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JUN 2 1 2001

BUREAU OF AIR REGULATION

MEMORANDUM OF AGREEMENT

TO:

Anthony J. Cotter

Assistant County Attorney

Orange County

FROM:

Thomas B. Tart

General Counsel

Orlando Utilities Commission

DATE:

June 18, 2001

SUBJECT: Orange County Building Permit Fee Recommended Methodology

Under the provisions of the Power Plant Siting Act (F.S. 403.501-519), local governments are allowed to charge appropriate fees and require that construction be in compliance with applicable building construction codes. For Stanton Energy Center Unit A, a natural gas/oil fired Combined Cycle Project, the Orange County Building Department is acting under this authority to charge plans review fees and building/inspection fees.

Upon consideration by the Orange County Attorney and Building Department staff, Orange County has agreed to appropriate fees based on the methodology outlined below. Specific details will be incorporated and appropriate fees will be assigned, based on the Orange County Book on Fees fee schedule, once the final design for the project has been submitted.

Memorandum of Understanding Anthony J. Cotter June 18, 2001

In establishing this fee amount, the following important items have been recognized:

- Appropriate fees will be assigned to occupied buildings and structures that have been designed for continuous human occupation.
- Appropriate fees for non-generation foundations will be included in the fee basis amount as 25 percent of their full value.
- Equipment directly related to generation is not included in the fee basis value (turbines, generators, cooling towers, brine plant, heat recovery steam generator, etc.).
- Non-Building Power Generation electrical work is not included in the fee basis value.

I believe acceptance of the building fee amount established by Orange County is reasonable and appropriate, and acceptance by the Commission is recommended.

Thomas B. Tart
General Counsel
Orlando Utilities Commission

Anthony J. Cotter Assistant County Attorney Orange County

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BEFORE THE DIVISION OF ADMINISTRATIVE HEARING

LIST OF EXHIBITS

CASE No. 01-0416EPP

JUNE 26, 2001

OUC-1	Curtis H. Stanton Energy Center CONDITIONS OF CERTIFICATION			
OUC-2	 Composite Public Notices: a. FDEP Notice of Receipt of Supplemental Site Certification			
OUC-3	Need for Power Order			
OUC-4	Regional Location Map			
OUC-5	Local Map			
OUC-6	Stanton A Site Arrangement			
OUC-7	Stanton A Project Rendering			
OUC-8	Memorandum of Agreement - Orange County Building Permit Fee Recommended Methodology			
OUC-9	Supplemental Site Certification Documents: a. Supplemental Site Certification Application b. Supplemental Site Certification Application: Sufficiency Response c. Certification Hearing Prefiled Testimony and Exhibits			

Curtis H. Stanton Energy Center CONDITIONS OF CERTIFICATION (COC)

I. CERTIFICATION CONTROL

- A. Pursuant to s. 403.501-518, F.S., the Florida Electrical Power Plant Siting Act, this certification is issued to Orlando Utilities Commission, Florida Municipal Power Agency, Kissimmee Utility Authority and Southern-Florida, LLC as joint owner/operators of Curtis H. Stanton Energy Center. Under the control of these Conditions of Certification the OUC will operate a 930 MW (nominal) facility consisting of two coal-fired **Units No. 1 and No. 2**, and ancillary equipment. Southern-Florida LLC will construct and operate a 633 MW gas-fired combined cycle facility known as **Combined Cycle Unit A**. These units are located on a 3280-acre site which is located at Township 23S, Ranges 31E and 32E, Orange County, Florida. UTM coordinates are: Zone 17; 483.61 km East; 3151.1 km North.
- B. The general and specific conditions contained in these Conditions of Certification, unless specifically amended or modified, are binding upon the permittees and shall apply to the construction and operation of the certified facility. If a conflict should occur between the design criteria of this project and the Conditions of Certification, the Conditions shall prevail unless amended or modified.

II. APPLICABLE RULES

The construction and operation of the certified facility shall be in accordance with all applicable provisions of Florida Statutes and Department and Water Management District rules, including the following regulations: [St. Johns River WMD: 40C-1, 40C-4, 40C-8, 40C-40, 40C-41, 40C-42,] [South Florida WMD: 40E-1, 40E-4, 40E-40, 40E-41,] 62-4, 62-17, 62-256, 62-296, 62-297, 62-301, 62-302, 62-531, 62-532, 62-550, 62-555, 62-560, 62-600, 62-601, 62-604, 62-610, 62-620, 62-621, 62-650, 62-699, 62-660, 62-701, 62-762, 62-767, 62-769, and 62-770, Florida Administrative Code (F.A.C.), or their successors as they are renumbered.

III. DEFINITIONS

The meaning of terms used herein shall be governed by the definitions contained in Chapter 403, Florida Statutes, and any regulation adopted pursuant thereto. In the event of any dispute over the meaning of a term used in these general or special 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:

- A. "Application" shall mean the Site Certification Application (SCA) for the certified facility, as supplemented.
- B. "DEP" or Department shall mean the Florida Department of Environmental Protection.

- C. "DHR" shall mean the Florida Department of State, Division of Historical Resources.
- D. "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.
- E. "Facility" shall mean the certified electrical power generation facility and all associated structures, including but not limited to: combustion turbine generators, heat recovery steam generators, duct burners, fossil steam boilers, steam turbine generators, selective catalytic reduction units, transformers, associated transmission lines, substations, fuel and water storage tanks, natural gas delivery metering station, air and water pollution control equipment, storm water control ponds and facilities, cooling towers, and related structures.
- F. "Feasible" or "practicable" shall mean reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.
 - G. "FFWCC" shall mean the Florida Fish and Wildlife Conservation Commission.
- H. "NPDES permit" shall mean the federal National Pollutant Discharge Permit System permit issued in accordance with the federal Clean Water Act.
 - I. "Permittee" shall mean the owners and operators of the certified facility.
- J. "Power plant" shall mean the electric power generating plant and associated structures to be modified or constructed on the certified site, as generally depicted in the Application.
- K. "Project" shall mean the electrical power generating facility and all associated facilities.
- L. "PSD permit" shall mean the federal Prevention of Significant Deterioration air emissions permit issued in accordance with the federal Clean Air Act.
- M. "NWF, SR, SJR, SWF, or SF WMD" shall mean the Northwest Florida, Suwannee River, St. Johns River, Southwest Florida, or South Florida Water Management District.
- N. "Title V permit" shall mean the federal permit issued in accordance with Title V of the federal Clean Air Act.

IV. GENERAL CONDITIONS

A. Facility Operation

1. The Permittee shall at all times properly operate and maintain the facility and related appurtenances, and systems of treatment and control that are installed and used 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.

2. In the event of a prolonged [thirty (30) days or more] equipment malfunction or shutdown of pollution control equipment, facility 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, water quality standards and rules, solid waste rules, domestic wastewater rules and industrial wastewater rules. During such malfunction or shutdown, the operation of the facility shall comply with all other requirements of this certification and all applicable state and federal emission and effluent standards not affected by the malfunction or shutdown.

B. Records Maintained at the Facility

- 1. These Conditions of Certification or a copy thereof shall be kept at the work site of the approved activity.
- 2. The permittee 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 this 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. The permittee shall provide copies of these records to the Department upon request. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in any report to the Department, such facts or information shall be promptly submitted or corrected.

C. Change in Discharge

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any pollutant not identified in the application, or more frequently than, or at a level in excess of that authorized herein, shall constitute a violation of the certification. Any anticipated facility expansions, production increases, or process modifications which may result in new, different or increased discharges or pollutants, change in fuel, or expansion in steam generating capacity must be reported by submission of a new application for amendment or modification pursuant to Chapter 403.516, F.S.

D. Noncompliance Notification

If, for any reason, the permittee does not comply with or is unable to comply with any limitation specified in this certification, the permittee shall notify the Central District Office of the Department by telephone during the working day that said noncompliance occurs. After normal business hours, the permittee shall report any condition that poses a public health threat to the State Warning Point at telephone number (850) 413-9911 or (850) 413-9912. The permittee shall confirm this situation to the DEP District Office in writing 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 noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and,
- 3. Steps being taken to reduce, eliminate and prevent recurrence of the noncomplying event.

E. 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 event.

F. Right of Entry

The permittee shall allow authorized Department personnel, including authorized representatives of the Florida Department of Environmental Protection, Water Management Districts, and/or United States Environmental Protection Agency, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated:

- 1. 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 permit; and,
- 2. To have access to and copy any records required to be kept under the conditions of this certification; and,
- 3. To inspect and observe the permitted facilities, equipment, practices, or operations regulated or required under these Conditions to determine compliance with the approved plans, specifications and conditions of this certification; and,
- 4. To sample or monitor any substances or parameters at any location necessary to assure compliance with these Conditions or Department rules.

