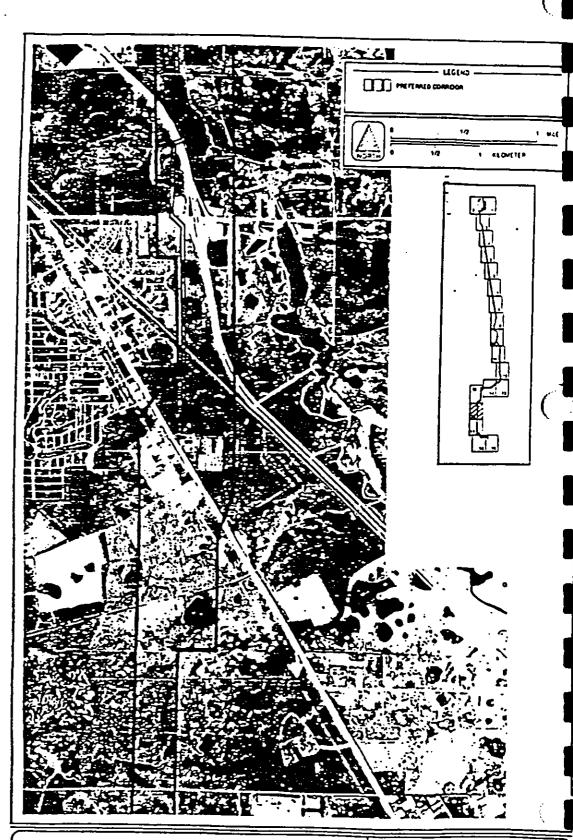


Figure 1-1 TRANSMISSION LINE COARDOR AND RIGHT-OF-WAY WITHIN CECIL M. WEBB WILDLIFE MANAGEMENT AREA PAGE 3 OF 4] EXHIBIT A

Hardee Power Station



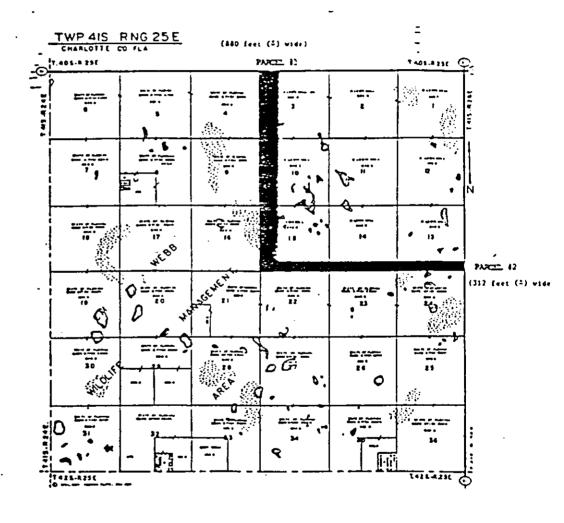
FOUR 1-1 TRANSMISSION LINE CORRIDOR AND RIGHT-OF-WAY WITHIN CECL M. WEBB WILDLIFE MANAGEMENT AREA (PAGE 4 OF 4) EXHIBIT A

