

**STATE OF FLORIDA
DEPARTMENT
OF
ENVIRONMENTAL PROTECTION**



Conditions of Certification

Tampa Electric Company
Polk Power Station
IGCC Unit 1
SCGT Units 2, 3, 4, and 5

PA 92-32J

February 29, 2008

TABLE OF CONTENTS

I.	GENERAL	1
	A. Definitions	1
	B. Applicable Rules	2
II.	CHANGE IN DISCHARGE	2
III.	GENERAL CONDITIONS	2
	A. Facilities Operation	2
	B. Non-Compliance Notification	3
	C. Safety.....	4
	D. Enforcement	4
	E. Design and Performance Criteria.....	4
	F. Certification.....	5
	G. Laboratories and Quality Assurance.....	6
	H. Procedures for Post-Certification Submittals	7
IV.	ADVERSE IMPACT	8
V.	RIGHT OF ENTRY	8
VI.	REVOCATION OR SUSPENSION.....	9
VII.	CIVIL AND CRIMINAL LIABILITY	9
VIII.	PROPERTY RIGHTS	9
IX.	SEVERABILITY	10
X.	REVIEW OF SITE CERTIFICATION.....	10
XI.	MODIFICATION OF CONDITIONS.....	10
XII.	CONSTRUCTION.....	10
	A. Standards and Review of Plans.....	10
	B. Control Measures	11
	C. Environmental Control Program.....	13
	D. Reporting	13
XIII.	AIR	14
XIV.	SURFACE WATER DISCHARGES	14
	A. NPDES Permit	14
	B. Applicable Provisions.....	14
	C. WQBEL Study Requirements	15
XV.	DOMESTIC WASTEWATER.....	15
	A. Prior Approval	18
	B. Construction.....	20
	C. Operation	21

XVII. INDUSTRIAL WASTEWATER.....	23
XVIII. GROUND WATER	25
A. Specific Conditions	25
B. Ground Water Monitoring Plan	25
C. Location Map	26
D. Well Information.....	26
E. Monitoring	27
F. Plugging and Abandonment.....	28
G. Zone of Discharge	28
H. Variances.....	28
I. Underground Injection.....	29
XIX. SCREENING	29
XX. TOXIC, DELETERIOUS OR HAZARDOUS MATERIALS	29
A. Spills	29
B. Handling and Testing of Potentially Hazardous Material.....	29
XXI. SOLID WASTE STORAGE AND DISPOSAL	29
A. Solid Waste General.....	29
B. Solid Waste Site Specific Standards.....	30
C. Processing Additional Information	33
XXII. FEDERAL ANNUAL OPERATING PERMITS AND FEES	33
A. DEP Responsibilities	33
B. TEC Responsibilities.....	33
XXIII. WETLANDS MITIGATION	33
A. Procedures for the Selection of the Transmission Line ROW	33
B. Work on the Certified Site	34
C. Transmission Line Construction Activities.....	34
D. Off-Site Impacts	34
E. Erosion/Runoff Control.....	35
F. Wetlands Clearing	35
G. Herbicides.....	36
H. Mitigation for Wetland Impacts.....	36
XXIV. WETLAND RECLAMATION REQUIREMENTS	37
A. Permit Transfer	37
B. Planting Plans.....	37
C. Management Plan.....	37
D. Biological Consultant	38
E. Hardwood Forest Reclamation	38

F.	Mixed Forest Reclamation	38
G.	Herbaceous Wetland Reclamation	38
H.	Surveying and Mapping	39
I.	Organic Soil Placement	39
J.	Plant Stock Requirements	39
K.	Reclamation Success Goals	39
L.	Reporting	41
M.	Review of Reclamation/Mitigation	42
N.	Dragline Walk Path	42
O.	Responsibility for Reclamation Success	42
XXV.	MINE RECLAMATION CONDITIONS.....	43
A.	Conceptual Plans.....	43
B.	Changes In Ownership	43
C.	Reclamation/Restoration.....	43
D.	Time Tables	44
E.	Standards	44
F.	Right of Entry	45
G.	Release Procedures	45
H.	Cockroach Bay	46
XXVI.	SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT	46
A.	Water Use Permitting Conditions.....	46
B.	Surface Water Management	56
XXVII.	FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS	66
XXVIII.	FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION	66
XXIX.	FLORIDA DEPARTMENT OF TRANSPORTATION	67
XXX.	POLK COUNTY	68
A.	CUP 92-05 Conditions	68
B.	Transmission Lines	71
C.	Sinkhole Response Plan.....	71
D.	Landscape Buffer.....	71
E.	Tall Structure Compliance.....	71
F.	Inspection and Permit Compliance Fees	71
G.	Flood Protection.....	71
H.	Reporting	72
I.	Fishing Lake	72
XXXI.	HILLSBOROUGH COUNTY	72
HISTORY		72

List of Appendices

- APPENDIX I. NPDES Permit FL0043869**
- APPENDIX II. Air Construction Permit PSD-FL-194**
- APPENDIX III. Air Construction Permit PSD-FL-263**
- APPENDIX IV. Air Construction Permit PSD-FL-363**
- APPENDIX V. Air Title V Permit 1050233-016-AV**

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 (F.S.), 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 (SCA) for the Polk Power Station Project, as supplemented.

2. "DEP" shall mean the Florida Department of Environmental Protection, or Department.

3. "DHR" shall mean the Florida Department of State, Division of Historical Resources.

4. "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.

5. "Feasible" or "practicable" shall mean reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.

6. "FFWCC" shall mean the Florida Fish and Wildlife Conservation Commission.

7. "Licensee" shall mean Tampa Electric Company (TEC).

8. "Power plant" shall mean the electric power generating equipment and appurtenances to be constructed on the Polk Power Station site in Polk County, as generally depicted in the Application.

9. "Project" shall mean the TEC Polk Power Station (PPS) and all associated facilities, including: the power plant, coal gasification plant, sulfuric acid plant and related facilities, and the cooling reservoir and related facilities.

10. "SWFWMD" shall mean the Southwest Florida Water Management District.

11. "ISO" shall mean International Organization for Standardization, ISO 3977-1978(E) standard conditions for gas turbines = 14.7 psia, 15°C, relative humidity 60 percent.

12. "ROW" shall mean the linear facility right-of-way to be selected within the certified corridors in accordance with the conditions of certification.

B. Applicable Rules

The construction and operation of the Power Plant Station shall be in accordance with all applicable provisions of at least the following regulations of DEP: Chapters 62-204, 62-210, 62-814, 62-528, 62-256, 62-296, 62-297, 62-301, 62-302, 62-531, 62-532, 62-550, 62-555, 62-560, 62-650, 62-660, 62-701, 62-4, and 62-601, Florida Administrative Code (F.A.C.), or their successors as they are renumbered.

II. CHANGE IN DISCHARGE

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any regulated pollutant not identified in the application, or more frequent than, or at a level in excess of that authorized herein, shall constitute a violation of the certification. Any anticipated facility expansions beyond the certified initial, nominal, net capacity of 260 MW, production increases, or process modifications which may result in new, different, or increased discharges of pollutants, change in type of fuel as described in XIII.D., or expansion in steam generation capacity shall be reported by submission of a supplemental application pursuant to Chapter 403, F.S.

III. GENERAL CONDITIONS

A. Facilities Operation

1. The Permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the Permittee to achieve compliance with the terms and conditions of this certification. In the event of a malfunction of a electric generating unit's pollution control system, that unit's load shall be shifted to any or all of the remaining units having a properly functioning pollution control system, and the malfunctioning unit shall be promptly shut down.

2. In the event of a prolonged [thirty (30) days or more] equipment malfunction or shutdown of air pollution control equipment, operation may be allowed to

resume and continue to take place under an appropriate Department order, provided that the Permittee demonstrates that such operation will be in compliance with all applicable ambient air quality standards and PSD increments, solid waste rules, domestic waste rules and industrial waste rules. During such malfunction or shutdown, the operation of the Polk Power Station shall comply with all other requirements of this certification and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the Department's order. Operational stoppages exceeding two hours for /air pollution control systems or four hours for other systems or operational malfunctions as defined in the operational contingency plans as specified in Condition XVI are to be reported as specified in Condition III.B. Identified operational malfunctions which do not stop operation but do compromise the integrity of the operation shall be reported to the Southwest District office as specified in Condition III.B.

3. TEC shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by the TEC to achieve compliance with the conditions of this certification, and are 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 approval and when required by Department rules.

B. Non-Compliance Notification

If, for any reason, the permittee (defined as the applicant or its successors and or assigns) does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the Southwest District office of the DEP by telephone within a working day that said noncompliance occurs and shall confirm this in writing at 3804 Coconut Palm Drive, Tampa, Florida 33619-8318 within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

1. A description of the discharge and cause of noncompliance; and,
2. The period of non-compliance, including exact 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 noncomplying event.
3. The permittee shall report all critical (having potential to significantly pollute surface or ground waters) spills of liquid or liquid-solid materials not confined to a building or similar containment structure to the Department by phone immediately after the discovery and submit a written report within forty-eight (48) hours, excluding weekends, from the original notification. The written report shall include, but not be limited to, a detailed description of how the spill occurred, the name and chemical make-up (include any MSDS sheets) of the substance, the amount spilled, the time and

date of the spill, the name and title of the person who first reported the spill, the areal size of the spill and surface types (impervious, ground, water bodies, etc.) it impacted, the cleanup procedures taken and status of completion, and include a map or aerial photograph showing the extent and paths of the material flow. Any deviation from this requirement must receive prior approval from the Department.

C. *Safety*

1. 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.

2. The Permittee shall not discharge to surface waters wastes which are acutely toxic, or present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant locally occurring wildlife or aquatic species. The Permittee shall not discharge to ground waters wastes in concentrations which, alone or in combination with other substances, or components of discharges (whether thermal or non-thermal) are carcinogenic, mutagenic, teratogenic, or toxic to human beings (unless specific criteria are established for such components in Section 62-520.420, F.A.C.) or are acutely toxic to indigenous species of significance to the aquatic community within surface waters affected by the ground water at the point of contact with surface waters.

D. *Enforcement*

The Department may take any and all lawful actions as it deems appropriate to enforce any condition of this certification.

E. *Design and Performance Criteria*

The power plant may be operated at up to 115 percent of the maximum electrical output at ISO conditions projected from design information without the need for modifying these conditions. Treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this certification are not to be bypassed without prior DEP approval. Moreover, the Permittee 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.

F. Certification

1. The terms, conditions, requirements, limitations and restrictions set forth in these conditions of certification are binding and enforceable pursuant to Sections 403.141, 403.161, 403.514, 403.727, and 403.859 through 403.861, F.S. TEC is placed on notice that the Department will review this approval periodically and may initiate enforcement action for any violation of these conditions.

2. This approval 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 approval may constitute grounds for revocation and enforcement action by the Department.

3. As provided in Subsections 403.087(6), 403.511, and 403.722(5), F.S., the issuance of this approval 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 approval is not a waiver of or approval of any other Department approval that may be required for other aspects of the total project under federally delegated programs which are not addressed in this certification.

4. This certification does not relieve the TEC 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 approved source, or from penalties therefore; nor does it allow the TEC to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

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

6. This certification is transferable only upon Department approval in accordance with Section 403.516, F.S., Rules 62-4.120 and 62-730.300, F.A.C., as applicable. TEC shall be liable for any noncompliance of the approved activity until the transfer is approved by the Department.

7. These conditions of certification or a copy thereof shall be kept at the work site of the approved activity.

8. TEC shall comply with the following:

a. Upon request, TEC 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. TEC shall hold at the facility or other location designated by this approval records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the approval, copies of all reports required by this approval, and records of all data used to complete the application for this approval. These materials shall be retained at least three (3) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- (1) the date, exact place, and time of sampling or measurements;
- (2) the person responsible for performing the sampling or measurements;
- (3) the dates analyses were performed;
- (4) the person responsible for performing the analyses;
- (5) the analytical techniques or methods used;
- (6) the results of such analyses.

9. When requested by the Department, TEC shall within a reasonable time furnish any information required by law which is needed to determine compliance with the certification. If TEC 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.

G. Laboratories and Quality Assurance

1. The Permittee shall ensure that all laboratory analytical data submitted to the Department, as required by this certification, must be from a laboratory which has a currently valid and Department approved comprehensive Quality Assurance Plan (QAP) [or a QAP pending approval] for all parameters being reported, as required by Chapter 62-160, F.A.C.

2. When a contract laboratory is used to analyze samples required pursuant to this certification, the Permittee is required to have the samples taken by qualified personnel following EPA and Department approved sampling procedures and chain-of-custody requirements in accordance with Rule 62-160, F.A.C.

3. When an in-house laboratory is used to analyze samples required pursuant to this permit, the Permittee is required to have the samples taken by a qualified technician following EPA and Department approved sampling procedures and chain-of-custody requirements. All chain-of-custody records must be retained on-site for at least three (3) years and made available to the Department immediately upon request.

H. Procedures for Post-Certification Submittals

1. Purpose of Submittals

Conditions of certification which provide for the post-certification submittal of information to DEP by TEC are for the purpose of facilitating DEP's monitoring of the effects arising from the location of the transmission line ROW and the construction and maintenance of the transmission line and the plant facilities. This monitoring is for DEP to assure, in consultation with other agencies with applicable regulatory jurisdiction, continued compliance with the conditions of certification, without any further agency action.

2. Filings

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

3. Completeness

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

4. Interagency Meetings

Within sixty (60) days of the filing of a complete post-certification submittal, DEP may conduct an interagency meeting with other agencies which received copies of the submittal. The purpose of such an interagency meeting shall be for the agencies with regulatory jurisdiction over the matters addressed in the post-

certification submittal to discuss whether reasonable assurance of compliance with the conditions of certification has been provided. Failure of any agency to attend an interagency meeting shall not be grounds for DEP to withhold a determination of compliance with these conditions nor to delay the time frames for review established by these conditions.

5. Reasonable Assurance of Compliance

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

6. Commencement of Construction

If DEP does not object within the time period specified in Condition III.H. above, TEC may begin construction pursuant to the terms of the conditions of certification and the subsequently submitted construction details.

IV. ADVERSE IMPACT

The Permittee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified in this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

V. RIGHT OF ENTRY

The Permittee shall allow during normal operational or business hours the Secretary of the Florida Department of Environmental Protection and/or authorized representatives, including representatives of the SWFWMD and Polk County upon the presentation of credentials:

A. To enter upon the Permittee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this certification;

B. To have access during normal business hours (Monday-Friday, 7:00 a.m. to 3:30 p.m.) to any records required to be kept under the conditions of this certification for examination and copying;

C. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants, or monitor any substances or parameters at any location reasonably necessary to assure compliance with this certification or Department rules; and,

D. To assess any damage to the environment or violation of ambient standards.

A reasonable time may depend on the nature of the concern being investigated.

VI. REVOCATION OR SUSPENSION

This certification may be suspended or revoked for violations of any of its conditions pursuant to Section 403.512, F.S.

VII. CIVIL AND CRIMINAL LIABILITY

This certification does not relieve the Permittee from civil or criminal penalties for noncompliance with any conditions of this certification, applicable rules or regulations of the Department or Chapter 403, F.S., or regulations thereunder.

Subject to Section 403.511, F.S., this certification shall not preclude the institution of any legal action or relieve the Permittee from any responsibilities or penalties established pursuant to any other applicable state statutes or regulations.

VIII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, 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.

This certification conveys no title to land or water, does not constitute state recognition or acknowledgment 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.

IX. SEVERABILITY

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

X. REVIEW OF SITE CERTIFICATION

The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five (5) years from the date of issuance of certification the Department may review these conditions of certification and propose any needed changes.

XI. MODIFICATION OF CONDITIONS

A. Pursuant to Subsection 403.516(1), F.S., the Board hereby delegates the authority to the Secretary to modify any condition of this certification.

B. For modifications in relation to federally delegated or approved permit programs, if no written objection is raised following notice to the parties and the public pursuant to Section 403.516(1)(b), F.S., the department shall modify a certification order and conditions of certification to conform to any subsequent department-issued amendments, modifications or renewals of any separately-issued prevention of significant deterioration (PSD) permit, Title V Air Operation permit, National Pollutant Discharges Elimination System (NPDES) permit, or any other permit for the certified electrical power plant issued by the department under a federally delegated or approved permit program so long as no state rule exists which conflicts or is more stringent than the provisions of the federal permits.