G. Enforcement

1. The terms, conditions, requirements, limitations and restrictions set forth in these Conditions of Certification are the same as "Permit Conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.514, 403.727, and 403.859 through 403.861, F.S. Any noncompliance with a Condition of Certification or condition of a federally delegated or approved permit constitutes a violation of chapter 403, F.S., and is grounds for enforcement action, permit termination, permit revocation, or permit revision. The permittee is placed on notice that the Department will review this approval periodically and may initiate enforcement action for any violation of these conditions.

2. All records, notes, monitoring data and other information relating to the construction or operation of this certified source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the certified source arising under the Florida Statutes or Department rules, except where such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

H. Revocation or Suspension

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

I. Civil and Criminal Liability

- 1. 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, Florida Statutes, or regulations thereunder.
- 2. This certification does not relieve the permittee from liability for harm or injury to human health or welfare, animal or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 3. As provided in Subsections 403.087(7), 403.511, and 403.722(5), F.S., the issuance of this certification 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 any other Department approval that may be required for other aspects of the total project under federally delegated programs.
- 4. Subject to Section 403.511, Florida Statutes, 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.

J. Property Rights

The issuance of this certification does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations. The applicant shall obtain title, lease or right of use from the State of Florida, to any sovereign submerged lands utilized by the project.

K. Severability

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

L. Review of Site Certification

The certification shall be final unless revised, revoked or suspended pursuant to law. At least every five years from the date of issuance of certification the Department shall review all monitoring data that has been submitted to it during the preceding five-year period for the purposes of determining the extent of the permittee's compliance with the conditions of this certification and the environmental impact of this facility. The Department shall submit the results of its review and recommendations to the permittee. Such review will be repeated at least every five years thereafter.

M. Procedural Rights

No term or condition of certification shall be interpreted to preclude the post-certification exercise by the permittee of whatever procedural rights it may have under Chapter 120, F.S., including those related to rule-making proceedings.

N. Modification of Conditions

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

- 1. The permittee shall comply with rules, adopted by the Department subsequent to the issuance of the certification, which prescribe new or stricter criteria to the extent that the rules are applicable to electric power plants. Except where express variances, exceptions, exemptions, or other relief have been granted, subsequently adopted rules which prescribe new or stricter criteria shall operate as automatic modifications to the certification.
- 2. The permittee may choose to operate in compliance with any rule subsequently adopted by the Department which prescribes criteria more lenient than the criteria required by the terms and conditions in the certification which are not site specific.
- 3. The Siting Board hereby delegates to the Secretary of the Department of Environmental Protection the authority to modify, after notice and opportunity for hearing, any conditions pertaining to monitoring or sampling and conditions of Certification pertaining to consumptive use of water, monitoring, sampling, specification of control equipment, related time schedules, effluent or emission standards or limitations, groundwater, mixing zones, zones of discharge, leachate control programs, railroad spur, transmission lines, access roads or pipeline construction, source of treated effluent cooling water, mitigation, transfer or assignment of the Certification or related federally delegated permits, or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes, which are not in conflict with Condition of Certification Part VII.

- 4. Subject to the notice requirements of 403.516(1), F.S., the certification shall be automatically modified to conform to subsequent DEP-issued amendments, modifications, or renewals of any separately issued Prevention of Significant Deterioration (PSD) permit, Title V Air Operation permit, or National Pollutant Discharge Elimination System (NPDES) permit for the project, and the conditions of such permits shall be controlling over these Conditions of Certification.
- 5. Except as provided in IV.N.1., 2., 3., and 4., amendments or modifications of certification shall be governed by Section 403.516, F.S.

O. Transfer of Certification

This certification is transferable only upon Department approval in accordance with Section 403.516, F.S., and Rules 62-17.211(3) and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any noncompliance of the approved activity until the transfer is approved by the Department.

P. Safety

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 shall be complied with during construction and operation.

Q. 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

R. Toxic, Deleterious or Hazardous Materials

- 1. 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.
- 2. The permittee shall report all spills of materials having potential to significantly pollute surface or ground waters and which are not confined to a building or similar containment structure, by telephone immediately after discovery of such spill. The permittee shall submit a written report within forty-eight hours, excluding weekends, from the original notification. The telephone report shall be submitted by calling the DEP District Office Industrial Wastewater Compliance/Enforcement Section. After normal business hours, the permittee shall contact the State Warning Point by calling (850) 413-9911 or (850) 413-9912. The written report shall

include, but not be limited to, a detailed description of how the spill occurred, the name and chemical make-up (include any MSDS sheets) of the substance, the amount spilled, the time and date of the spill, the name and title of the person who first reported the spill, the size and extent of the spill and surface types (impervious, ground, water bodies, etc.) it impacted, the cleanup procedures used and status of completion, and include a map or aerial photograph showing the extent and paths of the material flow. Any deviation from this requirement must receive prior approval from the Department.

S. Noise

Construction noise shall not exceed noise criteria or any applicable requirements of Orange County. The permittee shall notify area residents in advance of the onset and anticipated duration of the steam blowout of the facility's heat recovery steam generator and steam lines. Such steam blowout shall be conducted between 7:00 A.M. and sunset.

T. Flood Control Protection

The plant and associated facilities shall be constructed in such a manner as to comply with the appropriate County flood protection requirements, either by flood proofing or by raising the elevation of the facilities above the 100-year flood level.

U. 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 District office and the Bureau of Historic Preservation, Division of Historical Resources, R.A. Gray Building, Tallahassee, Florida 32399, telephone number (850) 487-2073.

V. Endangered and Threatened Species

Prior to start of construction, the permittee shall survey the certified site for endangered and threatened species of animal and plant life. Plant species listed as endangered or threatened by the federal government and plant species listed as endangered by the state shall be transplanted to an appropriate area if practicable. Gopher tortoises and any commensals on the rare or endangered species list shall be relocated after consultation with the FFWCC. A relocation program, as approved by the FFWCC, shall be followed. Entombment of gopher tortoises shall not be allowed.

W. Dispute Resolution

If a situation arises in which mutual agreement cannot be reached between the Permittee and an agency exercising its regulatory jurisdiction, then the matter shall be immediately referred to the Division of Administrative Hearings (DOAH) for disposition in accordance with the provisions of Chapter 120, F.S. A hearing under Section 120.57, F.S., shall be held within 30 days after its referral to DOAH. The Administrative Law Judge shall issue the decision 30 days after the termination of such hearing. All exceptions to the Administrative Law Judge's order shall be

filed with the Governor and Cabinet within 10 days of the issuance of such order. The Governor and Cabinet shall issue a decision within 30 days of the filing of the exceptions.

X. Laboratories And Quality Assurance

- 1. The permittee shall ensure that all laboratory analytical data submitted to the Department, as required by this Certification, are from a laboratory which has a currently valid and Department approved Comprehensive Quality Assurance Plan (CompQAP) or a CompQAP pending approval for all parameters being reported, as required by Chapter 62-160, F.A.C.
- 2. The permittee shall ensure that all samples required pursuant to this certification are taken by an appropriately trained technician following EPA and Department approved sampling procedures and chain-of-custody requirements in accordance with Rule 62-160, F.A.C. All chain-of-custody records shall be retained on-site for at least three (3) years and made available to the Department immediately upon request.
 - 3. Records of monitoring information shall include:
 - a. the date, exact place, and time of sampling or measurements;
 - b. the person responsible for performing the sampling or measurements;
 - c. the dates analyses were performed;
 - d. the person responsible for performing the analyses;
 - e. the analytical techniques or methods used; and,
 - f. the results of such analyses.

Y. Procedures For Post-Certification Submittals

- 1. Purpose of Submittals: Conditions of Certification which provide for the post-certification submittal of information to DEP or other agencies by the permittee are for the purpose of facilitating monitoring by the Department of the effects arising from 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 the permittee 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 the submittal is found to be incomplete,

the permittee 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, or 45 days after a submittal is made by the permittee, or unless another date is specified herein, DEP shall give written notification to the permittee 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, the permittee shall be notified with particularity and possible corrective measures suggested. Failure to notify the permittee in writing within ninety (90) days of receipt of a complete post-certification submittal shall constitute a determination of reasonable assurance of compliance.

V. CONSTRUCTION

A. Standards and Review of Plans

- 1. All construction at the facility shall be pursuant to the design standards presented in the application or amended application and the standards or plans and drawings submitted and signed by an engineer registered in the state of Florida. Specific Central DEP 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 any: industrial waste treatment facility; domestic waste treatment facility; potable water treatment and supply system; ground water monitoring system, storm water runoff system; solid waste disposal area; and hazardous or toxic handling facility or area. The Permittee shall present specific plans for these facilities for review by the DEP Central 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. Review and approval or disapproval shall be accomplished in accordance with Chapter 120, F.S., or these conditions of certification as applicable.
- 2. The Department must be notified in writing and prior written approval obtained for any material change, modification, or revision to be made to the project during construction which is in conflict with these conditions of certification. If there is any material change, 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, the Permittee shall provide the Central District and the Siting coordination Office of 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 pre-operational review of the final design and operation shall demonstrate continued compliance with Department rules and standards.
- 4. Final drainage plans illustrating all stormwater treatment facilities and conveyances for construction phases and ultimate operations for the entire Curtis H. Stanton Energy Center site shall be submitted to the DEP Central District Manager, the Orange County Pollution Control Department, and the St. Johns River Water Management District for review and approval prior to construction of any such conveyance or facility. The Department shall indicate its approval or disapproval within 60 days of the submittal.