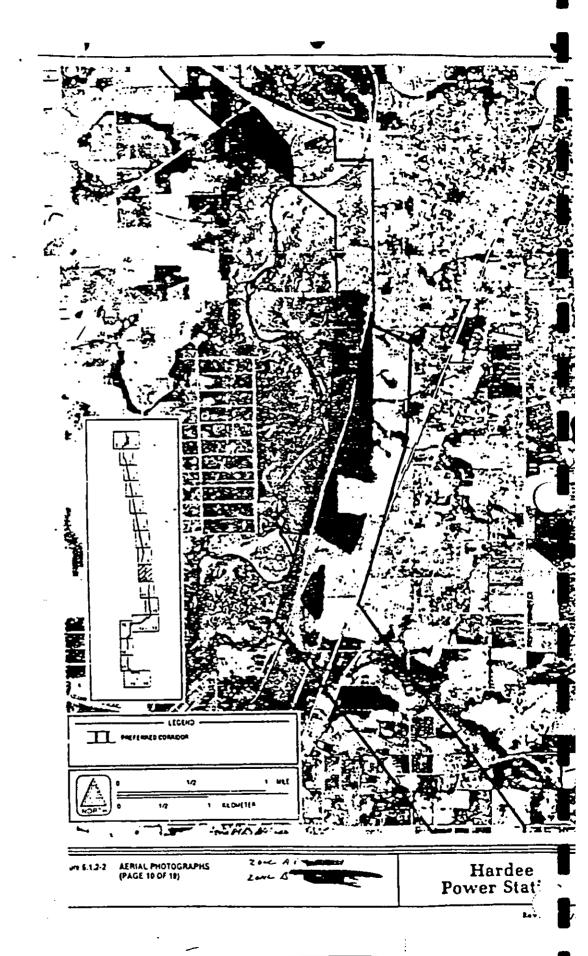
Hardee
Power Station

# **EXHIBIT** B

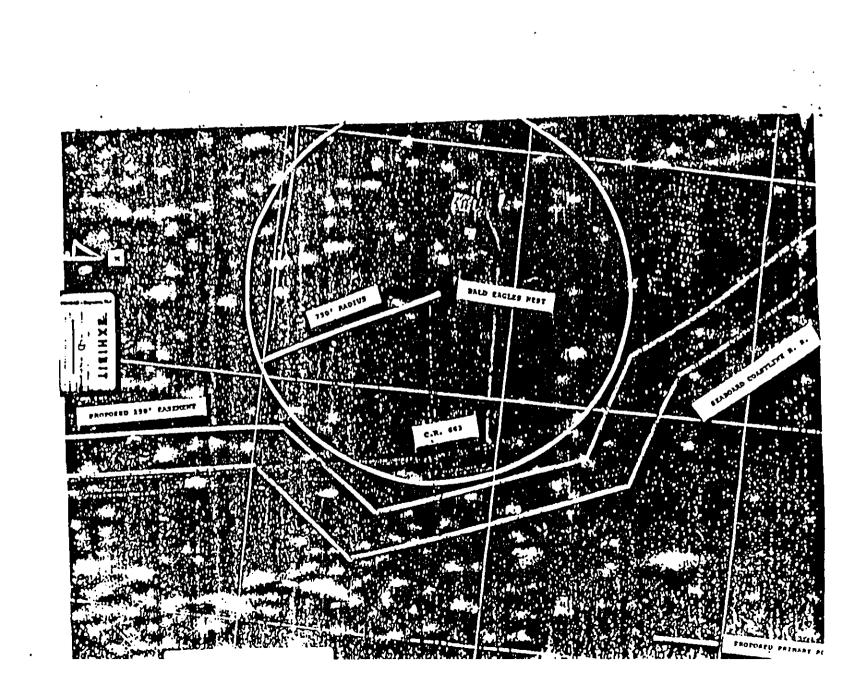
## PROPOSED COMPENSATION PROPERTY

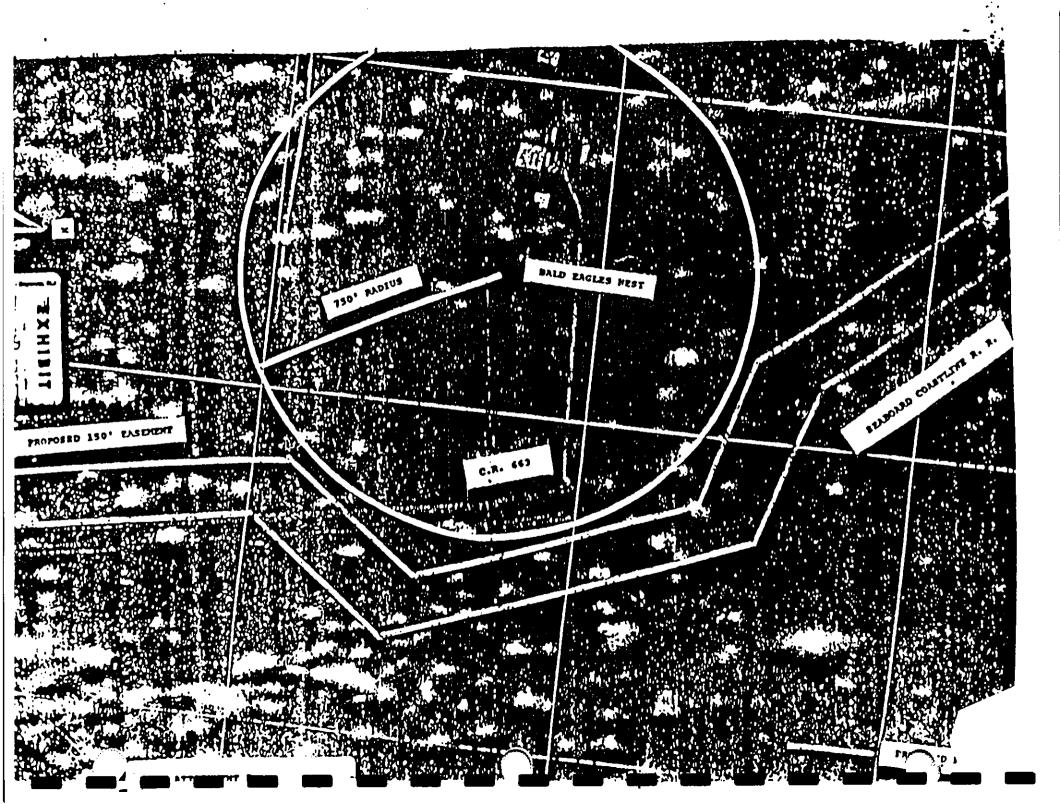
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EXHIBIT





8. The permittees shall monitor any discharge from the cooling reservoir at Outfall Serial Number 001 in the following manner:

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Parameter	Monitoring Requirements		
Flow (quantity and duration)	by Calculation during Discharge		
Temperature	Twice per day during Discharge		
Total Dissolved Solids	l/week during Discharge		
Gross Alpha	1/week discharge grab		
Radium 226	1/week discharge grab		
Turbidity (NTU)	1/week discharge grab		
	1/week discharge grab		
Cadmium	1/week discharge grab		
Cyanide	1/week discharge grab		
Iron	l/week discharge grab		
Lead	1/week discharge grab		
Mercury mg/L			
Dissolved Oxygen	l/week discharge grab		
pH .	1/week discharge grab		
Selenium	1/week discharge grab		
Silver	1/week discharge grab		
Zinc	1/week discharge grab		

- 9. Chemical Metal Cleaning There shall be no discharge of chemical metal cleaning wastes to the cooling reservoir. TPS shall arrange for a contractor to remove the wastes from site before or after treatment for disposal in a licensed facility.
- 10. Storm Water Runoff During construction and operation discharge from the storm water runoff collection system 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 002 by a grab sample once per discharge, but not more often than once per week:

# Effluent Characteristic Flow (MGD) TSS (mg/l) PH Discharge Limits Instantaneous Maximum Report 50 6.0-8.5

- 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 002 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 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 of the use of turbidity curtains (screens) in on-site impoundments shall be immediately implemented with any releases to state waters to be controlled.
- d. It is necessary that there be an entity responsible for maintenance of the system pursuant to Section 17-25.027, FAC.
- 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.
- 11. Steam System Blowdown Blowdown discharge from the steam electric generating system to the cooling reservoir shall be limited and monitored as specified below:

Effluent Characteristic Discharge Limits			its 1	Monitoring Requirements
	Daily	Daily	Sample	Measurement
	Average	Maximum	Type	Frequency
TSS	30.0	100.0	grab	1/month
Oil and Grease	= 15.0	20.0	grab	1/month
Flow	Report	Report	Calculation	1/month

## 12. Construction Dewatering

a. Discharge of construction dewatering to Payne Creek in the event of once in ten-year 24-hour or greater storm from outfall serial numbers 001 or 002 shall be limited and monitored as specified below:

Effluent Characteristic	Discharge Limits	Monitoring Requirements	
<u> </u>	Instantaneous Maximum	Measurement Frequency	Sample Type
Flow - m <sup>3</sup> /day (MGD)	-	daily (	Calculation
Turbidity (NTU) TSS mg/l pH	50.0 6.0-9.0	l/week l/week l/week	grab grab grab

b. Project discharge descriptions - Dewatering water, outfalls 001 and 002; includes all surficial groundwater extracted during all excavation construction on site for the purpose of installing structures, equipment, etc. Discharges to the storm water runoff sedimentation pond or cooling reservoir at a location to be depicted on an appropriate engineering drawing to be submitted to DER and SWFWMD. Final discharge after treatment is to Payne Creek. The permittee shall report to DER the date that construction dewatering is expected to begin at least one week prior to the commencement of dewatering.

c. If the storm water run off detention pond should discharge more frequently than once per year during construction, then the following parameters shall be monitored at OSN 001 or 002 at least once per week per discharge:

Parameter	Sample Type
Cadmium Cyanide Gross alpha Iron Oil and grease Mercury	grab grab grab grab grab grab grab
Radium 226 Selenium	grab
Silver	grab

13. Mixing Zones - The discharge of the following pollutants shall not violate the Water Quality Standards of Chapter 17-302, F.A.C., beyond the edge of the designated mixing zone, which shall be 200 feet from the point of discharge (POD). For purposes of compliance monitoring, the following limitations shall apply at the POD.

Parameter	Limit at POD
Cadmium	2.6 ug/l
Cyanide	0.01  mg/l
Mercury	0.5 ug/l
Selenium	32. ug/l
Silver	0.8 ug/l
Gross alpha	22.2 pC/1
Radium 226	6.2 pC/l

31 NTU

Turbidity Iron Lead Zinc

The Secretary of DER may authorize alternative mixing zones for the above parameters in accordance with Condition XXI upon a demonstration that such mixing zone would not interfere with beneficial use of the creek.

14. Sanitary wastes from the HPS shall be collected and treated in an appropriately designed domestic wastewater treatment plant. The permittee shall fill out the appropriate DER application for a domestic wastewater treatment facility including the design specifications for the proposed facility and, shall submit such application and specifications to the DER Southwest District Office for approval at least 90 days prior to start of construction of that facility.

## B. Water Monitoring Programs

- 1. The necessity and extent of continuation for any water monitoring program may be modified in accordance with Condition No. XXI, Modification of Conditions.
- 2. Chemical Monitoring The parameters described in Condition III. shall be monitored during discharge as described in Condition III commencing with the start of construction or operation of the HPS and reported quarterly to the Southwest District Office.

#### IV. GROUND WATER (TPS)

## A. Water Well Construction

Prior to the construction, modification, or abandonment of a production well for the HPS, the permittee must notify the SWFWMD pursuant to Chapter 40D-2, Florida Administrative Code. Construction, modification, or abandonment of a production well will require modification of the HPS consumptive use conditions when such construction, modification or abandonment is other than that specified and described on HPS consumptive use information as addressed in the application. The construction, modification, or abandonment of a monitor well specified in Condition IV.F. will require the prior approval of the Department.

## B. 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 17-532.200, 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. The HPS must notify the SWFWMD in the event that a replacement tag is needed.

## C. Maximum Annual Withdrawals

The use of groundwater from the proposed wellfield shall not exceed 3.8 million gallons per day ("mgd") on an average daily basis (averaged over a 12 month period) or a maximum 8.64 mgd on any day.

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.

## D. 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.

## E. 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, the HPS 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, FAC, 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.

## F. 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 Group Southwest Florida Water Management District 2379 Broad Street Brooksville, Florida 33469-6988

#### 2. Flow Meters

HPS wells identified with District withdrawal Nos. 1, 2, and 3 shall be equipped with totalizing flow meters or other flow measuring devices as approved in writing by the Director, Bartow Permitting Department, Resources Regulation. Such devices shall have and maintain an accuracy within 5 percent of actual flow. Those designated withdrawal points not equipped with such devices on the date the site certification is granted must be equipped within 120 days of the site certification date or upon completion of construction of the withdrawal facility, unless an extension is approved in writing by the Director, Bartow Permitting Department, Resource Regulation.