XII. CONSTRUCTION

A. Standards and Review of Plans

1. The facility shall be constructed pursuant to the design standards presented in the application and the standards or plans and drawings submitted and signed by an engineer registered in the state of Florida. The Applicant shall present specific facility plans, as developed, for review by the Southwest District office at least ninety (90) days prior to construction of those portions of the facility for which the plans are then being submitted, unless other time limits are specified in the following conditions herein. Specific Southwest District office acceptance of plans will be required based upon a determination of consistency with approved design concepts,

regulations and these conditions prior to initiation of construction of the: industrial waste treatment facilities; domestic waste treatment facilities; potable water treatment and supply systems; ground water monitoring systems; off-site water and wastewater pipelines; transmission lines; storm water runoff systems; solid waste disposal areas; and hazardous or toxic handling facilities or areas. Review and approval or disapproval shall be accomplished in accordance with Chapter 120, F.S.

2. The Department must be notified in writing and prior written approval obtained for any changes, modification, or revision to be made to the project during construction. If there are any changes, modification, or revision made to a project approved by the Department without this prior written approval, the project will be considered to have been constructed without departmental approval, the construction will not be cleared for service, and the construction will be considered a violation of the conditions of certification.

3. Ninety (90) days prior to the anticipated date of first operation, TEC shall provide the Department with an itemized list of any changes made to the facility design and operation plans that would affect a change in discharge as referenced in Condition II. since the time of the approval of these conditions. This preoperational review of the final design and operation shall demonstrate continued compliance with Department rules and standards.

B. Control Measures

1. Storm Water Runoff

To control runoff during construction which may reach and thereby pollute waters of the state, necessary measures shall be utilized to settle, filter, treat or absorb silt-containing or pollutant-laden storm water to ensure against spillage or discharge of excavated material that may cause turbidity in excess of 29 Nephelometric Turbidity Units above background in waters of the state. For the purposes of compliance, background turbidity shall be established by sampling the discharge from the reclaimed pond at the control structure CS-9 within one-half hour of detecting a discharge through OSN's 001 or 002. Control measures may consist of sediment traps, barriers, berms, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment-laden runoff. The pH of the runoff shall be kept within the range of 6.0 to 8.5. The Permittee shall comply with Chapter 40D-4, F.A.C. The Permittee shall complete the forms required by 40D-4, F.A.C., and submit those forms and the required information to the SWFWMD for any modifications that might occur.

2. Open Burning

Open burning in connection with initial land clearing shall be in accordance with Chapter 62-256, F.A.C., Chapter 51-2, F.A.C., Uniform Fire Code Section 33.101 Addendum, and any other applicable county regulation.

Any burning of construction-generated material, after initial land clearing that is allowed to be burned in accordance with Chapter 62-256, F.A.C., shall be approved by the Southwest District office in conjunction with the Division of Forestry and any other county regulations that may apply. Burning shall not occur unless approved by the appropriate agency or if the Department or the Division of Forestry has issued a ban on burning due to fire safety conditions or due to air pollution conditions.

3. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the appropriate local health agency.

4. Solid Wastes

Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 62-701, F.A.C.

5. Noise

Construction noise shall not exceed either local noise ordinance specifications, or those noise standards imposed by zoning.

6. Dust and Odors

The Permittee shall employ proper odor and dust control techniques to minimize odor and fugitive dust emissions. The applicant shall employ control techniques sufficient to prevent nuisance conditions on adjoining property.

7. Transmission Lines

The directly associated transmission lines from the Power Plant Station electric switchyard to the existing TEC transmission lines shall be cleared, maintained, and prepared in accordance with the application and the appropriate state and federal regulations concerning use of herbicides. TEC shall notify the Department of the type of herbicides to be used at least 60 days prior to its first use. Wetland mitigation shall be accomplished in accordance with Chapter 62-312, F.A.C., and Condition XXIII.

8. Protection of Vegetation

The Permittee shall develop the site so as to retain a buffer of trees or shall plant a buffer of trees sufficient to minimize the aesthetic and noise impacts of the facility. The buffer, as far as practicable, shall be of sufficient height and width suitable for the purpose of mitigating both construction and operational impacts of the facility.

9. Dewatering Operations

The dewatering operations during construction shall be carried out in such a manner that all water withdrawn will be retained on site. There shall be no discharge of water off site due to dewatering operations unless approved by the Department and SWFWMD, or unless such discharge occurs as a result of an extreme rainfall event such as a 24-hour, 10-year storm.

10. Historical or Archaeological Finds

If historical or archaeological artifacts, such as Indian canoes, are discovered at any time within the project site, the Permittee shall notify the DEP Southwest District office and the Bureau of Historic Preservation, Division of Historical Resources, 500 S. Bronough Street, Tallahassee, Florida 32399-0250, telephone number (850) 487-2073.

C. Environmental Control Program

An environmental control program shall be established under the supervision of a Florida registered professional engineer to assure that all construction activities conform to applicable environmental regulations and the applicable conditions of certification. If a violation of standards, harmful effects or irreversible environmental damage not anticipated by the application or the evidence presented at the certification hearing are detected during construction, the Permittee shall notify the Southwest District office as required by Condition III.B.

D. Reporting

1. Notice of commencement of construction shall be submitted to the Siting Coordination Office and the Southwest District office within fifteen (15) days of initiation. Starting three (3) months after construction commences, a quarterly construction status report shall be submitted to the Southwest District office. The report shall be a short narrative describing the progress of construction.

2. Upon or immediately prior to completion of construction of the Power Plant Station or a phase thereof and upon or immediately prior to completion of all necessary preparation for the operation of the on-site potable water supply, domestic or industrial waste treatment facility, ground water monitoring system, brine storage area or slag storage area, the Southwest District office will be notified of certification of construction completion and a date on which a site or facility inspection can be performed in accordance with Condition V.

XIII. AIR

The construction and operation of Polk Power Station (Project) shall be in accordance with all applicable provisions of Chapter 62, F.A.C., Air Construction Permits PSD-FL-194, PSD-FL-263, 1050233-018-AC (PSD-FL-363), and Title V Air Operation Permit 1050233-016-AV. Air Construction Permits PSD-FL-194, PSD-FL-263, 1050233-018-AC (PSD-FL-363), and Title V Air Operation Permit 1050233-016-AV are incorporated by reference herein as part of this Certification attached as Appendix II through V respectively. The provisions of Air Construction Permits PSD-FL-194, PSD-FL-263, 1050233-018-AC (PSD-FL-363), and Title V Air Operation Permit 1050233-016-AV shall be conditions of this certification. The licensee shall comply with the substantive provisions and limitations set forth in these permits as part of these Conditions of Certification, and as those provisions may be modified, amended, or renewed in the future by the Department. Such provisions shall be fully enforceable as conditions of this certification. Any violation of such provisions shall be a violation of these Conditions of Certification.

XIV. SURFACE WATER DISCHARGES

A. NPDES Permit

Industrial Wastewater Permit Number FL0043869, which is attached as Appendix I, is incorporated by reference herein as part of this Certification. The provisions of Industrial Wastewater Permit FL0043869 shall be conditions of this certification. The licensee shall comply with the substantive provisions and limitations set forth in Industrial Wastewater Permit Number FL0043869 as part of these Conditions of Certification, and as those provisions may be modified in the future by the Department. Such provisions shall be fully enforceable as conditions of this certification. Any violation of such provisions shall be a violation of the Conditions of Certification.

B. Applicable Provisions

Discharges into surface waters of the state during construction and operation of the project shall be in accordance with applicable provisions of Chapters

62-302, 62-4, 62-40, 62-160, 62-301, 62-520, 62-522, 62-531, 62-532, 62-550, 62-551, 62-555, 62-560, 62-600, 62-601, 62-604, 62-640, 62-650, 62-660, 62-672, 62-699, and 62-701, F.A.C.,

C. WQBEL Study Requirements

If effluent Total Nitrogen concentrations for OSN 001 exceed the ambient levels (twice in a six-month period) of these parameters as specified in Table 50-9.9 (Volume 4 of Sufficiency Response), TEC shall initiate a Level II Water Quality Based Effluent Limitation Study for the discharge from OSN 001. The study shall be conducted in accordance with the requirements of Rule 62-650, F.A.C. TEC shall submit a draft plan of study to the:

Director
Division of Water Resources Management
Department of Environmental Protection
Twin Towers Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

within six (6) months of notification by the Department that a study is necessary, and shall modify the plan of study as necessary to obtain Department approval.

The final plan of study shall include a schedule for the submittal of:

1. an Intensive Survey document summarizing all data collected; and
2. a WQBEL document summarizing all modeling conducted and proposed effluent limitations. The draft Intensive Survey document shall be provided within one year of the original plan of study submittal and the draft WQBEL document shall be provided within one and a half years of the original plan of study submittal.

XV. DOMESTIC WASTEWATER

A. No portion of the domestic wastewater collection system, treatment plant or effluent transmission line (excluding cooling reservoir) may be constructed without prior written approval from the Department. Construction of any portion of the domestic wastewater facility without the prior written approval of the Department will be considered a violation of the conditions of certification.

B. In order to obtain approval to construct a domestic wastewater treatment facility (DWT), the following forms, reports, plans and data, properly executed and appropriately signed and sealed by an engineer registered in the state of Florida, must

be submitted to the Department at least one hundred twenty (120) days prior to proposed date for commencement of construction of that system:

1. DEP Form 62-604.300(7)(a), Application to Construct a Domestic Wastewater Collection System, with supporting documents.
2. DEP Form 62-620.910(1) and (2), Wastewater Permit Application Form 1, General Information, and Application Form 2A, Permit for Domestic Wastewater Treatment and Reuse or Disposal Facility, with documentation.
3. DEP Form 62-640.210(2)(a), Agricultural Use Plan, with documentation.
4. 8-1/2" x 11" copies of: (i) DWT location, (ii) sludge disposal site, indicating all public or private drinking water wells within 0.5 miles, (iii) roadmap, or drawing of roads leading to the DWT, (iv) flow process diagram, showing all piping, and planar and volumetric data.

C. All plans and proposals must comply with the requirements of the departmental rules and regulations in effect as of the date of proposed commencement of construction. All requirements of Chapters 62-4, 62-600, and 62-640, F.A.C., and other pertinent Florida Administrative Code rules must be met, including construction certifications.

D. Department approval for construction of this domestic wastewater facility will be in effect for two (2) years from the date of issuance; request for extension of time must be submitted in writing on forms and in a manner prescribed by the Department of Environmental Protection at least sixty (60) days prior to date of expiration of the construction approval.

E. Domestic wastewater post-certification approvals will be issued under the provisions of Chapter 403, F.S., and Chapters 62-4, 62-302, 62-600, 62-604 and 62-620, F.A.C. TEC will be approved to perform the work or operate the facility shown on the approved drawing(s), plans, and other documents, attached thereto or on file with the Department.

F. In accordance with Chapter 62-699, F.A.C., the required certified operator on site time is:

A Class D or higher operator for three (3) nonconsecutive visits per week for 1-1/2 hours per week. The Department reserves the right to modify staffing requirements.

G. The discharge from the chlorine contact chamber shall be sampled in accordance with Chapter 62-601, F.A.C., and shall meet the following limitations:

TYPE PARAMETER	UNIT	MINIMUM	MAXIMUM	SAMPLE	FREQUENCY
Permitted Capacity (flow)	mgd	0	0.0105		Daily,5/wk
PH	STD UN	6.00	8.50	grab	Daily,5/wk
CBOD ₅ * & Total Suspended Solids*	mg/L	0	20 annual avg. 60 any one sample	grab	Monthly
Nitrate (as N)	mg/L	0	12	grab	Monthly
Cl ₂ residual	mg/L	0.5	-	grab	Daily,5/wk
Fecal coliform	#/100	0	200 annual avg. 200 monthly avg.	grab	Monthly

- Influent shall be monitored and each sampling shall be reported on a monthly basis [Rule 62-601.300(1), F.A.C.]

The results shall be reported monthly on DEP Form 62-601.900(1).

H. If sludge is disposed of by land application, the sludge shall be sampled after final treatment in accordance with Rule 62-640.650(1)(b) F.A.C., but prior to land application for the parameters listed below every twelve months. A copy of the analyses shall be submitted with the monthly operation report for the following parameters:

Total Nitrogen	% dry weight
Total Phosphorus	% dry weight
Total Potassium	% dry weight
Cadmium	mg/kg dry weight
Copper	mg/kg dry weight
Lead	mg/kg dry weight
Nickel	mg/kg dry weight
Zinc	mg/kg dry weight
pH	standard units
Total Solids	%

I. Direct discharge of effluent to waters of the state is not allowed. Such discharge shall be considered a violation of this certification and TEC shall immediately report any such discharge to the Southwest District office.

J. Upon completion of construction and prior to placing the treatment plant or effluent discharge system into operation for any purpose other than testing for leaks and equipment operation, TEC shall submit a Notification of Completion of Construction

[DEP Form 62-620.910(12)], signed and sealed by a registered engineer, to the DEP Southwest District office.

K. TEC shall provide an approved flow measurement device on the sewage treatment plant to monitor the influent (ahead of any return flows) and/or effluent flow, as appropriate. The flow measurement device shall be calibrated at least annually, with evidence of calibration kept at the site of flow measurement, and submitted to the Department upon request.

L. TEC shall provide a weatherproof location for an on-site log book to monitor each day's activities of the certified operator. This log book shall record sign in/out times of the certified operator, list any maintenance performed and contain the signature and certification number of the operator.

M. TEC shall maintain all audible and visual alarm systems on the lift station(s) in operating condition at all times.

N. A reduced pressure zone backflow preventer shall be installed on any potable water supply pipeline connected to the treatment facility. No potable water outlet intended for human contact shall be located down-line of the backflow preventer.

O. The disinfection system shall be operated to maintain a minimum chlorine residual of 0.5 mg/L at the outfall from the chlorine contact chamber. A metering device for dosing chlorine to the effluent shall be utilized, and the chlorine supply tank shall be inspected regularly to ensure proper operation.

P. Daily checks of the plant shall be performed by TEC or supplier, or his representative or agent five (5) days per week for a D plant pursuant to Rule 62-699.311(1), F.A.C.

XVI. DRINKING WATER FACILITIES

A. Prior Approval

1. No portion of the potable water supply system or any portion of a water supply system that will be or is intended to be converted to potable water use at a later date may be constructed without prior written approval from the Department. Construction of any portion of the potable water supply system without the prior written approval of the Department will be considered a violation of the conditions of certification.

2. In order to obtain approval to construct a potable water supply system which includes an on-site water treatment facility, the following information must be submitted to the Department no earlier than one (1) year prior to the date that the water supply system is proposed for construction:

a. A completed and fully executed "Application to Construct a Public Drinking Water System" form which complies with the requirements of the rules and regulations of the Department in effect as of the date that the request for approval to commence construction of the system is made to the Department.

b. Copy of the well driller's well completion report for each well to be used as a potable water supply well.

c. Complete water quality analysis of the raw water from each individual well to be used as a potable water supply well. Analysis of composite samples will not be accepted. The analysis must include all water quality parameters required for the classification of the water supply system being proposed pursuant to the rules and regulations of the Department in effect as of the date that the request for approval to construct the system is made to the Department. Each individual analysis must have been performed by a laboratory certified by the state to perform that particular potable water quality analysis and must have an analysis date within one (1) year of the date that the request for approval to construct the water supply system is made to the Department.

d. Complete specifications for the material and workmanship for the entire potable water supply system for which the request for approval to construct is being made. The specifications must be signed and sealed by an engineer registered in the state of Florida and must provide documentation that the material and workmanship will comply with all applicable rules and regulations of the Department in effect as of the date that the request for approval to construct is made to the Department.

e. Complete engineering drawings of the entire proposed potable water supply system for which approval to construct is being requested. The drawings must demonstrate full compliance with all applicable rules and regulations of the Department in effect as of the date that the request is made to the Department for approval to construct the system. The drawings must be signed and sealed by an engineer registered in the state of Florida.

f. Site plan showing the location of each potable water supply well. The site plan must include all proposed and existing, above and below grade, facilities, natural formations (e.g., streams, creeks, etc.), structures, etc. within a minimum of a complete five hundred (500) foot radius of each wellhead; however, if any facility, natural formation, structure, etc., is located outside of the five hundred (500) foot radius and that facility, natural formation, structure, etc., has a setback distance from the wellhead greater than five hundred (500) feet established in applicable rules of the Department in effect as of the date that the request for approval to construct is made, then that facility, natural formation, structure, etc., must also be shown on the site plan requested here. The site plan must be certified for accuracy by the professional

engineer registered in the state of Florida responsible for design of the potable water supply system.

g. Signed and sealed comprehensive engineering report on the proposed potable water supply system which fully describes the project and basis of design. The report must include design data and such pertinent data to give an accurate understanding of the work to be undertaken and must provide supporting documentation that the potable water system as proposed will comply with all applicable rules and regulations of the Department in effect as of the date that the request for approval to construct the water supply system is made to the Department.