B. Control Measures

- 1. To control runoff 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 (NTU) above background in waters of the state at the POD to Hart Branch or Cowpen Branch. Oil and grease shall not exceed 5 mg/l at any discharge from the makeup water storage supply pond or any other pond. 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 the applicable nonprocedural requirements in Chapter 62-25, F.A.C.
- 2. Any 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. 1 01 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 DEP Central District office in conjunction with the Division of Forestry and any other county regulations that may apply. Burning shall not occur if not 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. Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the appropriate local health agency. The sewage treatment plant shall be operated in accordance with Chapters 62-600-699, F.A.C.
- 4. Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 62-701, F.A.C.
- 5. Construction noise shall not exceed noise criteria or any applicable requirements of Orange County. To mitigate the effects of noise produced by the steam blowout of

steam boiler tubes, the permittee shall conduct public awareness campaigns prior to such activities to forewarn the public of the estimated time and duration of the noise.

- 6. 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 which interfere with enjoyment of residents of adjoining property.
- 7. Directly associated transmission lines from the facility electric switchyard to existing transmission lines shall be maintained in accordance with the application and the appropriate state and federal regulations concerning use of herbicides. The Permittee shall notify the Department of the type of herbicides to be used at least 60 days prior to their first use.
- 8. The permittee shall develop the site so as to retain the buffer of natural vegetation as described in the application and in Condition IV.Q. Screening.
- 9. Dewatering operations during construction shall be carried out in accordance with Rule 62-621.300(2), F.A.C.

C. Environmental Control Program

An environmental control program shall be established under the supervision of a Florida registered professional engineer or other qualified person 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 DEP Central District Office as required by Condition IV. D., Noncompliance Notification.

D. Reporting

Notice of commencement of construction shall be submitted to the Siting Coordination Office and the DEP Central 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 DEP Central District Office. The report shall be a short narrative describing the progress of construction.

E. POND PERIMETER BERMS

Construction of the water storage pond perimeter berms shall be in conformance with the provisions of Chapter 62-672, F.A.C, regarding earthen dams, and should be inspected regularly by a licensed engineer.

F. WETLAND VEGETATION

A non-disturbed area shall be maintained around the oak hardwood swamp area of Hart Branch for a distance of 300 feet during the construction and operating phase of the Stanton Plant.

VI. AIR

- A. The Permittee shall apply for and obtain a revision to any Department issued PSD or Title V permit in accordance with Department Rules in Chapter 620-4.030, Florida Administrative Code, before beginning construction of any planned substantial modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in the applicable portions of Chapter 62-4.030, F.A.C.
- **B.** The construction and operation of all units at the Curtis H. Stanton Energy Center (CHSEC) steam electric power plant site shall be in accordance with all applicable provisions of Chapter 62, Florida Administrative Code including all requirements of the State of Florida State Implementation Plan and approved Title V permit program. In addition, the construction and operation of the units shall be in accordance with 40 CFR Part 60, especially for opacity, NOx, and SO2 during periods of startup, shutdown, and malfunction; the provisions of PSD permits FL-084 and FL-313; and the following conditions of certification:

C. Emissions Limitations

- 1. The proposed steam generating station shall be constructed and operated in accordance with the capabilities and specifications of the application including, for Unit 1, a 474 (gross), and Unit 2, a 474 (gross) megawatt generating capacity and the 4286 MMBtu/hr heat input rate for each steam generator. For the purpose of calculating mass stack emissions, based on a maximum heat input of 4136 million Btu per hour, stack emissions from CHSEC Unit 1 shall not exceed the following when burning coal:
 - a. SO2 1.2 lb/million Btu heat input, maximum two hour average, and 1.14 lb/MMBtu maximum three hour average;
 - b. NOx 0.60 lb. per million Btu heat input, 30 day rolling average;
 - c. Particulates 0.03 lb per million Btu heat input, 124.1 lb. per hour;
 - d. Visible emissions 20% opacity (6 minute average, except one 6-minute period per hour of not more than 27% opacity).
- 2. Based on a maximum heat input of 4286 million Btu per hour, stack emissions from Unit 2 shall not exceed the following when burning coal:

a.

SO2	lb/million Btu heat input
30 – day rolling average	0.25
24 – hour emission rate	0.67
3 – hour emission rate	0.85

b.

NOx	lb/million Btu heat input
30 – day rolling average	0.17

c.

PM/PM10	lb/million Btu heat input		
	lb/MMBtu	lb/hr	
PM	0.02	85.7	
PM10	0.02	85.7	

- d. CO 0.15 lb/million Btu heat input, 643 lb/hour.
- e. VOC 0.015 lb/million Btu heat input, 64 lb/hour.
- f. H2SO4 0.033 lb/million Btu heat input 140 lb/hour.
- g. Be 5.2 x 10-6 lb/million Btu heat input, 0.022 lb/hour.
- h. Hg 1.1 x 10-5 lb/million Btu heat input, 0.046 lb/hour.
- i. Pb 1.5 x 10-4 lb/million Btu heat input, 0.64 lb/hour.
- j. Fluorides 4.2 x 10-4 lb/million Btu heat input, 1.8 lb/hour.
- 3. The height of the boiler exhaust stack for CHSEC Units 1 & 2 shall not be less than 550 ft. above grade.
 - 4. Particulate emissions from the coal, lime and limestone handling facilities:
 - a. All conveyors and conveyor transfer points will be enclosed to preclude PM emissions (except those directly associated with the coal stacker/reclaimer or emergency stockout, and the limestone stockout for which enclosure is operationally infeasible).
 - b. Inactive coal storage piles will be shaped, compacted and oriented to minimize wind erosion.
 - c. Water sprays or chemical wetting agents and stabilizers will be applied to storage piles, handling equipment, etc. during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent, except when adding, moving or removing coal from the coal pile, which would be allowed no more than 20%.
 - d. Limestone day silos and associated transfer points will be maintained at negative pressures during filling operations with the exhaust vented to a control system. Lime will be handled with a totally enclosed pneumatic system. Exhaust from the lime silos during filling will be vented to a collector system.
 - e. The fly ash handling system (including transfer and silo storage) will be totally enclosed and vented (including pneumatic system exhaust) through fabric filters; and
 - f. Any additional coal, lime, and limestone handling facilities for Stanton Unit 2 will be equipped with particulate control systems equivalent to those for Stanton Unit 1.
- 5. Particulate emissions from bag filter exhausts from the following facilities shall be limited to 0.02 gr./acf: coal, lime, limestone and flyash handling systems excluding those facilities covered by II/I.A.3.c above. A visible emission reading of 5% opacity or less may be used to establish compliance with this emission limit. A visible emission reading greater than 5% opacity will not create a presumption that the 0.02 gr./acf emission limit is being violated. However, a visible emission reading greater that 5% opacity will

require the permittee to perform a stack test for particulate emissions, as set forth in condition VI_•D.

- 6. Compliance with opacity limits of the facilities listed in Condition VI.C. will be determined by EPA referenced method 9 (Appendix A, 40 CFR 60).
- 7. Construction shall reasonably conform to the plans and schedule given in the original application or the supplemental application.
- 8. The permittee shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the DEP Central District office in Orlando.
- 9. Reasonable precautions to prevent fugitive particulate emissions during construction shall be to coat the roads and construction sites used by contractors, and to regrass or water areas of disturb soils.
- 10. Coal shall not be burned in the unit unless the electrostatic precipitator and limestone scrubber and other air pollution control devices are operating as designed except as provided under 40 CFR Part 60, Subpart Da.
- 11. Except as noted herein, the fuel oil to be fired in Stanton Units 1 & 2 and the auxiliary boiler shall be primarily "new oil" which means an oil which has been refined from crude oil and has not been used. On-site generated lubricating oil and used fuel oil which meets the requirements of 40 CFR 266.40 may also be burned.
- a. The quality of the No. 2 fuel oil used by the auxiliary boiler shall not contain more than 0.5% sulfur by weight and cause the allowable emission limits listed in the following table to be exceeded. Such emissions may be calculated in accordance with AP-42.

