F.S.; and
  4. The wetlands are restored in accordance with the conditions of certification.
- I. Forested wetland creation shall be considered successful when the following conditions are met:
1. An average of at least 400 wetland trees per acre shall be growing above the herbaceous stratum, with canopy cover of at least 35 percent;
  2. The wetland species tree cover shall exceed 35% of the total area and in no area of an acre in size shall the tree cover be less than 20% total cover. Cover measurement shall be restricted to (1) those trees exceeding the herbaceous stratum in height and (2) those indigenous species that contribute to the overstory of the mature forest of the Payne Creek and its tributaries and that are wetland vegetation listed in Florida Administrative Code Rule 62-301.400;

3. At least 80% of obligate groundcover (herbaceous) and obligate shrub (non-canopy woody species) vegetation shall among be those species listed in Florida Administrative Code Rule 62-301.400, and shall be reproducing naturally, either normal, healthy, vegetative spread (in ways that would be normal for each wetland species) or through seedling establishment, growth and survival. Nuisance species such as Mikania scandens (climbing hempvine), Typha sp. (cattail) and Ludwigia peruviana (primrose willow) and all exotic species, shall be limited to 1% or less of the total cover.

SECI shall undertake required maintenance activities within the wetland compensation area in accordance with the approved Maintenance Plan submitted on October 14, 1994, as needed throughout the monitoring period. Maintenance shall include the manual removal (with sufficient frequency) of all nuisance and exotic plant species, such that their combined coverage at no time exceeds the criteria within the Wetland Compensation Success Criteria. SECI may use state approved herbicides with the prior approval of the SWFWMD and the Department, if it encounters problems with the removal of nuisance and exotic plant species.;

4. At least 80 percent non-canopy cover of desirable plant species;
5. Not less than 0.26 ac. of forested wetlands are determined by the Department to be jurisdictional pursuant to Rule 62-301, F.A.C.; and
6. The mitigation wetlands are constructed in accordance with the conditions of certification.

J. SECI shall furnish to the Siting Coordination Office, Bureau of Submerged Lands and Environmental Resources and the Department's Southwest District office in Tampa annual statistical reports of vegetational sampling of the restored and created wetlands done by any mutually agreed-upon method. Acceptable methods may be found in Daubenmire (1968), Green (1979), Grieg-Smith (1983), Mueller-Dombois and Ellenberg (1974), Oosting (1956), Poole (1974), and Southwood (1978). It is the responsibility of SECI to ensure that the monitoring report provides a qualitative and quantitative depiction of the site that is representative of the conditions at the entire restoration and creation site. This report shall include on the cover page, just below the title, the certification of the following statement by the individual who supervised preparation of the report: "This report represents a true, accurate, and representative description of the site conditions present at the time of monitoring."

1. A monitoring plan describing sampling methods and report format and map of sampling locations and photographic stations shall be submitted to the



Department for review and approval within 60 days prior to construction of the mitigation area. If this plan differs from the plan previously approved by the SWFWMD, a copy will be submitted to the SWFWMD for approval.

2. Annual statistical reports shall describe as appropriate for each restoration and creation area: (1) the density and percent cover of listed trees, (2) percent cover of listed and non-listed herbaceous species, bare ground and water. For forested wetlands, canopy cover shall be submitted for not less than the third, fifth, and any subsequent years after planting until a determination of a successful creation has been made. Data for listed nuisance or exotic species shall be tabulated separately from the remaining data. A listed species is one listed in Florida Administrative Code Rule 62-301.400. Reports shall also include an assessment of the jurisdictional status of each restoration and mitigation areas. Data shall be taken during the summer growing season. Reports shall be submitted annually within 60 days of data collection until a determination of a successful wetland restoration and creation has been made. The first annual statistical report data gathering shall occur not later than one year after planting.
  3. Following implementation of the mitigation and restoration plan, described in the application for certification, monitoring of mitigation and restoration wetlands to assess the effectiveness of the mitigation and restoration projects, in accordance with the methods established in the monitoring section, shall be performed until a determination of success is obtained. At the end of the first three years of monitoring, SECI may request in writing that the monitoring program be reviewed by the Bureau of Submerged Lands and Environmental Resources to determine whether or not the frequency or parameters of the monitoring program should be changed.
  4. If it is determined by Department staff, based on visual inspection and review of the monitoring reports that the restoration or mitigation effort is not successful pursuant to Specific Condition Nos. H and I above, SECI shall present methods and proposals to be reviewed and approved by the Department within 30 days of the Department's notification to ensure success of the effort. The plan of corrective actions shall be implemented within 90 days of written approval by the Department.
- K. Prior to dewatering within 300 feet of an on- or off-site wetland that is greater than 0.5 acre in size and will not be disturbed in association with this certification, SECI shall implement a procedure to mitigate impacts by maintaining the water table at historic levels beneath such wetlands or at the property boundary for off-site
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wetlands. Prior to implementation, SECI must obtain approval, in writing, from the Permitting Department Director, Resource Regulation at the SWFWMD. The procedure may include:

1. A water table monitoring well network, approved by the Permitting Department Director, Resource Regulation, designed to demonstrate that water table drawdown does not exceed one foot under on-site wetlands that will not be disturbed.
  2. Collection of water table level data after construction of the approved monitoring well network for at least six months prior to the initiation of dewatering in the area, to obtain background data. During this time period, water level data shall be recorded on a weekly basis and submitted monthly.
  3. If a rim-ditch system is proposed to recharge the water table near on-site wetlands that will not be disturbed, design and operation details must be submitted to demonstrate that the water table will be maintained at appropriate levels based on the background data collected. Rim-ditch systems must also be accompanied by a monitoring well network to verify water table maintenance.
  4. At least one month prior to the anticipated date of dewatering an area within the setback distance, water level data shall be recorded and submitted on a weekly basis.
  5. Data collection shall continue for six months following completion of dewatering and reclamation or until SWFWMD staff determine that background or steady-state levels are attained. During this time period, water level data shall be recorded on a weekly basis and reported monthly. Water levels shall be reported in feet relative to the National Geodetic Vertical Datum (N.G.V.D.)
- L. SECI shall replace at least 5.16 acres of functional habitat by not mowing at least a 37.5 foot wide band of vegetation along either side of the unnamed tributary's upper and lower extensions to the extent practicable.

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References cited in V. are the following:

Daubenmire, R. 1968. Plant Communities: A Textbook of Synecology. Harper & Row, New York. 300 pp.

- Green, R. H. 1979. *Sampling Design and Statistical Methods for Environmental Biologists*. John Wiley & Sons, New York. 257 pp.
- Grieg-Smith, P. 1983, 3rd Ed. *Quantitative Plant Ecology*. University of California Press, Berkeley.
- Mueller-Dombois, D. and H. Ellenberg. 1974. *Aims and Methods of Vegetation Ecology*. John Wiley, New York. 547 pp.
- Oosting, H. J. 1956. *The Study of Plant Communities: An Introduction to Plant Ecology*. W. H. Freeman, San Francisco. 440 pp.
- Poole, R. W. 1974. *An Introduction to Quantitative Ecology*. McGraw-Hill, New York.
- Southwood, T. R. E. 1978. *Ecological Methods*. Chapman & Hall, London.
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## VI. INDUSTRIAL WASTE

### A. Standard Criteria

1. Drawings, plans, documents or specifications of the industrial wastewater treatment system comprising the neutralization basin submitted by SECI, not attached hereto, but retained on file at the Department, are made a part hereof.
2. SECI shall not discharge to surface waters wastes which are acutely toxic, or present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant locally occurring wildlife or aquatic species. SECI shall not discharge to ground waters wastes in concentrations which, alone or in combination with other substances or components of discharges (whether thermal or non-thermal), are carcinogenic, mutagenic, teratogenic, or toxic to human beings (unless specific criteria are established for such components in Section 62-520.420, F.A.C.) or are acutely toxic to indigenous species of significance to the aquatic community within surface waters affected by the ground water at the point of contact with surface waters.
3. If historical or archaeological artifacts, such as Indian canoes, are discovered at any time within the project site, SECI shall immediately notify the District Office and the Bureau of Historic Preservation, Division of Archives, History and Records Management, R. A. Gray Building, Tallahassee, Florida 32301.

4. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.), Florida Statutes, applicable portions of post-certification submittals and supporting documents for the industrial wastewater treatment system which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared them.
5. SECI shall ensure that the construction/operation of this facility is as described in the Site Certification application and supporting documents. Any proposed change to this Certification shall be submitted in writing to the Department for review and clearance prior to implementation. Changes of negligible impact to the environment and requiring minimal staff time will be reviewed by the Department, cleared when appropriate and incorporated into this permit. Changes or modifications other than those described above will require submission of a completed application and the appropriate processing fee.
6. SECI shall report all critical (having potential to significantly pollute surface or ground waters) spills of liquid or liquid-solid materials, not confined to a building or similar containment structure, to the Department by telephone within 24 hours after discovery and submit a written report within seventy-two hours, excluding weekends, from the original notification. The telephonic report shall be submitted by calling the Southwest District Industrial Wastewater Compliance/Enforcement Section under telephone number (813)744-6100. After normal business hours, contact the State Warning Point by calling (904)413-9911 or (904)413-9912. The written report shall include, but not be limited to, a detailed description of how the spill occurred, the name and chemical make-up (include any MSDS sheets) of the substance, the amount spilled, the time and date of the spill, the name and title of the person who first reported the spill, the areal size of the spill and surface types (impervious, ground, water bodies, etc.) it impacted, the cleanup procedures used and status of completion, and include a map or aerial photograph showing the extent and paths of the material flow. Any deviation from this requirement must receive prior approval from the Department.
7. SECI shall ensure that all laboratory analytical data submitted to the Department, as required by this Certification, is from a laboratory which has a currently valid and Department-approved comprehensive Quality Assurance Plan (QAP) [or a QAP pending approval] for all parameters being reported as required by Chapter 62-160, Florida Administrative Code.
8. When a contract laboratory is used to analyze samples required pursuant to this Certification, SECI is required to have the samples taken by qualified personnel following EPA- and Department-approved sampling procedures and

chain-of-custody requirements. All chain-of-custody records must be retained by the contract laboratory for at least three (3) years and made available to the Department immediately upon request.

9. When an in-house laboratory is used to analyze samples required pursuant to this Certification, SECI is required to have the samples taken by a qualified technician following EPA- and Department-approved sampling procedures and chain-of-custody requirements. All chain-of-custody records must be retained on-site for at least three (3) years and made available to the Department immediately upon request.
10. SECI shall notify the Department immediately of any problems that may seriously hinder compliance of the industrial wastewater system with this Certification by calling the Southwest District Industrial Wastewater Compliance/Enforcement Section under telephone number (813)744-6100. After normal business hours, report any condition that poses a public health threat to the State Warning Point under telephone number (904)413-9911 or (904)413-9912. The Department may require a detailed written report describing the problem, remedial measures taken to assure compliance and measures taken to prevent recurrence of the problem.
11. SECI shall not deliberately allow any wastewater to bypass the pollution control facility without prior approval from the Department.