3. Construction of potable water lines for the purpose of obtaining potable water from an off-site public water supply system is not covered by the conditions of certification. To obtain permission to connect to such a potable water system, TEC shall submit a modification request pursuant to 403.516, F.S., in accordance with the requirements of Chapter 62-555, F.A.C.

4. Prior to submitting any information to the Department for review of the proposed potable water supply system, all wells that are proposed for use as potable water supply wells and that will be included in the request for approval to construct the water supply system must have been constructed and fully developed. Once the well has been fully developed and the water samples collected, the well must be properly capped (or isolated from the potable water system) until written approval to construct the potable water supply system has been issued by the Department.

5. Should TEC request approval to construct a water treatment system which produces a waste stream (e.g., softening, electrodialysis, reverse osmosis, etc.) other than as described in the original SCA, TEC must submit as part of its request for approval to construct that water supply system documentation that the disposal of that waste stream has been approved by the appropriate agency or section of the Department.

B. Construction

1. TEC must retain the services of a project engineer registered in the state of Florida to observe that the construction of the water supply system is in accordance with the plans and specifications approved by the Department. The project engineer will be responsible for certifying to the Department that he/she observed the construction and that the construction conformed to the plans and specifications approved by the Department.

2. The approval to construct the potable water supply system will be in effect for two (2) years from the date of issuance. All construction of the potable water supply system must be completed within this two (2) year period unless a written request for an extension of this date is made to the Department at least sixty (60) days

prior to the expiration of the construction approval, and written approval for an extension of the expiration date is issued by the Department. The expiration date of the construction approval may be extended on a year by year basis; however, under no circumstances will the approval to construct the water supply system be extended beyond three (3) years from the date of the earliest water quality analysis of the initial wells. The request for an extension of the expiration date must be accompanied by an analysis of the raw water from each well for each water quality parameter required pursuant to the requirements of the rules and regulations of the Department in effect as of the date that the request for the extension is made. Such an analysis and a request for approval shall be submitted and approved prior to constructing and operating any portion of the appurtenances necessary to connect and operate that new well to the existing system for each new well added to the potable water system after the initial system is constructed and approved. The water quality analysis report submitted with this request must have an analysis date no earlier than one (1) year from the date that the request for an extension of the expiration date is made, must have been performed by a laboratory certified by the state to perform the analysis, and must contain no water quality violations other than those for which the water supply system was originally designed to address. The maximum length of time that the approval or each subsequent approval for the construction of the potable water system may be in effect is five (5) years from the date of the original approval or for subsequent approvals from the date of issuance of each approval. Should the construction of the water supply system not be completed within that five (5) year period, should TEC have failed to request a timely extension of the approval expiration date, or should any water quality analysis submitted with the request for an extension of the expiration date demonstrate the presence of a contaminant for which the water treatment plant was not originally designed to handle, or as additional wells are installed on-site and proposed for connection to the potable water system, TEC will have to make a new request to the Department for approval to construct the potable water system. That request must meet the submittal and approval requirements of the rules of the Department in effect as of the date that the request for approval is submitted and will be subject to the same review schedule as the original request.

C. *Operation*

1. No portion of the potable water supply system may be placed into service without the prior written approval of the Department. Placing any portion of the potable water supply system into service prior to receipt of this written approval will be considered as a violation of the conditions of certification.

2. The Department will not issue approval to place the potable water supply system or any portion of that system into service unless the construction of the system or portion thereof had been approved for construction by the Department prior to the commencement of that construction.

3. In order to obtain approval to place the potable water supply system into service, TEC must make a written request for clearance to the Department. The request must be in the form and/or manner stipulated in the letter authorizing construction of the potable water supply system and must include all information stipulated in that letter as being required to be submitted with the request for clearance, as well as any information required for clearance of a potable water supply system contained in applicable rules and regulations of the Department in effect as of the date that the request for clearance is made.

4. The Department will issue a letter of clearance to place the water supply system into service within thirty (30) days of receipt of a written request for clearance, provided that the request is accompanied by all necessary supporting documentation and meets the criteria for clearance contained in the applicable rules and regulations of the Department in effect as of the date that the request for clearance was made.

5. All construction or activity taking place in the vicinity of the potable water supply wells must conform with the setback distances from a potable water supply well established in the rules of the Department at the time that the construction or activity is proposed and must be coordinated with the Department.

6. TEC must provide, in accordance with applicable state rules, a certified water treatment plant operator who meets the staffing requirements for the type and capacity of the water treatment system cleared for service.

7. The water meter at the potable water treatment plant(s) must be read at approximately the same time each day, seven days per week, and both the meter reading and the gallons of water pumped to distribution recorded in the plant log.

8. The certified water treatment plant operator must submit a report on the operation of the water treatment plant(s) to the Department monthly in the manner required by the rules and regulations of the Department.

9. The drinking water must be analyzed for all applicable water quality parameters to the degree and frequency required by the rules and regulations of the Department. The analysis must be performed in accordance with these rules and regulations and submitted to the Department in the format required by these rules and regulations.

10. The one-day maximum day demand for the period of time covering the most recent twelve (12) months of operation of the water treatment plant may not exceed the capacity of the water treatment plant approved for construction and cleared for use by the Department. Should the demand on any one day during a twelve (12) month period exceed the capacity of the water treatment plant, TEC shall submit a request for any expansion of the potable water system for review and approval.

11. TEC must plan, design, obtain approval for, and construct all necessary modifications to its water supply system in a timely manner in order to provide sufficient capacity to meet the potable water demands of its system.

12. TEC must operate the water supply system in such a manner as to comply with the provisions of Chapter 403, F.S., and all the rules of the Department.

XVII. INDUSTRIAL WASTEWATER

A. The Permittee shall assure that the sludge filter cake generated from the industrial wastewater treatment plant will meet the leachate standards established by the Toxicity Characteristic Leaching Procedure prior to its disposal.

B. The solids generated by the brine concentration system should be concentrated or dewatered to obtain a solids content of 50 percent or greater prior to disposal off-site.

C. Water Treatment Systems

1. Low Volume Wastes - All discharges of low volume wastes shall be treated in an adequately sized and constructed treatment facility prior to discharge into the cooling pond. TEC shall demonstrate that the discharge of reject water from the wastewater treatment plant will not cause or contribute to a violation of water quality standards at the POD from the cooling pond. Such demonstration will include as a minimum the testing of treated discharges as required by Condition XVII.K.

2. Submission of Plans - The Permittee shall submit to the Department at least ninety (90) days prior to start of construction of the industrial waste treatment system a set of drawings, signed and sealed by a professional engineer registered in the state of Florida, showing the construction details of the proposed lime/soda ash pretreatment system and multi-stage reverse osmosis system.

3. Chemical Metal Cleaning - Chemical metal cleaning wastes shall be disposed off-site in an approved treatment system or disposal area. Prior to operation, TEC shall provide the name and address of the firm holding the contract for off-site disposal to the Southwest District office of the DEP.

D. The Permittee shall ensure that construction and subsequent operation of the cooling pond, and its system of above-grade internal dikes and external berms shall be in strict accordance with the best engineering practices, using Chapter 62-672, F.A.C., where applicable as a guide.

E. The Permittee shall ensure that a vegetative or non-vegetative cover adequate to inhibit wind and water erosion shall be established and maintained on all exposed dam surfaces. Such vegetation shall be maintained by the Permittee

sufficiently low enough to permit visual inspection of the soil surfaces in critical areas outlined in Section 62-672.400(1), F.A.C.

F. The Permittee shall, at a minimum, inspect the cooling pond once per week as prescribed in Section 62-672.500(2), F.A.C.

G. An inspection of the cooling pond berms shall be conducted annually by a professional engineer registered in Florida experienced in the field of construction and maintenance of dams. A copy of the inspection report shall be furnished, upon receipt by the Permittee, to the Department for review [Section 62-672.500(5), F.A.C.].

H. The Permittee shall ensure that the cooling pond will be designed, constructed and operated to maintain a surge capacity equal to the runoff from a 100-year, 24-hour rainfall event, plus the flow of all process water diverted from the power plant operation.

I. The Permittee shall dispose of all waste oil collected from the oil/water separator in a Department-approved manner.

J. The Permittee shall not allow any waste sludge or other solid waste to be discharged into the receiving waters either directly or indirectly.

K. Sampling and Design

Within twelve (12) months from commencement of operation of the IGCC, each of the waste streams discharged to the cooling reservoir shall be properly characterized through an approved sampling and analytical protocol.

1. Ninety (90) days prior to operation of the unit producing the listed waste stream, TEC shall submit for approval a sampling and analysis plan identifying the expected frequency of each wastewater discharge, appropriate sampling parameters, expected variability of the wastewater stream quality and a proposed sampling schedule.

2. The sampling plan shall also include an assessment of the effectiveness of each of the wastewater treatment units prior to discharge to the cooling pond. Effluent sampling shall be conducted for each unit through a plan submitted as specified in Condition XVII.K.1.

3. Upon approval by the Department, the sampling and analysis plan specified in Condition XVII.K.1. and 2. shall be implemented.

XVIII. GROUND WATER

A. *Specific Conditions*

1. TEC shall submit a Ground Water Monitoring Plan within one hundred eighty (180) days of certification of the application. TEC shall propose monitor well locations, for Department approval, that will provide reasonable assurance that contamination to ground waters of the state that may potentially occur will be detected. These monitor well locations shall be located so that each disposal site as well as the facility will be monitored in the unconfined, upper intermediate, lower intermediate and upper Floridan aquifer system as defined by Florida Geological Survey Bulletin No. 59 and as discussed in the SCA. A ground water monitoring plan shall be prepared by TEC for submittal to the Department prior to construction of any solid waste disposal unit. The ground water monitoring plan shall include, at a minimum, the equivalent to the requirements of Chapter 62-701.510, F.A.C. Detection monitoring wells shall be screened at the base of the surficial aquifer system, specifically no deeper than the base of the Bone Valley Member as defined in FGS Bulletin No. 59. If the surficial aquifer is present within 100 feet laterally of the edge of the Solid Waste Disposal Area (SWDA), one additional well shall be located down gradient from the SWDA.

2. Construction on the monitoring system to implement the Ground Water Monitoring Plan shall be completed at least sixty (60) days prior to start of commercial operation in accordance with Rule 62-522.600, F.A.C.

3. Operation of the facility shall not commence without a written notice from the DEP's Technical Support Section that the installation of the monitor wells and water quality analyses have been approved and reviewed by the Technical Support Section.

B. *Ground Water Monitoring Plan*

At a minimum the Ground Water Monitoring Plan shall include or address the following, under the indicated section, and shall become effective upon written approval from the Technical Support Section of the Department's Southwest District office:

1. This Ground Water Monitoring Plan is designed for the monitoring of the following sites (as defined in Rule 62-520.200(17), F.A.C.): the Cooling Water Pond and the Brine Storage Area where the outward facing portion of the pond berms define each respective site boundary. The Zone of Discharge (as defined in Rule 62-520.200(23), F.A.C.), for each site, shall be horizontally located 100 feet from the disposal site boundary, pursuant to Rule 62-522.410(2)(a), F.A.C., and vertically extend

to the base of the surficial aquifer system, specifically no deeper than the base of the Bone Valley Member as defined in FGS Bulletin No. 59.

2. The Ground Water Monitoring System shall be designed and constructed by the Permittee in accordance with the plans and supporting documentation submitted and on file in the Southwest District office. Each monitor well shall be constructed within an individual bore hole.

3. Upon approval, TEC shall comply with the Ground Water Monitoring Plan.

C. Location Map

Within ninety (90) days of completion of construction of the ground water monitor wells, a surveyed drawing shall be submitted showing the location of all monitoring wells (active and abandoned) which will be horizontally located by metes and bounds or equivalent surveying techniques. The surveyed drawing shall include the monitor well identification number as well as location and elevation of all permanent benchmark(s) and/or corner monument marker(s) at the site. The survey shall be conducted by a Florida registered surveyor. Two (2) copies of the certified drawing shall be sent to the DEP's Technical Support Section, Southwest District office.

D. Well Information

Within ninety (90) days of completion of construction of each monitor well, the Permittee or the authorized representative shall submit the following information for each monitor well:

1. A complete DEP Monitor Well Completion Report.
2. A copy of the SWFWMD Application to Construct a Well, SWFWMD Form SF 306(3) Rev. 9/92; and,
3. A copy of the SWFWMD Well Completion Report, SWFWMD Form 25-18-3/90.

The information shall be sent to the Technical Support Section, Southwest District office, Department of Environmental Protection, 3804 Coconut Palm Drive, Tampa, Florida 33619-8318.

E. Monitoring

1. Within sixty (60) days of completion of construction of the Ground Water Monitoring System and every five (5) years thereafter, the Permittee shall sample all ground water monitor wells for the Primary and Secondary Drinking Water parameters included in Chapter 62-550, F.A.C., Public Drinking Water Systems, Fecal Coliform and EPA Methods 601 and 602. The results shall be sent to the DEP's Technical Support Section. First test results shall determine background.

2. Within six (6) months of startup for any new facilities certified through supplemental proceedings and at least every five (5) years thereafter the Permittee shall provide a waste stream characterization for the cooling water pond. The waste streams shall be analyzed for the Primary and Secondary Drinking Water Standards (Chapter 62-550, F.A.C), Fecal Coliform and the EPA Priority Pollutants. The results shall be sent to the Technical Support Section, Southwest District office, DEP.

3. The wells shall be sampled at the frequency specified and for the parameters listed in the ground water monitoring plan. The results shall be sent to the Technical Support Section, Southwest District office, DEP.

4. After four (4) consecutive quarters of data (after completion and operation of the IGCC), the Permittee may request a reduction in sampling frequency or specific parameters of the ground water monitoring plan. The request shall be considered reasonable when a trend analysis of the parameter indicates no significant or substantial change in the parameter. Specific parameters that are key indicators of the domestic or industrial processes or field measured parameters may not be reduced or eliminated from the ground water monitoring plan.

5. Following the initial analysis of the ground water monitor wells, all monitor wells shall be sampled, and analyzed, and results reported in accordance with the ground water monitoring plan. TEC shall submit to the Department the results of the water quality analyses no later than the fifteenth (15th) day of the month immediately following the end of the sampling period. The results shall be sent to the Technical Support Section, Southwest District office, DEP.

6. Ground water sampling shall be reported on the Monitoring Report Forms [DEP Form 62-522.900(2)]. In order to facilitate entry of this data into the state computer system, these forms or an exact replica must be used and must not be altered as to content. The original copies should be retained so that the necessary information is available to properly complete future reports. The report forms received from the laboratory must be submitted along with the DEP Parameter Monitoring Report Forms described above.

7. If, at any time, background ground water standards are exceeded at the edge of the zone of discharge, the Permittee has fifteen (15) days from receipt of the laboratory analyses in which to resample the monitor well(s) to verify the original analyses. The monitoring test results must be submitted to the Department within fifteen (15) days of receipt of the reanalyses from the laboratory. Should the Permittee choose not to resample, the Department will consider the water quality analysis as representative of current ground water conditions at the facility.

8. The field testing, sample collection, preservation and laboratory testing, including quality control procedures, shall be in accordance with methods approved by the Department in accordance with Chapter 62-160, F.A.C.

9. If any monitor well becomes damaged or inoperable, the TEC shall notify the Department the next business day and a detailed written report shall follow within seven (7) days. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent the recurrence. All monitoring well design and replacement shall be approved by the Department prior to installation of the replacement well.

F. Plugging and Abandonment

Within sixty (60) days of issuance of this certification, all piezometers and wells not a part of the approved ground water monitoring plan or monitoring wells required by SWFWMD are to be plugged and abandoned in accordance with Rule 62-532.500(4), F.A.C., and the rules of the SWFWMD. The Permittee shall submit a written report to the Department providing verification of the plugging program. A written request for exemption to the plugging of a well must be submitted to the DEP's Technical Support Section for prior approval.

G. Zone of Discharge

1. The Permittee shall ensure that the water quality standards for Class G-II ground waters will not be exceeded at the boundary of the zone of discharge in accordance with Rules 62-520.400 and 62-520.420, F.A.C.

2. The Permittee shall ensure that the minimum criteria for ground water specified in Rule 62-520.420, F.A.C., shall not be violated within the permitted zone of discharge.