Allowable Emission Limits			
Pollutant lb/MMBtu			
PM	0.015		
SO2	0.51		
NOx	0.16		
Visible emissions	Maximum 20% Opacity		

b. Landfill gas from the Orange County Landfill may be burned in Unit No. 1 and Unit No. 2 to the extent that quantities are available provided that all emission limits contained in condition VI.C.1. for Unit 1 and Condition VI.C.2. for Unit 2 are met.

c. Natural gas as supplied by commercial pipeline may be burned in Unit No. 1 and Unit No. 2 to the extent that quantities are available provided that all emission limits contained in Condition VI.C.1. for Unit 1 and Condition VI.C.2. for Unit 2 are met.

- 12. The flue gas scrubber shall be put into service during normal operational startup, and shut down when No. 6 fuel oil is being burned. The No. 6 fuel oil shall not contain more than 1.5% sulfur by weight.
- 13. No fraction of flue gas shall be allowed to bypass the FGD system to reheat the gases exiting from the FDG system, except that bypass shall be allowed during startup and shutdown.
- 14. All fuel oil and coal shipments received shall have an analysis for sulfur content, ash content, and heating value either documented by the supplier or determined by analysis. Coal sulfur content shall be determined and recorded on a daily basis. Records of all the analysis shall be kept for public inspection for a minimum of two years after the data is recorded.
- 15. Within 90 days of commencement of operations, the applicant will determine and submit to FDER the pH level range in the scrubber reaction tank that correlates with the specified limits for SO2 in the flue gas. Moreover, the applicant is required to operate a continuous pH meter equipped with an upset alarm to ensure that the operator becomes aware when the pH level of the scrubber reaction tank falls out of this range. The pH monitor can also act as a backup in the event of malfunction of the continuous SO2 monitor. The value of the scrubber pH may be revised at a later date provided notification to FDER is made demonstrating the emission limit is met. Further, if compliance data show that higher FGD performance is necessary to maintain the emission limit, a different pH value will be determined and maintained.
- 16. The applicant will comply with all requirements and provisions of the New Source Performance standard for electric utility steam generating units (40 CFR 60 Part Da).
- 17. The Licensee shall submit to the Department at least 120 days prior to start of construction of the NOx control system, copies of technical data pertaining to the selected NOx control system. These data, if applicable to the technology chosen by the Licensee, should include but not be limited to design efficiency, guaranteed efficiency, emission rates, low rates, reagent injection rates, or types of catalysts. The Department may, upon review of these data, disapprove the use of any such device or system if the Department determines the selected control device or system to be inadequate to meet the emission limits specified in l.b. above. Such disapproval shall be issued within 90 days of receipt of the technical data.

18. Concrete Batch Plant

- a. For the operation of a Vince Hagan Company Model HSM-10250C-400 concrete batch plant with cement and fly ash storage silos, emissions generated during pneumatic drilling of storage silos will be controlled by two Vince Hagan Company Model ES-268B baghouses, one on each silo, with 268 square feet of cloth filtration area. A water spray ring will be used to control emissions during truck loading.
- b. Visible emissions from concrete batching plants, silos, hoppers and other storage or conveying equipment shall not exceed 5% opacity (Rule 17-296.414(1), F.A.C.).
- c. The initial and subsequent compliance tests for visible emissions on the particulate matter control equipment shall be conducted using DER Method 9 in accordance with Rule 17-297.420, F.A.C. The initial and subsequent compliance tests for visible emissions on the storage piles shall be conducted using EPA Method 22 in accordance with Rule 17-297.401(22), F.A.C., and 40 CFR 60, appendix A. The

- Department's Central District office shall be notified in writing at least 15 days prior to the compliance test in accordance with Rule 17-297.340, F.A.C. The test reports shall be submitted to the Department's Central District office no later than 45 days after the last sampling run of each test is completed in accordance with Rule 17-297.570(2), F.A.C.
- d. The visible emissions test observation period shall include the period during which the highest opacity can reasonably be expected to occur. For the storage silos, this is expected to be the last 30 minutes of filling.
- e. Testing of emissions must be accomplished while filling the cement and fly ash storage silos within ± 10% of the permitted capacity of 27 tons per hour. A compliance test submitted at operating rates less than 90% of the permitted capacity will automatically constitute an amended permit at the lesser rate. Failure to submit the input rates and actual operating conditions may invalidate the test (Rule 17-297.570, F.A.C.).
- f. Permitted hours of operation are up to 20 hrs/day, seven days per week, and not to exceed 4,200 hrs/year.
- g. All reasonable precautions shall be taken to prevent and control generation of unconfined emissions of particulate matter in accordance with the provision in rule 17-296.310(3), F.A.C. These provisions are applicable to any source, including, but not limited to, vehicular movement, transportation of materials, construction, alteration, demolition or wrecking, or industrial related activities such as loading, unloading, storing and handling. Reasonable precautions shall include the use of water sprinklers to prevent and control fugitive particulates from plant grounds and aggregate storage piles and the use of the water spray ring at the truck loadout.

D. Air Monitoring Program

- 1. A flue gas oxygen meter shall be installed for Stanton Unit 2 to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintain air/fuel ratio parameters at an optimum. The flue gas manufacturing oxygen monitor shall be calibrated and operated according to established procedures as approved by DER. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" may be used as a guide.
- 2. The permittee shall install and operate continuous monitoring devices for Stanton Unit 2 main boiler exhaust for sulfur dioxide, nitrogen oxides, oxygen, and opacity. The monitoring devices shall meet the applicable requirements of Section 17-2.710, FAC., and 40 CFR 60.47a. The opacity monitor may be placed in the ductwork between the electrostatic precipitator and the FGD scrubber.
- 3. The permittee shall maintain a daily log of the amounts and types of fuel used. The log shall be kept for inspection for at least two years after the data is record. Fuel analysis data including sulfur content, ash content, and heating values shall be determine on an as received basis and kept for two years.
- 4. The permittee shall provide stack sampling facilities as required by Rule 17-2.700(4) F.A.C.

E. Stack Testing

- 1. Within 60 calendar days after achieving the maximum capacity at which unit 2 will be operated, but no later than 180 operating days after initial startup, the permittee shall conduct performance tests for particulates, SO2, NOx, and visible emissions during formal operations near ($\pm 10\%$) 4286 MMBtu/hr heat input and furnish the Department a written report the results of such performance tests within 45 days of completion of the tests. The performance test will be conducted in accordance with the provisions of 40 CFR 60.46a and 48a.
- 2. Compliance with emission limitation standards mentioned in specific condition No. VI.B. shall be demonstrated during the initial performance test using appropriate EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any method as proposed by the Applicant and approved by the Department, in accordance with F.A.C. Rule 62-297.

EPA Method	For Determination Of
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentration to or from mass emission limits.
3	Gas analysis when needed for calculation of molecular weight or percent O2.
4	Moisture contents when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
201 or 201A	PM10 emissions.
6, 6C, or 19	Sulfur dioxide emissions from stationary sources.
7, 7C, or 19	Nitrogen oxide emissions from stationary sources.
9	Visible emission determination of opacity. - At least three one hour runs to be conducted
	simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse. - At least one lime truck unloading into the lime silo (from start to finish).
10	Carbon monoxide emissions from stationary sources.
12 or l0lA	Lead concentration from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18, 25, 25A or 25B	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

3. The permittee shall provide 30 days written notice of the performance tests for continuous emission monitors or 10 working days written notice for stack tests in order to afford the Department the opportunity to have an observer present.

4. Stack tests for particulates NOx and SO2 and visible emissions shall be performed annually.

F. Reporting

- 1. For Stanton Unit 2, a summary in the EPA format of stack continuous monitoring data, fuel usage and fuel analysis data shall be reported to the Department's Central District Office and to the Orange County Environmental Protection Department on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a.
- 2. Beginning one month after certification, the permittee shall submit to the Department a quarterly status report briefly outlining progress made on engineering and design and purchase of major of pieces of air pollution control equipment. All reports and information required to be submitted under this condition shall be submitted to the Siting Coordination Office, Department of Environmental Protection, 2600 Blair Stone Road MS 48, Tallahassee, 32399-2400.

G. Malfunction or Shutdown

In the event of a prolonged (thirty days or more) equipment malfunction or shut down of air pollution control equipment, operation may be allowed to resume or continue to take place under appropriate Department order, provided that the Licensee demonstrates such operation will be in compliance with all applicable ambient air quality standards and PSD increments. During such malfunction or shutdown, the operation of Stanton Unit 2 shall comply with all other requirements of this certification and all applicable state and federal emission standard not affected by the malfunction or shutdown which is the subject of the Department's order. Exceedances produced by operational conditions for more than two hours due to upsets in air pollution control systems as a result of start-up, shutdown, or malfunctions as defined by 40 CFR 60 need not be reported as specified in Condition IV.D. Identified operational malfunctions which do not stop operation but prevent compliance with emission limitations shall be reported to DEP as specified in Condition IV.D.