#### B. Construction

1. No earlier than 24 months nor later than four months prior to construction of any unit or device for the treatment of industrial wastewater generated by this facility, appropriate design information plans and specifications for such unit or device shall be submitted to the Department for approval; All information shall be submitted as specified in DER Form 62-1.204(2). No industrial wastewater treatment unit shall be operated without prior Department approval.
2. Upon completion of construction of the Hardee Unit Number 3 Project, SECI shall submit to the Department's Southwest District Office a completed "Certificate of Completion of Construction" form signed and sealed by the Professional Engineer of record.
3. SECI shall submit to the Department, within thirty (30) days from completion of construction of industrial wastewater system, a set of "record" drawings, signed and sealed by a Professional Engineer registered in the State of Florida showing the construction details as well as any deviations from the approved

preconstruction design. All deviations not previously reported to the Department shall be described in detail and the reasons therefor enumerated.

4. SECI shall ensure that operation of the reservoir (cooling pond) and its internal dike system shall be in accordance with the provisions of Section 62-672.400, F.A.C.
5. SECI shall ensure that the reservoir (cooling pond) will be operated to maintain a surge capacity equal to the runoff from the 10-year, 24-hour rainfall event, in addition to all process wastewater diverted from the power plant operation.

## VII. DOMESTIC WASTE

- A. No portion of the domestic wastewater collection and transmission system, treatment plant or reuse/disposal - system, excluding the cooling pond, may be constructed without prior written approval from the Department. Construction of any portion of the domestic wastewater facility without the prior written approval of the Department will be considered a violation of the Conditions of Certification.
- B. In order to obtain approval to construct a domestic wastewater treatment plant and reuse/disposal system, excluding the cooling pond, the following forms, reports, plans and data as applicable, appropriately signed and sealed by an engineer registered in the State of Florida, must be submitted to the Department at least one hundred twenty (120) days prior to proposed date for commencement of construction to demonstrate the consistency of that system with these conditions (All forms cited are titled "DER" Forms under Title "17", Florida Administrative Code, now "DEP" and Title "62" respectively):
  1. The preliminary design report in accordance with Rule 62-600.715, F.A.C., and the Engineering Report required by Rule 62-610.310, F.A.C. Minimum Class III Reliability features must be indicated. A Reduced Pressure Zone Back flow Preventer must be designated for potable water isolation.;
  2. DER Form 17-604.900(1), Application to Construct a Domestic Wastewater Collection System, with documentation;
  3. DER Form 17-600.910(1), Application to Construct a Domestic Wastewater Facility, with documentation;
  4. DER Form 17-610.910(1), Application to Construct a Reuse/Land

- Application System, with documentation;
5. DER Form 17-640.900(1), Agricultural Use Plan, with documentation;
  6. 8-1/2" x 11" copies of:
    - a. WWTP and effluent disposal site locations;
    - b. Residuals disposal site, indicating all public or private drinking water wells within 0.5 miles;
    - c. Road map, or drawing of roads leading to the WWTP; and,
    - d. Flow process diagram, showing all piping (air and liquid), as well as planar and volumetric data.
- C. Department approval for construction of this domestic wastewater facility must be requested no earlier than 24 months nor later than four months prior to construction of that facility.
- D. The approval is subject to the non-procedural provisions of Chapter 403, F.S., and F.A.C. Chapters 62-3, 62-4, and pertinent chapters within the 62-300, 62-500 and 62-600 Series. SECI will be approved to perform the work or operate the facility shown on the application(s) and approved drawing(s), plans, and other documents, attached thereto or on file with the Department and made a part thereof and specifically described in the application(s).
- E. Operation staffing will be in accordance with Chapter 62-699, F.A.C.
- F. The discharge from the chlorine contact chamber shall be sampled in accordance with Chapter 62-601, F.A.C. and shall meet the limitations designated by the Department when the facility is approved to be placed into service. They will include, but are not limited to, the following parameters: pH, CBOD<sub>5</sub>, TSS, CL<sub>2</sub>, FC and Flow.
- G. Direct discharge from the reuse/disposal system to area surface waters of the state is not allowed. Surface discharge to such waters shall be considered a violation of this approval and SECI shall immediately report any such discharge to the Southwest District office of the Department of Environmental Protection.
- H. SECI shall comply with all applicable provisions of Chapter 62-640, F.A.C. and shall report any non-compliance or changes from the approved site plan to the Department. At the time the wastewater treatment plant is placed into service, SECI shall provide an update to the Agricultural Use Plan(s) detailing the classification of residuals
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stabilization to be achieved, the methodology to be used and new or expanded application site information. Additional updates of these plans, as well as landspreading summaries, are required to be submitted to the Department annually thereafter.

- I. Upon completion of construction of the wastewater collection system, SECI shall submit two (2) copies of the Domestic Wastewater Collection/Transmission Systems Certificate of Completion of Construction [DER Form 17-604.900(2)], and a copy of the record drawings for the system, signed and sealed by a registered engineer, to the DEP Southwest District office. Upon completion of construction and prior to placing the treatment plant or effluent reuse/disposal system into operation for any purpose other than testing for leaks and equipment operation, SECI shall submit a Notification That a Domestic Wastewater Facility Will Be Placed Into Operation [DER Form 17-600.910(3)] and a Completion of Construction Notification for a Reuse/land Application System [DER form 17-610.910(6)], signed and sealed by a Registered Engineer, to the DEP Southwest District office.
- J. SECI shall provide an approved flow measurement device on the wastewater treatment plant to monitor the influent (ahead of any return flows) and/or effluent flow, as appropriate. The flow measurement device shall be calibrated at least annually, with evidence of calibration kept at the site of flow measurement, and submitted to the Department upon request.
- K. SECI shall furnish a weatherproof location at the plant site for the operator log. SECI shall ensure that the certified operator keeps an on-site log current to the last operation and maintenance performed which shall include at a minimum: plant name; signature and certification number of the operator; date and time in and out; specific operation and maintenance performed; tests performed and samples taken and major repairs made. The log shall contain information for at least the preceding 12 months. The SECI or a designated representative shall report to the Department within 24 hours of discovery any occurrence that causes a violation of permit conditions. Occurrences such as equipment breakdown, power outage, destruction by fire, wind or other cause, or any occurrence which causes or is likely to cause serious plant breakdowns, inefficient or unsafe treatment plant operation, or a discharge of water or wastewater in a manner not authorized by the SCA shall be reported. The SECI is responsible for maintaining communication with the operator to become aware of such abnormal events.
- L. SECI shall maintain all audible and visual alarm systems on the lift station(s) in operating condition at all times. Wastewater overflows must be immediately reported, along with clean-up and disinfection methodology.
- M. A reduced pressure zone (RPZ) back flow preventer shall be installed on any potable



water supply to the treatment facility. No potable water outlet intended for human contact shall be located down-line of the back flow preventer. Annual checks of the RPZ by a certified back flow technician are required. The certifications shall be kept at the plant as a part of the operational records and shall be submitted to the Department upon request. As an alternative, the SECI may disconnect and cap all potable water sources to the plant and install a pump in the chlorine contact chamber in order to provide effluent for plant maintenance.

- N. The disinfection system shall be operated to maintain a minimum chlorine residual of 0.5 mg/L at the outfall from the chlorine contact chamber. A metering device for dosing chlorine to the effluent shall be utilized and the chlorine supply tank shall be inspected regularly to ensure proper operation.
- O. Daily checks of the plant shall be performed by SECI or supplier, or its representative or agent five (5) days per week for all Class C and D plants pursuant to Rule 62-699.311(1), F.A.C.
- P. SECI shall ensure that the construction and operation of this facility shall be as described in the application and supporting documents. Any change to this approval shall be submitted in writing to the Domestic Wastewater Program Manager for review and clearance prior to implementation. Changes of negligible impact to the environment and staff time will be reviewed by the Program Manager, cleared when appropriate and incorporated into this approval. Changes or modifications other than those described above and those addressed in a supplemental application or modification of site certification will require submission of a completed application and appropriate processing fee per Rule 62-4.050, F.A.C.
- Q. In accordance with Rule 62-601.400(3), F.A.C., any laboratory test required by this approval shall be performed by a laboratory that has been certified by DHRS in accordance with Rule 10D41.100-113, F.A.C., to perform the test. On-site tests for dissolved oxygen, pH, and total chlorine residual shall be performed by a laboratory certified to test for dissolved oxygen, pH, and total chlorine residual or under the direction of an operator certified in accordance with Chapter 61E12-41, F.A.C.
- R. In accordance with Rule 62-160.300(6), F.A.C., sample collection shall be performed by following the protocols outlined in "DEP Standard Operating Procedures for Laboratory Operations and Sample Collection Activities" (DEP-QA-001/92). Alternatively, sample collection may be performed by an organization which has an approved Comprehensive Quality Assurance Plan (CompQAP) on file with DEP. This CompQAP shall be approved for collection of samples from the required matrices and for the required tests.
- S. Any condition at this facility that causes a violation of these Conditions shall be

reported to the Department within twenty-four (24) hours of occurrence by calling the Domestic Wastewater Section, Water Facilities, FDEP Southwest District at (813) 744-6100. After normal business hours, any condition that poses a serious health threat shall immediately be reported by calling (904) 488-1320.

## VIII. POTABLE WATER

### A. Prior Approval

1. No portion of the potable water supply system or any portion of a water supply system that will be or is intended to be converted to potable water use at a later date may be constructed without prior written approval from the Department. Construction of any portion of the potable water supply system without the prior written approval of the Department will be considered a violation of the conditions of certification.
2. In order to obtain approval to construct a potable water supply system which includes an on-site water treatment facility and distribution system (if applicable), the following information must be submitted to the Department no earlier than one (1) year prior to the date that the water supply system is proposed for construction:
  - a. A completed "Application to Construct a Public Drinking Water System" form which complies with the requirements of the rules and regulations of the Department in effect as of the date that the request for approval to commence construction of the system is made to the Department.
  - b. Copy of the well driller's well completion report for any new well to be used as a potable water supply well.
  - c. Complete water quality analysis of the raw water from each individual new well to be used as a potable water supply well. Analysis of composite samples will not be accepted. The analysis must include all water quality parameters required for the classification of the water supply system being proposed pursuant to the rules and regulations of the Department in effect as of the date that the request for approval to construct the system is made to the Department. Each individual analysis must have been performed by a laboratory certified by the state to perform that particular potable water quality analysis and must have an analysis date within one (1) year of the date that the request for approval to construct the water supply system is made to the

Department.

- d. Complete specifications for the material and workmanship for the entire potable water supply system for which the request for approval to construct is being made. The specifications must be signed and sealed by an engineer registered in the state of Florida and must provide documentation that the material and workmanship will comply with all applicable rules and regulations of the Department in effect as of the date that the request for approval to construct is made to the Department.
- e. Complete engineering drawings of the entire proposed potable water supply system for which approval to construct is being requested. The drawings must demonstrate full compliance with all applicable rules and regulations of the Department in effect as of the date that the request is made to the Department for approval to construct the system. The drawings must be signed and sealed by an engineer registered in the state of Florida.
- f. Site plan showing the location of each new potable water supply well. The site plan must include all proposed and existing, above and below grade, facilities, natural formations (e.g., streams, creeks, etc.), structures, etc. within a minimum of a complete five hundred (500) foot radius of each wellhead; however, if any facility, natural formation, structure, etc., is located outside of the five hundred (500) foot radius and that facility, natural formation, structure, etc., has a setback distance from the wellhead greater than five hundred (500) feet established in applicable rules of the Department in effect as of the date that the request for approval to construct is made, then that facility, natural formation, structure, etc., must also be shown on the site plan requested here. The site plan must be certified for accuracy by the professional engineer registered in the state of Florida responsible for design of the potable water supply system.
- g. Signed and sealed comprehensive engineering report on the proposed potable water supply system which fully describes the project and basis of design. The report must include design data and such pertinent data to give an accurate understanding of the work to be undertaken and must provide supporting documentation that the potable water system as proposed will comply with all applicable rules and regulations of the Department in effect as of the date that the request for approval to construct the water supply system is made to the Department.