- 3. Total withdrawal from each monitored source shall be recorded on a monthly basis and reported to SWFWMD (using District forms) on or before the tenth day of the following month.
- G. Sampling and Analysis Report
  - 1. The Permittee shall submit a report describing the sampling and analytical methodologies employed. The report shall address all parameters for which analyses are performed. The report shall be included with the first data submitted after the date the site certification is granted and upon any change in sampling and/or analytical method.
  - 2. Reports of the analyses shall be submitted to SWFWMD (using District forms) on or before the tenth day of the following month. The parameters and frequency of sampling and analysis may be modified by SWFWMD staff as necessary to ensure the protection of the resource. Water quality samples shall be collected and analyzed, for the specified withdrawal point, parameter, and frequency.

District
I.D. No. Parameter Sampling Frequency

Chlorides, Sulfates Quarterly
Total Dissolved Solids

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).

# H. Ground Water Monitoring Requirements

After consultation with the DER and SWFWMD, the permittee shall install a monitoring well network to monitor ground water quality horizontally and vertically through the aquifer above the Hawthorn Formation. Ground water quantity and flow directions will be determined seasonally at the site through the preparation of seasonal water table contour maps, based upon water level data obtained during the applicant's preoperational monitoring program. From these maps and the results of the detailed subsurface investigation of site stratigraphy, the water quality monitoring well network will be located. A ground water monitoring plan that meets the requirements of Section 17-28.700(d), F.A.C., shall be submitted to the Department's Southwest District Office for review. Approval or disapproval of the ground water monitoring plan shall be given within 60 days of receipt. Ground water monitoring shall be required at HPS's sedimentation pond. Insofar as possible, the monitoring wells may be selected from the existing wells and piezometers used in the permittees preoperational monitoring program, provided that the wells construction will not preclude their use. Existing wells will be properly sealed in accordance with Chapter 17-21, F.A.C., whenever they are abandoned due to construction of facilities. The water samples collected from each of the monitor wells shall be collected immediately after removal by pumping of a quantity of water equal to at least three casing volumes. The water quality analyses shall be performed monthly during the year prior to commercial operation and quarterly thereafter. No sampling or analysis is to be initiated until receipt of written approval of a site-specific quality assurance project plan (QAPP) by the Department. Results shall be submitted to the DER by the fifteenth (15th) day of the month following the month during which such analyses were performed. Testing for the following constituents is required around unlined ponds or storage areas:

Cadmium TDS Zinc Conductance Copper Ha Nickel Redox Selenium Sulfate Chromium Sulfite Arsenic Color Beryllium Chloride Mercury Iron Lead Aluminum Gross Alpha Radium 226

## Zone of Discharge

The HPS shall meet the groundwater criteria of Chapter 17-3, F.A.C. at the boundary of a mixing zone extending 100 feet from the outside toe of the cooling reservoir. A ground water

monitoring program as described in Condition IV.H. shall be implemented to verify compliance with these requirements. Such sampling program shall commence at least 12 months prior to start of commercial operation of the HPS.

## J. Water Samples

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

#### K. SWFWMD Access

The Permittee 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. The Permittee shall either accompany SWFWMD staff onto the property or make provision for access onto the property.

#### L. Surface Water Reduction

The Permittee shall cease or reduce surface water withdrawal as directed by SWFWMD if water levels in lakes, other than the cooling reservoir, fall below applicable minimum water level established in Chapter 40D-8, FAC, or rates of flow in streams fall below the minimum levels established in Chapter 40D-8, FAC.

#### M. Conservation

The Permittee 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.

The Permittee 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 the Permittee's water use classification, the Permittee shall be subject to those requirements upon notice and after a reasonable period for compliance.

## N. Special Regulations

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

## O. Legal Use Impacts Mitigation

The Permittee 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 the Permittee to mitigate the impacts. Adverse impacts include:

- 1. A reduction in water levels which impairs the ability of a well to produce water;
- 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

The Permittee 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 the Permittee to mitigate the impacts. Adverse impacts include the following:

- Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams, or other watercourses;
- Sinkholes or subsidence caused by reduction in water levels;
- 3. Damage to crops and other vegetation causing financial harm to the owner; and
- 4. Damage to the habitat of endangered or threatened species.

## Q. Alternative Source Investigation

The Permittee shall investigate alternate sources of water supply on an on-going basis in an effort to reduce groundwater withdrawals. SWFWMD may direct the Permittee to report on the investigation through a written request, and allow the Permittee adequate time to prepare such a report.

# V. CONTROL MEASURES DURING CONSTRUCTION (TPS)

#### 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

Each permittee 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 DER within sixty days of issuance of the Certification. The plan shall identify and describe all pollutants and waste generated

during construction and the methods for control, treatment and disposal. Each permittee 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 the permittee's dewatering operation create shoaling in adjacent water bodies, the permittee is responsible for removing such shoaling.

All offsite discharges resulting from dewatering activities must be in compliance with water quality standards required by DER Chapters 17-3, 17-4 and 17-302, F.A.C., or such standards as issued through a variance by DER.

#### VI. SAFETY (TPS)

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.

#### VII. SCREENING (TPS)

The permittee 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.

## VIII. TOXIC, DELETERIOUS OR HAZARDOUS MATERIALS (TPS)

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

## IX. SOLID WASTE STORAGE AND DISPOSAL (TPS)

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

## X. CHANGE IN DISCHARGE (TPS)

All discharges or emissions authorized herein to HPS shall be consistent with the terms and conditions of this certification. The discharge of any pollutant not identified in the application or any 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 new or supplemental application to DER's Siting Coordination Office pursuant to Chapter 403, F.S.

## XI. NONCOMPLIANCE NOTIFICATION (TPS)

If, for any reason, either permittee does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the Deputy Assistant Secretary of DER's Southwest District office by telephone as soon as possible but not later than the first DER working day after the permittee 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.

## XII. FACILITIES OPERATION (TPS)

Unless granted an exception by a specific condition herein, each permittee 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 the permittee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior notice to the Department (Southwest District) and approval, except where otherwise authorized by applicable regulations.

#### XIII. ADVERSE IMPACT (HPS)

The permittees 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.

#### XIV. RIGHT OF ENTRY (TPS)

The Permittees shall allow DER authorized representatives, upon the presentation of credentials:

- A. To enter upon the Permittees' 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. SFWMD authorized staff, upon proper identification, will have permission to enter, inspect, and observe permitted and related transmission line facilities in order to determine compliance with the approved plans, specifications, and conditions of this certification.
- G. Moreover, the Permittees shall allow authorized representatives of DER and other appropriate agencies, acting within the scope of their jurisdiction and authority, upon the presentation of credentials:
  - To enter upon the project site or mitigation area, or during business hours to enter the Permittees' premises in which records are required to be kept under the terms and conditions of this certification; and
  - To have access to and copy all records required to be kept under the conditions of this certification.

## XV. REVOCATION OR SUSPENSION (HPS)

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

## XVI. CIVIL AND CRIMINAL LIABILITY (HPS)

This certification does not relieve either permittee 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 either permittee from any responsibilities or penalties established pursuant to any other applicable State Statutes or regulations.

#### XVII. PROPERTY RIGHTS (HPS)

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. The permittees shall obtain title, lease or right of use to any sovereign submerged lands occupied by the plant, transmission line structures, or appurtenant facilities from the State of Florida.

## XVIII. SEVERABILITY (HPS)

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.

#### XIX. CERTIFIED SITE (HPS)

The site of the certified power plant is generally depicted in the application. The sites of directly associated transmission line and natural gas pipeline corridors for which certification is granted are generally depicted in the application. Except where noted otherwise, ROWs of linear facilities will be established in the post-certification information submittal and review process in accordance with the conditions of certification.