H. Open Burning

Open burning in connection with initial land clearing shall be in accordance with chapter 62-256, F.A.C., Chapter 5I-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 17-256, F.A.C., shall be approved by the DEP Central 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 jurisdictional 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.

I. For Combined Cycle Unit A Permittee shall comply with all limitations, restrictions, and conditions contained in PSD permit number PSD-FL-313. The PSD permit is included in and made part of these Conditions of Certification as follows:

1. EMISSIONS UNITS

This permit addresses the following emissions units:

Emission Unit	SYSTEM	EMISSION UNIT DESCRIPTION
025	Power Generation	One nominal 170 Megawatt Gas Combustion Turbine- Electrical Generator configured as a combined cycle unit, complete with supplementary fired HRSG
026	Power Generation	One nominal 170 Megawatt Gas Combustion Turbine- Electrical Generator configured as a combined cycle unit, complete with supplementary fired HRSG
027	Water Cooling	One 10 cell mechanical draft Cooling Tower
028	Fuel Storage	One 1,680,000 Gallon Distillate Fuel Oil Storage Tank

2. REGULATORY CLASSIFICATION

The facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_X), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is within an industry (fossil fuel-fired steam electric plant) included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD). Pursuant to Table 62-212.400-2, this facility modification results in emissions increases greater than 40 TPY of SO₂ and NO_x, 25/15 TPY of PM/PM₁₀, 100 TPY of CO and 40 TPY of VOC's. These pollutants require review per the PSD rules and a determination for Best Available Control Technology (BACT) per Rule 62-212.400, F.A.C.

This project is subject to the applicable requirements of Chapter 403. Part II, F.S., Electric Power Plant and Transmission Line Siting. [Chapter 403.503 (12), F.S., Definitions]

Based on the Title V permit, this facility is not currently a major source of hazardous air pollutants (HAPs). This facility is subject to certain Acid Rain provisions of Title IV of the Clean Air Act.

3. RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action, but are not incorporated into this permit. These documents are on file with the Department.

- Application received on January 22, 2001.
- Letter from Fish & Wildlife Service dated February 9, 2001.
- Additional information received from applicant on May 1, 2001.
- Department's Intent to Issue and Public Notice Package dated May 17, 2001.
- Department's Draft Permit and Draft BACT determination dated May 17, 2001.
- Letter from EPA Region IV dated xx/xx/01.
- Site Certification for the Stanton A Combined Cycle addition dated xx/xx/01.

concurrently with the			

4. GENERAL AND ADMINISTRATIVE REQUIREMENTS

- Regulating Agencies: All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number (850) 488-0114. All documents related to reports, tests, and notifications should be submitted to the DEP Central District Office, 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767 and phone number 407/894-7555.
- 2. General Conditions: The owner and operator is subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- 3. <u>Terminology</u>: The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
- 4. Forms and Application Procedures: The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
- 5. Modifications: The permittee shall give written notification to the Department when there is any modification to this facility. This notice shall be submitted sufficiently in advance of any critical date involved to allow sufficient time for review, discussion, and revision of plans, if necessary. Such notice shall include, but not be limited to, information describing the precise nature of the change; modifications to any emission control system; production capacity of the facility before and after the change; and the anticipated completion date of the change. [Chapters 62-210 and 62-212, F.A.C.]
- 6. Expiration: Approval to construct shall become invalid if construction is not commenced within 18 months after receipt of such approval, or if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. [40 CFR 52.21(r)(2)]
- 7. BACT Determination: In accordance with paragraph (4) of 40 CFR 52.21 (j) and 40 CFR 51.166(j), the Best Available Control Technology (BACT) determination shall be reviewed and modified as appropriate in the event of a plant conversion. This paragraph states: "For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source." This reassessment will also be conducted for this project if there are any increases in heat input limits, hours of operation, oil firing, low or baseload operation, short-term or annual emission limits, annual fuel heat input limits or similar changes. [40 CFR 52.21(j), 40 CFR 51.166(j) and Rule 62-4.070 F.A.C.]
- 8. Permit Extension: The permittee, for good cause, may request that this PSD permit be extended. Such a request shall be submitted to the Bureau of Air Regulation prior to 60 days before the expiration of the permit. In conjunction with extension of the 18-month periods to commence or continue construction, or extension of the December 31, 2004 permit expiration date, the permittee may be required to demonstrate the adequacy of any previous determination of best available control technology for the source. [Rule 62-4.080, F.A.C.]
- 9. <u>Application for Title IV Permit</u>: An application for a Title IV Acid Rain Permit, must be submitted to the U.S. Environmental Protection Agency Region IV office in Atlanta, Georgia and a copy to the

- DEP's Bureau of Air Regulation in Tallahassee 24 months before the date on which the new unit begins serving an electrical generator (greater than 25 MW). [40 CFR 72]
- 10. Application for Title V Permit: An application for a Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the DEP's Bureau of Air Regulation, and a copy to the Department's Central District Office. [Chapter 62-213, F.A.C.]
- 11. New or Additional Conditions: Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 12. <u>Annual Reports</u>: Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports shall be sent to the DEP's Central District Office by March 1st of each year.
- 13. Stack Testing Facilities: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.
- 14. Quarterly Reports: Quarterly excess emission reports, in accordance with 40 CFR 60.7 (a)(7) (c) (1998 version), shall be submitted to the DEP's Central District Office.

5. APPLICABLE STANDARDS AND REGULATIONS

- 1. Unless otherwise indicated in this permit, the construction and operation of the subject emission unit(s) shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-17, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, and 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Parts 52, 60, 72, 73, and 75.
- 2. NSPS Requirements: Each combustion turbine (CT) shall comply with all applicable requirements of 40 CFR 60, adopted by reference in Rule 62-204.800(7)(b), F.A.C.
 - a. **Subpart A, General Provisions**, including: 40 CFR 60.7 (Notification and Record Keeping), 40 CFR 60.8 (Performance Tests), 40 CFR 60.11 (Compliance with Standards and Maintenance Requirements), 40 CFR 60.12 (Circumvention), 40 CFR 60.13 (Monitoring Requirements), and 40 CFR 60.19 (General Notification and Reporting Requirements).
 - b. Subpart GG, Standards of Performance for Stationary Gas Turbines; see attached Appendix GG.
- 3. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting requirements or regulations. [Rule 62-210.300, F.A.C.]
- 4. These emission units shall comply with all applicable requirements of 40CFR60, Subpart A, General Provisions including:
 - 40CFR60.7, Notification and Recordkeeping
 - 40CFR60.8, Performance Tests
 - 40CFR60.11, Compliance with Standards and Maintenance Requirements
 - 40CFR60.12, Circumvention
 - 40CFR60.13, Monitoring Requirements
 - 40CFR60.19, General Notification and Reporting requirements
- 5. ARMS Emissions Units 025 and 026. Direct Power Generation, each consisting of a nominal 170 megawatt combustion turbine-electrical generator, shall comply with all applicable provisions of 40CFR60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference

- in Rule 62-204.800(7)(b), F.A.C. The Subpart GG requirement to correct test data to ISO conditions applies. However, such correction is not used for compliance determinations with the BACT standard(s). Additionally, each Emissions Unit consists of a supplementally fired heat recovery steam generator equipped with a natural gas fired 533 MMBTU/hr duct burner (LHV) and combined with a nominal 300 MW steam electrical generators. These shall comply with all applicable provisions of 40CFR60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units Which Construction is Commenced After September 18, 1978, adopted by reference in Rule 62-204.800(7), F.A.C.
- 6. ARMS Emission Unit 027. Cooling Tower, an unregulated emission unit. The Cooling Tower is not subject to a NESHAP because chromium-based chemical treatment is not used.
- 7. ARMS Emission Unit 028. Fuel Storage Tank, consisting of a 1,680,000-gallon distillate fuel storage tank. The storage tank is subject to 40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction or Modification Commenced After July 23, 1984.
- 8. All notifications and reports required by the above specific conditions shall be submitted to the DEP's Central District Office.