3. Construction of potable water lines for the purpose of obtaining potable water from an off-site public water supply system is not covered by the conditions of certification. To obtain permission to connect to such a potable water system, SECI shall submit a modification request pursuant to 403.516, F.S., in accordance with the requirements of Chapter 62-555, F.A.C.
4. Prior to submitting any information to the Department for review of the proposed potable water supply system, all new wells that are proposed for use as potable water supply wells and that will be included in the request for approval to construct the water supply system must have been constructed and fully developed. Once the well has been fully developed and the water samples collected, the well must be properly capped (or isolated from the potable water system) until written approval to construct the potable water supply system has been issued by the Department.
5. Should SECI request approval to construct a water treatment system which produces a waste stream (e.g., softening, electro dialysis, reverse osmosis, etc.) other than the conventional water treatment system for groundwater sources, SECI must submit as part of its request for approval to construct that water supply system documentation that the disposal of that waste stream has been approved by the appropriate agency or section of the Department.

B. Construction

1. SECI must retain the services of a project engineer registered in the state of Florida to observe that the construction of the water supply system is in accordance with the plans and specifications approved by the Department. The project engineer will be responsible for certifying to the Department that he/she observed the construction and that the construction conformed to the plans and specifications approved by the Department.
2. The approval to construct the potable water supply system will be in effect for three (3) years from the date of issuance. All construction of the potable water supply system must be completed within this three (3) year period unless a written request for an extension of this date is made to the Department at least sixty (60) days prior to the expiration of the construction approval, and written approval for an extension of the expiration date is issued by the Department. The expiration date of the construction approval may be extended on a year-by-year basis; however, under no circumstances will the approval to construct the water supply system be extended beyond three (3) years from the date of the earliest water quality analysis of any new wells. The request for an extension of the expiration date must be accompanied by an analysis of the raw water from each new potable water well for each water

quality parameter required pursuant to the requirements of the rules and regulations of the Department in effect as of the date that the request for the extension is made. Such an analysis and a request for approval shall be submitted and approved prior to constructing and operating any portion of the appurtenances necessary to connect and operate that new well to the existing system for each new well added to the potable water system after the initial system is constructed and approved. The water quality analysis report submitted with this request must have an analysis date no earlier than one (1) year from the date that the request for an extension of the expiration date is made, must have been performed by a laboratory certified by the state to perform the analysis, and must contain no water quality violations other than those for which the water supply system was originally designed to address. The maximum length of time that the approval or each subsequent approval for the construction of the potable water system may be in effect is five (5) years from the date of the original approval or for subsequent approvals from the date of issuance of each approval. Should the construction of the water supply system not be completed within that five (5) year period, should SECI have failed to request a timely extension of the approval expiration date, or should any water quality analysis submitted with the request for an extension of the expiration date demonstrate the presence of a contaminant for which the water treatment plant was not originally designed to handle, or as additional wells are installed on-site and proposed for connection to the potable water system, SECI will have to make a new request to the Department for approval to construct the potable water system. That request must meet the submittal and approval requirements of the rules of the Department in effect as of the date that the request for approval is submitted and will be subject to the same review schedule as the original request.

C. Operation

1. No portion of the potable water supply system may be placed into service without the prior written approval of the Department. Placing any portion of the potable water supply system into service prior to receipt of this written approval will be considered as a violation of the conditions of certification.
2. The Department will not issue approval to place the potable water supply system or any portion of that system into service unless the construction of the system or portion thereof had been approved for construction by the Department prior to the commencement of that construction.
3. In order to obtain approval to place the potable water supply system into service, SECI must make a written request for clearance to the Department. The request must be in the form and/or manner stipulated in the letter

- authorizing construction of the potable water supply system and must include all information stipulated in that letter as being required to be submitted with the request for clearance, as well as any information required for clearance of a potable water supply system contained in applicable rules and regulations of the Department in effect as of the date that the request for clearance is made.
4. The Department will issue a letter of clearance to place the water supply system into service within thirty (30) days of receipt of a written request for clearance, provided that the request is accompanied by all necessary supporting documentation and meets the criteria for clearance contained in the applicable rules and regulations of the Department in effect as of the date that the request for clearance was made.
  5. All construction or activities taking place in the vicinity of the potable water supply well must conform with the minimum setback distances from a potable water supply well that are applicable to the activity under Chapter 62-555, F.A.C., as in effect on the date of certification and/or as subsequently adopted by the Department pursuant to Section 403.511(5)(a), F.S.
  6. SECI must provide, in accordance with applicable state rules, a certified water treatment plant operator who meets the staffing requirements for the type and capacity of the water treatment system cleared for service.
  7. The potable water treatment plant flow meters shall be read and recorded in the plant log at those times when the certified operator is required by the Department's rules, Chapter 62-699, F.A.C., to visit the facility for the type and size of the water treatment plant constructed to serve the facility.
  8. The certified water treatment plant operator must submit a report on the operation of the water treatment plant(s) to the Department monthly in the manner required by the rules and regulations of the Department.
  9. The drinking water must be analyzed for all applicable water quality parameters to the degree and frequency required by the rules and regulations of the Department. The analysis must be performed in accordance with these rules and regulations and submitted to the Department in the format required by these rules and regulations.
  10. The one-day maximum day demand for the period of time covering the most recent twelve (12) months of operation of the water treatment plant may not exceed the capacity of the water treatment plant approved for construction and cleared for use by the Department. Should the demand on any one day during a twelve (12) month period exceed the capacity of the water treatment
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plant without sufficient justification, SECI shall submit a request for any expansion of the potable water system for review and approval.

11. SECI must plan, design, obtain approval for, and construct all necessary modifications to its water supply system in a timely manner in order to provide sufficient capacity to meet the potable water demands of its system.
12. SECI must operate the water supply system in such a manner as to comply with the provisions of Chapter 403, F.S., and all the rules of the Department.

## IX. SURFACE WATER AND STORMWATER MANAGEMENT FACILITIES

SECI shall construct all aspects of the surface water management system in accordance with the construction plans received by the SWFWMD on August 29, 1994, and October 14 and 18, 1994. This certification for the surface water management system 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 Certification may constitute grounds for revocation and enforcement action.

### A. General

#### 1. SECI Confirmation

The operational phases of the surface water management systems authorized under this certification shall not become effective until SECI confirms in writing, upon completion of each phase, that these facilities have been constructed consistent with the conditions of certification. Such confirmation shall include a certification by an engineer (practicing in the State of Florida, having the appropriate experience in surface water management design and construction, and in compliance with Chapter 471, Florida Statutes, unless exempt thereunder), that the facilities have been constructed in accordance with the approved project design. Within 30 days after completion of construction of the surface water management system, SECI shall submit the confirmation, including "as-built" construction drawings with the engineer's certification and a description of any deviations; and notify the water management district that the facilities are ready for inspection for consistency with the conditions of certification and information submitted hereunder.

2. The discharges from the surface water management system shall meet state water quality standards as set forth in Chapter 62-302, F.A.C. for class waters equivalent to the receiving waters.

3. Minimum Standards.

This certification is predicated on SECI's submitted information to SWFWMD which reasonably demonstrates that adverse off-site water resource related impacts will not be caused by the authorized activities. The plans, drawings, and design specifications submitted shall be considered minimum standards for compliance.

4. Post-Certification Information Submittal.

Information submitted to the water management districts subsequent to certification, in compliance with the conditions of this certification, shall be for the purpose of water management district monitoring and confirming compliance with the conditions of certification and the criteria contained in 40D-4 (Surface Water Management), Florida Administrative Code, as applicable, prior to the commencement of the subject construction, operation and/or maintenance activity, covered thereunder.

5. Liability.

Permittee shall hold and save SWFWMD harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance and/or use of any facility authorized by this certification, to the extent allowed under Florida law.

6. Enforcement

Authorized representatives of the SWFWMD shall be allowed reasonable escorted access to the project site and any authorized off-site mitigation/compensation areas to inspect and observe any activities associated with the project construction and/or the operation and/or maintenance of the surface water management systems(s) and stormwater facilities in order to determine compliance with the conditions of this certification.

7. Monitoring.

Post-certification monitoring requirements may be determined and specified as a result of technical review of construction information, where necessary, to demonstrate compliance with water management district regulations. If monitoring data is required by SWFWMD in conjunction with post-certification review, it shall be submitted to the SWFWMD and the DEP. Parameters to be monitored may include those listed in Chapter 62-302,



Florida Administrative Code. SECI also shall, if required, provide data to SWFWMD regarding: Construction, operation, and maintenance of surface water management systems; NGVD levels; volumes and timing of water discharged, including total volume discharged during period of sampling and total discharges from the property. Environmental monitoring may also be required in conjunction with wetlands compensation/mitigation.

**B. Construction Conditions**

1. This project must be constructed in compliance with and meet all applicable requirements set forth in Chapter 373, Florida Statutes, and Chapter 40D-4, Florida Administrative Code.
2. Any surface water discharged from the site during construction of the project shall meet State water quality standards at the property boundary or point of discharge to wetlands or State waters. If the discharge does not meet these standards, the discharge will be immediately stopped and the SWFWMD shall be notified of corrective action taken to correct the violation. Turbidity shall not exceed 29 NTU above background level. Turbidity shall be monitored at least once during discharge, or more often as determined by the project engineer or SWFWMD if needed, to ensure compliance.
3. Except as authorized by this certification for the surface water management system, any further land development, wetlands disturbance or other construction within the total land area of this site will require additional certifications in accordance with the SWFWMD's rules (Chapter 40D-4 F.A.C.)
4. All rights-of-way and easement locations necessary to construct, operate and maintain all facilities, including uplands conservation/buffer areas and wetlands, which constitute the certified surface water management system, shall be reserved for water management purposes.
5. Construction of the discharge control and water quality treatment facilities which are part of the certified surface water management system shall be completed and operational prior to beneficial occupancy and use of the project development being served.
6. Establishment and survival of littoral areas provided for stormwater quality treatment in wet detention systems shall be assured by proper and continuing maintenance procedures designed to promote viable wetlands plant growth of natural diversity and character. As-built drawings depicting the established wet detention treatment areas shall be submitted to the SWFWMD for

inspection and approval upon completion of construction. Following as-built approval, perpetual maintenance shall be provided for the certified system.

7. Any existing wells in the path of construction shall be properly plugged and abandoned by a licensed water well contractor in accordance with Chapter 40D-3 and Rule 62-532.500(4), F.A.C.
8. All retention/detention pond side slopes shall be sodded and staked as necessary, to prevent erosion.
9. Any system alteration, including for augmentation into or withdrawal of water from the certified surface water management system, other than as specifically authorized by this certification, will require additional District certification consideration. The water level of stormwater detention ponds shall not be augmented by pumping or diversion of water into the ponds to artificially control their level above the design normal or beginning storage level.
10. The SECI shall perform the construction authorized in a manner so as to minimize any adverse impact of the system on fish, wildlife, natural environmental values, and water quality. The SECI shall institute necessary measures during the construction period, including full compaction of any fill material placed around newly installed structures, to reduce erosion, turbidity, nutrient loading and sedimentation in the receiving waters.
11. Off-site discharges of surface water during construction and development shall be made only through the facilities authorized by this certificate.
12. In order to insure that the person who will construct the proposed work is identified as required by 373.413(2)(f), F.S., once the contract is awarded, the name, address, and telephone number of the contractor will be submitted to the SWFWMD prior to construction.
13. SECI shall immediately provide written notification to the SWFWMD upon beginning any construction authorized by this certificate.
14. SECI shall retain the design engineer, or other Professional Engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project. SECI shall inform the SWFWMD in writing and prior to beginning construction of the name, address, and telephone number of the Professional Engineer so employed by SECI.