# XX. REVIEW OF SITE CERTIFICATION (HPS)

A. 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 it's agent(s) during the preceding five-year period for the purpose of determining the extent of the permittee's compliance with the conditions of this certification and the environmental impact of this facility. The Department shall submit the results of it's review and recommendations to the permittees. Such review will be repeated at least every five years thereafter.

#### XXI. MODIFICATION OF CONDITIONS (HPS)

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 DER the authority to modify, upon application by the Permittees 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; variances or exemptions to water quality standards; and transmission lines.
- B. All other modifications shall be made in accordance with Sections 403.516, Florida Statutes.

Replacement of any portion of the gas pipeline, transmission lines, or access roads constructed under this certification necessitated by emergency conditions shall not be considered a modification. A verbal report of any such emergency shall be made to DER as soon as possible. Within 14 calendar days after correction of an emergency which would require the Permittees to perform an activity not in accordance with the conditions of certification, a report to the DER shall be made outlining the details of the emergency and the steps taken for its temporary relief. The report shall be a written description of all of the work performed and shall set forth any pollution control measures or mitigative measures which were utilized or are being utilized to prevent pollution of waters, harm to sensitive areas, or alteration of archaeological or historical resources.

## XXII. FLOOD CONTROL PROTECTION (HPS)

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

## XXIII. EFFECT OF CERTIFICATION (HPS)

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.

## XXIV. NOISE (TPS)

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

## XXV. ENFORCEMENT (HPS)

- 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.

## XXVI. ENDANGERED AND THREATENED SPECIES (HPS)

Prior to start of construction, the parmittee shall survey the site for endangered and threatened species of animal and plant life. Plant species on the endangered or threatened list shall be transplanted to an appropriate area if practicable. Gopher Tortoises and any commensals on the rare or endangered species list shall be relocated after consultation with the Florida Game and Fresh Water Fish Commission. A relocation program, as approved by the FGFWFC, shall be followed.

## XXVII. DESIGN AND PERFORMANCE CRITERIA (HPS)

The power plant 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 DER approval.

Moreover, the Permittees 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.

#### XXVIII. COMPLIANCE (HPS)

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.

## XXIX. ROW DELINEATION AND COMPLIANCE VERIFICATION (HPS)

TPS is responsible for compliance with this General Condition with respect to the natural gas pipeline. TEC is responsible for compliance with this condition with respect to the Pebbledale transmission line. SECI is responsible for complying with this condition with respect to the Vandolah and Lee transmission lines.

At least 90 days prior to commencement of construction, three copies of blue-line reproductions of aerial photographs of at least 1:400 scale shall be submitted to DER and one copy to each water management district (insofar as an area within its jurisdiction is involved) delineating the ROW routes selected, boundaries, preliminary pole and pad locations, and access The Permittees shall notify all parties of such filing. These photographs shall be submitted prior to commencement of construction on the various segments of the linear facility; it is recommended that this information be submitted in segments rather than waiting until the entire ROW is acquired. DER, the water management districts, and any other party who requests to do so shall have 30 days from receipt of notice to review the photographs and to call any apparent conflicts with the requirements of the conditions of certification to the Permittees' attention. However, this paragraph shall not operate to avoid the need for post-certification submittals and compliance reviews otherwise required by the conditions of certification.

If DER or any substantially affected party has reason to believe that the construction of the linear facility and access roads within the Permittees' designated ROW cannot be accomplished in compliance with the conditions of certification, the Permittees shall be so notified in writing. Failure of such a notice to be served on Permittees within 30 days from the notice of filing of the various segments in the aerial photographs with DER constitutes acknowledgment that construction of the linear facility and access roads can be accomplished in compliance with the conditions of certification within the designated ROW or the various segments of ROW submitted for review.

The acquisition of a particular ROW or the expenditure of funds toward acquisition of a particular ROW prior to post-certification review pursuant to this condition will be at the Permittees' risk, and no party will be estopped by such acquisition to seek disapproval of the construction of the linear facility or access roads within the ROW in accordance with these conditions of certification.

## XXX. DISPUTE RESOLUTION (HPS)

If a situation arises in which mutual agreement cannot be reached between the Permittees 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 within 30 days after its referral to DOAH. The hearing officer shall issue the decision 30 days after the termination of such hearing. All exceptions to the hearing officer's order shall be filed with the Governor and Cabinet within 10 days of the issuance of such order. The Governor and Cabinet shall issue a decision within 30 days of the filing of the exceptions.

## XXXI. POST-CERTIFICATION SUBMITTALS (HPS)

Conditions of certification which provide for the post-certification submittal of information to agencies by the Permittees are intended to allow the agencies to monitor the effects arising from the location of the natural gas pipeline and transmission line rights-of-way and the construction and maintenance of the permitted activities to thereby assure continued compliance with state water quality requirements, other agency nonprocedural rules and standards, and the conditions of certification, without any further government action.

## XXXII. TRANSMISSION (TEC and SECI) AND PIPELINE (TPS) ROWS

#### A. Construction

- 1. The Permittee shall avoid impacting wetlands within all certified corridors wherever practicable. When necessary and feasible, the location of the span between power poles shall be maximized or varied to eliminate or reduce wetland impacts.
- 2. The Permittee shall, wherever practicable, utilize adjacent existing public roads for access to the ROW for construction, operation and/or maintenance purposes.

- 3. The Permittee shall consult with the Bureau of Wetland Resource Management prior to final determination of the access road locations, (including those not located on the ROW), tower locations, and construction techniques which are to be reflected on any post-certification review information submittals. At DER's request, the Permittee shall conduct field inspection with staff of this agency.
- Prior to clearing activities within any of the ROW associated with the various linear facilities, an ecological survey shall be conducted to identify the presence of threatened or endangered species (plant and animals) as defined in the application, likely to occur in the ROW based on range and habitat. This survey shall also identify the location of any wading bird colonies. Results of this survey shall be submitted to the DER and the Florida Game and Freshwater Fish Commission (FGFWFC) and the United States Fish and Wildlife Service (USFWS). If any clearing activity will take place in or otherwise adversely affect jurisdictional wetlands, survey results will also be submitted to the appropriate water management district. it is determined that any of these species will be affected by the construction of any of the linear facilities, the Permittee shall consult with DER and FGFWFC to determine the appropriate steps to be take to avoid, minimize, mitigate, or otherwise appropriately deal with, any adverse impacts within each agency's respective jurisdiction.
- 5. After all ROWs have been selected, the Permittee shall conduct a survey of archaeological sensitive areas, as determined in consultation with the Department of State, Division of Historical Resources, where they are crossed by the ROW. This report shall be submitted to DHR. If practicable, sites considered to be eligible for the National Register shall be avoided during construction of the linear facilities, and subsequently during maintenance of the ROWs. For any other significant site, Permittee shall consult with DHR to determine appropriate action. If avoidance is not practicable, impact shall be mitigated through archaeological salvage operations or other methods acceptable to DHR.
- 6. All materials used for any purpose related to the construction of the transmission lines or other linear facilities shall come from fill sources in compliance with applicable local ordinances. No fill materials shall be obtained from excavated wetlands within the ROW unless authorized by DER and appropriate water management district in accordance with a mitigation plan submitted in compliance with certification.
- 7. The Permittee shall provide mitigation/compensation (M/C) for any wetland or open water habitat within the jurisdiction of DER or WMD which is degraded or destroyed as a result of the construction of any portion of the transmission lines, natural gas pipelines, or power plant facilities. M/C may include the creation of new wetland or openwater habitat, the restoration of degraded habitat, the enhancement of functions and values provided

by existing wetland or openwater habitats, removal of exotics, or other activities found by the relevant agencies and appropriate local government to be in compliance with their applicable regulations. Prior to the elimination or degradation of any such wetland or openwater habitat, the Permittee shall concurrently submit mitigation plans to DER, Bureau of Wetland Resources Management and the appropriate water management district. These mitigation plans shall, at a minimum, include the following:

- (a) Specific acreage figures, descriptions and locations of all jurisdictional wetlands, both within the ROW as well as adjacent to it which would be impacted by the construction or ROW maintenance activities, including an explanation of why no feasible alternative exists which would avoid impact to these wetlands;
- (b) A discussion and a detailed set of plan-view and crosssectional drawings of the proposed M/C activities to be
  undertaken, including the location of all M/C areas and a
  description of the manner in which these areas will be
  created, restored or otherwise enhanced. Success
  standards will be determined based on the functional
  values of wetlands impacted and created. The Permittees
  will work with the appropriate agency staff to establish
  success criteria. The M/C plans proposed by Permittees
  shall be submitted concurrently to DER and the
  appropriate water management district for review and
  compliance monitoring.
- (c) A timetable for accomplishing the proposed M/C activities (i.e., the time for commencement and completion of activities for each mitigation area) concurrently with the construction of the various aspects of proposed facilities and any associated wetland impacts.
- (d) A monitoring and maintenance program including success criteria, to ensure the survival and success of any created, restored, or enhanced wetlands.
- 8. M/C plans must be found to fully compensate for the functions and values provided by wetlands that will be degraded or eliminated. DER and WMDs will work with the permittee in the development of acceptable mitigation plans. The mitigation plans proposed by the permittee shall be submitted for review and compliance monitoring to DER and the appropriate water management district and such review shall be subject to the time constraints set forth in specific Conditions XXXII. 9., and XXXV. C. below, as appropriate.
- 9. For all construction activities in waters of the State where DER has wetland resource protection jurisdiction pursuant to Chapter 403, Florida Statutes, the Permittees shall file with DER, Office of Siting Coordination and Bureau of Wetland Resource Management the information described in Florida Administrative Code Rule 17-17.665 and 17-1.212(1), Section 3.2.2.

- (a) DER shall promptly review the submittal for completeness and sufficiency. If the submittal is found to be incomplete or insufficient, Permittee shall be so notified. Failure to issue such a notice within 30 days after filing of the submittal shall constitute a finding of completeness and sufficiency.
- (b) Within 90 days filing complete and sufficient information, DER shall determine whether there is reasonable assurance of compliance with applicable substantive agency regulations as required by the conditions of certification if the plans are executed as filed. If it is determined that reasonable assurance has not been provided, the Permittee shall be notified with particularity and possible corrective measures suggested. Failure to notify Permittee in writing within 90 days of receipt of a complete information submittal shall constitute a compliance verification.
- (c) If DER does not object within the time period specified, Permittee may begin construction pursuant to the terms of the conditions of certification and the subsequently submitted construction details and DER shall provide to the Corps of Engineers a letter indicating that the full requirements of this condition have been met and the water quality certification for the purposes of 33 USC Section 1341 is thereby conveyed.
- (d) Permittee, at its option, may submit information for different wetlands modification activities at different time intervals. Each submittal shall be processed by DER separately.
- 10. Semi-annual narrative reports shall be submitted to DER's Bureau of Wetlands Resource Management in Tallahassee and DER's Southwest District Office, indicating the status of all construction activities within waters of the State. These reports shall be submitted until all construction in that respective area is complete. The reports include the following information:
  - (a) Date the activity (dredge and fill) began; if work has not begun on-site, please so indicate.
  - (b) Brief description and extent of work completed since the previous report.
  - (c) Brief description and extent of work anticipated in the next six months.
- 11. Upon completion of construction, the permittee shall provide DER with detailed engineering drawings which depict the pre and post construction contours in all areas in which construction occurred in waters of the State.
- 12. During construction all Brazilian Pepper, Australian Pine, and melaleuca in each ROW shall be removed or the trees cut and

the stumps treated with an approved herbicide consistent with these conditions. A plan for removal and disposal of such exotic species which minimizes seed dispersal shall be developed by the Permittee in consultation with DER. The Permittee shall abide by the plan.

- 13. Following construction, a plan for maintenance and control of Brazilian Pepper, Australian pine, and melaleuca within the ROWs shall be developed by the Permittee in consultation with DER. The Permittee shall abide by the plan.
- 14. The Permittee shall perform the work authorized under the certification in a manner so as to minimize any adverse impacts on fish, wildlife, native vegetation, natural environmental valued, water resources, and water quality.
- 15. The Permittee shall develop a water quality monitoring program to measure the turbidity generated by construction in all open waters to be crossed by the proposed natural gas pipeline. This program shall be developed in coordination with the Bureau of Wetland Resource Management of the Department prior to the commencement of construction.
- 16. The Permittee shall be responsible for the correction of any water quality problems that result from the construction, operation and/or maintenance of works authorized under this certification. The Permittee will work with DER to determine additional methods necessary to ensure that State Water Quality Standards are not violated as a result of construction.
- 17. Where necessary to prevent secondary impacts to adjacent wetlands during construction, adjacent wetland areas outside of the limits of construction shall be isolated from the construction area by silt fences. These silt containment devices shall be maintained and remain in place until all construction is complete and all associated side slopes or areas denuded of vegetation have been adequately stabilized. The Permittee shall be responsible for explaining the significance of these barriers to all construction personnel prior to construction. The Permittee shall use turbidity control as necessary so that turbidity levels in adjacent areas do not exceed 29 N.T.U.'s above natural background. Any placement of fill or encroachment into jurisdictional wetlands or waterbodies outside the limits of construction shall be immediately reported to DER, Southwest District Office in Tampa, and the Bureau of Wetland Resource Management in Tallahassee. Appropriate remedial action to restore the affected area shall be immediately undertaken.
- 18. In addition to the erosion and turbidity control measures specified above, best management practices, including but not limited to the use of floating silt screens in flowing waters, as well as the use of staked hay bales and silt curtains shall be used wherever necessary at all times during project construction. These erosion and turbidity control devices shall be regularly inspected and maintained when necessary. These devices shall remain in place until all construction is complete

and all fill side slopes or denuded areas have been stabilized with suitable vegetation.

19. No dewatering operation shall be allowed unless the Permittee can provide reasonable assures to DER or WMD that no unauthorized adverse, off-site water resource impacts will occur as a result of the construction operation, and/or maintenance of the project.

## B. Operation

- 1. Ground vehicles to be used in wetlands for maintenance access shall be low ground pressure vehicles unless limited to the access roads and structure pads.
- 2. Only EPA approved herbicides may be used in Waters of the State, or the use of other herbicides in any areas of the ROW, shall only be allowed with the concurrence of DER.

## XXXIII. MINE RECLAMATION (SECI)

- A. General Conditions to Approval of the AGR-PC-CPC Conceptual Plan Modification and AGR-PC-PC1 LRU Applications
- 1. Approval of these applications shall not constitute a statement, admission or waiver by the State of Florida concerning the ownership of any interest in lands within the conceptual plans.
- 2. In restoring drainage patterns, the DNR and Agrico and its successors reserve the right to reexamine, in each stage of reclamation and restoration program application, the placement and configuration of the lakes, streams, wetlands, and watersheds which have been proposed in the conceptual plan, to assure that the natural functions of the lakes, streams, and wetlands are restored in accordance with the provisions of the then-existing standards and criteria of Chapter 16C-16, F.A.C.
  - B. Specific Conditions to Approval of the AGR-PC-CPC Conceptual Plan Modification and AGR-PC-PC1 LRU Applications
- 1. SECI and its successors shall assure that vegetation adversely affected by cooling water, prior to release of the wetlands, within the reservoir's zone of fluctuation shall be replaced in accordance with subparagraph 16C-16.0051(9)(d)1., F.A.C. A monoculture of nuisance species will not be an acceptable form of herbaceous vegetation in reclamation. Exotic species will be controlled within the cooling reservoir until the waterbody and its associated herbaceous wetlands are completely released of the reclamation obligation.
- 2. Agrico and its successors shall perform the proposed compensation in compliance with reclamation standards detailed in Chapter 16C-16, F.A.C. Should the operator proposed a reduction

in wetland or upland forest to be vegetated within the AGR-PC-PCl, AGR-PC-PC2, and AGR-PC-SP(2) LRUs; the bureaus will review the reduction considering the impacts to the intent of the waiver of paragraphs 16C-16.0051(5)(a and b), F.A.C., and the approved mitigation.