6. GENERAL OPERATION REQUIREMENTS

- 9. <u>Fuels</u>: Only pipeline natural gas or (up to) 1000 hours per year of 0.05% distillate fuel oil shall be fired in each CT emissions unit. Only natural gas shall be fired in each duct burner. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions Potential Emissions)]
- 10. Combustion Turbine Capacity: The maximum heat input rates to each CT/HRSG shall not exceed 2,402 million Btu per hour (MMBtu/hr) when firing natural gas with duct burner firing and power augmentation. The maximum heat input rates to each CT/HRSG shall not exceed 2,068 million Btu per hour (MMBtu/hr) when firing fuel oil. These maximum heat input rates shall not be exceeded under any condition, regardless of ambient conditions or combustion turbine characteristics. Manufacturer's curves corrected for ISO conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. [Design, Rule 62-210.200, F.A.C. (Definitions Potential Emissions)]
- 11. Heat Recovery Steam Generator equipped with Duct Burner. The maximum heat input rate of the natural gas fired duct burner shall not exceed 533 MMBtu/hour (LHV) at any temperature or under any scenario. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions Potential Emissions)]
- 12. <u>Unconfined Particulate Emissions</u>: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary.
- 13. Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the DEP Central District office as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]
- 14. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of

- air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]
- 15. <u>Circumvention</u>: The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650, F.A.C.]
- 16. Maximum allowable hours of operation for each CT/HRSG Emissions Unit are 8760 hours per year while firing natural gas. Fuel oil firing is permitted for 1000 hours during any consecutive 12-month period in each CT. [Applicant Request, Rule 62-210.200, F.A.C. (Definitions Potential Emissions)]
- 17. <u>Simple Cycle Operation</u>: The plant may not be operated without the use of the SCR system except during periods of startup and shutdown.

7. CONTROL TECHNOLOGY

- 18. Dry Low NO_X (DLN) combustors and water injection capability shall be installed on each stationary combustion turbine. The permittee shall install a selective catalytic reduction system to comply with the NO_X and ammonia limits listed in Specific Condition 21. Additionally, space shall be provided for the installation of oxidation catalysts. [Design, Rules 62-4.070 and 62-212.400, F.A.C.]
- 19. The permittee shall design these units to accommodate adequate testing and sampling locations for compliance with the applicable emission limits (per each unit) listed in Specific Conditions No. 21 through 25. [Rule 62-4.070, Rule 62-204.800, F.A.C., and 40 CFR60.40a(b)]
- 20. Drift eliminators shall be installed on the cooling tower to reduce PM/PM₁₀ emissions. A certification following installation (and prior to startup) shall be submitted that the drift eliminators were installed and that the installation is capable of meeting 0.002-gallons/100 gallons recirculation water flowrate.

8. EMISSION LIMITS AND STANDARDS

21. Nitrogen Oxides (NO_X) Emissions:

- The concentration of NO_X in the stack exhaust gas, with the combustion turbine operating on natural gas shall not exceed 3.5 ppmvd @15% O₂ on a 3-hr block average. This limit shall apply whether or not the unit is operating with duct burner on and/or in power augmentation mode. Compliance shall be determined by the continuous emission monitor (CEMS). [BACT Determination]
- The emissions of NO_X in the stack exhaust gas, with the combustion turbine operating on fuel oil shall not exceed 10.0 ppmvd @15% O₂ on a 3-hr block average. Compliance shall be determined by the continuous emission monitor (CEMS). [BACT Determination]
- Emissions of NO_X from the duct burner shall not exceed 0.1 lb/MMBtu, which is more stringent than the NSPS (see Specific Condition 30 for compliance procedures). [Applicant Request, Rule 62-4.070 and 62-204.800(7), F.A.C.]
- The concentration of ammonia in the exhaust gas from each CT/HRSG shall not exceed 5.0 ppmvd @15% O₂. The compliance procedures are described in Specific Conditions 29 and 45. [BACT, Rules 62-212.400 and 62-4.070, F.A.C.]
- 22. Carbon Monoxide (CO) Emissions: Emissions of CO in the stack exhaust gas (at ISO conditions) with the combustion turbine operating on natural gas shall not exceed 17 ppmvd @15% O₂ on a 24-hr block average to be demonstrated by CEMS; and neither 14 ppmvd @15% O₂ with the CT operating on fuel oil on a 24-hr block average to be demonstrated by CEMS. These limits shall also be demonstrated by annual stack test using EPA Method 10 or through annual RATA testing. Within 24 months of the date of completion of initial testing, the applicant shall either have

installed oxidation catalyst in each CT/HRSG or forfeit its right to do so with the pre-determined (BACT) emission limits specified below. [BACT, Rule 62-212.400, F.A.C.]

- In the event that an oxidation catalyst is installed for any reason in either CT/HRSG pair within 24 months of the date of completion of initial testing, the limits for CO and VOC shall be 5 ppmvd and 3 ppmvd (respectively) to be demonstrated by stack testing during power augmentation and duct burner firing (I, A). [BACT]
- 23. Volatile Organic Compounds (VOC) Emissions: Emissions of VOC in the stack exhaust gas (baseload at ISO conditions) with the combustion turbine operating on gas shall exceed neither 2.7 ppmvd @15% O₂ with the CT firing fuel oil and neither 6.3 ppmvd @15% O₂ with the CT firing natural gas (with maximum duct burner firing and operating in power augmentation mode); to be demonstrated by initial stack tests using EPA Method 18, 25 or 25A. [BACT, Rule 62-212.400, F.A.C.]
- 24. Sulfur Dioxide (SO₂) emissions: SO₂ emissions shall be limited by firing pipeline natural gas (sulfur content not greater than 1.5 grains per 100 standard cubic foot) and up to 1000 hours per consecutive 12-month period of 0.05% sulfur fuel oil. Compliance with these fuel limits in conjunction with implementation of the attached Appendix GG will demonstrate compliance with the applicable NSPS SO₂ emissions limitations from the duct burner and the combustion turbine. Note: This will effectively limit the combined SO₂ emissions for EU-025 and EU-026 to approximately 134 tons per year. [BACT, 40CFR60 Subpart GG and Rules 62-4.070, 62-212.400, and 62-204.800(7), F.A.C.]
- 25. PM/PM₁₀ and Visible emissions (VE): VE emissions shall not exceed 10 percent opacity from the stack in use. [BACT, Rules 62-4.070, 62-212.400, and 62-204.800(7), F.A.C.]

9. EXCESS EMISSIONS

- 26. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices are adhered to and the duration of excess emissions shall be minimized. Excess emissions occurrences shall in no case exceed two hours in any 24-hour period except during a "cold start-up" to combined cycle plant operation. During cold start-up to combined cycle operation, up to four hours of excess emissions are allowed. Cold start-up is defined as a startup to combined cycle operation following a complete shutdown lasting at least 72 hours. Operation below 50% output per turbine shall otherwise be limited to 2 hours in any 24-hour period. [BACT, Rule 62-210.700, F.A.C.].
- 27. Excess emissions entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction, shall be prohibited pursuant to Rule 62-210.700, F.A.C. These emissions shall be included in the 3-hr average for NO_x and the 24-hr average for CO.
- 28. Excess Emissions Report: If excess emissions occur for more than two hours due to malfunction, the owner or operator shall notify DEP's Central District office within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, all excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Following this format, 40 CFR 60.7, and using the monitoring methods listed in Specific Conditions 41 through 45, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels exceed the permitted standards listed in Specific Condition No. 21 through 25. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7 (1998 version)].

10. COMPLIANCE DETERMINATION

- 29. Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate, but not later than 180 days of initial operation of the unit, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1998 version), and adopted by reference in Chapter 62-204.800, F.A.C.
- 30. Initial (I) performance tests shall be performed by the deadlines in Specific Condition 29. Initial tests shall also be conducted after any replacement of the major components of the air pollution control equipment (and shake down period not to exceed 100 days after re-starting the CT), such as replacement of SCR catalyst or addition of oxidation catalyst (or change of combustors, if specifically requested by the DEP on a case-by-case basis). Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 September 30) pursuant to Rule 62-297.310(7), F.A.C., on these units as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing. Where initial tests only are indicated, these tests shall be repeated prior to renewal of each operation permit.
 - EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I, A).
 - EPA Reference Method 10, "Determination of Carbon Monoxide Emissions from Stationary Sources" (I, A).
 - EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines" (EPA reference Method 7E, "Determination of Nitrogen Oxides Emissions from Stationary Sources" or RATA test data may be used to demonstrate compliance for annual test requirement) shall be conducted a) while firing natural gas with maximum duct burner heat input as well as maximum power augmentation and b) while firing fuel oil at the maximum heat input; Initial test for compliance with 40CFR60 Subpart GG; Initial (only) NO_X compliance test for the duct burners (Subpart Da) shall be accomplished via testing with duct burners "on" as compared to "off" and computing the difference.
 - EPA Reference Method 18, 25 and/or 25A, "Determination of Volatile Organic Concentrations."
 Initial test only.
 - EPA Method 0011 or CARB Method 430 shall be utilized to evaluate the emissions of formaldehydes on each CT/Duct Burner as per the table below. A full report including all test results, analyses and applicant's MACT Determination shall be forwarded to the Bureau of Air Regulation in Tallahassee within the same time constraints identified in Specific Condition G.29.