H. Variances

Consideration of requests for ground water variances shall be postponed until two (2) years after the beginning of plant operations. A variance from the drinking

water quality standard for antimony may be granted by the Department upon demonstration that levels of antimony in the cooling pond exceed the standard in Rule 62-520, F.A.C. However, if representative ambient values for iron and color are shown to already exceed secondary drinking water standards, then these representative values shall be the prevailing standard [Rule 62-520.420(2), F.A.C.].

I. Underground Injection

TEC shall not use underground injection without prior approval pursuant to Chapter 403.516, F.S.

XIX. SCREENING

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.

XX. TOXIC, DELETERIOUS OR HAZARDOUS MATERIALS

A. Spills

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

B. Handling and Testing of Potentially Hazardous Material

Within one hundred twenty (120) days prior to commercial operation, TEC shall provide a plan for handling and disposing of hazardous catalysts to the DEP Southwest District office.

XXI. SOLID WASTE STORAGE AND DISPOSAL

A. Solid Waste General

1. The solid waste disposal areas shall be designed, constructed, operated, maintained, closed and monitored in accordance with acceptable landfill practices described in Chapter 62-701, F.A.C.

2. No solid waste disposal areas shall be constructed until detailed plans and drawings as required by Chapter 62-701, F.A.C., have been submitted to and approved by the Solid Waste Section of the Southwest District (SWSSWD) of the DEP.

3. Each solid waste disposal unit shall meet the general criteria for landfills as stated in Rule 62-701.340, F.A.C.

4. Any solid waste produced by the operation of the facility shall be disposed of in a permitted disposal facility. By-products that are sold for reuse are not considered solid waste.

B. Solid Waste Site Specific Standards

1. The temporary storage area for the brine solids shall have a leachate control system to prevent a discharge of leachate and mixing of leachate with storm water.

2. Provisions for storing slag for more than one year shall be addressed in the Solid Waste Operations Plan to be submitted to the SWSSWD of the DEP prior to operation of the slag storage unit.

3. The Permittee shall provide reasonable assurance that the liners for all solid waste storage areas shall be constructed, operated and maintained in accordance with acceptable landfill liner practices. Acceptable practices are detailed in Rule 62-701.400, F.A.C., (new January 6, 1993). The characteristics of the soils underlying the liner shall also be determined to prevent settlement or other problems associated with use of a geomembrane liner. The results of all soils and materials testing shall be submitted to the Solid Waste Section of the Department's Southwest District Office (SWSSWD) with liner specifications for approval prior to construction.

4. The Permittee shall provide leachate collection and disposal plans that meet the criteria of Rule 62-701.400, F.A.C. Leachate sampling shall be addressed in the facility ground water monitoring plan as a post-certification submittal. Parameters detected in the leachate at levels of concern may be included in future ground water sampling analyses. The Permittee is responsible for the storm water control in the solid waste retention areas. Storm water or other surface water which comes into contact with the solid waste or mixes with leachate shall be considered leachate.

5. The Permittee shall provide backup provisions for leachate management in the event that the industrial wastewater treatment plant is inoperable. This shall be submitted to the SWSSWD of the DEP prior to operation of any solid waste disposal unit.

6. The zone of discharge for each SWDA shall be 100 feet from the edge of the SWDA, or the property boundary, whichever is less. Ground water

standards for G-II ground waters shall be maintained at the boundary of the zone of discharge.

7. The Permittee shall provide reasonable assurance that the solid waste disposal area liner system shall be equivalent to a composite or double liner system.

8. The Permittee shall submit to the SWSSWD of the DEP a quality assurance plan for the liner systems equivalent to that for a composite or double liner system for approval by the Department's SWSSWD prior to construction. Soil liner construction quality assurance shall include a quality control plan specifying performance criteria for the soil liner, testing procedures and sampling frequencies.

9. The Permittee shall submit to the SWSSWD of the DEP a comprehensive operation plan for the facility that provides written, detailed instructions for the daily operation of the solid waste disposal areas. The plan shall include the items listed in Rule 62-701.500, F.A.C. The plan shall be kept at the facility and shall be accessible to the operators. The plan shall be revised if operational procedures change. A schedule for routine maintenance of the leachate collection and removal system shall be established to ensure operation of the system. The maintenance schedule shall be a part of the operational procedures for the plan. The initial operation plan shall include the first solid waste disposal area and shall be submitted for approval to the SWSSWD of the DEP prior to operation of the solid waste disposal area.

10. The Permittee shall hold the operator responsible for leachate level monitoring, sampling, analysis of the leachate, and for providing copies of the leachate analysis to the Department's SWSSWD. The operator shall have a prepared contingency plan to handle leachate collection, removal, and treatment problems such as interruptions of discharges to a treatment plant. Quantities of leachate collected by the leachate collection and removal system shall be recorded in gallons per day before on-site treatment or transport off-site. A rain gauge shall be installed, operated, and maintained to record precipitation at the facility. Precipitation records shall be maintained and used to compare with leachate generation rates.

11. Hazardous waste or any hazardous substance shall not be accepted for disposal at this site. Hazardous waste is a solid waste identified by the Department as a hazardous waste in Chapter 62-730, F.A.C. Hazardous substances are those defined in Section 403.703, F.S., or in any other applicable state or federal law or administrative rule.

12. The Permittee shall maintain a program which prohibits the disposal of bulk industrial wastes which operation personnel reasonably believe to either be or contain hazardous waste, without first obtaining a chemical analysis of the material showing the waste to be non-hazardous. The chemical analysis of any such material, along with the date of disposal, shall be kept on file at the facility.

13. A trained supervisor or foreman shall be responsible for maintaining the solid waste disposal areas in an orderly, safe, and sanitary manner. Sufficient personnel shall be employed for adequate operation. In the event of damage to any portion of the solid waste disposal area or failure of any portion of the related systems, the Department's SWSSWD shall receive notification in accordance with Condition III.B.

14. The facility ground water monitoring plan, to be submitted as a post-certification report, shall include monitoring of the solid waste disposal areas. This plan shall include, at a minimum, the equivalent to the requirements of Rule 62-701.510, F.A.C., for the solid waste disposal areas. The facility ground water monitoring plan must be approved by the Department prior to facility operation. The facility ground water monitoring plan is described in condition of certification Section XVIII.

15. All engineering plans, reports, and related information shall be provided by the engineer of record with professional certification and shall be approved by the Department's SWSSWD prior to construction. A construction certification report signed and sealed by a professional engineer, and record drawings showing all modifications to construction plans, shall be submitted for approval to the SWSSWD of the DEP prior to operation of each solid waste disposal area.

16. Prior to any construction of each solid waste disposal area, the engineer shall define the engineering properties of the site that are necessary for the design, construction, and support for the disposal area.

17. The closure of each solid waste disposal area shall be equivalent to lined landfill closures, and shall have a barrier layer. All engineering plans, reports, and related information shall be provided by the engineer of record with professional certification and shall be approved by the Department's SWSSWD prior to closure.

18. Financial assurance for the solid waste disposal areas shall be provided in accordance with Rule 62-701.630, F.A.C., prior to operation of each solid waste disposal area. All cost estimates for closure and long-term care shall be adjusted and submitted annually to: SWSSWD of the DEP. Proof that the financial assurance has been funded adequately shall be submitted annually to the SWSSWD and to: Financial Coordinator, Solid Waste Section, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

19. If ground water monitoring reveals chemical parameters at concentrations significantly above background concentrations due to leachate, the Permittee shall submit a contamination assessment plan to the Department's Solid Waste Section within one hundred fifty (150) days of knowledge of exceedance. The contamination assessment plan shall provide a detailed plan for evaluating the vertical and horizontal extent of affected soils and ground water.

C. *Processing Additional Information*

The Permittee shall send all appropriate submittals to the SWSSWD of the DEP to the following address:

Florida Department of Environmental Protection
Solid Waste Section
3804 Coconut Palm Drive
Tampa, FL 33619

XXII. FEDERAL ANNUAL OPERATING PERMITS AND FEES

A. *DEP Responsibilities*

The Department of Environmental Protection shall implement the provisions of Title V of the 1990 Clean Air Act for the Power Plant Station (PPS) developing conditions of certification requiring submission of annual operating permit information and annual pollutant emission fees in accordance with federal law and federal regulations.

B. *TEC Responsibilities*

TEC shall submit the appropriate annual operating information as well as the appropriate annual pollutant emission fees as required by federal law to the Department.

XXIII. WETLANDS MITIGATION

A. *Procedures for the Selection of the Transmission Line ROW*

Prior to finalization of the ROW location, three (3) copies of blue-line reproductions of the aerial photographs, taken no earlier than 1991, of the corridor, at a scale of 1"= 400' with wetland locations generally identified (see Appendix 2; *editorial comment: Appendix 2 not included since blue-line reproductions are not readily incorporated*), shall be submitted to DEP, and one copy to SWFWMD delineating the certified corridor and the designated transmission line ROW, structure locations and access road locations. In addition, TEC shall note on the aerial photographs new development in the corridor. TEC shall notify all parties of such filing. This information may be submitted in segments. The agencies receiving copies of the aerial photographs from TEC shall have thirty (30) days from receipt of the photographs to review the photographs and to notify DEP of any apparent conflicts with the

requirements of the conditions of certification. However, this paragraph shall not operate to avoid the need for post-certification submittals and compliance reviews otherwise required by the conditions of certification.

After review of the aerial photographs and comments from the other reviewing agencies, if DEP has reason to believe that the construction of the transmission line, access roads, or pads within TEC's designated ROW cannot be accomplished in compliance with the conditions of certification, TEC shall be so notified in writing within forty-five (45) days from receipt of the aerial photographs. Such notice shall specify with particularity the basis for DEP's conclusion, and possible corrective measures shall be suggested. If such notice is provided, TEC may relocate the ROW within the certified corridor to address the specified concern, or TEC may proceed with design of the transmission line on the noticed ROW at its own risk that construction can be accomplished in compliance with the conditions of certification.

B. Work on the Certified Site

Prior to construction, TEC shall submit to DEP for review a detailed narrative and 8-1/2" x 11" plan view and cross-section drawings explaining and illustrating the dewatering plans and turbidity controls for each construction and reclamation phase on the certified site. The purpose of the information is to provide DEP with reasonable assurance that state water quality standards will not be violated in waters of the state during the construction and reclamation on the site.

C. Transmission Line Construction Activities

Prior to construction, TEC shall submit to DEP for review 8-1/2" x 11" plan view and cross-section drawings showing all dredge and fill, structure placement and wetland clearing necessary to construct the transmission line. The drawings shall include the dimensions and elevations of all the structures and show the areas to be cleared to the ground and restrictively cleared.

D. Off-Site Impacts

It is the responsibility of TEC to ensure that adverse off-site water resource related impacts do not occur during construction. All wetland areas or water bodies that are outside of the specific limits of construction authorized by this certification shall be protected from erosion, siltation, scouring or excess turbidity, and dewatering. TEC shall prevent adverse off-site water resource related impacts during construction as required by Condition XII.B.1. In determining the acceptability of other methods of control, DEP shall consult with SWFWMD. Off-site discharges during construction and development shall not violate state water quality standards.

E. Erosion/Runoff Control

TEC shall compact or otherwise stabilize any fill material placed around newly installed structures, to reduce erosion, turbidity, nutrient loading and sedimentation in the receiving waters.

Grass seed, mulch or sod must be installed and maintained on exposed slopes within forty-eight (48) hours of completing final grade, and at any other time as necessary, to prevent erosion, sedimentation or turbid discharges into waters of the state.

TEC shall take additional measures when necessary to prevent turbid discharges in violation of state water quality standards and to minimize off-site damage associated with erosion or turbidity. These measures may include but are not limited to the installation of turbidity barriers at all locations where the possibility of transferring suspended solids into the receiving water body exists due to the proposed construction. Turbidity barriers must be maintained in effective condition at all locations until construction is completed and disturbed soil areas are stabilized. TEC shall be responsible for implementing measures to address any sedimentation, turbidity, erosion, or shoaling problems that result from the construction, operation or maintenance of the works authorized under this certification. After fill material has been stabilized, TEC will be responsible for the removal of the barriers.

F. Wetlands Clearing

TEC shall use only restrictive clearing practices during construction and maintenance of the transmission line where it crosses wetlands. Restrictive clearing, as used in this condition, is the cutting and removal of vegetation from the wetland by hand, usually with chain saws, or with low-ground-pressure shear or rotary machines to reduce soil compaction and damage to ground cover. These methods may be used alone or in combination, as may be appropriate for specific sites. Restrictive clearing includes the removal of vegetation from areas extending from the transmission line centerline to 20 feet on each side of the outer conductors and in work areas approximately 100 feet by 150 feet around structure sites. Also, in areas where TEC may need to create access to particular structure sites via finger roads rather than a continuous access road, a path approximately 20 to 25 feet wide may be cleared to reach the site from an existing access road. If necessary, the work area around the structure and the access areas may be destumped. Removable construction matting may be used in these areas to support equipment. The stumps shall not be removed in the portion of the ROW outside of the work area and the access areas. The remainder of the ROW in wetland areas, beyond 20 feet on either side of the outer conductors, shall not be cleared to the ground; however, these areas may be restrictively cleared, in that vegetation that has an expected mature height greater than 14 feet may be removed. All cut vegetation shall be removed from the restrictively cleared areas by hand, if practicable. All invasive exotic species shall be removed from the ROW.

Herbicides shall not be applied to the cut stumps of native tree species during the initial clearing.

G. Herbicides

Herbicides used in the transmission line ROW or on the certified site shall include only those registered by the U.S. Environmental Protection Agency and which have state approval. Herbicide application rates and concentrations will be in accordance with label directions and will be carried out by a licensed applicator, meeting all federal, state, and local regulations. Herbicide applications shall be selectively applied to targeted vegetation. Broadcast or aerial application of a herbicide shall not be used in the ROW or on the certified site unless approved in writing by DEP.

H. Mitigation for Wetland Impacts

TEC shall provide mitigation as necessary to offset the wetland loss and habitat degradation resulting from the construction of this project. Prior to construction, TEC shall propose a mitigation plan and shall provide the following information to the Bureau of Wetland Resource Management to allow DEP to review the proposed mitigation plan:

1. detailed description of each wetland impact area;
2. acreage of the type and quality of wetland being impacted at each site;
3. narrative, drawings and aerial photographs showing and explaining the proposed mitigation;
4. detailed description of the existing conditions at the mitigation area;
5. acreage of the total proposed mitigation area, broken down by acreage of each mitigation type and wetland type;
6. documentation providing reasonable assurance that the proposed mitigation will be successful.

If the mitigation submittal is deemed by DEP to provide insufficient information for review, additional information requested by DEP shall be submitted. If DEP, upon review of the proposed mitigation, determines that the proposed mitigation is inadequate to offset the wetland loss and habitat degradation from this project, TEC shall propose additional mitigation.

If the proposed mitigation plan is deemed acceptable by DEP, DEP shall establish construction conditions, success criteria and a monitoring plan to be carried out for the approved mitigation. These conditions, criteria and monitoring plan shall be incorporated into the certification conditions as a minor modification.

No construction within wetland areas shall commence until DEP approves a mitigation plan, and mitigation construction conditions, success criteria and a monitoring plan are incorporated into the certification conditions.

XXIV. WETLAND RECLAMATION REQUIREMENTS

A. Permit Transfer

Prior to any construction on the certified site, the process to transfer DEP Permit No. 531620259 from Agrico Chemical Company to TEC shall be initiated and a permit modification for the same permit to change the reclamation plan shall be submitted to the Bureau of Wetland Resource Management for review. The mining authorized in the above referenced permit shall be allowed to proceed as described in the permit pursuant to the conditions in the permit.

B. Planting Plans

Prior to construction, TEC shall submit final planting plans for all areas to be reclaimed as wetlands. The plans shall include plan views and cross-sections showing the species to be planted at the various elevations. The plans shall specify the size of the plants to be planted and the source of the plants.

C. Management Plan

Prior to construction, a detailed management plan for the reclaimed wetlands shall be submitted to DEP for review. The approved plan shall be made part of this certification. Upon approval, the plan shall be fully implemented. The management plan shall include, but not be limited to, frequent assessment and regular removal, if present, of any nuisance and exotic species and supplemental plantings of wetland species (including groundcover, shrubs and trees) to simulate a natural floristic composition in the shrub and groundcover strata in the forested wetlands. Specific details for all aspects of the plans shall be included, such as specific time intervals for nuisance species assessments and planting densities. The management and maintenance actions shall be fully described in the required annual monitoring reports.