3. SECI and its successors shall insure that the water quality conditions of AGR-PC-PC1 meet the water quality .. requirements of the Hardee Power Plant Site Certification Order.

## XXXIV. DIVISION OF FORESTRY (SECI)

SECI shall consult with the Division of Forestry (DOF) to locate the proposed HPS - Lee Substation 230 kV transmission line as far from the DOF's Punta Gorda Work Station as practicable or maintain at least a 250 foot separation between the line and DOF facilities.

XXXV. PROJECT SURFACE WATER AND STORMWATER MANAGEMENT FACILITIES (HPS)

Permittees shall be responsible for the construction, operation, and maintenance of the surface water management systems and stormwater facilities installed for the project. TPS is responsible for compliance with this specific condition in regard to the power plant and natural gas pipeline. TEC is responsible in regard to the Pebbledale transmission line. SECI is responsible in regard to the Vandolah and Lee transmission lines.

#### A. General.

## 1. Permittees Confirmation.

The operational phases of the surface water management systems authorized under this certification shall not become effective until the Permittees confirm 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 each phase of the surface water management system, the Permittees 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.

#### Minimum Standards.

This certification is predicated on Permittees' submitted information to SWFWMD and SFWMD 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.

#### Post-Certification Information Submittals.

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 and 40E-4 (Surface Water Management), Florida Administrative Code, as applicable, prior to the commencement of the subject construction, operation and/or maintenance activity, covered thereunder.

## 4. Liability.

Permittees shall hold and save SWFWMD and SFWMD 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.

#### Enforcement.

Authorized representatives of the SWFWMD and SFWMD 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 system(s) and stormwater facilities in order to determine compliance with the conditions of this certification.

#### 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 or SFWMD in conjunction with post-certification review, it shall be submitted to the respective water management district and the DER. Parameters to be monitored may include those listed in Chapter 17-302, Florida Administrative Code. Permittees also shall, if required, provide data to SWFWMD or SFWMD 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.

This project must be constructed in compliance with and meet all applicable requirements set forth in Chapter 373, Florida Statutes, and Chapters 40D-4 and 40E-4, Florida Administrative Code, as applicable.

# C. Project Informational Requirements.

#### 1. General.

- a. At least 90 days prior to the commencement of construction of any portion of the project for which additional information is required under Condition XXXV.C.2. below, for that portion proposed for construction, the Permittees shall submit such information to SWFWMD or SFWMD staff, as applicable, for a completeness and sufficiency review. If the water management district staff does not issue a written request for additional information within 30 days of receipt of the information, the information will be deemed to be complete and sufficient.
- b. Within 60 days of the determination by SWFWMD or SFWMD staff that the additional information is complete and sufficient, the water management district shall determine and notify the Permittees in writing whether the proposed activities conform to applicable criteria in Chapters 40D-4 and 40E-4, Florida Administrative Code, and the conditions of certification. If necessary, the water management district shall identify what items are in need of clarification. Construction activities which impact works of the water management district or have surface water management impacts shall not begin until the water management district has an opportunity to assure that the activities are in compliance with the applicable water management district rule criteria and conditions of site certification, either in writing or by failure to notify the Permittees in writing.
- c. Subsequent modifications to the drawings and supporting calculations submitted to SWFWMD or SFWMD which may significantly alter the quantity and/or quality of waters discharged off site shall also be submitted to the respective water management district for a determination that the modifications are in compliance with Chapters 40D-4 or 40E-4, Florida Administrative Code, as appropriate, prior to the commencement of construction. However, minor deviations from construction plans deemed necessary in the field including, but not necessarily limited to, changes in the number, size, and location of culverts and other structures, shall be allowed.
- d. The respective water management districts and the Permittees may mutually agree to vary the information requirements.

## Surface Water Management.

Prior to the commencement of construction of any portion or phase of the project which may obstruct, divert, control, or impound waters of the state, such construction must be reviewed by the water management district with jurisdiction for a determination of compliance with Chapters 40D-4 or 40E-4, Florida Administrative Code and the conditions of certification, as "Construction" activities for which such review is appropriate. required includes but is not limited to, installation of all surface water and stormwater management facilities, the placement of structure pads, dredging and filling, the installation of access/maintenance roads and culverts and fill materials, wetlands mitigation/compensation and related activities in circumstances where a permit from the water management district would ordinarily be required under applicable rules. construction activities, the applicable information requirements of Chapters 40D-4 and 40E-4, Florida Administrative Code, shall be submitted as may be appropriate. The Permittee shall submit to SWFWMD erosion control plans for the HPS construction project (or discrete phases of the project) detailing measures to be taken to prevent the offsite discharge of turbid waters during construciton. These plans must also be provided to the construction contractor prior to the initiation of construction. For all construction activities related to linear facilities, the following information shall be provided at a minimum:

- a. A centerline profile of existing topographic features along the proposed access/maintenance road(s) sufficient to show contours and drainage patterns;
- b. Construction plans and designs of the proposed access/maintenance and finger road(s) with elevations and dimensions shown;
- c. Typical cross-sections of the proposed access/maintenance and finger road(s);
- d. Cross-section(s) of each wetland, stream or creek at the points to be crossed by the access/ maintenance and finger road(s) or other construction;
- e. Specifications showing the location of each linear facility structure, finger and maintenance/ access road, and culvert to be constructed, including all areas to be filled or excavated;
- f. Specifications, including supporting assumptions and calculations, showing the type and size of water control structures (ditch, culvert, equalizer, etc.) to be used, with proposed flowline elevations marked, drainage areas identified and design capacity verified;
- g. A cross-section of all proposed fill/excavation areas, with the exception of fill/excavation directly associated with transmission line support poles, showing the proposed depth;

APPENDIX C

**CURRENT PERMITS** 

PSD Permit (PSD-FL-140)



# 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,
- 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

Data

Date

## **HARDEE POWER STATION**

# Procedures for start-up and shut-down of Combustion Turbines

# A. Start-up

Unit is "walked down" by a Roving Operator to ensure that all systems are in a normal and safe to start-up condition.

Control Room Operator checks for fuel type and that start-up functions are in the desired mode.

Control Room Operator initiates a start on the unit from the Bailey DCIS (Distributed Control and Information System)

Roving Operator then verifies the following sequence of automatic events:

- Turbine starting motor engages, which will take the CT to approximately 800 RPM for a purge cycle, followed by a decrease to 360 RPM for fuel and ignitor operations.
- All logical permissives are met, the fuel/air ratio is correct, and the combustors are ignited as indicated by all four Flame Sensors seeing flame.
- Ignitors retract at about 1200 RPM.
- Starting motor assists in the acceleration of the CT to 60% RPM (2160), and then disengages.
- CT continues to accelerate under its own power toward 100% (3600) RPM for synchronization of the generator to the grid. The generator field is flashed and the generator excited at 95% RPM.
- The generator has synchronized to the grid, the generator breaker closes and the generator output is immediately increased to 5 megawatts.
- At approximately 18 megawatts CT output, the Water Injection System will start up to control NO<sub>x</sub> by injecting demineralized water into the combustors.

If Combined Cycle operation is desired, the Control Room Operator will open the Diverter Dampers to apply heat to the HRSG, and raise CT megawatt output to the level required to generate sufficient steam to roll the Steam Turbine.

#### B. Shut-Down

During Combined Cycle operations, the Control Room Operator decreases load to the point where the Diverter Damper can be closed, uncoupling the CT exhaust from the HRSG.

To shut-down the CT the Control Room Operator will select "STOP" on the DCIS, and the CT will ramp down at a maximum ramp rate of 6MW per minute to -1.5 megawatts. At this point, the generator breaker is opened and the CT begins a fired shutdown for approximately 60 seconds.

When the fired shutdown is complete, the Fuel Valve closes and the CT coasts down in speed until it goes on cooldown around 45 RPM.