OPERATING MODE CALCULATION

TEST PROTOCOL

TPY

Maximum CT output Natural Gas; Duct Burner firi	ng at CARB Method 430 or (6760/2000) times measured
maximum output	EPA Method 0011 Lb/Hour Formaldehyde
Maximum CT output Natural Gas; Duct Burner firir	g and CARB Method 430 or (1000/2000) times measured
Power Augmentation implemented, both at max. or	tput EPA Method 0011 Lb/Hour Formaldehyde
Manianana antont Fuel Oil	CARB Method 430 or (1000/2000) times measured
Maximum output, Fuel Oil	EPA Method 0011 Lb/Hour Formaldehyde

Note: Results of the sampling method(s) identified above shall be blank corrected. For Method 0011, a minimum sample volume of 30 cubic feet shall be collected. To improve test precision, there shall be two co-located trains for each test. A minimum of 3 runs per CT/Duct Burner shall constitute a test.

 Method CTM-027 for ammonia slip (I, A) to be completed simultaneously with NO_X compliance testing.

- The applicant shall calculate and report the ppmvd ammonia slip (@ 15% O_2) at the measured lb/hr NO_X emission rate as a means of compliance with the BACT standard. The applicant shall also be capable of calculating ammonia slip at the Department's request, according to Specific Condition 45.
- 31. Continuous compliance with the CO and NO_X emission limits: Continuous compliance with the CO and NO_X emission limits shall be demonstrated by the CEM system on the specified hour average basis. Based on CEMS data, a separate compliance determination is conducted at the end of each period and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous period. Specific Condition 41 further describes the CEM system requirements. Excess emissions periods shall be reported as required in Condition 28. [Rules 62-4.070 F.A.C., 62-210.700, F.A.C., 40 CFR 75 and BACT]
- 32. Compliance with the SO₂ and PM/PM₁₀ emission limits: For the purposes of demonstrating compliance with the 40 CFR 60.333 SO₂ standard, the applicant is responsible for ensuring that the procedures outlined in attached Appendix GG are complied with.
- 33. Compliance with CO emission limit: An initial and annual test for CO shall be conducted at 100% capacity with the duct burners off. The NO_X and CO test results shall be the average of three valid one-hour runs. Annual RATA testing for the CO and NO_X CEMS shall be required pursuant to 40 CFR 75.
- 34. Compliance with the VOC emission limit: An initial test is required to demonstrate compliance with the VOC emission limit. Thereafter, the CO emission limit will be employed as a surrogate and no annual testing is required [see Specific Condition 22 for exception].
- 35. Testing procedures: Unless otherwise specified, testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C.
- 36. <u>Test Notification</u>: The DEP's Central District office shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance tests.
- 37. Special Compliance Tests: The DEP may request a special compliance test pursuant to Rule 62-297.310(7), F.A.C., when, after investigation (such as complaints, increased visible emissions, odors or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated.
- 38. <u>Test Results</u>: Compliance test results shall be submitted to the DEP's Central District office no later than 45 days after completion of the last test run. [Rule 62-297.310(8), F.A.C.].

11. NOTIFICATION, REPORTING, AND RECORDKEEPING

- 39. Records: All measurements, records, and other data required to be maintained by the applicant shall be recorded in a permanent form and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP representatives upon request.
 - The applicant will be required to maintain records indicating the daily hours of operation of each CT/HRSG unit. These records shall specify which type of fuel is being combusted and the records shall be available for review at the site. Each calendar month, a compilation of the hours of operation for each CT/HRSG unit combusting fuel oil shall be made and totalized for the most recent consecutive 12-month period. Each AOR submitted by the applicant shall include a compilation of each consecutive 12-month period during the preceding calendar year.

40. Compliance Test Reports: The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.

11. MONITORING REQUIREMENTS

41. Continuous Monitoring System: The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the emissions of NO_x and CO from these emissions units, and the Carbon Dioxide (CO₂) content of the flue gas at the location where NO_x and CO are monitored, in a manner sufficient to demonstrate compliance with the emission limits of this permit. The CEM system shall be used to demonstrate compliance with the emission limits for NO_x and CO established in this permit. Compliance with the emission limits for NOx shall be based on a 3-hour block average. The 3-hour block average shall be calculated from 3 consecutive hourly average emission rate values. Compliance with the emission limits for CO shall be based on a 24-hour block average starting at midnight of each operating day. The 24-hour block average shall be calculated from 24 consecutive hourly average emission rate values. Each hourly value shall be computed using at least one data point in each fifteen-minute quadrant of an hour, where the unit combusted fuel during that quadrant of an hour. Notwithstanding this requirement, an hourly value shall be computed from at least two data points separated by a minimum of 15 minutes (where the unit operates for more than one quadrant of an hour). The owner or operator shall use all valid measurements or data points collected during an hour to calculate the hourly averages. All data points collected during an hour shall be, to the extent practicable, evenly spaced over the hour. If the CEM system measures concentration on a wet basis, the CEM system shall include provisions to determine the moisture content of the exhaust gas and an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Alternatively, the owner or operator may develop through manual stack test measurements a curve of moisture contents in the exhaust gas versus load for each allowable fuel, and use these typical values in an algorithm to enable correction of the monitoring results to a dry basis (0% moisture). Final results of the CEM system shall be expressed as ppmvd, corrected to 15% oxygen.

The NO_X monitor shall be certified and operated in accordance with the following requirements. The NO_X monitor shall be certified pursuant to 40 CFR Part 75 and shall be operated and maintained in accordance with the applicable requirements of 40 CFR Part 75, Subparts B and C. For purposes of determining compliance with the emission limits specified within this permit, missing data shall not be substituted. Instead the block average shall be determined using the remaining hourly data in the 3-hour block. Record keeping and reporting shall be conducted pursuant to 40 CFR Part 75, Subparts F and G. The RATA tests required for the NO_X monitor shall be performed using EPA Method 20 or 7E, of Appendix A of 40 CFR 60. The NO_X monitor shall be a dual range monitor. The span for the lower range shall not be greater than 10 ppm, and the span for the upper range shall not be greater than 30 ppm, as corrected to 15% O_2 .

The CO monitor and CO₂ monitor shall be certified and operated in accordance with the following requirements. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4. The CO₂ monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 3. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of section 7 shall be made each calendar quarter, and reported semi-annually to the Department's Central District Office. The RATA tests required for the CO monitor shall be performed using EPA Method 10, of Appendix A of 40 CFR 60. The Method 10 analysis shall be based on a continuous sampling train, and the ascarite trap may be omitted or the interference trap of section 10.1 may be used in lieu of the silica gel and ascarite traps. The CO monitor shall be a dual range monitor. The span for the lower range shall not be greater than 20 ppm, and the span for the upper range shall not be greater than 100 ppm, as corrected to 15% O₂.

The RATA tests required for the CO₂ monitor shall be performed using EPA Method 3B, of Appendix A of 40 CFR 60.

NO_X, CO and CO₂ emissions data shall be recorded by the CEM system during episodes of startup, shutdown and malfunction. NO_X and CO emissions data recorded during these episodes may be excluded from the block average calculated to demonstrate compliance with the emission limits specified within this permit. Periods of data excluded for startup shall not exceed two hours in any block 24-hour period except for "cold startup." A cold startup is defined as a startup following a complete shutdown lasting a minimum of 72 hours. Periods of data excluded for cold startup shall not exceed four hours in any 24-hour block period. Periods of data excluded for shutdown shall not exceed two hours in any 24-hour block period. Periods of data excluded for malfunctions shall not exceed two hours in any 24-hour block period. All periods of data excluded for any startup, shutdown or malfunction episode shall be consecutive for each episode. Periods of data excluded for all startup, shutdown or malfunction episodes shall not exceed four hours in any 24-hour block period. The owner or operator shall minimize the duration of data excluded for startup, shutdown and malfunctions, to the extent practicable. Data recorded during startup, shutdown or malfunction events shall not be excluded if the startup, shutdown or malfunction episode was caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented.

Best operational practices shall be used to minimize hourly emissions that occur during episodes of startup, shutdown and malfunction. Emissions of any quantity or duration that occur entirely or in part from poor maintenance, poor operation, or any other equipment or process failure, which may reasonably be prevented, shall be prohibited.

A summary report of duration of data excluded from the block average calculation, and all instances of missing data from monitor downtime, shall be reported to the Department's Central District office semi-annually, and shall be consolidated with the report required pursuant to 40 CFR 60.7. For purposes of reporting "excess emissions" pursuant to the requirements of 40 CFR 60.7, excess emissions shall be defined as the hourly emissions which are recorded by the CEM system during periods of data excluded for episodes of startup, shutdown and malfunction, allowed above. The duration of excess emissions shall be the duration of the periods of data excluded for such episodes. Reports required by this paragraph and by 40 CFR 60.7 shall be submitted no less than semi-annually, including semi-annual periods in which no data is excluded or no instances of missing data occur.

Upon request from the Department, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332. [Rules 62-4.070(3) and 62-212.400., F.A.C., and BACT]

[Note: Compliance with these requirements will ensure compliance with the other CEM system requirements of this permit to comply with Subpart GG requirements, as well as the applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.7(a)(5) and 40 CFR 60.13, and with 40 CFR Part 51, Appendix P, 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60, Appendix F, Quality Assurance Procedures].