D. Biological Consultant

In order to ensure that the wetland reclamation is correctly implemented, a qualified biological consultant shall oversee the earthmoving, mucking, grading, planting, and monitoring required for the reclamation plan. Prior to the commencement of any reclamation activities, TEC shall submit to DEP for review and approval the name of the biological consultant and supporting documentation that the biological consultant is qualified to oversee the work. The biological consultant must have documented experience in successful reclamation. Any proposed change in the biological consultant during the life of the facility shall be submitted to DEP for review and approval.

E. Hardwood Forest Reclamation

TEC shall plant the 31 acres to be reclaimed as hardwood forest with a mixture of woody species at a density of 800 trees/acre. The species shall be a mixture, including but not limited to, the following species: *Acer rubrum* (red maple), *Gordonia lasianthus* (loblolly bay), *Fraxinus caroliniana* (pop ash), *Nyssa sylvatica* var. *biflora* (black gum), *Magnolia virginiana* (sweet bay), *Liquidambar styraciflua* (sweetgum), *Ilex cassine* (dahoon holly), *Persea palustris* (swamp bay), and *Ulmus americana* (elm). In addition to the woody species, these areas shall be planted on 3-foot centers with a mixture, including but not limited to, the following herbaceous species: *Panicum hemitomon* (maidencane), *Pontederia cordata* (pickerelweed), *Sagittaria* sp. (arrowhead), *Saururus cernuus* (lizard's tail), *Woodwardia* sp. (chain fern), and *Juncus* sp. (bog rush). The woody species and the herbaceous species shall be planted at elevations within the reclaimed wetland that will provide hydroperiods appropriate for the species.

F. Mixed Forest Reclamation

TEC shall plant the 38 acres to be reclaimed as mixed forest with *Taxodium distichum* (bald cypress) in addition to the woody and herbaceous species listed for the hardwood forest areas at densities specified for the hardwood forest areas. The woody species and the herbaceous species shall be planted at elevations within the reclaimed wetland that will provide hydroperiods appropriate for the species.

G. Herbaceous Wetland Reclamation

TEC shall plant the 252 acres to be reclaimed as herbaceous wetlands with a mixture, including but not limited to the following herbaceous species: *Panicum hemitomon* (maidencane), *Pontederia cordata* (pickerelweed), *Sagittaria* sp. (arrowhead), *Spartina bakeri* (cordgrass), *Thalia geniculata* (arrowroot), and *Juncus* sp. (bog rush). These herbaceous species shall be planted at elevations within the reclaimed wetland that will provide hydroperiods appropriate for the species.

H. Surveying and Mapping

Within thirty (30) days of achieving final grade, cross sections of the wetland reclamation areas shall be resubmitted to DEP. The cross sections shall meet the following criteria:

1. They shall clearly depict the wetland topography in such a way as to unambiguously show how the site will retain, detain, shed, or otherwise influence the flow and detention of water at the site;
2. They shall be certified by a registered land surveyor;
3. They shall show any hydrologic connections between the reclaimed and adjacent, existing wetlands; and,
4. They shall show the variations of topographic relief within the graded areas.

I. Organic Soil Placement

To provide for a more hospitable root zone environment and to foster better water quality in the short term, DEP encourages TEC to place organic soils or muck to a minimum depth of four inches on as much of the reclaimed wetlands on the site as possible and requires that organic soils or muck be placed on the seven acres of wetlands to be reclaimed pursuant to DEP Permit No. 531620259. An alternative that would be acceptable to the Department would be to cap the wetland area with mucky sand rather than overburden. Mucky sand, for purposes of the condition, is defined as a fine sand with six (6) percent or greater organic content, if tested by the Walkley-Black method.

J. Plant Stock Requirements

The plants used to plant the mitigation areas shall be container-grown, nursery stock. "Container-grown stock" means plants grown in containers from cuttings or seeds. The plants shall originate from within a 50 mile radius of the site or within the same SCS sub-hardiness zone as the mitigation site.

K. Reclamation Success Goals

1. Freshwater herbaceous wetland

Freshwater herbaceous wetland reclamation shall be considered successful when the following conditions are met:

a. Percent cover by non-nuisance, non-exotic wetland species shall be 80 percent or more. Percent covers for the aggregate of those wetland species, and of non-wetland species, bare ground and water shall be reported relative to the total area. A list of the wetland species included in the aggregate shall be included. Wetland species shall be those listed in Rule 62-301.400, F.A.C.;

b. Nuisance species, such as *Mikania scandens* (climbing hempvine), *Typha* sp. (cattail) and *Ludwigia peruviana* (primrose willow), and exotic species are limited to ten (10) percent or less of the total cover with no one species being more than five (5) percent of the total cover. If these species exceed ten (10) percent of the total cover, their density must be declining over several years, which would be considered a positive indication that they are under control;

c. The reclaimed wetlands are constructed in accordance with the conditions of certification.

These criteria must all be met at least one year after connection to waters of the state for sites that are severed from waters of the state during some or all of the establishment phase.

2. Forested wetland reclamation shall be considered successful when the following conditions are met:

a. An average of at least 400 wetland trees per acre shall be growing above the herbaceous stratum;

b. The wetland species tree cover shall exceed thirty (33) percent of the total area and in no area of an acre in size shall the tree cover be less than twenty (20) percent total cover. Cover measurement shall be restricted to (1) those trees exceeding the herbaceous stratum in height and (2) those indigenous species that contribute to the overstory of the mature forest of the South Prong of the Alafia River and the Peace River and its tributaries and that are wetland vegetation listed in Rule 62-301.400, F.A.C.

c. At least eight (80) percent of obligate groundcover (herbaceous) and obligate shrub (non-canopy woody species) vegetation shall be among those species listed in Rule 62-301.400, F.A.C., and shall be reproducing naturally, either normal, healthy, vegetative spread (in ways that would be normal for each wetland species) or through seedling establishment, growth and survival. Nuisance species such as *Mikania scandens* (climbing hempvine), *Typha* sp. (cattail) and *Ludwigia peruviana* (primrose willow), and all exotic species shall be limited to 10 percent or less of the total cover with no one species being more than five percent of the total cover. If these species exceed ten (10) percent of the total cover, their density

must be declining over several years, which would be considered a positive indication that they are under control;

d. The reclaimed wetlands are constructed in accordance with the conditions of certification.

These criteria must all be met at least one year after connection to waters of the state for sites that are severed from waters of the state during some or all of the establishment phase.

L. Reporting

TEC shall furnish to DEP annual statistical reports of vegetational sampling of the reclaimed wetlands done by any mutually agreed-upon method. Acceptable methods may be found in Daubenmire (1968), Green (1979), Grieg-Smith (1983), Mueller-Dombois and Ellenberg (1974), Oosting (1956), Poole (1974), and Southwood (1978). It is the responsibility of TEC to ensure that the monitoring report provides a qualitative and quantitative depiction of the site that is representative of the conditions at the entire site.

This report shall include on the cover page, just below the title, the certification of the following statement by the individual who supervised preparation of the report: "This report represents a true, accurate, and representative description of the site conditions present at the time of monitoring." This report shall also contain the following:

1. A monitoring plan describing sampling methods and report format, and map of sampling locations and photographic stations shall be submitted to the Department for review and approval within sixty (60) days after certification issuance and prior to the first monitoring event.

2. Annual statistical reports describing as appropriate for each reclamation area: (1) the density and percent cover of listed trees, and (2) percent cover of listed and non-listed herbaceous species, bare ground and water. For forested wetlands, reports on canopy cover shall be submitted for not less than the third, fifth, and any subsequent years after planting until a determination of a successful reclamation has been made. Data for listed nuisance or exotic species shall be tabulated separately from the remaining data. A listed species is one listed in Rule 62-301.400, F.A.C. Reports shall also include an assessment of the jurisdictional status of each reclamation area. Data shall be taken during the summer growing season. Reports shall be submitted annually within sixty (60) days of data acquisition until a determination of a successful wetland reclamation has been made. The first annual statistical report data gathering shall occur not later than one (1) year after planting.

M. *Review of Reclamation/Mitigation*

Following implementation of the reclamation plan, monitoring shall be performed, following the methods established in the monitoring section, until a determination of a successful reclamation is obtained. At the end of the first three (3) years of monitoring, TEC may request in writing that the monitoring program be reviewed by the DEP to determine whether or not the frequency or parameters of the monitoring program should be changed.

If it is determined by DEP staff, based on visual inspection and review of the monitoring reports that the reclamation is not trending toward success, TEC shall present within thirty (30) days of DEP's notification a plan of corrective actions containing methods and proposals to be reviewed and approved by the DEP to ensure success of the reclamation effort. The plan of corrective actions shall be implemented within ninety (90) days of written approval by DEP.

N. *Dragline Walk Path*

TEC shall retain an easement along the west side of State Road 37 sufficiently wide for use as a drag-line walk path. TEC shall be responsible for notifying the Siting Coordination Office, and the Department's Bureau of Mine Reclamation of a proposed usage of the drag-line walk path on the west side of SR 37 at least fifteen (15) days prior to the event. With the notification, TEC shall provide the Bureau of Mine Reclamation and the Southwest District Office with certified drawings showing the proposed modifications to jurisdictional wetland areas. Within twenty-four (24) hours of the dragline crossing, any wetlands that were impacted by the crossing, shall be restored to original grade and stabilized by either planting or sodding. Use of the drag-line walk path for a future transmission line corridor will require TEC to submit an amendment to the original application and to submit a petition for modification of the applicable conditions of certification.

O. *Responsibility for Reclamation Success*

TEC shall retain full responsibility for the reclamation of those lands within the original site lying west of State Road 37 until reclamation areas achieve the success criteria listed in the above Conditions of Certification and TEC receives a written notification from the DEP releasing them from said responsibility. The transfer of title for the land to Polk County and its designated land manager shall not release TEC of its responsibility to reclaim the site successfully.

XXV. MINE RECLAMATION CONDITIONS

A. Conceptual Plans

The conceptual plan modification TEC-PPS-CP and variance TEC-PPS-V1 applications are to be incorporated into the DEP's siting certification process as part of the TEC's Polk Power Station Site Certification Application. Final agency action on these applications by the Governor and Cabinet, sitting as the Siting Board, shall take place simultaneously with the Site Certification Application under the provisions of the Florida Electric Power Plant Siting Act (FEPPSA), pursuant to Sections 403.501-403.517, F.S. Approval of the conceptual plan modification application, AGR-FG-CPG, and variance application, AGR-FG-TEC-V1, as part of the site certification of the PPS does not warrant the suitability of subject lands for any current or proposed land use and does not constitute a statement, admission, or waiver by the state of Florida concerning ownership of any interest in the subject lands within the PPS site or the conceptual plan area. Approval of the conceptual plan modification and variance applications does not relieve IMC Phosphate Company, Cytec Industries Incorporated and/or the current land owner or mine operator from the obligation to comply with the requirements, standards, and criteria set forth in Chapter 62C-16, F.A.C.

B. Changes In Ownership

All changes in land ownership, within the lands specifically identified in the TEC's Site Certification Application as the PPS site, shall be reported to the DEP's Siting Coordination Office and the Bureau of Mine Reclamation no later than thirty (30) days after the effective date of such changes, pursuant to Subsection 62C-16.006(6), F.A.C. This notification shall be in the form of a legal contract of sale or transfer agreement between TEC and the entity(ies) claiming a fee interest in the affected lands. The contract/agreement shall appropriately identify the rights, duties, and responsibilities that shall be assumed and delegated by the transferee and each applicable operator, and shall be signed by the transferee and the applicable operators.

C. Reclamation/Restoration

The TEC shall reclaim and restore all lands within the 4,348-acre PPS site as depicted and described in the TEC's Site Certification Application and in TEC's conceptual plan modification application, TEC-PPS-CPA, in accordance with the required time schedules in Condition XXV.D and in a manner which will yield the following total (including non-mandatory acreages) post-reclamation land use acreages: 3 acres of transportation routes; 321 acres of industrial use as power plant associated facilities; 730 acres of improved pasture; 18 acres of citrus; 544 acres of shrub and brushland; 6 acres of mixed rangeland; 55 acres of upland hardwood forest; 774 acres

of upland mixed forest; 264 acres of lakes; 834 acres of cooling reservoir; 61 acres of wetland hardwood forest; 310 acres of wetland mixed forests; and 428 acres of herbaceous wetlands. Of the total site acreage, 523 acres are non-mandatory acres and will exist as 201 acres of improved pasture, 4 acres of shrub and brushland, 6 acres of mixed rangeland, 29 acres of upland hardwood forest, 34 acres of upland mixed forest, 165 acres of lakes, 40 acres of wetland hardwood forest, 11 acres of wetland mixed forest, and 33 acres of herbaceous wetlands.

D. Time Tables

The TEC shall carry out and complete all reclamation and restoration activities in Tract A, all lands east of State Road 37, and Tract B, all lands west of State Road 37, within the Polk Power Station site in accordance with the following time tables:

TRACT	CONTOURING		REVEGETATION		ESTABLISHMENT	
	BEGINS	ENDS	BEGINS	ENDS	BEGINS	ENDS
A	06/94	11/95	12/95	05/96	06/96	05/97
B*	10/94	03/96	04/96	09/96	10/96	09/97

* In lieu of reclamation and restoration, TEC shall donate 1,511 acres of land in Tract B of the Polk Power Station site in Polk County to Polk County, donate 589 acres of submerged lands adjacent to the Cockroach Bay Aquatic preserve to the Tampa Bay Port Authority, and abide by the Conservation Easement for uplands adjacent to Cockroach Bay in Hillsborough County as granted to the State of Florida Board of Trustees in consideration for the variance to phosphate mine reclamation requirements and to provide significant regional benefit to wildlife and the environment as required for variances in accordance with Section 378.212(1) Florida Statutes. Such donation and transfer of ownership shall be as attached as Exhibit 1 hereto and as described in the Easement recorded in Hillsborough County Public Records Official Record Book 12822, Pages 1397 thru 1423; and the Conservation Easement as recorded in Hillsborough County Public Records Official Record Book 12822, Pages 1424 through 1452.

E. Standards

The TEC shall carry out and complete all reclamation and restoration activities within the Polk Power Station site in accordance with the required time schedules as previously stated in Condition XXV.D. and in accordance with the requirements, criteria, and standards as set forth in Section 16.0051, F.A.C., with the following exceptions:

Variances for the following rules adopted pursuant to Chapter 378, F.S. shall be granted in accordance with the provision of Subsection 378.212(1)(a), F.S.:

1. No minimum annual zone of fluctuation shall be required for the 834-acre cooling reservoir, rather than the twenty-five (25) percent required by Subsection 62C-16.0051(5)(a), F.A.C.;

2. Approximately eight (8) percent (60 acres) of the low water surface of the cooling reservoir will consist of a zone between the annual low water line and six feet below the annual low water line to provide fish bedding areas and submerged vegetation zones, rather than the 20 percent required by Subsection 62C-16.0051(5)(b), F.A.C.; and,

Variances for the following rules adopted pursuant to Chapter 378, F.S. shall be granted in accordance with the provision of Subsection 378.212(1)(f), F.S.:

3. The herbaceous and mixed forest wetlands shall be reclaimed in reduced amounts, rather than the acre-for-acre and type-for-type restoration required by Subsection 62C-16.0051(4), F.A.C.

4. No minimum zone of annual fluctuation shall be required for lakes west of SR 37, rather than the 25% required by Subsection 62C-16.0051(5)(a), F.A.C.

5. Some islands within the reclaimed lakes west of SR 37 may have steeper slopes than the 4:1 slopes required by Subsection 62C-16.0051(2)(a), F.A.C.

F. Right of Entry

All authorized representatives of the Department, on presentation of appropriate credentials to the applicable land owner and/or mine operator, or its authorized representatives, shall have the right of entry to, on, or through all lands subject to Chapter 62C-16, F.A.C. Inspections shall be conducted in accordance with the requirements mandated in Subsections 62C-16.0067(1)-(9), F.A.C.

G. Release Procedures

Upon fulfillment of the requirements, standards, and criteria, as dictated above in Conditions XXV. B. and C., within Tracts A and B of the TEC's PPS site, the authorized agent of the TEC or the applicable land owner shall submit a release request to the Department that identifies the post-reclamation land use acreages to be released. The release request shall include a statement certifying that the requirements, standards, and criteria, as required in the Conditions XXV.B.,C.,D.,E., and F. above, have been met. This request shall be submitted to:

The Department of Environmental Protection

The Bureau of Mine Reclamation
2051 Paul Dirac Drive,
Tallahassee, Florida 32310.