The Roving Operator will do a post run "walk down" to check condition of the systems and to ensure that the ignitors have returned to the start-up position.

The CT will remain on cooldown until the conditions of 14 hours elapsed time since shutdown, and highest wheel space temperature has cooled to 150 degrees or less are met. At this point, the Roving Operator will take the CT off cooldown and RPM will decrease to zero.

# Alternative Methods of Operation

# Combustion Turbines (CTs) 1A, 1B, and 2A

No. 1		-		Maximum Operating Hours		
Method No.	Equipment	Fuel Type	Heat Input Range (MMBtu/hr)	(Hrs/Dy)	(Dys/Wk)	(Hrs/Yr)
1	CTs	Natural Gas	0 - 1,268.4	24	7	8,760
2	CTs	No. 2 Oil	0 - 1,312.3	24	7	8,760

Activity	Basis*
Brazing, soldering and welding	Rule 62-210.300(3)(a)16., F.A.C.
Parts cleaning and degreasing stations	All cleaning conducted at work stations with lids closed when not in use. Rule 62-213.430(6)(b)., F.A.C.
One or more emergency generators which are not subject to the Acid Rain Program and have total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, and 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.	Rule 62-210.300(3)(a)20., F.A.C.
One or more heating units and general purpose internal combustion engines which are not subject to the Acid Rain Program and have total fuel consumption, in the aggregate, of 32,000 gallons per year or less of diesel fuel, 4,000 gallons per year or less of gasoline, and 4.4 million cubic feet per year or less of natural gas or propane, or an equivalent prorated amount if multiple fuels are used.	Rule 62-210.300(3)(a)21., F.A.C.
Storage tanks < 550 gallons	Prior consensus with FDEP: Item 40, Title V Insignificant Source Summary for Electric Power Plants Rule 62-213.430(6)(b)., F.A.C.
Inorganic substance storage tanks > 550 gallons	Prior consensus with FDEP: Item 41, Title V Insignificant Source Summary for Sugar Cane Growers Rule 62-213.430(6)(b)., F.A.C.
No. 2 fuel oil storage tanks > 550 gallons	Low volatility materials. Rule 62-213.430(6)(b)., F.A.C.
No. 2 fuel oil truck unloading equipment	Low volatility materials. Rule 62-213.430(6)(b)., F.A.C.
Laboratory equipment used exclusively for chemical or physical analyses	Rule 62-210.300(3)(a)15.,F.A.C.
Fire and safety equipment	Rule 62-210.300(3)(a)22.,F.A.C.
Turbine vapor extractor	Prior consensus with FDEP: Item 31, Title V Insignificant Source Summary for Electric Power Plants Rule 62-213.430(6)(b)., F.A.C.

Activity	Basis*
Degasifiers/Dearators	Prior consensus with FDEP: Item 18, Title V Insignificant Source Summary for Electric Power Plants Rule 62-213.430(6)(b)., F.A.C.
Sand blasting and abrasive grit blasting where temporary total enclosures are used to contain particulates	Prior consensus with FDEP: Item 39, Title V Insignificant Source Summary for Electric Power Plants Rule 62-213.430(6)(b)., F.A.C.
Vehicular traffic on paved roads	Low traffic volumes. Rule 62-213.430(6)(b)., F.A.C.
Architectural (equipment) maintenance painting	Intermittent maintenance painting of equipment. Rule 62-213.430(6)(b)., F.A.C.
Equipment used for steam cleaning	Rule 62-210.300(3)(a)10.,F.A.C.
Vacuum pumps in laboratory operations	Rule 62-210.300(3)(a)9.,F.A.C.
Equipment used exclusively for space heating, other than boilers	Rule 62-210.300(3)(a)12.,F.A.C.
Surface coating operations utilizing 6.0 gallons per day or less, averaged monthly, of coatings containing greater than 5.0 percent VOCs, by volume.	Rule 62-210.300(3)(a)23.,F.A.C.
Surface coating operations utilizing only coatings containing 5.0 percent or less VOCs, by volume.	Rule 62-210.300(3)(a)24.,F.A.C.
Degreasing units using heavier-than-air vapors exclusively, except any unit using or emitting any substance classified as a hazardous air pollutant	Rule 62-210.300(3)(a)26.,F.A.C.

<sup>\*</sup> Although emission rates have not been quantified for all of the activities listed above, professional judgement

indicates that each listed source unit type will meet the following criteria pursuant to Rule 62-213.430(6)(b).,

## F.A.C.:

- Are not subject to any unit specific applicable requirements; i.e., listed source unit types are only subject to general facility-wide applicable requirements;
- Potential emissions are expected to be less than 500 pounds per year of lead and lead compounds;
- Potential emissions are expected to be less than 1,000 pounds per year of any hazardous air pollutant,
- Potential emissions are expected to be less than 2,500 pounds per year of total hazardous air pollutants; and

List of Proposed Exempt Activities for Hardee Power Station (Page 3 of 2)

Potential emissions are expected to be less than 5 tons per year of any other regulated pollutant.

Source: ECT, 1996.



# Florida Department of Environmental Regulation

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

February 26, 1992

## CERTIFIED MAIL-RETURN RECEIPT REQUESTED

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

Dear Mr. Jennings:

RE: Hardee Power Station

PSD-FL-140

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

Sincerely,

C. H. Fancy, P.E.

Chief

Bureau of Air Regulation

CHF/pa

#### Enclosure

cc: B. Thomas, SW District

J. Harper, EPA

C. Shaver, NPS

R. Donelan, OGC

B. Oven, Siting Office

L. Curtin, Esq.

Revised Final Determination

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

Permit No. PSD-FL-140

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

#### 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 32399-2409 Lawton Chiles, Governor Carol M. Browner, Secretary

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

Permit Number: PSD-FL-140 County: Hardee/Polk

Latitude/Longitude: 22°38'02"N 81°38'02"W

Project: Hardee Power Station

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

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

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

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

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

## Attachments are listed below:

- Power Plant Site Certification Package PA 89-25 and its associated attachments, dated June 14, 1990.
- 2. Letter from EPA dated December 21, 1990.
- DER's Final Determination dated January 4, 1991.
- 4. First District Court of Appeal Court Order dated December 20, 1991.
- 5. DER's Revised Final Determination dated January 22, 1991.

#### GENERAL CONDITIONS:

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

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

#### GENERAL CONDITIONS:

as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
  - (x) Determination of Best Available Control Technology (BACT)
  - (x) Determination of Prevention of Significant Deterioration (PSD)
  - (x) Compliance with New Source Performance Standards
    (!!SPS)
- 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,

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

#### GENERAL CONDITIONS:

report, or application unless otherwise specified by Department rule.

- c. Records of monitoring information shall include:
  - date, exact place, and time of sampling or measurements;
  - the person responsible for performing the sampling 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.
- When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which 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:

- On or before April 1 of each year, the Permittee shall submit 1. 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:
  - The annual average capacity factor for each individual (a) generating unit;
  - The cumulative lifetime average capacity factor for each individual generating unit;
  - The annual average capacity factor for the Hardee Power (C) Station; and,
  - The cumulative lifetime average capacity factor for the (d) 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 Cumulative lifetime average capacity factor of hours in a year. 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:

- 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  $NO_X$  reduction capability. In no event shall any such SCR or equivalent  $NO_X$  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	Concentration	Emission Limitations lbs/hr/CT
иох	Gas Cil	42 ppmvd 0 15% O <sub>2</sub> 65 ppmvd 0 15% O <sub>2</sub>	215.9 383.8
voc	Gas Oil	<pre>2 ppmvd 5 ppmvd</pre>	3.6
CO .	Gas Oil	10 ppmvd 26 ppmvd	31.3 (2) 11° (3) -
PM/PM <sub>10</sub>	Gas Oil		5.0 10.0
so <sub>2</sub>	Gas Oil	 0.3% S Oil	. 35.8 734.4

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

#### SPECIFIC CONDITIONS:

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

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

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 Oil		1.6 22.0 (avg)/33.7 (max)
Mercury	Gas Oil		0.0144 0.0039
Fluoride	oil		0.0427
Beryllium	0il		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 EFA 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  $NO_X$  (1,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).
  - 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  $NO_X$  emissions and water injection, and also another of ambient temperature and heat inputs to the CT shall be submitted to DER's Southwest District office and the Bureau of Air Regulation.
- 19. Stack sampling facilities shall be provided for both the bypass stack (CT) and the main stack (HRSG).
- 20. Construction period fugitive dust emissions shall be minimized by covering or watering dust generation areas.