15. The operation and maintenance entity shall submit inspection reports for the surface water management system in the form required by the SWFWMD, in accordance with the following schedule:

For systems utilizing wet detention the inspections shall be performed two (2) years after operation is authorized and every two (2) years thereafter.

16. The SWFWMD verified wetland boundaries shall be clearly delineated on the site prior to initial clearing and grading activities. The delineation shall endure throughout the construction period and be readily discernable to construction personnel and SWFWMD staff.

#### X. TOXIC, DELETERIOUS OR HAZARDOUS MATERIALS

The spill of any toxic, deleterious, or hazardous materials shall be reported in the manner specified by Condition XVIII, Noncompliance Notification.

#### XI. SOLID WASTE STORAGE AND DISPOSAL

##### A. Recycling

The Permittee shall make all feasible efforts to recycle project wastes during plant operation.

##### B. Disposal

Solid waste produced by the operation of Unit 3 shall be removed from site and disposed of in a permitted disposal facility.

#### XII. NOISE

To mitigate the effects of noise produced by the steam blowout of steam boiler tubes, the SECI shall conduct public awareness campaigns prior to such activities to forewarn the public of the estimated time and duration of the noise.

#### XIII. FLOOD CONTROL PROTECTION

The plant and associated facilities shall be constructed in such a manner as to comply with the Hardee County flood protection requirements.

#### XIV. CONTROL MEASURES DURING CONSTRUCTION

##### A. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the Department and the Hardee County Health Department.

##### B. Environmental Control Program

SECI shall establish an environmental control program under the supervision of a qualified person to assure that all construction activities conform to good environmental practices and the applicable conditions of certification. A written plan for controlling pollution during construction shall be submitted to DEP sixty days prior to commencement of construction. The plan shall identify and describe all pollutants and waste generated during construction and the methods for control, treatment and disposal. SECI shall notify the Department's Southwest District Office by telephone within 24 hours, if possible, if unexpected harmful effects or evidence of irreversible environmental damage are detected by it during construction, shall immediately report in writing to the Department, and shall within two weeks provide an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects or damage and a plan to prevent reoccurrence.

##### C. Construction Dewatering Effluent

Should SECI's dewatering operation create shoaling in adjacent water bodies, SECI is responsible for removing such shoaling.

All offsite discharges resulting from dewatering activities must be in compliance with water quality standards required by DEP Chapters 62-3, 62-4, and 62-302, F.A.C., or such standards as issued through a variance by DEP.

#### XV. SAFETY

##### A. Facility Design and Operation

The overall design, layout, and operation of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The Safety Standards specified under Section 440.56, F.S., by the Industrial Safety

Section of the Florida Department of Commerce will also be complied with.

B. Radon

The Permittee's office/administration buildings at the Project site shall be included in the Department of Community Affairs' radon-related Construction Standards and Development Activities, specifically the Department of Community Affairs' Study of Large Buildings. Additionally, the Permittee shall conduct a preconstruction, site-specific soil gas radon test in accordance with the protocols used by the Department of Community Affairs to identify the radon potential of the construction site for the office/administration buildings. If the test results indicate that the construction site has high radon potential, the Permittee shall -- (1) integrate improved slabs and subslab depressurization systems construction design criteria developed by the Department of Community Affairs in the office/administration building; (2) conduct postconstruction tests in accordance with the Department of Community Affairs' protocols to evaluate the proposed designed criteria, and (3) make test results available to the Department of Community Affairs.

XVI. SCREENING

SECI shall provide screening of the site to the extent feasible through the use of aesthetically acceptable structures, vegetated earthen walls and/or existing or planted vegetation.

XVII. CHANGE IN DISCHARGE

All discharges or emissions authorized herein to Unit 3 shall be consistent with the terms and conditions of this certification. The discharge of any regulated pollutant not identified in the application or any regulated discharge more frequent than, or at a level in excess of, that authorized herein shall constitute a violation of this certification. Any anticipated facility expansions, production increases, or process modification which will result in new, different or increased discharges or expansion in steam generating capacity will require a submission of a request for modification of certification or a new or supplemental application to the Siting Coordination Office pursuant to Chapter 403, F.S.

XVIII. NONCOMPLIANCE NOTIFICATION

If, for any reason, SECI does not comply with or will be unable to comply with any limitation specified in this certification, SECI shall notify the Deputy Assistant Secretary of DEP's Southwest District office by telephone as soon as possible but not later than the first DEP working day after SECI becomes aware of said noncompliance, and shall confirm the reported

situation in writing within seventy-two (72) hours supplying the following information:

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

#### **XIX. FACILITIES OPERATION**

Unless granted an exception by a specific condition herein, SECI shall at all times maintain in good working order and operate as efficiently as possible all of its treatment or control facilities or systems installed or used by SECI to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior notice to the Department and approval, except where otherwise authorized by applicable regulations.

#### **XX. ADVERSE IMPACT**

SECI shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying event.

#### **XXI. RIGHT OF ENTRY**

SECI shall allow DEP and other authorized representatives, upon the presentation of credentials:

- A. To enter upon the Unit 3 premises where an effluent source is located or, during business hours, in which records are required to be kept under the terms and conditions of this permit;
- B. To have access to and to make copies of all records required to be kept under the conditions of this certification;
- C. To inspect any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants; and
- D. To assess any damage to the environment or violation of ambient standards.

- E. SWFWMD authorized staff, upon proper identification, will have permission to enter, inspect, and observe surface water management facilities and water use facilities in order to determine compliance with the approved plans, specifications, and conditions of this certification.
- F. Moreover, SECI shall allow authorized representatives of DEP and other appropriate agencies, acting within the scope of their jurisdiction and authority, upon the presentation of credentials:
  - 1. To enter upon the project site or mitigation area, or during business hours to enter the Unit 3 premises in which records are required to be kept under the terms and conditions of this certification; and
  - 2. To have access to and copy all records required to be kept under the conditions of this certification.

## XXII. REVOCATION OR SUSPENSION

This certification may be suspended, or revoked pursuant to Section 403.512, Florida Statutes, or for violations of any Condition of Certification.

## XXIII. CIVIL AND CRIMINAL LIABILITY

This certification does not relieve SECI from civil or criminal responsibility or liability for noncompliance with any conditions of this certification, applicable rules or regulations of the Department, or Chapter 403, Florida Statutes, or regulations thereunder.

Subject to Section 403.511, Florida Statutes, this certification shall not preclude the institution of any legal action or relieve SECI from any responsibilities or penalties established pursuant to any other applicable State Statutes or regulations.

## XXIV. PROPERTY RIGHTS

The issuance of this certification does not, unless noted otherwise, convey any property rights in either real or personal property, tangible or intangible, nor any exclusive privileges, nor 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. SECI shall obtain title, lease or right of use to any sovereign submerged lands occupied by the plant or appurtenant facilities from the State of Florida.

## XXV. SEVERABILITY

The provisions of this certification are severable, and, if any provision of this certification or the application of any provision of this certification to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of the certification shall not be affected thereby.

## XXVI. CERTIFIED SITE

The site of the certified power plant is generally depicted in the application.

## XXVII. REVIEW OF SITE CERTIFICATION

The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five years from the date of issuance of this certification or any National Pollutant Discharge Elimination Control Act amendments of 1972 for the plant units, the Department shall review all monitoring data, including groundwater quality monitoring data, that has been submitted to it or its agent(s) during the preceding five-year period for the purpose of determining the extent of SECI's compliance with the conditions of this certification and the environmental impact of this facility. The Department shall submit the results of its review and recommendations to SECI. Such review will be repeated at least every five years thereafter.

## XXVIII. MODIFICATION OF CONDITIONS

The conditions of this certification may be modified in the following manner:

- A. The Siting Board pursuant to 403.516(1), Florida Statutes, hereby delegates to the Secretary of DEP the authority to modify, upon application by SECI and after notice and opportunity for hearing, any conditions pertaining to monitoring; sampling; mixing zone; zone of discharge; surface water, groundwater, and air effluent or emission limitations; and variances or exemptions to water quality standards.
- B. All other modifications shall be made in accordance with Sections 403.516, Florida Statutes.
- C. The Certification shall be automatically modified to conform to any subsequent DEP issued amendments, modifications, or renewals of the separately issued Prevention of Significant Deterioration (PSD) permit or the National Pollutant Discharge Elimination System permit (NPDES) for the project and the conditions of such



permits shall be controlling over these Conditions of Certification.

#### XXIX. EFFECT OF CERTIFICATION

Certification and conditions of certification are predicated upon design and performance criteria indicated in the application and explained at the certification hearing. Thus, conformance to those criteria, unless specifically amended, modified, or as the Department and parties are otherwise notified, is binding upon the applicants in the preparation, construction, and maintenance of the certified project. In those instances where a conflict occurs between the application's design criteria and the conditions of certification, the conditions shall prevail.

#### XXX. ENFORCEMENT

- A. The Secretary may take any and all lawful actions as he or she deems appropriate to enforce any condition of this certification.
- B. Any participating agency (federal, state, local) may take any and all lawful actions to enforce any condition of this certification that is based on the rules of that agency. Prior to initiating such action the agency head shall notify the Secretary of that agency's proposed action.

#### XXXI. DESIGN AND PERFORMANCE CRITERIA

Each combustion turbine may be operated at up to 115% of the maximum electrical output at ISO conditions projected from design information without the need for modifying these conditions. Treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this certification are not to be bypassed without prior DEP approval. Moreover, SECI shall take all reasonable steps to minimize any adverse impacts resulting from noncompliance with any limitation specified in this certification, including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying event.

#### XXXII. COMPLIANCE

Except as otherwise provided herein and in the certification order, and subject to Section 403.511(5), Florida Statutes, construction, maintenance, and operation of the permitted facility shall comply with the applicable nonprocedural rules of all agencies, unless a variance or waiver was obtained as part of the certification process.

### XXXIII. DISPUTE RESOLUTION

If a situation arises in which mutual agreement cannot be reached between SECI and an agency exercising its regulatory jurisdiction, then the matter shall be immediately referred to the Division of Administrative Hearings (DOAH) for disposition in accordance with the provisions of Chapter 120, Florida Statutes. A hearing under Section 120.57, Florida Statutes, shall be held as soon as possible after its referral to DOAH.

Petitions for dispute resolution shall be disposed of in the same manner as an application, but with time periods established by the Hearing Officer commensurate with the significance of the dispute.

### XXXIV. POST-CERTIFICATION SUBMITTAL

#### A. Purpose of Submittals

Conditions of Certification which provide for the post-certification submittal of information to DEP by SECI are for the purpose of facilitating DEP's and other agencies' monitoring of the effects arising from construction, operation and maintenance of the certified project. This monitoring is for DEP to assure, in consultation with other agencies with applicable regulatory jurisdiction, continued compliance with the Conditions of Certification and applicable nonprocedural agency requirements, without any further agency action.

#### B. Filings

All post-certification submittals of information by SECI are to be filed with DEP. Copies of each submittal shall be simultaneously submitted to any other agency indicated in the Specific Condition requiring the post-certification submittal.