Release procedures shall be followed in accordance with the requirements set forth in Subsections 62C-16.0068(2) - (6), F.A.C.

H. Cockroach Bay

After transferring ownership of the approximately 589 acres of submerged lands in Hillsborough County adjacent to the Cockroach Bay Aquatic Preserve to the Tampa Bay Port Authority, and the Conservation Easement uplands and wetlands to the State of Florida Board of Trustees, as described in Condition XXV.D. above and Exhibit 1, TEC shall provide the State with easements for access and for management purposes including permanent State access to the uplands north of the Reeder property and at the shell pits located at the southwest side of the parcel as described in Exhibit 1. If TEC should decide to sell lands they hold in ownership that buffer the 1433 acres of uplands property, TEC shall offer a public entity including the State, Hillsborough County, or Southwest Florida Water Management District, or a non profit entity, whose mission is conservation, the right of first refusal.

XXVI. SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

A. Water Use Permitting Conditions

1. If any of the statements in the application and in the supporting data are found to be untrue and/or inaccurate, or if TEC fails to comply with all of the provisions of Chapter 373, F.S., Chapter 40D, F.A.C., or the conditions set forth herein, the SWFWMD shall initiate action for suspension or revocation of certification.

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

3. TEC shall not deviate from any of the water use related terms or conditions of the site certificate without written approval by the SWFWMD.

4. In the event the SWFWMD declares that a water shortage exists pursuant to Chapter 40D-21, F.A.C., the SWFWMD shall initiate any required action to alter, modify, or declare inactive all or parts of this certification as necessary to address the water shortage.

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

6. The SWFWMD shall initiate any necessary action to require TEC to cease or reduce withdrawal if water levels in aquifers fall below the minimum levels established by the Governing Board.

7. TEC 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 Governing Board adopts specific conservation requirements for TEC's water use classification, the SWFWMD shall initiate any required action to make this certification subject to those requirements upon notice and after a reasonable period for compliance.

8. The SWFWMD may establish special regulations for permits within the regions designated a Water Use Caution Area. If the SWFWMD has established, or establishes in the future, a Water Use Caution Area for the region that encompasses this certificate, at such time as the Governing Board adopts such special regulations, the SWFWMD shall initiate any required action to make TEC subject to them upon notice and after a reasonable period for compliance.

9. TEC shall mitigate, to the satisfaction of the SWFWMD, any adverse impact to existing legal uses caused by withdrawals. When adverse impacts occur or are imminent, the SWFWMD shall require TEC to mitigate the impacts. Adverse impacts include, but are not limited to:

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

b. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams or other water courses; or,

c. Significant inducement of natural or manmade contaminants into a water supply or into a usable portion of any aquifer or water body.

10. TEC shall mitigate to the satisfaction of the SWFWMD any adverse impact to environmental features or off-site land uses as a result of withdrawals. When adverse impacts occur or are imminent, the SWFWMD shall require TEC to mitigate the impacts. Adverse impacts include the following:

a. Significant reduction in levels or flows in water bodies such as lakes, impoundments, wetlands, springs, streams, or other watercourses;

b. Sinkholes or subsidence caused by reduction in water levels;

c. Damage to crops and other vegetation causing financial harm to the owner; and,

d. Damage to the habitat of endangered or threatened species.

11. A SWFWMD identification tag shall be prominently displayed at each withdrawal point by permanently affixing the tag to the withdrawal facility.

12. TEC must notify the SWFWMD within thirty (30) days of the sale or transfer of permitted water withdrawal facilities or the land on which the facilities are located.

13. All reports required by the certificate shall be submitted to the SWFWMD on or before the tenth day of the month following data collection and shall be addressed to:

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

Unless otherwise indicated, three (3) copies of each plan or report, with the exception of pumpage, rainfall, evapotranspiration, water level or water quality data which require one copy, are required by the certification.

14. Subject to the provisions of Condition XXVI.A.27, TEC is authorized to withdraw from the Upper Floridan aquifer in support of the 260 MW nominal net generating capacity an amount of water not to exceed 5.24 MGD Annual Average Daily and 7.4 MGD Peak Month Daily. TEC is further authorized to withdraw, in support of 1,150 MW nominal net ultimate site capacity at its Polk Power Station, up to a total of 6.4 MGD Annual Average Daily and 9.22 MGD Peak Month Daily of water from the Upper Floridan aquifer, subject to the following conditions:

The total quantity of water which TEC is authorized to withdraw from the Upper Floridan aquifer shall be limited to 6.4 MGD Annual Average Daily, which amount is determined by the SWFWMD not to have an adverse effect on other legal existing users. However, withdrawal of any water from the Upper Floridan aquifer beyond 5.24 MGD Annual Average Daily and 7.4 MGD Peak Month Daily shall be subject to additional conditions. These conditions shall be applied during review pursuant to Section 403.517, F.S., of any supplemental application for the construction and operation of additional generating units or a further increment of generating capacity at the Polk Power Station. The conditions are as follows:

a. TEC shall demonstrate that any incremental quantity of process or cooling water which it proposes to withdraw from the Upper Floridan aquifer

in support of generating units will be minimized to the greatest extent practicable by prudent technologically and economically feasible water conservation practices consistent with those generally required within the Southern Water Use Caution Area (SWUCA) of SWFWMD, including but not limited to the following:

- (1) Minimization of loss of water from the site during construction;
- (2) Use of water-conserving electric generation and pollution control technologies;
- (3) On-site rainwater and storm water capture and management;
- (4) Reuse of internal wastewater streams of technologically suitable quality;
- (5) Reuse of treated wastewater of technologically suitable quality available from other sources, such as publicly-owned sewage treatment facilities; and,
^^^
- (6) Use of other available sources of non-potable water of technologically suitable quality.

b. To the extent that total water use in the SWUCA is fixed in a manner which limits the withdrawal of Upper Floridan aquifer water for TEC's Polk Power Station, withdrawal by TEC from that source of any quantity greater than 5.24 MGD Annual Average Daily and 7.4 MGD Peak Month Daily must also be either:

- (1) Offset by retirement of permitted quantities which are actively used within the SWUCA, to the extent such quantities are eligible to provide offset, pursuant to agreements between TEC and other Permittees which are subject to review by SWFWMD for conformity with generally applicable standards; or,
- (2) Approved through the "competing application process" under the applicable standards of Section 373.233, F.S., and applicable SWFWMD rules.

c. To the extent that total water use in the SWUCA is not fixed in a manner which limits the withdrawal of Upper Floridan aquifer water for TEC's Polk Power Station, TEC may withdraw from that source up to 6.4 MGD Annual Average Daily and 9.22 MGD Peak Month Daily subject to the requirements of Condition XXVI.A.14.a.1., but not subject to those of Condition XXVI.A.14.a.2.

15. TEC shall investigate the feasibility of using reclaimed water as a water source and submit a report describing the feasibility to the Permits Data Section

by January 1, 1995. The report shall contain an analysis of reclaimed water sources for the area, including the relative location of these sources to TEC's property, the quantity of reclaimed water available, the projected date(s) of availability, costs associated with obtaining the reclaimed water, and an implementation schedule for reuse, if feasible. Infeasibility shall be supported with a detailed explanation.

16. Within ninety (90) days of completion of construction of the withdrawal facility or prior to activation of a standby source, District ID Nos. 1, 2, 3, and 4, TEC ID Nos. P1, P2, P3, and P4, shall be equipped with non-resettable, totalizing flow meters, or other measuring devices as approved in writing by the Permitting Department Director, Resource Regulation, unless an extension is granted by the Director. Such devices shall have and maintain an accuracy within five percent of the actual flow as installed. Total withdrawal and meter readings from each metered withdrawal shall be recorded on a monthly basis and reported to the Permits Data Section (using district forms) on or before the tenth (10th) day of the following month. If a metered withdrawal is not utilized during a given month, a report shall be submitted to the Permits Data Section indicating zero gallons. Prior to meter installation, non-use shall be documented with monthly pumpage reports indicating zero gallons withdrawn.

17. Water quality samples shall be collected and analyzed, for parameter(s) and frequency(ies) specified below. Water quality samples from production wells shall be collected whether or not the well is being used, unless infeasible. If sampling is infeasible, TEC shall indicate the reason for not sampling on the water quality data form. Water quality samples shall be analyzed by a Department of Health (DOH) certified laboratory under Environmental Laboratory Certification General Category "1". At a minimum, water quality samples shall be collected after pumping the well at its normal rate for a pumping time specified in the table below, or to a constant temperature, pH, and conductivity. In addition, TEC's sampling procedure shall follow the handling and chain-of-custody procedures designated by the certified laboratory which will undertake the analysis. Any variance in sampling and/or analytical methods shall have prior approval of the SWFWMD Permitting Department Director, Resource Regulation. Reports of the analyses shall be submitted to the Permits Data Section (using SWFWMD forms) on or before the tenth (10th) day of the following month, and shall include the signature of an authorized representative and the certification number of the certified laboratory which undertook the analysis. The parameters and frequency of sampling and analysis may be modified by the SWFWMD Permitting Department Director, Resource Regulation, as necessary to ensure the protection of the resource.

SWFWMD ID NO	TEC ID NO.	MINIMUM PUMPING TIME (MINUTES)	PARAMETER	SAMPLING FREQUENCY
1	P1	45 minutes	Chlorides, Sulfates, TDS	Feb., May, Aug., & Nov.

Water quality samples shall be collected based on the following time table:
Quarterly Same week of months specified

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

18. During drilling of SWFWMD ID Nos. 1 and 4, TEC ID Nos. P1 and P4, water quality samples shall be collected at intervals of 50 feet or less, from 300 feet to a maximum depth of five feet above the bottom of the well. Regardless of the specified sample collection interval, a sample shall be collected from the depth which corresponds to five feet above the bottom of the well. Samples shall be collected during reverse air drilling or other appropriate method with prior approval by the SWFWMD Permitting Department Director, Resource Regulation, which will allow representative samples for each depth to be collected. Samples shall be analyzed by a certified laboratory for chlorides, sulfates, and TDS. TEC's sampling procedure shall follow the handling and chain-of-custody procedures designated by the certified laboratory which will undertake the analysis. Reports of the analyses shall be submitted to the Permits Data Section (using SWFWMD forms) within thirty (30) days of sampling, and shall include the signature of an authorized representative and the certification number of the Department of Health (DOH) certified laboratory under Environmental Laboratory Certification General Category "1" which undertook the analysis.

Analyses shall be performed according to procedures outlined in the current edition of *Standard Methods for the Examination of Water and Wastewater*, by the (APHA-AWWA-WPCF) or *Methods for Chemical Analyses of Water and Wastes*, by the U.S. Environmental Protection Agency.

19. Within ninety (90) days of completion of construction of the first phase power generation facility, TEC shall install and maintain a continuous recording rain gauge in the area around SWFWMD ID No. 1. Total daily rainfall shall be recorded at this station and submitted to the Permits Data Section, on SWFWMD forms on or before the tenth day of the following month. The reporting period for these data shall begin on the first day of each month and end on the last day of each month. Final location shall be submitted plotted on an original blue-line aerial map or United States Geological Survey quadrangle map, or by providing latitude - longitude location.

20. Any wells not in use and in which pumping equipment is not installed shall be capped or valved in a water tight manner in accordance with Chapter 62-532.500(3)(a)(4), F.A.C.

21. TEC shall construct the proposed wells according to the surface diameter and casing depth specifications below. The casing depth specified is to prevent the unauthorized interchange of water between different water bearing zones. If a total depth is listed below, this is an estimate, based on best available information, of the depth at which high producing zones are encountered. However, it is TEC's

responsibility to have the water in the well sampled during well construction, before reaching the estimated total depth. Such sampling is necessary to ensure that the well does not encounter water quality that cannot be utilized by TEC, and to ensure that withdrawals from the well will not cause saltwater intrusion.

SWFWMD ID NO.	TEC ID NO.	SURFACE DIAMETER	MINIMUM CASING DEPTH	ESTIMATED TOTAL DEPTH
1	P1	10 in.	300 ft.	900 ft.
2	P2	10 in.	300 ft.	900 ft.
3	P3	24 in.	300 ft.	900 ft.
4	P4	24 in.	300 ft.	900 ft.

- a. The casing shall be continuous from land surface to the minimum depth stated above;
- b. All well casing (including liners and/or pipe) must be sealed with neat cement grout to the depth specified above;
- c. The proposed wells(s) shall be constructed of materials that are resistant to degradation of the casing/grout due to interaction with water of lesser quality. A minimum grout thickness of two (2) inches is required on wells four (4) inches or more in diameter.
- d. A minimum of twenty (20) feet overlap and two (2) centralizers is required for public supply wells, and all wells six (6) inches or more in diameter.
- e. The finished well casing depth shall not vary from these specifications by greater than ten (10) percent unless advance approval is granted by the Permitting Department Director, Resource Regulation, or the supervisor of the Well Construction Permitting Section in Brooksville.
- f. Advance approval from the Permitting Department Director, Resource Regulation is necessary should TEC propose to change the well location or casing diameter.

22. Within six (6) months of site certification issuance, TEC shall submit a detailed plan for a long-term aquifer performance test (APT) for approval by the Permitting Department Director, Resource Regulation. The test shall be conducted for a sufficient period of time to determine the leakance parameter between the surficial and intermediate aquifers and the leakance parameter between the intermediate and Upper Floridan aquifers. The test shall be conducted for a minimum of seven (7) days, and shall include collection of water quality data (see Condition XXVI.A.21 for water quality parameters). Attempts will be made to conduct the test during a period of minimal adjacent pumpage and during a period of minimal rainfall to minimize interference with the test. This test shall take place prior to initiation of pumpage from

these wells. A report of the results of the test, including all raw data and analyses, shall be provided to the Permits Data Section within thirty (30) days of the completion of the test.

If any of the aquifer characteristics vary significantly from those used in the ground water flow model submitted with the certification, TEC shall submit an updated ground water flow model upon notification by the Permitting Department Director, Resource Regulation. This model shall utilize the actual aquifer characteristics determined during the APT to predict impacts due to ground water withdrawals at this site. If the new modeling (if required) indicates that there are adverse impacts not indicated in the SCA, TEC may be required to amend the Site Certification.

23. By January 1, 1998, TEC shall submit for approval by the Permitting Department Director, Resource Regulation, a water conservation plan for the purposes of documenting the current ground water use for each aspect of the plant's water use operations, and the existing and proposed water conservation programs which are, or will be, implemented to conserve ground water at the plant. The plan shall address the following:

a. Current Plant Operation

(1) For ground water and recycled surface water sources, separately document the processes which use water, and the magnitude of the use in terms of average annual and peak monthly quantities;

(2) For ground water and recycled surface water sources, separately document the range in monthly water use for each process;

(3) For ground water and recycled surface water sources, separately document the factors which contribute to monthly fluctuations in water use; and,

(4) Describe the methods used to determine the range in water use and the methods used to determine the factors which contribute to the water use fluctuations.

b. Future Plant Operation

(1) Determine processes which can be modified to reduce ground water dependency;

(2) Propose conservation measures for reducing ground water use and provide implementation dates; and,

(3) Propose methods for calculating the effectiveness of water conservation methods in Condition XXVI.A.23.b.2. above.

24. Prior to dewatering within 2,640 feet of a property boundary, TEC shall comply with one of the following two (2) alternatives:

a. Secure written consent from all adjacent property users for lowering the water table below their lands. Three copies of the consent shall be submitted in writing to the Permitting Department Director, Resource Regulation prior to dewatering within the specified distance. This alternative cannot be used if adjacent lands contain wetlands or other water bodies within 2,640 feet of TEC's dewatering activity.

b. Implement a procedure to mitigate impacts by maintaining the water table at historic levels at the property boundary. TEC must obtain approval from the Permitting Department Director, Resource Regulation. The procedure shall include Conditions XXVI.A.26.a.,b.,c.,d., and e.