Issued this <u>24th</u> day of <u>February</u>, 1992

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

Carol M. Browner, Secretary

CONDITIONS OF CERTIFICATION (PA 89-12)



# Department of Environmental Protection

GDJ
GLG
WFO
LFT
M. DUFE
Virginia B. Wetherell
Secretary

Lawton Chiles Governor Marjory Stoneman Douglas Building 3900 Commonwealth Boulevard Tallahassee, Florida 32399-3000

July 15, 1994

PLC FILE E 1.2

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

RECEIVED

JUL 2 0 1994

TECO Power Services

Re: Hardee Power Station, PA 89-25

4-7

Dear Mr. Gilletto:

The Department of Environmental Protection hereby approves the use of either EPA Reference Method 5 or 17 for particulate testing when firing oil. Method 17 may be used when the stack temperature is less than 320° F. This approval is granted pursuant to Condition II.A. 8.

By copy of this letter, I am forwarding your request for modification of the PSD Permit to the Bureau of Air Regulation.

Sincerely, Hamilton S. Oven

Hamilton s. Oven, P.E. Administrator, Siting

Coordination Section

cc: Clair Fancy, w/inc Robert Soich, w/inc

1 ... ..... / - - - - - -

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL REGULATION

TECO POWER SERVICES/SEMINOLE ELECTRIC COOPERATIVE, 'INC.

TAMPA ELECTRIC COMPANY

HARDEE POWER STATION

PA 89-25

# 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, as supplemented.
- 2. "CFRPC" shall mean the Central Florida Regional Planning Council.
- 3. "DER" shall mean the Florida Department of Environmental Regulation.
- 4. "DHR" shall mean the Florida Department of State, Division of Historical Resources.
- 5. "DNR" shall mean the Florida Department of Natural Resources.
- 6. "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.
- 7. "Feasible" or "practicable" shall mean reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.

- 8. "GFWFC" shall mean the Florida Game and Freshwater Fish Commission.
- 9. "Lee transmission line" shall mean the corridor depicted in Attachment A.
- 10. "Linear facility" shall mean any one of the three transmission lines or the natural gas pipeline associated with the Hardee Power Station.
  - 11. "M/C" shall mean mitigation/compensation.
- 12. "Pebbledale transmission line" shall mean the corridor depicted in Attachment B.
- 13. "Permittees" shall mean TECO Power Services Corporation (TPS), Tampa Electric Company (TEC), and Seminole Electric Cooperative, Inc. (SECI).
- 14. "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.
- 15. "Project" shall mean the Hardee Power Station and all associated facilities, including: the power plant and related facilities; the cooling reservoir and related facilities; any off-site mitigation/compensation areas; and all of the linear facilities.
- 16. "ROW" shall mean the transmission line and natural gas pipeline rights-of-way to be selected by the Permittees within the certified corridors in accordance with the conditions of certification.
- 17. "SFWMD" shall mean the South Florida Water Management District.
- 18. "SWFRPC" shall mean the Southwest Florida Regional Planning Council.
- 19. "SWFWMD" shall mean the Southwest Florida Water Management District.
- 20. "USFWS" shall mean the United States Fish and Wildlife Service.
- 21. "Vandolah transmission line" shall mean the corridor depicted in Attachment C.
  - 22. "WMD" shall mean water management district.
- 23. "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 Permittees Responsible for Compliance

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 future 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/PM10	Gas		5.0
•	Oil	<del></del>	10.0
so <sub>2</sub>	Gas		35.8
	Oil	0.3% S oil	734.4

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

Pollutant	Fuel	Maximum Allowable Emissions (@ 32° F.)			
	concer		ation	lb/hr/CT	<u></u>
H <sub>2</sub> SO <sub>4</sub> Acid Mist	Gas Oil		22.0	1.6 (avg)/33.7	(max)
Mercury	- Gas. Oil			0.0144 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.
- 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:
  - 5 for PM (I,A) - a. 8 for sulfuric acid mist (I, for oil only) **b**.
  - 9 for VE (I,A) - c.
  - 10 for CO (I,A) **-**--- d.
  - e.
  - 20 for NOx (I,A) 25A for VOC (I,A) --- £ .
    - 104 for Beryllium (I, for distillate oil only) A g. fuel analysis for Be using either Method 7090 or 7091, and sample extraction using Method 3040, as described in the EPA solid waste regulations SW 846, is also acceptable.
  - ASTM D 2880-71 for sulfur content of distillate oil - h.
  - ASTM D 1072-80, D 3031-81, D 4084-82 or D 3246-81 for - i. 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, 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 Departement 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 70.7 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).
- 20. Construction period fugitive dust emissions shall be minimized by covering or watering dust generation areas.

# III. SURFACE WATER DISCHARGES (TPS)

Discharges into surface waters of the state during construction and operation of the project shall be in accordance with applicable provisions of Chapters 17-3, 17-4, 17-302, 17-650, and 17-660, Florida Administrative Code, and the following conditions of certification.

A. Plant Effluents and Receiving Body of Water

For discharges made from the HPS the following conditions shall apply:

- 1. Receiving Body of Water (RBW) The receiving body of water has been determined by the Department to be those waters of 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 from either the storm water runoff retention pond or the cooling reservoir; however, compliance monitoring will be required at the cooling pond overflow weir and the stormwater detention pond discharge pipes.
- 3. Thermal Mixing Zones The instantaneous zone of thermal mixing for the HPS cooling system shall not exceed a distance of 50 feet from the POD. The temperature at the POD into Payne Creek shall not be greater than 95 degrees F. The temperature of the water at the edge of the mixing zone shall not exceed the limitations of Section 17-302.520(5)(b), F.A.C..
- 4. Chemical Wastes from HPS 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 Serial Number (OSN) 003 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. During the first 18 months, the permittees shall monitor the cooling reservoir at the condenser cooling water intake for the following parameters in the manner prescribed; upon completion of the 18 month monitoring period, the monitoring frequency may be decreased to once per year:

Parameter	Monitoring Requirements		
	Measurement	Sample	
	Frequency	Type	
Total Dissolved Solids	l/quarter	grab	
Turbidity (NTU)	l/quarter	grab	
Ammonia Nitrogen	l/quarter	grab	
Ammonia (un-ionized)	l/quarter	grab	
Beryllium	1/quarter	grab	
Cadmium	1/quarter	grab	
Chlorophyll A.	l/quarter	grab	
Copper	l/quarter	grab	
Cyanide	l/quarter	grab	
Iron	l/quarter	grab	
Lead	1/quarter	grab	
Nitrogen, Total	1/quarter	grab	
Nitrogen, Organic	1/quarter	grab	
Mercury mg/L	1/quarter	grab	
pH	1/quarter	grab	
Selenium	1/quarter	grab	
Silver	1/quarter	grab	
Zinc	1/quarter	grab	
Temperature	1/quarter	grab	
TKN	1/quarter	grab	
Ortho-phosphorus	1/quarter	grab	
	1/quarter	grab	
Total Phosphorus	=/ ======		

The results of the monitoring shall be submitted to the DER Southwest District Office in Tampa within 45 days of collection. The permittees shall maintain a summary of the results in the form of a yearly average for the life of the project. If any of the above parameters should reach 80% of the water quality criteria as contained in Chapter 17-302, F.A.C., the permittees shall notify the department. The department may then require sampling on a monthly basis in the reservoir and in Payne Creek and may approve mixing zones for parameters that exceed criteria.