#### C. Completeness

The DEP shall promptly review each post-certification submittal for completeness. This review shall include consultation with the other agencies receiving the post-certification submittal. For the purposes of this condition, completeness shall mean that the information submitted is both complete and sufficient. If found to be incomplete, SECI shall be so notified. Failure to issue such notice within 45 days after filing of the submittal shall constitute a finding of completeness.

#### D. Interagency Meetings

Within 60 days of the filing of a complete post-certification submittal, DEP may conduct an interagency meeting with other agencies which received a copy of the submittal. The purpose of such an interagency meeting shall be for the agencies with regulatory jurisdiction over the matters addressed in the post-certification submittal to discuss whether reasonable assurance of compliance with the Conditions of Certification has been provided. Failure of any agency to attend an interagency meeting shall not be grounds for DEP to withhold a determination of compliance with these conditions nor to delay the time frames for review established by these conditions.

E. Reasonable Assurance of Compliance

Within 90 days of the filing of a complete post-certification submittal, DEP shall give written notification to SECI and the agencies to which the post-certification information was submitted of its determination whether there is reasonable assurance of compliance with the Conditions of Certification. If it is determined that reasonable assurance has not been provided, SECI shall be notified with particularity and possible corrective measures suggested. Failure to notify SECI in writing within 90 days of receipt of a complete post-certification submittal shall constitute a compliance determination.

F. Commencement of Construction

When SECI has submitted all preconstruction post-certification information required by the Conditions of Certification and DEP has notified SECI that there is reasonable assurance of compliance with the Conditions of Certification, SECI may begin construction pursuant to the terms of the Conditions of Certification and the subsequently submitted construction details.

### XXXV. TRANSPORTATION

Monitoring of the intersection of State Road 37/County Road 630 is to commence at such time as the total number of construction employees reaches 344 persons or June 1, 1997, whichever occurs first. Monitoring on an annual basis shall continue to February 1998, or until the number of employees is again below 344, whichever occurs last. Should the monitoring identify needed improvements to maintain an acceptable level of service, SECI shall be responsible for the proportion of the improvements which can be attributed to the impact of the Hardee Unit 3 facility (Section 9J-5.0055, F.A.C.).

### XXXVI. EMERGENCY RESPONSE

---

A. Violent Weather

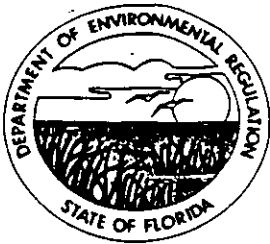
The Permittee shall prepare a violent weather component of the Facility's emergency response plan and submit it to Hardee and Polk Counties, DEP, and DCA for approval prior to start of commercial operation. This plan shall include measures to coordinate with local emergency management authorities in the event of violent weather or a berm breach. Hardee and Polk County emergency response personnel shall be invited to participate in safety drills and exercises conducted by the plant operator.

B. Fire

The Permittee shall prepare a fire emergency component of the emergency response plan and submit it to Hardee and Polk Counties for approval prior to the start of commercial operation. This plan shall include measures to coordinate with local fire, police and emergency management authorities in the event of a fire.

C. Spill Response

The facility's emergency response plan and spill prevention, containment and contingency plan shall be reviewed and updated regularly by the Permittee to include the names and telephone numbers of state and local emergency response contact persons.



# 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. Ludwig:

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,

*for Howard K. Rhodes*  
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.

*Letter to Mr. Jennings  
and Mr. Thomas*



STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
APPLICATION FOR TRANSFER OF PERMIT

Permit No. PSD-FL140 Date issued January 7, 1991 Date Expires \_\_\_\_\_

NOTIFICATION OF SALE OR LEGAL TRANSFER

Source Name: Hardee Power Station County: Polk/Hardee  
Source Location: Polk and Hardee County, Florida City: \_\_\_\_\_  
Permittee Name: TECO Power Services Corporation Title: \_\_\_\_\_  
Mailing Address: P.O. Box 111, Tampa, FL 33601

The undersigned hereby notifies the department of the sale or legal transfer of this pollution source. He further agrees to assign his rights as permittee to the applicant in the event the department agrees to the transfer of permit.

Sworn to and subscribed before me at Tampa, Florida \_\_\_\_\_  
County: Hillsborough Signature of Permittee  
this 6th day of June 19 91 Title: President  
\_\_\_\_\_  
Notary Public Date: 6/6/91  
My Commission Expires: 6/18/91

REQUEST FOR TRANSFER OF PERMIT

Source Name: Hardee Power Station  
Applicant Name: Hardee Power Partners, Limited, a Florida limited partnership Title: \_\_\_\_\_  
Mailing Address: 702 North Franklin St.  
Tampa, FL 33602 Telephone: (813) 228-1301  
Project Engineer Name: Kevin E. Fleming  
Mailing Address: 702 North Franklin St.  
Tampa, FL 33602 Telephone: (813) 228-1301

The undersigned hereby notifies the department of his having acquired title to this pollution source. He further states that he has examined the application and documents submitted by the current permittee the basis on which Permit No. \_\_\_\_\_ was issued by the department, and states that they accurately and completely describe the permitted activity or project. He further states that he is familiar with the permit, agrees to comply with its terms and conditions, and agrees to assume the rights and liabilities contained therein. He also agrees to promptly notify the department of any future change in ownership of, or responsibility for, the permitted activity or project.

Sworn to and subscribed before me at Tampa, Florida \_\_\_\_\_  
County: Hillsborough Signature of Applicant  
this 6th day of June 19 91 Title: Vice President, Operations & Development  
\_\_\_\_\_  
Notary Public Date: 6/6/91  
My Commission Expires: 6/18/91

Attach letter of authorization if other than owner or corporate officer.



State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

# Interoffice Memorandum

TO: Howard Rhodes  
FROM: Clair Fancy *CHF*  
DATE: August 9, 1991  
SUBJ: Hardee Power Station, PSD-FL-140  
Transfer of Permit

Attached for your approval and signature is a letter that will transfer the permit for the above referenced facility to Hardee Power Partners, Limited. Although this permit is currently under appeal, the Office of General Counsel has no objections to the transfer.

I recommend your signature.

CHF/kt

attachment

**SENDER:**

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

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

- Addressee's Address
- Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:  
 Mr. R. E. Ludwig, President  
 TECO Power Services Corporation  
 Post Office Box 111  
 Tampa, FL 33601

4a. Article Number  
 P 832 538 672

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

7. Date of Delivery  
**AUG 15 1991**

5. Signature (Addressee)  
 Division of Air Resources Management

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

6. Signature (Agent)  
*[Signature]*

PS Form 3811, October 1990 \*U.S. GPO: 1990-273-861 **DOMESTIC RETURN RECEIPT**

**RECEIVED**  
**AUG 19 1991**

P 832 538 672



**Certified Mail Receipt**  
 No Insurance Coverage Provided  
 Do not use for International Mail  
 (See Reverse)

Sent to	
Mr. R. E. Ludwig, TECO Power	
Street & No Services	
P. O. Box 111	
P.O., State & ZIP Code	
Tampa, FL 33601	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date & Address of Delivery	
TOTAL Postage & Fees	\$
Postmark or Date	
Mailed: 8-12-91	
Permit: PSD-FL-140	

PS Form 3800, June 1990



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

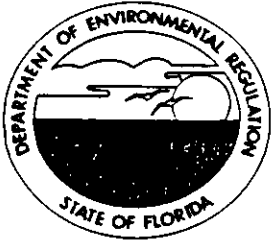
## Revised Final Determination

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<sub>x</sub> 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.

PERMITTEE:  
TECO Power Services Corporation

Permit Number: PSD-FL-140  
Project: Hardee Power Station

**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.

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

PERMITTEE:  
TECO Power Services Corporation

Permit Number: PSD-FL-140  
Project: Hardee Power Station

**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:  
TECO Power Services Corporation

Permit Number: PSD-FL-140  
Project: Hardee Power Station

**SPECIFIC CONDITIONS:**

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

Pollutant	Fuel	Concentration	Maximum Allowable Emission (@ 32°F) lbs/hr/CT
H <sub>2</sub> SO <sub>4</sub> Acid Mist	Gas	---	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.

7. Visible emissions shall neither exceed 10% opacity while burning natural gas, nor 20% opacity while burning distillate oil.

8. Initial (I) compliance tests shall be performed using both fuels. The stack test for each turbine shall be performed within 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:

- a. 5 for PM (I,A).
- b. 8 for sulfuric acid mist (I, for oil only).
- c. 9 for VE (I,A).
- d. 10 for CO (I,A).
- e. 20 for NO<sub>x</sub> (I,A).
- f. 25A for VOC (I,A).
- g. 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.
- h. ASTM D 2880-71 for sulfur content of distillate oil (I,A).
- i. 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).

PERMITTEE:  
TECO Power Services Corporation

Permit Number: PSD-FL-140  
Project: Hardee Power Station

**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<sub>x</sub> 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.

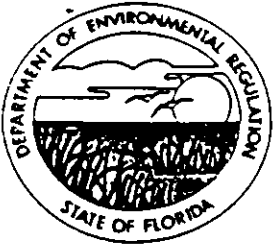
19. Stack sampling facilities shall be provided for both the bypass stack (CT) and the main stack (HRSG).

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. Ludwig:

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*  
for 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.  
*Larry Lustin*  
*Richard Brennan, O&C*





STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL REGULATION  
APPLICATION FOR TRANSFER OF PERMIT

Permit No. PSD-FL140 Date Issued January 7, 1991 Date Expires \_\_\_\_\_

NOTIFICATION OF SALE OR LEGAL TRANSFER

Source Name: Hardee Power Station County: Polk/Hardee  
 Source Location: Polk and Hardee County, Florida City: \_\_\_\_\_  
 Permittee Name: TECO Power Services Corporation Title: \_\_\_\_\_  
 Mailing Address: P.O. Box 111, Tampa, FL 33601

The undersigned hereby notifies the department of the sale or legal transfer of this pollution source. He further agrees to assign his rights as permitted to the applicant in the event the department agrees to the transfer of permit.

Sworn to and subscribed before me at Tampa, Florida \_\_\_\_\_  
 County: Hillsborough Signature of Permittee  
 this 6th day of June 19 91 Title: President  
 \_\_\_\_\_ Date: 6/6/91  
 Notary Public  
 My Commission Expires: 6/18/91

REQUEST FOR TRANSFER OF PERMIT

Source Name: Hardee Power Station  
 Applicant Name: Hardee Power Partners, Limited, a Florida limited partnership Title: \_\_\_\_\_  
 Mailing Address: 702 North Franklin St.  
Tampa, FL 33602 Telephone: 813, 228-1301  
 Project Engineer Name: Kevin E. Fleming  
 Mailing Address: 702 North Franklin St.  
Tampa, FL 33602 Telephone: 813, 228-1301

The undersigned hereby notifies the department of his having acquired title to this pollution source. He further states that he has examined the application and documents submitted by the current permittee the basis on which Permit No. \_\_\_\_\_ was issued by the department, and states that they accurately and completely describe the permitted activity of project. He further states that he is familiar with the permit, agrees to comply with its terms and conditions, and agrees to assume the rights and liabilities contained therein. He also agrees to promptly notify the department of any future change in ownership of, or responsibility for, the permitted activity of project.