25. Prior to dewatering within 2,640 feet of an on- or off-site wetland that is greater than 0.5 acre in size and will not be disturbed in association with this certification, TEC shall implement a procedure to mitigate impacts by maintaining the water table at historic levels beneath such wetlands or at the property boundary for off-site wetlands. Prior to implementation, TEC must obtain approval, in writing, from the Permitting Department Director, Resource Regulation. The procedure shall include:

a. A water table monitoring network, approved by the Permitting Department Director, Resource Regulation, designed to demonstrate that water table drawdown does not exceed one foot under on-site wetlands that will not be disturbed.

b. Collection of water table level data after construction of the approved monitor well network for at least six (6) months prior to the initiation of dewatering in the area, to obtain background data. During this time period, water level data shall be recorded on a weekly basis and submitted monthly.

c. If a rim-ditch system is proposed to recharge the water table near on-site wetlands that will not be disturbed, design and operation details must be submitted to demonstrate that the water table will be maintained at appropriate levels based on the background data collected. Rim-ditch systems must also be accompanied by a monitor well network to verify water table maintenance.

d. At least one (1) month prior to the anticipated date of dewatering an area within the setback distance, water level data shall be recorded and submitted on a weekly basis.

e. Data collection shall continue for six (6) months following completion of dewatering and reclamation or until SWFWMD staff determine that background or steady-state levels are attained. During this time period, water level data

shall be recorded on a weekly basis and reported monthly. Water levels shall be reported in feet relative to the National Geodetic Vertical Datum (N.G.V.D.).

26. TEC's current development schedule for ultimate site capacity at the Polk Power Station estimates incremental additions of generating capacity at an approximate average rate of approximately 72 MW (range of 65 to 220 MW) every two (2) to three (3) years for the period 1995 through 2010, both inclusive, for a total of approximately 1,150 MW nominal net generating capacity. The following additional requirements shall apply in order to ensure that TEC does not unnecessarily deprive other users of ground water:

a. In each supplemental application for the construction and operation of a further increment of generating capacity at the Polk Power Station, TEC shall indicate:

(1) Whether it has determined not to install any prior or subsequent increment of generating capacity;

(2) The basis for delay in the installation of any increment of generating capacity for more than five (5) years beyond the estimated schedule; and,

(3) The quantity of ground water from the Upper Floridan aquifer which any such increment of capacity that has been eliminated or delayed would have required.

b. If TEC has determined not to install any increment of generating capacity or in the absence of a reasonable basis for a delay greater than five (5) years, the quantity of ground water which TEC is authorized to withdraw from the Upper Floridan aquifer in support of ultimate site capacity may be reduced accordingly.

27. Prior to initiation of withdrawals from the proposed production wells in amounts in excess of 3.14 MGD Annual Average Daily and 5.8 MGD Peak Month Daily ground water quantities for the first phase, and 4.3 MGD Annual Average Daily and 7.6 MGD Peak Month Daily quantities for buildout, TEC must submit a detailed plan of study, including a detailed cost analysis for the treatment and reuse of the 2.1 MGD of cooling reservoir blowdown water (wastewater) that is proposed to be discharged to prevent the water quality in the cooling reservoir from exceeding Class III Florida water quality standards. This plan must address, but is not limited to: the initial investment capital costs for construction of the treatment facilities, operational costs of the treatment facility on an annual basis, costs associated with construction of the brine storage area, and the average cost to store and/or dispose of the brines on- or off-site. The study must also include a comparison of the above mentioned costs with the total budgeted project cost. TEC will also address the feasibility of reuse of treated wastewater of technologically suitable quality available from other sources, such as publicly-owned sewage treatment facilities, and the feasibility of use of other available sources of non-potable water of technologically suitable quality. The study shall be

submitted to the Permitting Department Director, Resource Regulation. Based on the information submitted, the SWFWMD Governing Board shall determine whether or not treatment of the wastewater is feasible. If the SWFWMD Governing Board, subject to approval pursuant to the site certification modification process, determines that treatment of this wastewater is economically feasible, then the first phase Annual Average Daily and Peak Month Daily ground water quantities shall be maintained at 3.14 MGD and 5.8 MGD, respectively, and the build-out Annual Average Daily and Peak Month Daily quantities shall be maintained at 4.3 MGD and 7.6 MGD, respectively. If the SWFWMD Governing Board determines that treatment of this wastewater is economically infeasible, the quantities shall not change for the first phase.

If the SWFWMD Governing Board determines that treatment of the wastewater is infeasible for the first phase of the project, TEC shall submit a revised plan of study prior to any subsequent increases in power generation capacity and the corresponding increase in ground water requirements. If during the review of any of the subsequent plans of study the SWFWMD Governing Board determines that treatment of the wastewater is economically feasible, the Annual Average Daily and Peak Month Daily quantity shall be reduced by 2.1 MGD and 1.6 MGD, respectively, from the quantities indicated in SWFWMD Water Use Condition XXVI.A.14. subject to approval pursuant to the site certification modification process.

B. Surface Water Management

1. TEC shall provide post-certification submittals to the SWFWMD to ensure that the construction, operation and maintenance of the surface water management system will be in compliance with the Conditions of Certification and the rules of Chapter 40D-4, F.A.C., in effect at the time of post-certification submittals. The TEC shall consult with the SWFWMD surface water permitting staff prior to finalization of construction designs, plans, specifications and locations of project facilities to coordinate and foster mutual understanding of construction designs, techniques and regulatory objectives which are to be reflected on any post-certification review information submittals.

Three (3) sets of the post-certification submittals for the surface water management system shall be sent to the Southwest Florida Water Management District, Bartow Service Office, 170 Century Boulevard, Bartow, Florida 33830. If SWFWMD staff does not issue a written request within thirty (30) days of receipt of the information, the information will be deemed to be complete and sufficient. Within ninety (90) days of the determination by SWFWMD staff that the additional information is complete and sufficient, the SWFWMD shall determine and notify the TEC in writing whether the proposed activities conform to SWFWMD criteria, as required by Chapter 40D-4, F.A.C., and the Conditions of Certification. Construction activities which impact works of the SWFWMD or have surface water management impacts shall not begin until the SWFWMD has determined that the activities are in compliance with the applicable

SWFWMD rule criteria and Conditions of Certification, either in writing or by failure to notify the TEC in writing.

The following information shall be provided to the SWFWMD by the TEC for further post-certification regulatory review:

a. At least one hundred twenty (120) days prior to commencement of construction of the linear facilities, copies of blue-line reproductions of aerial photographs of at least 1:400 scale shall be submitted to the SWFWMD delineating the ROW routes selected, boundaries, preliminary pole and pad locations and access roads. The SWFWMD and any other party who requests to do so shall have thirty (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 TEC's attention. However, this condition shall not operate to avoid the need for post-certification submittals and compliance reviews otherwise required by the Conditions of Certification.

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

The TEC shall, where practicable, utilize adjacent existing public roads for access to the linear facility rows for construction, operation and/or maintenance purposes. Finger roads connecting the existing roads to transmission lines, structure pads and access roads must be constructed in a manner which minimizes changes to natural drainage flows and adverse water resource impacts.

The acquisition of a particular ROW or the expenditure of funds toward acquisition of a particular ROW prior to post-certification review pursuant to these conditions will be at the TEC's 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.

b. At least one hundred twenty days (120) days 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 SWFWMD for a determination of compliance with Chapter 40D-4, F.A.C., and the Conditions of Certification, as appropriate. "Construction" activities for which such review is required shall include those activities as defined in Rule 40D-4.021(13), F.A.C., and includes, but is not limited to, installation of all surface water and storm water management facilities, the placement of structure pads, dredging and filling, the installation of access/maintenance roads and culverts and fill materials, and related

activities in circumstances where a permit from the SWFWMD would ordinarily be required. The TEC will provide appropriate final site information and construction drawings, engineering design calculations, operating and maintenance procedures (all designed and sealed 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, F.S.), mitigation/compensation measures and other explicit supporting information for various project phases that are applicable to surface water or storm water management systems. This information shall be sufficiently provided in scope, content and detail to demonstrate compliance with the surface water regulation requirements of Chapter 40D-4, F.A.C., and the Conditions of Certification.

(1) For all construction activities resulting in and adjacent to wetlands, the following information shall be provided as a minimum:

(a) Provide a certified survey or other form of accurate and reproducible means of depicting the field verified wetland limits and clearly indicate these limits on the construction drawings.

(b) Provide a numbering system for all on-site wetlands (including those less than 0.5 acre) and for each wetland clearly indicate the index number on the construction drawings. In tabular form, please indicate for each wetland the index number, on-site acreage, impact acreage, and indicate whether the wetland has been claimed by the SWFWMD, the ACOE, and/or DEP.

(c) Conduct a habitat assessment of each of the proposed wetland impact areas. Describe the type and function and include the dominant floral and faunal species for each distinct vegetative zone and stratum.

(d) Submit a sufficiently comprehensive wetland mitigation/compensation plan to provide reasonable assurance of the successful replacement of the proposed impact wetlands values and functions. Include all design details of the wetland mitigation/compensation areas on the construction drawings. Details should include plan and cross-sectional views showing limits of each distinct zone in reference to proposed control elevations, proposed plantings (species, relative compensation, sizes, and densities) within each zone, mulching details, proposed water elevations (Seasonal High Water Level and Normal Pool), bottom elevations, slopes, and schedules for wetlands compensation, grading, mulching, planting of the mitigation areas, etc.

(e) Provide a monitoring and maintenance plan for the wetland mitigation/compensation areas. Sampling design and methodology must clearly demonstrate that the sampling methods and intensity are sufficient to accurately characterize each vegetative zone and stratum in a reproducible manner.

(2) For all construction activities related to linear facilities, the following information shall be provided as a minimum:

- (a) A centerline profile of existing topographic features along the proposed linear facilities corridor(s) sufficient to show contours, drainage patterns, and wetland limits;
- (b) Construction plans and designs of the proposed access/maintenance and finger road(s) with elevations, dimensions, and wetland limits 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; and,
- (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.

2. TEC shall avoid impacting wetlands by construction of the linear facilities wherever practicable. If necessary and feasible, the location of and span between power poles shall be varied to eliminate or reduce wetland impacts.

3. Subsequent modifications to the drawings and supporting calculations submitted to the SWFWMD which may significantly alter the quantity and/or quality of waters discharged off-site shall also be submitted to the SWFWMD for determinations that the modifications are in compliance with Chapters 40D-4, F.A.C., as appropriate, prior to the commencement of construction.

4. The operational phase of the surface water management system authorized under this certification shall not become effective until the TEC confirms in writing, upon completion of each phase, that these facilities have been constructed consistent with the conditions of certification. Such confirmation shall include a certification by an engineer registered in the state of Florida that the facilities have been constructed in accordance with the approved project design. Within thirty (30) days after completion of construction of each phase of the surface water management

system, the TEC shall submit the confirmation, including “as-built” construction drawings with the engineer’s certification and a description of any deviations and notify the SWFWMD that the facilities are ready for inspection for consistency with the conditions of certification and information submitted hereunder.

5. The SWFWMD may initiate action to require additional post-certification monitoring requirements as a result of technical review of construction information, where necessary to demonstrate compliance with SWFWMD regulations.

6. If a situation arises in which mutual agreement cannot be reached between the TEC and an agency with 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, F.S.

7. The terms, conditions, requirements, limitations, and restrictions set forth herein are “conditions of certification” for the surface water management system and as such are binding upon the TEC and enforceable pursuant to the authority of Chapters 373 and 403, F.S. The TEC is hereby placed on notice that the SWFWMD will review this certification periodically and may initiate enforcement action for any violation of the conditions of certification for the surface water management system by the TEC, its agents, employees, servants, or representatives.

8. This certification for the surface water management system is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of certification may constitute grounds for revocation and enforcement action.

9. This certification for the surface water management system does not relieve the TEC from liability for harm or injury to human health or welfare, animal, plant or aquatic life or property and penalties therefore caused by the construction or operation of the certified system, nor does it allow the TEC to cause pollution in contravention of Florida Statutes and SWFWMD rules, unless specifically authorized by any order from the SWFWMD.

10. The TEC shall at all times properly operate and maintain the systems of treatment and control (and related appurtenances) that are installed or used by the TEC to achieve compliance with conditions of certification for the surface water management system, as required by the SWFWMD rules (Chapter 40D-4, F.A.C.). This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of certification and when required by the SWFWMD rules.

11. If, for any reason, the TEC does not comply with or will be unable to comply with any condition or limitation specified in this certification for the surface water

management system, the TEC shall immediately notify and provide the SWFWMD with the following information:

- a. A description of 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 noncompliance.

The TEC shall be responsible for any and all damages which may result and may be subject to enforcement action for penalties or revocation of the certificate.

12. In accepting this certification for the surface water management system, the TEC understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this certified source, which are submitted to the SWFWMD, may be used by the SWFWMD as evidence in any enforcement case arising under the Florida Statutes, or SWFWMD rules, except where such use is proscribed by Florida Statutes.

13. The SWFWMD may initiate any necessary action to require TEC to comply with any applicable changes in SWFWMD rules and Florida Statutes after a reasonable time for compliance, provided, however, the TEC does not waive any other rights granted by Florida Statutes or SWFWMD rules.

14. TEC shall comply with the following monitoring and record keeping requirements:

- a. Upon request, the TEC shall furnish all records and plans required under the SWFWMD rules. The retention period for all records will be extended automatically, unless otherwise stipulated by the SWFWMD, during the course of any unresolved enforcement action.

- b. The TEC shall retain, at the facility or other location designated by this certification, records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentations), copies of all reports required by this certification, and records of all data used to complete the application for this certification for the surface water management system. The time period of retention shall be at least three (3) years from the date of the sample, measurement, report or application unless otherwise specified by SWFWMD rule.

- c. Records of monitoring information shall include:

- measurements;
- (1) the date, exact place, and time of sampling or
- or measurements;
- (2) The person responsible for performing the sampling
- (3) The date(s) analyses were performed;
- (4) The person responsible for performing the analyses;
- (5) The analytical techniques or methods used; and,
- (6) The results of such analyses.

15. When requested by the SWFWMD, the TEC shall within a reasonable time furnish any information required by law which is needed to determine compliance with the certification for the surface water management system. If the TEC becomes aware that relevant facts were not submitted or were incorrect in the certification application or in any report to the SWFWMD, such facts or information shall be submitted or corrected promptly.

16. Drawings, plans, calculations, specifications or other information submitted by the TEC, not attached hereto, but retained on file at the SWFWMD office, are made a part of this certification.

17. A copy of this certification and a set of construction drawings depicting the certified system are required to be kept at the work site of the certified activity during the entire period of construction or operation.

18. Any surface water discharged from the site during construction of the project shall meet state water quality standards at the property boundary or point of discharge to wetlands or state waters. If the discharge does not meet these standards, the discharge will be immediately stopped and the SWFWMD shall be notified of action taken to correct the violation. Turbidity shall not exceed 29 N.T.U. above background level. Turbidity shall be monitored at least daily during discharge, or more often as determined by the project engineer or SWFWMD if needed, to ensure compliance.

19. The TEC and construction representatives shall assure that erosion and sediment control measures as necessary and as required by Rule 40D-4.091, F.A.C., shall be effectively implemented continuously from the beginning of project construction until completion to prevent erosion and transport and discharge of sediment to wetlands or any property other than the project area. Project detention ponds and discharge control structures which are to be constructed as part of the project shall be initially built and maintained continuously during project construction to avoid adverse impact to receiving waters or off-site lands.

20. Except as authorized by this certification for the surface water management system, any further land development, wetlands disturbance or other construction within the total land area of this site will require a review and potential modification of these conditions pursuant to Section 403.516, F.S., and in accordance with the SWFWMD's rules (Chapter 40D-4, F.A.C.).

21. All rights-of-way and easement locations necessary to construct, operate and maintain all facilities, including uplands conservation/buffer areas and wetlands which constitute the certified surface water management system, shall be reserved for water management purposes.

22. Construction of the discharge control and water quality treatment facilities which are part of the certified surface water management system shall be completed and operational prior to beneficial occupancy and use of the project development being served.

23. Establishment and survival of littoral areas provided for storm water quality treatment in wet detention systems shall be assured by proper and continuing maintenance procedures designed to promote viable wetlands plant growth of natural diversity and character. As-built drawings depicting the established wet detention treatment areas shall be submitted to the SWFWMD for inspection and approval upon completion of construction. Following as-built approval, perpetual maintenance shall be provided for the certified system.

24. Any existing wells in the path of construction shall be properly plugged and abandoned by a licensed water well contractor in accordance with Chapter 40D-3 and Rule 62-532.500(4), F.A.C.

25. Any existing septic tanks on this site shall be abandoned at the beginning of the project construction in accordance with Rule 10D-6.53, F.A.C.

26. Any existing fuel storage tanks and fuel pumps on this site shall be removed at the beginning of project construction in accordance with Rule 62-761.800(3).

27. All retention/detention pond side slopes shall be sodded and staked as necessary, to prevent erosion.

28. By issuance of this certification, the SWFWMD, its employees and representatives assume no responsibility and/or liability in regard to either the design, construction or performance of the certified facilities.