Sworn to and subscribed before me at Tampa, Florida \_\_\_\_\_  
 County: Hillsborough Signature of Applicant  
 this 6th day of June 19 91 Title: Vice President, Operations & Development  
 \_\_\_\_\_ Date: 6/6/91  
 Notary Public  
 My Commission Expires: 6/18/91

\*Attach letter of authorization if other than owner or corporate officer.

Final Determination

TECO/Seminole Electric - Hardee Power Station  
Hardee/Polk County, Florida

Permit No. PSD-FL-140

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

January 4, 1991

## Final Determination

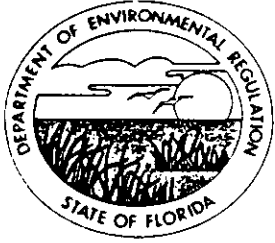
TECO Power Services Corporation's PSD permit application (part of the Power Plant Siting application), has been reviewed by the Division of Air Resources Management. Comments received from EPA Region IV dated December 21, 1990 (see attachment 2) are addressed below.

### Modeling/Monitoring

The EPA has questioned the use of Hillsborough County urban ozone data to represent background conditions in Hardee County. While it is true that, in many areas, the maximum ozone concentrations will occur downwind from an urban area in the range of 30 or more kilometers, it is unlikely that such high concentrations will occur at the Hardee County site (approximately 60 km from Tampa). High ozone values in Florida typically occur under conditions of a large-scale high pressure system and a weak surface pressure gradient. This allows the land-sea breeze to dominate the local wind flow pattern. The daytime onshore flow pattern and its nighttime return flow makes it very unlikely that high readings of ozone would be found in Hardee County. The Tampa monitoring site with the highest, second-highest value (Site No. 1800-081, 1989 second-highest value of 0.103 ppm) would be expected to provide a conservative estimate for the actual background concentration at the Hardee County site. Furthermore, during the period 1988 through 1990 there are no monitors in Hillsborough County or any other nearby county that indicate a violation of the ozone standard. Therefore, the Department has concluded that onsite preconstruction monitoring for ozone is not needed.

### BACT Analysis

Based on EPA's comments the Department has revised the BACT determination to exempt the gas/oil fired turbines from being equipped with selective catalytic reduction (SCR) emissions control technology for nitrogen oxides only if all of the turbines are collectively operated at a capacity factor of 25% or less, based on a twelve month rolling average. The permit has been modified such that if the 25 percent 12 month rolling average facility capacity factor be exceeded, the permittee shall within 30 months install SCR or another technology of equal or greater NOx reduction capability. Specific Conditions 1 and 2 of the Preliminary Determination will be amended to include these changes.



# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

PERMITTEE:  
TECO Power Services Corporation  
c/o Tampa Electric Company  
P.O. Box 111  
Tampa, FL 33601-0111

Permit Number: PSD-FL-140  
County: Hardee/Polk  
Latitude/Longitude: 22° 38' 02"N  
81° 38' 02"E  
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 combined capacity of all the turbines (both combined cycle and simple cycle) exceeds 25 percent of the facility's capacity. Should any quarterly report demonstrate that the combined capacity of all the turbines (both combined cycle and simple cycle) exceeds 25 percent of the facility's capacity at any time, the Permittee shall install SCR or another technology of equal or greater NOx reduction capability. The power plant site certification number for this project is PA 89-25.

Construction shall be in accordance with the attached permit application and additional information except as other wise noted in the Specific Conditions.

**PERMITTEE:**  
TECO Power Services

**Permit Number:** PSD-FL-140  
**Project:** Hardee Power Station

Attachments are as follows:

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.

**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.

PERMITTEE:  
TECO Power Services

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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.

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

PERMITTEE:  
TECO Power Services

Permit Number: PSD-FL-140  
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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 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 Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards

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.

**PERMITTEE:**  
**TECO Power Services**

**Permit Number: PSD-FL-140**  
**Project: Hardee Power Station**

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. Beginning with the fifth quarter of operation, the Permittee shall submit to the Bureau of Air Regulation and the Air Section, Southwest District Office, a quarterly report for the previous quarter showing:

(a) The 12 month rolling average capacity factor for each individual generating unit; and

(b) The 12 month rolling average capacity factor for the Hardee Power Station.

The 12 month rolling 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 the 12 month period.

2. 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 quarterly report demonstrate that the 12 month rolling average capacity factor for the Hardee Power Station exceeds 25 percent at any time, the Permittee shall install SCR or another technology of equal or greater NO<sub>x</sub> reduction capability. In no event shall any such SCR or equivalent NO<sub>x</sub> control technology installation and compliance testing occur later than 30 months from the date that the Permittee requested or the facility exceeded the 25 percent 12 month rolling average capacity factor.



PERMITTEE:  
TECO Power Services

Permit Number: PSD-FL-140  
Project: Hardee Power Station

3. Only natural gas or No. 2 fuel oil shall be fired in the turbine.

4. 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 be continuously measured and recorded.

5. The maximum allowable emissions from each CT in accordance with the BACT determination, shall not exceed the following:

Pollutant	Fuel	Emission Limitations	
		concentration	lb/hr/CT
NOx	Gas	42 ppmvd @ 15% O <sub>2</sub>	215.9
	Oil	65 ppmvd "	383.8
VOC	Gas	2 ppmvd	3.6
	Oil	5 ppmvd	10.3
CO	Gas	10 ppmvd	31.3
	Oil	26 ppmvd	93.4
PM/PM <sub>10</sub>	Gas	--	5.0
	Oil	--	10.0
SO <sub>2</sub>	Gas	--	35.8
	Oil	0.3% S oil	734.4

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

Pollutant	Fuel	Maximum Allowable Emission (@ 32°F)	
		concentration	lb/hr/CT
H <sub>2</sub> SO <sub>4</sub> Acid Mist	Gas	---	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.

PERMITTEE:  
TECO Power Services

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7. Visible emissions shall neither exceed 10% opacity while burning natural gas, nor 20% opacity while burning distillate oil.

8. Initial (I) compliance tests shall be performed on each Combustion Turbine using both fuels. The stack test for each turbine shall be performed within 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:

- a. 5 for PM (I,A)
- b. 8 for sulfuric acid mist (I, for oil only)
- c. 9 for VE (I,A)
- d. 10 for CO (I,A)
- e. 20 for NOx (I,A)
- f. 25A for VOC (I,A)
- g. 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.
- h. ASTM D 2880-71 for sulfur content of distillate oil (I,A)
- i. 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)

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 NOx 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.

PERMITTEE:  
TECO Power Services

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Project: Hardee Power Station

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 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 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 NOx 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).

PERMITTEE:  
TECO Power Services Corporation

Permit Number: PSD-FL-140  
Project: Hardee Power Station

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).

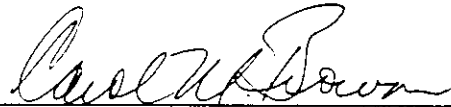
18. Literature of equipment selected shall be submitted as it becomes available. A CT-specific graph of the relationship between NO<sub>x</sub> emissions and water injection, and also another of ambient temperature and heat inputs to the CT shall be submitted to DER's Southwest District office and the 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



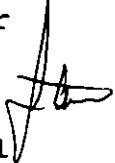
Carol M. Browner, Secretary



State of Florida  
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To _____	Location _____
To _____	Location _____
To _____	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

11-27-90

*Petty, To applicant  
copy files  
KSL*

BEFORE THE GOVERNOR AND CABINET  
OF THE STATE OF FLORIDA

IN RE: HARDEE POWER STATION )  
POWER PLANT SITE CERTIFICATION )  
APPLICATION, TECO POWER SERVICES, )  
TAMPA ELECTRIC COMPANY, AND )  
SEMINOLE ELECTRIC COOPERATIVE, INC. )  
PA 89-25 )  
\_\_\_\_\_ )

DOAH CASE NO. 89-3560  
OGC FILE NO. 89-0703

FINAL ORDER

BY THE GOVERNOR AND CABINET

On November 27, 1990, this matter came before the Governor and Cabinet, sitting as the siting Board pursuant to the Florida Electrical Power Plant Siting Act, Section 403.501 et seq., Florida Statutes (1989), for final action concerning a Recommended Order dated October 15, 1990, attached as Exhibit A, which recommends certification of the Hardee Power Station. On November 8, 1990,<sup>1</sup> Intervenors Katzen and Slack filed exceptions to the Recommended Order, attached as Exhibit B. On November 16, 1990, Co-Applicants TECO Power Services Corporation (TPS), Tampa Electric Company (TECO) and Seminole Electric Cooperative, Inc. (SECI) filed a Response to those exceptions.

Intervenors' Exceptions 1-4 contest to findings of fact set forth in the Recommended Order. Section 120.57(1)(b)10., Florida Statutes, limits an agency's authority to reject or modify findings of fact to the situation when, based upon

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<sup>1</sup>Intervenors' exceptions were filed late with the consent of the Co-applicants.

review of the entire record, it can be concluded that such findings "were not based upon substantial competent evidence or the proceedings upon which the findings were based did not comport with the essential requirements of law." Heifetz v. Department of Business Regulation, 475 So.2d 1277 (Fla. 1st DCA 1985) Upon review of the record, it is clear in this case that the findings of fact contested by the Intervenors' Exceptions are supported by competent substantial evidence. Therefore, Intervenors' Exceptions Nos. 1-4 are denied.

Intervenors' exception No. 5 objects to several conclusions of law contained in the Recommended Order. For the Board to adopt the Intervenors' suggested conclusions of law, as proposed in paragraphs A through G under Exception No. 5, the Board would be required to disregard numerous findings of fact contained in the Recommended Order. As already noted, there is no basis for rejecting any findings of fact. It is settled that the Board may not reject well-supported findings of fact by treating them as conclusions of law. Leapley v. Board of Regents, 423 So.2d 431 (Fla. 1st DCA 1982)

The Intervenors' contention that the procedure for alternate corridor consideration established in Section 403.527(5), Florida Statutes, pursuant to the Transmission Line Siting Act should be made available in this Power Plant Siting Act proceeding is rejected. The intention of the Florida Legislature is specifically articulated in each act. Had the

Legislature intended the same procedure to apply, it would have so stated. No provision was made for alternate corridor consideration under the Power Plant Siting Act.

The Intervenor's "denial of due process" claims are rejected as without legal foundation and contrary to the facts of this case, which demonstrate that the Co-Applicants have met or exceeded all statutory notice requirements. Moreover, Intervenor's were given full opportunity to be heard. Intervenor's have no entitlement to any process beyond that specified in the Act. Peoples State Bank of Indian River County v. State, Department of Banking and Finance, 395 So.2d 52 (Fla. 1980) Consequently, Intervenor's Exception No. 5 is rejected.

Pursuant to Sections 403.501-403.517, Florida Statutes (1989), having reviewed the Recommended Order, the Exceptions to Recommended Order, the Responses to the Exceptions, argument of counsel, and otherwise being fully advised herein, it is

ORDERED:

1. The Exceptions to the Recommended Order are rejected.
2. The Recommended Order (dated October 15, 1990) prepared by the Hearing Officer pursuant to Section 403.508(3), F.S., concerning the certification of the proposed Hardee Power Station is adopted in toto.
3. The Siting Board finds that the proposed Hardee Power Station should be certified subject to the conditions of certification included in the Recommended Order and attached hereto.



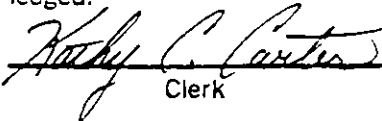
4. Pursuant to Section 403.509(3), F.S., this Final Order shall constitute approval for the granting of any necessary easements by the Game and Fresh Water Fish Commission over lands within the Cecil M. Webb Wildlife Management Area, in accordance with the Conditions of Certification.

Any party to this Order has the right to seek judicial review of the order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of Siting Board, the Department of Environmental Regulation in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; 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 of Appeal must be filed within thirty (30) days from the date this Order is filed with the clerk of the Siting Board.

DONE and ENTERED this 27<sup>th</sup> day of November, 1990, in Tallahassee, Florida pursuant to the vote of the Governor and Cabinet, sitting as the Siting Board, at a duly constituted Cabinet meeting November 27, 1990.

FILING AND ACKNOWLEDGEMENT

FILED, on this date, pursuant to S120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

  
Clerk

11-27-90  
Date

BY THE GOVERNOR AND CABINET  
SITTING AS THE SITING BOARD

  
THE HONORABLE BOB MARTINEZ  
GOVERNOR

APPENDIX C

CONDITIONS OF CERTIFICATION

I hereby certify that a true and correct copy of the foregoing Final Order and its attachments have been furnished by U.S. Mail to the following this 28<sup>th</sup> day of November, 1990:

Lawrence J. Curtin, Esq.  
P.O. Drawer 810  
Tallahassee, FL 32302

William H. Green, Esq.  
James S. Alves, Esq.  
P.O. Box 6526  
Tallahassee, FL 32314

Michael P. Haymans, Esq.  
P.O. Box 2159  
Port Charlotte, FL 33949

James V. Antista, Esq.  
Fla. Game & Fresh Water Fish Comm.  
620 S. Meridian Street  
Tallahassee, FL 32399-1600

Eugene E. McClellan, Jr., Esq.  
Department of Natural Resources  
3900 Commonwealth Blvd.  
Tallahassee, FL 32399-3000

Gary Vorbeck, Esq.  
207 East Magnolia Street  
Arcadia, FL 33821

Beth Ann Sullivan, Esq.  
Charlotte County  
18500 Murdock Circle  
Port Charlotte, FL 33948-1094

Mark F. Carpanini, Esq.  
Polk County  
P.O. Box 60  
Bartow, FL 33830

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Manatee County  
P.O. Box 1000  
Brandenton, FL 34205

Richard A. Lotspeich, Esq.  
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Tallahassee, FL 32302

William Powell, Esq.  
City of Cape Coral  
P.O. Box 150027  
Cape Coral, FL 33915-0027

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Manasota-88, Inc.  
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St. Petersburg, FL 33701

Harry R. Bishop, Esq.  
Department of Transportation  
605 Suwannee Street - M.S. #58  
Tallahassee, FL 32399-0458

David E. Bruner, Esq.  
S.W. Florida Regional Planning Council  
1114-B North Collier Blvd.  
Marco Island, FL 33937

Angela M. Anderson, Esq.  
Lee County  
P.O. Box 398  
Fort Myers, FL 33902-0398

Ralph Artigliere, Esq.  
Central Fla. Regional Planning Council  
P.O. Box 3  
LaKeland, FL 33802-0003

Frederick M. Karl, Esq.  
Hillsborough County  
P.O. Box 1110  
Tampa, FL 33602

L. Kathryn Funchess, Esq.  
S.W. Florida Water Management District  
2379 Broad Street  
Brooksville, FL 34609-6899

Sarah Nall, Esq.  
South Fla. Water Management District  
P.O. Box 24680  
West Palm Beach, FL 33416-4680

David C. Holloman, Esq.  
City of Arcadia  
P.O. Drawer 592  
Arcadia, FL 33821



RICHARD T. DONELAN, Jr.  
Assistant General Counsel  
Florida Department of Environmental  
Regulation  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

BEFORE THE ADMINISTRATOR  
U.S. ENVIRONMENTAL PROTECTION AGENCY  
WASHINGTON, D.C.

\_\_\_\_\_  
In the Matter of: )

Columbia Gulf Transmission Company )

ID No. 105-0640-0021 )

Applicant )  
\_\_\_\_\_

PSD Appeal No. 88-11

ORDER

By petition dated November 14, 1988, and pursuant to 40 CFR §124.19 (1987), the Regional Administrator, U.S. Environmental Protection Agency, Region IV, Atlanta, Georgia, requested review of a determination by the Kentucky Department of Air Quality to issue a prevention of significant deterioration (PSD) permit to Columbia Gulf Transmission Company. The permit would allow Columbia Gulf to construct an 11,864 horsepower (8.9 MW) gas turbine to compress gas at its compressor station in Clementsville, Kentucky. The Department made its permit determination pursuant to a general delegation of PSD-issuing authority from EPA Region IV. Because of the delegation, Kentucky's authority to issue PSD permits is subject to the review provisions of 40 CFR §124.19, and any permit it issues will be an EPA-issued permit for purposes of federal law. 40 CFR §124.41; 45 Fed. Reg. 33413 (May 19, 1980).

The Regional Administrator claims Kentucky's determination of best available control technology (BACT) for the proposed facility is clearly erroneous. The proposed permit calls for no add-on controls to reduce NOx emissions, relying instead on combustor design (so-called "dry controls"), whereas the Region believes water injection controls must be added to satisfy BACT requirements. Kentucky responds by arguing that dry controls are BACT because: (1) the impact of NOx emissions on ambient air quality will be negligible if dry controls are used, thus making the addition of water injection environmentally unnecessary and economically unreasonable; (2) use of water injection will cause additional energy to be consumed and it will cause an increase in CO emissions; and (3) federal new source performance standards (NSPS) do not require water injection for "small" turbines.

Under the rules governing this proceeding, there is no appeal as of right from the permit determination. Ordinarily, a petition for review of a PSD permit determination is not granted unless it is based on a clearly erroneous finding of fact or conclusion of law, or involves an important matter of policy or exercise of discretion that warrants review. The preamble to the regulations states that "this power of review should be only sparingly exercised," and that "most permit conditions should be finally determined at the Regional [state] level \* \* \*." 45 Fed. Reg. 33,412 (May 19, 1980). The burden of demonstrating that the permit conditions should be reviewed is therefore on the petitioner. EPA Region IV has met its burden.

The issues raised by Kentucky's contentions are discussed below.

1. Ambient Air Quality and the BACT Determination

Kentucky argues that the benefits to ambient air quality from adding water injection are negligible, and are clearly outweighed by the additional economic costs associated with this form of NO<sub>x</sub> control, which it estimates are \$2,121.00 for each additional ton of NO<sub>x</sub> removed. According to modelling results, ambient concentrations of NO<sub>2</sub> from all sources (including the proposed facility) within 50 kilometers of the proposed facility will be 50.67  $\mu\text{g}/\text{m}^3$  without use of water injection and 50.65  $\mu\text{g}/\text{m}^3$  with use of water injection. In other words, the total reduction in NO<sub>2</sub> pollution is a mere 0.02  $\mu\text{g}/\text{m}^3$ . This slight numerical improvement in air quality, according to Kentucky and the applicant, is not statistically significant, for it falls within the margin of error employed in the air quality model.

The Region does not dispute Kentucky's evaluation of air quality impacts as presented; however, according to the Region, when the focus is on actual NO<sub>x</sub> emissions reductions from the facility itself, the costs of water injection are reasonable. Specifically, by using water injection the facility will emit 114.08 fewer tons of NO<sub>x</sub> per year, at a cost of \$2,121.00 per ton of NO<sub>x</sub> removed, which is below the range of costs (\$3,000 -

\$6,500) normally expended for NO<sub>x</sub> removal. <sup>1/</sup> According to the Region, the definition of BACT mandates use of water injection, the most effective available technology for NO<sub>x</sub> removal under consideration in this case, <sup>2/</sup> unless the applicant can demonstrate that the economic, environmental, or energy impacts from using this technology make the choice unreasonable. In the Region's opinion, Columbia Gulf did not demonstrate that any of these considerations made the choice of water injection unreasonable.

By looking at the modelled impact of the proposed facility's NO<sub>x</sub> emissions, the Department argues that it has identified an environmental impact that it may consider for purposes of its BACT determination. I disagree. BACT is defined in the Clean Air Act as an "emission limitation" set by the permit issuer, based on the "maximum degree of reduction" that can be achieved for each regulated pollutant, on case-by-case basis, after "taking into account energy, environmental, and economic impacts

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<sup>1/</sup> The Region also argues that Kentucky has overestimated the incremental costs of NO<sub>x</sub> removal using water injection. Kentucky computed the costs per ton assuming 6,000 hours of operation per year. The Region correctly points out that this assumption is unwarranted because the permit does not contain any restrictions limiting hours of operation to 6,000 hours per year. Unrestricted, the facility could operate 8,760 hours per year (24 hrs. x 365 days).

<sup>2/</sup> The Region has conceded that although a more effective control technology, selective catalytic reduction, has been successfully employed on gas-fired turbines, that technology would be technically infeasible in this case due to source-specific factors.

and other costs." 42 U.S.C. §7479(3). <sup>3/</sup> The latter clause is in the BACT definition to temper the stringency of the technology requirements whenever one or more of the specified "collateral" impacts -- energy, environmental, or economic -- renders use of the most effective technology inappropriate. As explained by Senator Edmund S. Muskie, the principal architect of the Clean Air Act amendments of 1977:

One objection which has been raised to requiring the use of the best available pollution control technology is that a technology demonstrated to be applicable in one area of the country is not applicable at a new facility in another area because of difference [sic] in feedstock material, plant configuration or other reasons. For this and other reasons, the committee voted to permit emission limits based on best available technology on a case-by-case judgment at the State level. This flexibility should allow such differences to be accommodated and still maximize the use of improved technology.

Senate Debate on S.252 (June 8, 1977), reprinted in 3 Senate Committee on Environment And Public Works, A Legislative History

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<sup>3/</sup> The complete text of the statutory definition of BACT states:

The term "best available control technology" means an emission limitation based on the maximum degree of reduction of each pollutant subject to regulation under this chapter emitted from or which results from any major emitting facility, which the permitting authority, on a case-by-case basis, taking into account energy, environmental, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, and techniques, including fuel cleaning or treatment or innovative fuel combustion techniques for control of each such pollutant. In no event shall application of "best available control technology" result in emissions of any pollutants which will exceed the emissions allowed by any applicable standard established pursuant to section 7411 [new source standards] or 7412 [hazardous pollutant standards] of this title.