29. Any system alteration, including for augmentation into or withdrawal of water from the certified surface water management system, other than as specifically authorized by this certification will require additional SWFWMD certification consideration. The water level of detention ponds shall not be augmented by pumping

or diversion of water into the ponds to artificially control their level above the design normal or beginning storage level.

30. Information and reports required to be submitted by this certification shall be submitted to:

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

31. Construction of all surface water management facilities, excluding wetlands compensation, grading, mulching, planting of the mitigation areas, etc., must be completed prior to operation of the surface water management system.

32. The TEC shall notify the SWFWMD within thirty (30) days of the sale or transfer of ownership of land on which a surface water management system will be or is located.

33. The TEC shall perform the construction authorized in a manner so as to minimize any adverse impact of the system on fish, wildlife, natural environmental values, and water quality. TEC shall institute necessary measures during the construction period, including full compaction of any fill material placed around newly installed structures, to reduce erosion, turbidity, nutrient loading and sedimentation in the receiving waters.

34. Following review of post-certification submittals, the SWFWMD may initiate action to require additional water quality data for the storm water discharged from the surface water management system. Parameters to be monitored may include those listed in Chapter 62-302, F.A.C. 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, or *Methods for Chemical Analyses of Water and Wastes*, by the U.S. Environmental Protection Agency. If water quality data are required, the TEC shall provide data as required on volumes of water discharged from the surface water management system, including total volume discharged during the days of sampling and total monthly discharges from the property or into surface waters of the state.

35. The TEC shall obtain all necessary federal, state, local and special district authorizations prior to the start of any construction or alteration of works authorized by this certification.

36. The operation phase of this certification for the surface water management system shall not become effective until the owner or authorized agent certifies that all facilities of the surface water management system have been constructed in accordance with the design approved by the SWFWMD. Within thirty

(30) days after completion of construction of the surface water management system, the TEC shall submit the as-builts and notify the SWFWMD that the facilities are complete. The SWFWMD may inspect the system and require remedial measures.

37. Off-site discharges of surface water during construction and development shall be made only through the facilities authorized by this certificate. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream stages. Stages may be subject to operating schedules satisfactory to the SWFWMD.

38. No construction authorized herein shall commence until a responsible entity acceptable to the SWFWMD has been established and has agreed to operate and maintain the system. The entity must be provided with sufficient ownership so that it has control over all water management facilities authorized herein. Upon receipt of written evidence of the satisfaction of this condition, the SWFWMD will issue an authorization to commence construction.

39. The TEC shall hold and save the SWFWMD harmless from any and all damages, claims, or liabilities which may arise by reason of the construction operation, maintenance or use of any facility authorized by the certificate.

40. This certificate is issued based on the TEC's submitted information, which reasonably demonstrates that adverse off-site water resource-related impacts will not be caused by the completed surface water management system. It is also the responsibility of the TEC to ensure that adverse off-site water resource-related impacts do not occur during construction.

41. All surface water management systems shall practice water conservation to maintain environmental quality and resource protection; to increase the efficiency of transport, application and use; to decrease waste; to minimize unnatural runoff from the property; and to minimize dewatering of off-site property. At such time in the future as the SWFWMD Governing Board establishes minimum water levels in aquifers or minimum rates of flow in streams, or otherwise adopts specific conservation criteria, SWFWMD may initiate any necessary action to require TEC to undergo an alteration of the system to comply with such criteria upon notice and after a reasonable period for compliance.

42. In order to ensure that the person who will construct the proposed work is identified as required by Subsection 373.413(2)(f), F.S., once the contract is awarded, the name, address, and telephone number of the contractor will be submitted to the SWFWMD prior to construction.

43. The TEC shall immediately provide written notification to the SWFWMD upon beginning any construction authorized by this certificate.

44. The TEC shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observations of construction and assist with the as-built certification requirements of this project; the TEC shall inform the SWFWMD in writing and prior to beginning construction of the name, address and phone number of the professional engineer so employed by the TEC for that purpose.

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

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

XXVII. FLORIDA DEPARTMENT OF COMMUNITY AFFAIRS

A. To the extent feasible, TEC shall avoid guyed transmission line structures in any residential areas to reduce visual impact.

B. To the extent feasible, TEC shall locate the proposed linear facilities within existing utility rights-of-way.

C. To the extent feasible, TEC shall locate the transmission line away from residences, schools, and places of employment.

D. Hazardous and Non-Hazardous Materials

1. The Permittee shall make all feasible efforts to recycle project wastes.

2. The Permittee shall treat its sanitary waste on-site and route it to the cooling pond in order to reduce ground water withdrawals.

XXVIII. FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

A. The post reclamation land use plan proposed by TEC includes areas which, by nature of elevation, soils and hydroperiod, may be suitable for the development of xeric upland habitat systems. Following reclamation, areas so identified will be managed to promote their succession into productive xeric systems. The use of any available top soil mulch stripped from the disturbed power block area which would advance this succession is encouraged.

B. During the final phases of the reclamation of portions of the Polk Power Station site intended to function as habitat, TEC will develop, with Florida Fish and Wildlife Conservation Commission input, a wildlife habitat and management plan.

Where appropriate, TEC will incorporate best management practices from the Florida Fish and Wildlife Conservation Commission publication *Habitat Reclamation Guidelines: A Series of Recommendations for Fish and Wildlife Habitat Enhancement on Phosphate Mined Lands and Other Disturbed Areas*, April, 1985.

C. Reclamation success and wildlife utilization of the site should be monitored on a routine basis as proposed in the site certification application. In addition, the Florida Fish and Wildlife Conservation Commission will encourage TEC to provide reasonable access to local Audubon chapters and other conservation groups who may desire to conduct annual bird counts, nesting surveys or other studies of fish and wildlife habitat values.

D. Prior to construction of the proposed facility or installation of any associated linear facility, wildlife surveys shall be conducted for the presence of listed species (endangered, threatened, or species of special concern). The results of these surveys shall be presented to the Florida Fish and Wildlife Conservation Commission and the United States Fish and Wildlife Service. TEC shall consult with the Florida Fish and Wildlife Conservation Commission and the United States Fish and Wildlife Service to determine the appropriate steps to be taken to avoid, minimize, mitigate or otherwise appropriately address impacts within each agency's respective jurisdiction.

XXIX. FLORIDA DEPARTMENT OF TRANSPORTATION

A. By 1995, TEC shall begin a traffic monitoring program at the intersection of SR 37 and CR 630 for determining the need to install a traffic signal or to make geometric improvements. Intersection monitoring shall consist of conducting turning movement counts and a signal warrant analysis. The monitoring shall be conducted once per year in January, February or March, until the number of employees has peaked or a signal and appropriate intersections improvements are installed, whichever comes first. Should the traffic monitoring program show the need for a new traffic signal and/or geometric improvements as a result of traffic to the Polk Power Station, it shall be the responsibility of TEC to install a new traffic signal and/or to make geometric improvements.

B. By 1995, TEC shall begin a traffic monitoring program at the intersection of SR 37 and CR 640 for determining the need to install a traffic signal or to make geometric improvements. Intersection monitoring shall consist of conducting turning movement counts and a signal warrant analysis. The monitoring shall be conducted once per year in January, February or March, until the number of employees has peaked or a signal and appropriate intersections improvements are installed, whichever comes first. Should the traffic monitoring program show the need for a new traffic signal and/or geometric improvements as a result of traffic to the Polk Power Station, it shall be the responsibility of TEC to install a new traffic signal and/or to make geometric improvements.

C. Work/Construction Within the State Rights-of-Way

All utility work/construction within the state rights-of-way shall conform to the minimum requirements of the Utility Accommodation Guidelines (UAG) dated 5/90, or as may be amended. For all work normally requiring a Utility Permit, FDOT shall issue the permit within ninety (90) days, or as may be required by the UAG, of the submission of a satisfactorily completed Utility Permit (Form #592-03, or as may be amended).

D. New and Modifications to Existing Intersections

Construction of new and modifications to existing intersections with state roads shall be in compliance with Rule Chapters 14-96 and 14-97, F.A.C. For construction of new and modifications to existing intersections with state roads, FDOT shall assign a permit number within ninety (90) days of the submission of a satisfactorily completed Connection Permit [Form #850-040-10-a (12/89), or as may be amended].

E. New Public Rail/Highway At-Grade Crossings

Any new public rail/highway at-grade crossings which may be deemed necessary for this site by TEC must adhere to the standards of Rule 14-46.003, F.A.C. TEC shall submit the appropriate information on the proposed crossing to FDOT for review and approval.

F. Erection of Towers and/or Structures

Erection of towers and/or structures that exceed an overall height of 200 feet above ground level, including any appurtenances, must be coordinated with FDOT's Aviation Bureau in Tallahassee as required by Chapter 14-60, F.A.C.

XXX. POLK COUNTY

A. CUP 92-05 Conditions

1. Permits - Copies of all federal permits and the PPSA certification order required for each phase of development of the Polk County Site facility shall be provided to the Polk County Planning Division Director prior to the commencement of building construction code compliance review.

2. Fuel - The project shall be restricted to the use of the following fuels: natural gas, coal, coal gas, petroleum coke, or oil unless a CUP modification is received.

3. Fire Protection Plan - Prior to obtaining a building permit, TEC shall submit an acceptable fire protection plan to Polk County outlining specific measures to be taken to meet all local fire codes and regulations. As part of these plans, TEC shall give consideration to foam systems for tank protection as discussed in NFPA 850(5-3.9.2) as part of the overall fire risk evaluation. The evaluation shall consider such factors as the specific type of tank to be utilized, exposure to other important structures, product value and resupply capability.

4. Emergency Management and Response Plans - Following site certification, and prior to commercial operation, TEC shall submit an acceptable Emergency Management Plan to Polk County (Office of Public Safety). This plan will detail emergency management procedures for any project-related, off-site incident in Polk County so as to minimize response time and maximize effectiveness to protect the public health, safety, and welfare.

5. Emergency Notice - TEC shall agree to immediately contact Polk County's Office of Public Safety when the applicant becomes aware of project-related off-site incidents which have the potential for affecting the public's health, safety, and welfare.

6. Transportation

a. In 1995, 1996, and 1997, TEC shall begin a traffic monitoring program at the intersection of SR 37 and CR 630 to monitor the need to install a traffic signal or to make geometric improvements. Intersection monitoring shall consist of conducting turning movement counts and a signal warrant analysis. The monitoring shall be conducted once in 1995, 1996, and 1997, during January, February, or March and reported to the Transportation Section of the Planning Division. Should the traffic monitoring program show the need for a new traffic signal as a result of traffic to the Polk Power Station, it shall be the responsibility of TEC to install such a signal.

b. In 1995, 1996, and 1997, TEC shall begin a traffic monitoring program at the intersection of CR 630 and Fort Green Road to monitor the need to install a traffic signal or to make geometric improvements. Intersection monitoring shall consist of conducting turning movement counts and a signal warrant analysis. The monitoring shall be conducted once in 1995, 1996, and 1997, during January, February, or March. Should the traffic monitoring program show the need for improvements as a result of traffic to the Polk Power Station, it shall be the responsibility of TEC to install a new traffic signal or to make geometric improvements.

7. Solid Waste Disposal

a. TEC shall be responsible for proper disposal of slag and/or ash by-products produced in the power generation process at locations other than at county landfills.

b. TEC shall monitor ground water in relation to by-product and temporary storage areas and make available to the county all data produced from the ground water monitoring system. Upon 24-hour notice, TEC shall allow county staff members access to the site for purposes of examining the condition of the ground water monitoring equipment.

8. Hazardous Materials Storage - TEC shall report its storage and usage of hazardous material annually to Polk County's Environmental Services Department and shall allow the county to make random inspection of the facility to determine compliance with the reporting requirements. As part of the first report, TEC shall specifically address provision (a) through (g) of Comprehensive Plan Policy 2.310A4.

9. Spill Prevention Containment and Control Plan (SPCC) - TEC shall be required to submit a preliminary Spill Prevention Containment and Control Plan (SPCC) to the Polk County Public Safety Department and the Polk County Planning Department as part of the building construction code compliance review. The final SPCC Plan shall be submitted within six (6) months after the date the facility begins operations. Spill Prevention Containment and Control Plan updates and amendments, due to a change in design, construction, operation, technology, or maintenance, shall be submitted within six (6) months of such change.

10. Flood Study - TEC shall submit a flood study within one (1) year of release of reclamation of the site.

11. Stack Emissions Monitoring - TEC shall make available to the county all data produced from the emissions monitoring systems for the exhaust stack when requested and shall allow designated county staff members access to the site for purposes of examining the condition of this equipment, upon prior notice.

12. Compliance with Applicable Air Quality Regulations - TEC shall comply with applicable air quality regulations in effect at the time of filing of each site certification application or supplemental application for each phase of development of the Polk Power Station.

13. Wildlife Habitat Management Plan - Within one (1) year of release of reclamation of the site by DEP, TEC shall prepare a wildlife management plan in consultation with the Florida Game and Fresh Water Fish Commission, Polk County and other interested parties concerning that portion of TEC's site located west of SR 37.

14. Water Use and Conservation Reporting - TEC shall supply water use quantities, methods of water conservation, and estimates of water conservation if available, on an annual basis to Polk County (Planning and Water Resources Divisions).

B. *Transmission Lines*

TEC shall apply to Polk County for a modification to CUP 92-05 at the time it submits a supplement to or modification of its site certification application to the state regarding a defined, proposed corridor route for any new, proposed transmission lines associated with the TEC Polk Power Station site, other than those detailed in the CUP application.

C. *Sinkhole Response Plan*

TEC shall develop and submit to Polk County for approval six (6) months prior to commencing operation of the first commercial unit, a plan detailing the emergency measures to be implemented if a sinkhole occurs on the TEC site. TEC shall include a plan to address any necessary remedial actions required as a result of contamination to impacted aquifer(s) and surface water(s) if a sinkhole occurs on the TEC site.

D. *Landscape Buffer*

Landscaping shall be installed in accordance with the landscape plan included in the Site Certification Application.

E. *Tall Structure Compliance*

TEC shall, at the time it proposes to construct any structure over 500 feet in height at its site, comply with all regulations as imposed by the Polk County Airport Zoning Ordinance, prior to completion of building construction code compliance review for the units requiring such a structure.

F. *Inspection and Permit Compliance Fees*

Polk County shall be allowed to inspect any and all construction, operating, monitoring, sampling, and remediation activities which TEC conducts on site. Polk County shall provide notice to TEC prior to performing any such inspection. TEC shall be required to pay Polk County all generally applicable building code compliance and inspection fees provided, however, that such fees shall be adjusted to reasonably reflect actual cost to the county.

G. *Flood Protection*

TEC during construction and operation shall maintain adequate flood protection berms to assure that residential properties will not receive floodwaters in the event of a berm failure. TEC shall perform and provide to Polk County an analysis of berm failure flood conditions including alternatives for minimizing obstruction and damage to roadways.

H. Reporting

TEC shall submit all reports and submissions to the Director of the Polk County Community Services Department in addition to the other departments as noted in the preceding conditions.

I. Fishing Lake

1. TEC shall construct the recreational fishing lakes on the parcel west of SR 37 as proposed in the 1996, submissions to the DEP. The ungraded “nesting islands” in the fishing lakes shall be planted with native trees as recommended by the Fish and Wildlife Conservation Commission.

2. TEC shall donate the 1,511 acres of land in Tract B west of State Road (SR) 37 to the Polk County by December 31, 2003.

XXXI. HILLSBOROUGH COUNTY

Placement of natural gas pipeline facilities in Hillsborough County to serve future Polk Power Station units will require modification of this certification or submittal of a supplemental certification application.

History

Issued 01/27/94; signed by Governor Chiles
Modified 02/22/95; signed by Secretary Wetherell
Modified 08/16/00; signed by Deputy Secretary Green
Modified 01/03/01; signed by Deputy Secretary Green
Modified 11/15/01; signed by Deputy Secretary Bedwell
Modified 05/07/03; signed by Siting Administrator Oven
Modified 11/05/03; signed by Siting Administrator Oven
Modified 08/26/04; signed by Siting Administrator Oven
Modified 06/26/06; signed by Siting Administrator Oven
Modified 08/15/06; signed by Siting Administrator Oven
Modified 02/29/08; signed by Siting Administrator Halpin

APPENDIX I. NPDES Permit FL0043869

APPENDIX II. Air Construction Permit PSD-FL-194

APPENDIX III. Air Construction Permit PSD-FL-263

APPENDIX IV. Air Construction Permit PSD-FL-363

APPENDIX V. Air Title V Permit 1050233-016-AV