42 U.S.C. §7479(3).



of the Clean Air Act Amendments of 1977 at 729 (Comm. Print August 1978) (Congressional Research Service, Serial No. 95-16). In other words, the collateral impacts clause operates primarily as a safety valve whenever unusual circumstances specific to the facility make it appropriate to use less than the most effective technology. The permit applicant must install the most effective technology if it fails to demonstrate to the satisfaction of the permit issuer that such unusual circumstances exist. <sup>4/</sup>

Here, the Department argues that the modelled negligible impact of the proposed facility on overall air quality is an environmental impact that can be factored into the BACT analysis to justify using less than the most effective technology to

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<sup>4/</sup> The process of selecting the most effective technology is described in Pennsauken County Resource Recovery Facility, PSD Appeal No. 88-8 (EPA Administrator, Nov. 10, 1988) (Remand Order). Pennsauken cites recent Agency guidance on the subject, which refers to the process as the "top-down" approach to BACT analysis, and quotes from the guidance as follows:

The first step in this approach is to determine, for the emission source in question, the most stringent control available for a similar or identical source or source category. If it can be shown that this level of control is technically or economically infeasible for the source in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental or economic objections. Thus, the "top-down" approach shifts the burden of proof to the applicant to justify why the proposed source is unable to apply the best technology available. It also differs from other processes in that it requires the applicant to analyze a control technology only if the applicant opposes that level of control; the other processes required a full analysis of all possible types and levels of control above the baseline case.

control NO<sub>x</sub> emissions. This argument is without merit. It gives no effect to the primary purpose of the collateral impacts clause, which, as the legislative history indicates, is to focus on local impacts that constrain the source from using the most effective technology. For example, if the most effective technology would impose exceptional demands on local water resources, so that use of the technology would have adverse impacts on the environment, then, under those circumstances, the applicant would have a sound basis for foregoing use of the most effective technology in favor of some less water-intensive technology. This would be a "water resources" equivalent of a "feedstock" or "plant configuration" constraint referred to by Senator Muskie. <sup>2/</sup>

In the present case, the Department and the applicant have not demonstrated the existence of any environmental impacts that would constrain or even remotely circumscribe the applicant's ability to use the most effective technology. The negligible air

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<sup>2/</sup> Depending on the factors present in a particular case, consideration of collateral impacts can also result in a more stringent BACT determination than would otherwise occur. For example, unusually high costs may represent an adverse economic impact that could, standing alone, justify rejection of the most effective control technology. However, the permitting authority could ultimately conclude that such adverse economic impacts are outweighed by adverse collateral environmental impacts associated with the less effective control option. See North County Resource Recovery Associates, PSD Appeal No. 85-2 (EPA June 3, 1986) (remand order) (environmental impact of pollutants not regulated under the Clean Air Act may necessitate a more stringent emission limit for regulated pollutants undergoing BACT review).

quality impact of the proposed NO<sub>x</sub> emissions is clearly not a constraint on implementing the most effective technology. Because it is not a constraint, the modelled impact of the proposed facility's NO<sub>x</sub> emissions on air quality should not be considered for purposes of making the BACT determination.

This conclusion is further confirmed by the statutory scheme of the Clean Air Act, which separates issues of overall air quality from issues of technology. Section 165(a)(3) of the Act, 42 USC §7475(a)(3), addresses the direct impact of regulated pollutants on ambient air quality by requiring an applicant for a PSD permit to demonstrate that the proposed facility will not cause or contribute to a violation of national ambient air quality standards or PSD increments, whereas section 165(a)(4) of the Act, 42 USC §7475(a)(4), is concerned exclusively with BACT, which is principally a technology-forcing measure that is intended to foster rapid adoption of improvements in control technology. <sup>6/</sup> Both of these provisions of the Clean Air Act

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<sup>6/</sup> Section 165 of the Clean Air Act provides, in relevant part, as follows:

(a) No major emitting facility on which construction is commenced after August 7, 1977, may be constructed in any area to which this part applies unless --

\* \* \*

(3) the owner or operator of such facility demonstrates \* \* \* that emissions from construction or operation of such facility will not cause, or contribute to, air pollution in excess of any (A) [increment], (B) national ambient air quality standard in any air quality control region, or (C)

(continued...)

must be satisfied by an applicant seeking a PSD permit, and compliance with one provision does not relieve or lessen an applicant's burden of complying fully with the other. Thus, even though Columbia Gulf's NO<sub>x</sub> emissions will not cause a violation of ambient air quality standards in contravention of section 165(a)(3) of the Act, it must still satisfy the BACT technology requirements imposed by section 165(a)(4).

It does not appear to have done so in this instance, for the record on appeal does not show that any collateral impacts -- in particular, environmental impacts -- operate as a constraint on implementing the most effective technology.

## 2. Energy Consumption and Increased CO Emissions From Water Injection

Kentucky also claims that water injection is not BACT because it increases fuel consumption by 2.2 percent and carbon monoxide (CO) emissions by 4 tons per year (TPY) -- from 2 TPY to 6 TPY. The Region rejected these arguments, because the projected 2.2 percent increase in energy consumption is, in its opinion, insignificant, since the increase does not place any substantial strain on natural gas demand, and the additional 4 TPY increase

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<sup>b/</sup> (...continued)

any other applicable emission standard or standard of performance under this chapter; [and]

(4) the proposed facility is subject to the best available control technology [BACT] for each pollutant subject to regulation under this chapter emitted from, or which results from, such facility \* \* \*.

in CO emissions will be offset by a much greater reduction in NO<sub>x</sub> emissions -- from 193 TPY to 79 TPY -- which, in the Region's opinion, represents an environmentally beneficial trade-off.

I agree completely with the Region about the trade-off between the CO and NO<sub>x</sub> emissions; the increase in CO emissions is simply insignificant in light of the reductions that can be achieved in NO<sub>x</sub> emissions. I am less certain about the 2.2 percent increase in energy consumption and what it implies. Nevertheless, it is generally incumbent on the permit issuer and the permit applicant to demonstrate in the record the relevance or significance of any claimed basis for rejecting the most effective technology on energy or other statutory grounds. It is not enough for them to assert, without substantiation, that adoption of the most effective technology will result in an energy penalty. They must provide substantiation and they must show that the penalty is so substantial or unusual as to merit rejection of the most effective technology. They have not done so in this instance, for the record does not disclose any substantial information on the impact of the alleged energy penalty.

### 3. New Source Performance Standards (NSPS) and BACT

Kentucky believes that because the emission limitation it proposed for Columbia Gulf's NO<sub>x</sub> emissions (178 ppm) is below the level specified by the NSPS (196 ppm), <sup>1/</sup> this fact should serve as further proof that its BACT determination is correct.

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<sup>1/</sup> See 40 CFR §60.332(d).

Kentucky notes in this respect that the NSPS contemplate use of dry controls for small gas turbines. Kentucky's reliance on the NSPS is misplaced. Simply meeting or exceeding the NSPS does not attest to the correctness of a BACT determination. As the language of the statute plainly indicates, <sup>8/</sup> the applicable NSPS limitation merely serves as a floor for the BACT limitation, i.e., the BACT limitation must never fall below the level of stringency set by the NSPS. Although the NSPS are developed by considering many of the same factors that go into a BACT determination, <sup>9/</sup> their utility is limited in any individual case by at least two considerations. The first is that BACT determinations are made on a case-by-case basis whereas the NSPS are set on an industry-wide basis. The second is that BACT determinations are made on the basis of currently available information, whereas the NSPS, although based on current information when promulgated, may not reflect the most current information avail-

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<sup>8/</sup> See footnote 3 (last sentence).

<sup>9/</sup> The similarity between BACT and NSPS is reflected in the following definition of a "standard of performance" for new sources and by comparing it with the definition of BACT in footnote 3 above:

[A] standard of performance shall reflect the degree of emission limitation and the percentage reduction achievable through the application of the best technological system of continuous emission reduction which (taking into consideration the cost of achieving such emission reduction, any non-air quality health and environmental impact and energy requirements) the Administrator determines has been adequately demonstrated.

able at the time of making an individual BACT determination. These two considerations can combine in an individual case to create a substantial gap between the two emission levels. That appears to be the case here, based on the information in the record of this appeal. According to the Region, the applicable NSPS is ten years old and thus does not reflect the most current technological considerations. It therefore appears that Kentucky relied too heavily and, in the final analysis, relied improperly on the NSPS in this case. Moreover, I note that the Region cites three examples of comparable turbines currently using water injection or scheduling it for use -- thus effectively removing concern about the availability of this technology for small turbines. <sup>10/</sup> Kentucky has not shown that water injection is not an available technology for BACT purposes.

#### Conclusion

The Region has met its burden of showing that Kentucky's permit determination warrants review. As explained above, Kentucky's reliance on negligible ambient air quality impacts to justify using a control technology less effective than water injection represents clear error. Kentucky's rejection of water injection because of associated increases in CO emissions and because of its interpretation of BACT in relationship to the NSPS also represents clear error. Kentucky's concerns over increased

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<sup>10/</sup> See Letter from Bruce T. Miller, Chief, Air Programs Branch, EPA Region IV, to Ronald L. McCallum, Chief Judicial Officer, Attachment at 6, dated January 25, 1989.

energy consumption fail to establish that the increases are so substantial or unusual as to warrant rejection of the most effective technology. I therefore conclude that clear error has been shown here also.

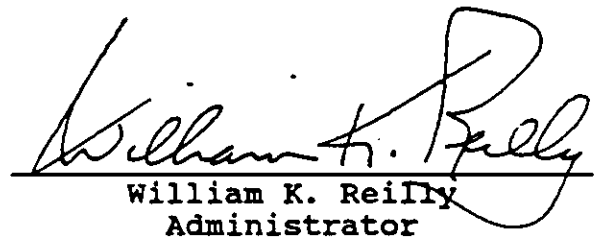
According to the procedural rules governing petitions for review, a briefing period is supposed to follow the granting of review. 40 CFR §124.19(c). In a sense, one has already begun, since both Kentucky and the Region, following the filing of the petition, have submitted additional statements of their positions on the issues. Columbia Gulf, however, did not file any extensive submissions during this post-petition period, nor was it required to file any at this stage of the proceedings.

Therefore, to restore balance to the record, I propose to set a briefing schedule that takes this background into consideration. Specifically, Columbia Gulf (and, as permitted by the rules, other interested persons) may submit a brief on the issues discussed in this order within thirty (30) days after public notice of the granting of review has been given. See 40 CFR §124.19(c). (Kentucky shall give notice of the briefing schedule and this order, as provided in 40 CFR §124.10.) Kentucky and the Region shall then file their respective responses within twenty (20) days after receipt of each brief filed during the first round of briefing. Columbia Gulf and, if applicable, other interested persons shall then have fifteen (15) days in which to file a reply to the responses.



Also, on or before the date public notice is given, Kentucky shall transmit to the undersigned a complete copy of the administrative record on which it made its permit determination, accompanied by an index of the contents of the administrative record. Copies of the index shall also be sent to the Region and Columbia Gulf and, if requested, to other interested persons. Thereafter, all persons filing briefs in this matter shall support their arguments and factual assertions with appropriate citations to the documents listed in the index.

So ordered.

  
William K. Reilly  
Administrator

Dated: JUN 21 1989

CERTIFICATE OF SERVICE

I hereby certify that copies of the foregoing Order in the matter of Columbia Gulf Transmission Company, PSD Appeal No. 88-11 were sent by First Class Mail to the following persons:

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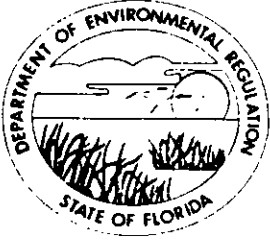
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Dated: JUN 21 1989

  
Brenda H. Selden, Secretary  
to the Chief Judicial Officer



# Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Bob Martinez, Governor

Dale Twachtmann, Secretary

John Shearer, Assistant Secretary

July 5, 1989

Mr. Wayne Aronson, Chief  
Program Support Section  
U.S. EPA, Region IV  
345 Courtland Street, N.E.  
Atlanta, Georgia 30365

Dear Mr. Aronson:

RE: TECO Power Services Corp./Seminole Electric Cooperative  
Hardee Power Station/Power Plant Siting Application  
PSD-FL-140

Enclosed for you review and comment are Volumes I and II of the above referenced application. Please direct any comments or questions to Pradeep Raval, Barry Andrews, or Max Linn at the above address or (904)488-1344 by August 1, 1989.

Sincerely,

*Patricia G. Adams*

Patricia G. Adams  
Planner  
Bureau of Air Quality  
Management

/pa

Enclosures