- 42. Continuous Monitoring System Reports: The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5) or 40 CFR Part 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40 CFR 75. The monitoring plan, consisting of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the DEP Bureau of Ambient Monitoring & Mobile Sources (BAMMS) as well as the EPA for review no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62.
- 43. Determination of Process Variables:

- The permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards. No later than 90 days prior to operation, the permittee shall submit for the Department's approval a list of process variables that will be measured to comply with this permit condition.
- Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value [Rule 62-297.310(5), F.A.C]
- 44. Subpart Da Monitoring and Recordkeeping Requirements: The permittee shall comply with all applicable requirements of this Subpart [40CFR60, Subpart Da].
- 45. Selective Catalytic Reduction System (SCR) Compliance Procedures:
 - An annual stack emission test for nitrogen oxides and ammonia from the CT/HRSG pair shall be simultaneously conducted while operating in the power augmentation mode with the duct burner on as defined in Specific Condition 21. The ammonia injection rate necessary to comply with the NO_X standard shall be established and reported during the each performance test.
 - The SCR shall operate at all times that the turbine is operating, except during turbine start-up and shutdown periods, as dictated by manufacturer's guidelines and in accordance with this permit.
 - The permittee shall install and operate an ammonia flow meter to measure and record the ammonia injection rate to the SCR system of the CT/HRSG set. It shall be maintained and calibrated according to the manufacturer's specifications.
 - During the stack test, the permittee (at each tested load condition) shall determine and report the ammonia flow rate required to meet the emissions limitations. During NO_X CEM downtimes or malfunctions, the permittee shall operate at the ammonia flow rate, which was established during the last stack test.
 - Ammonia emissions shall be calculated continuously using inlet and outlet NO_X concentrations
 from the SCR system and ammonia flow supplied to the SCR system. The calculation procedure
 shall be provided with the CEM monitoring plan required by 40CFR Part 75. The following
 calculation represents one means by which the permittee may demonstrate compliance with this
 condition:

Ammonia slip @ $15\%O_2$ = (A-(BxC/1,000,000)) x (1,000,000/B) x D, where:

A= ammonia injection rate (lb/hr)/ 17 (lb/lb.mol)

B = dry gas exhaust flow rate (lb/hr) / 29 (lb/lb.mol)

C = change in measured NO_X (ppmv@15%O₂) across catalyst

D = correction factor, derived annually during compliance testing by comparing actual to tested ammonia slip

- The calculation along with each newly determined correction factor shall be submitted with each annual compliance test. Calibration data ("as found" and "as left") shall be provided for each measurement device utilized to make the ammonia emission measurement and submitted with each annual compliance test.
- Upon specific request by the Department, a special re-test shall occur as described in the previous conditions concerning annual test requirements, in order to demonstrate that all NO_X and ammonia slip related permit limits can be complied with.

12. NSPS SUBPART GG REQUIREMENTS

[Note: Inapplicable provisions have been deleted in the following conditions, but the numbering of the original rules has been preserved for ease of reference to the original rules. The term "Administrator" when used in 40 CFR 60 shall mean the Department's Secretary or the Secretary's designee. Department notes and requirements related to the Subpart GG requirements are shown in **bold** immediately following the section to which they refer. The rule basis for the Department requirements specified below is Rule 62-4.070(3), F.A.C.]

Pursuant to 40 CFR 60.332 Standard for Nitrogen Oxides:

- (a) On and after the date of the performance test required by § 60.8 is completed, every owner or operator subject to the provisions of this subpart as specified in paragraph (b) section shall comply with:
 - (1) No owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any stationary gas turbine, any gases which contain nitrogen oxides in excess of:

$$STD = 0.0075 \frac{(14.4)}{Y} + F$$

where:

STD = allowable NOx emissions (percent by volume at 15 percent oxygen and on a dry basis).

Y = manufacturer's rated heat rate at manufacturer's rated load (kilojoules per watt hour) or, actual measured heat rate based on lower heating value of fuel as measured at actual peak load for the facility. The value of Y shall not exceed 14.4 kilojoules per watt-hour.

F = NOx emission allowance for fuel-bound nitrogen as defined in paragraph (a)(3) of this section.

(3) F shall be defined according to the nitrogen content of the fuel as follows:

Fuel-bound nitrogen (percent by weight)	F (NOx percent by volume)
N≤0.015	0
0.015 <n≤0.1< td=""><td>0.04(N)</td></n≤0.1<>	0.04(N)
0.1 <n≤0.25< td=""><td>0.004+0.0067(N-0.1)</td></n≤0.25<>	0.004+0.0067(N-0.1)
N>0.25	0.005

Where, N = the nitrogen content of the fuel (percent by weight).

Department requirement: While firing gas, the "F" value shall be assumed to be 0.

[Note: This is required by EPA's March 12, 1993 determination regarding the use of NOx CEMS. The "Y" values are approximately 10.0 for natural gas and 10.6 for fuel oil. The equivalent emission standards are 108 and 102 ppmvd at 15% oxygen. The emissions standards of this permit are more stringent than this requirement.]

(b) Electric utility stationary gas turbines with a heat input at peak load greater than 107.2 gigajoules per hour (100 million Btu/hour) based on the lower heating value of the fuel fired shall comply with the provisions of paragraph (a)(1) of this section.

Pursuant to 40 CFR 60.333 Standard for Sulfur Dioxide:

- On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, every owner or operator subject to the provision of this subpart shall comply with:
- (b) No owner or operator subject to the provisions of this subpart shall burn in any stationary gas turbine any fuel, which contains sulfur in excess of 0.8 percent by weight.

Pursuant to 40 CFR 60.334 Monitoring of Operations:

- (b) The owner or operator of any stationary gas turbine subject to the provisions of this subpart shall monitor sulfur content and nitrogen content of the fuel being fired in the turbine. The frequency of determination of these values shall be as follows:
 - (1) If the turbine is supplied its fuel from a bulk storage tank, the values shall be determined on each occasion that fuel is transferred to the storage tank from any other source.

<u>Department requirement</u>: The owner or operator is allowed to use vendor analyses of the fuel as received to satisfy the sulfur content monitoring requirements of this rule for fuel oil. Alternatively, if the fuel oil storage tank is isolated from the combustion turbines while being filled, the owner or operator is allowed to determine the sulfur content of the tank after completion of filling of the tank, before it is placed back into service.

[Note: This is consistent with guidance from EPA Region 4 dated May 26, 2000 to Ronald W. Gore of the Alabama Department of Environmental Management.]

- (2) If the turbine is supplied its fuel without intermediate bulk storage the values shall be determined and recorded daily. Owners, operators or fuel vendors may develop custom schedules for determination of the values based on the design and operation of the affected facility and the characteristics of the fuel supply. These custom schedules shall be substantiated with data and must be approved by the Administrator before they can be used to comply with paragraph (b) of this section.
 - (1) Department requirement: The requirement to monitor the nitrogen content of pipeline quality natural gas fired is waived. The requirement to monitor the nitrogen content of fuel oil fired is waived because a NOx CEMS shall be used to demonstrate compliance with the NOx limits of this permit. For purposes of complying with the sulfur content monitoring requirements of this rule, the owner or operator shall obtain a monthly report from the vendor indicating the sulfur content of the natural gas being supplied from the pipeline for each month of operation.
 - (2) [Note: This is consistent with EPA's custom fuel monitoring policy and guidance from EPA Region 4.]
- (c) For the purpose of reports required under 40 CFR 60.7(c), periods of excess emissions that shall be reported are defined as follows:
 - (1) Nitrogen oxides. Any one-hour period during which the average water-to-fuel ratio, as measured by the continuous monitoring system, falls below the water-to-fuel ratio determined to demonstrate compliance with 40 CFR 60.332 by the performance test required in § 60.8 or any period during which the fuel-bound nitrogen of the fuel is greater than the maximum nitrogen content allowed by the fuel-bound nitrogen allowance used during the performance test required in § 60.8. Each report shall include the average water-to-fuel ratio, average fuel consumption, ambient conditions, gas turbine load, and nitrogen content of the fuel during the period of excess emissions, and the graphs or figures developed under 40 CFR 60.335(a).

<u>Department requirement</u>: NOx emissions monitoring by CEM system shall substitute for the requirements of paragraph (c)(1) because a NOx monitor is required to demonstrate compliance with the standards of this permit. Data from the NOx monitor shall be used to determine "excess emissions" for purposes of 40 CFR 60.7 subject to the conditions of the permit.

[Note: This is consistent with guidance from EPA Region 4 dated May 26, 2000 to Ronald W. Gore of the Alabama Department of Environmental Management.]

(2) Sulfur dioxide. Any daily period during which the sulfur content of the fuel being fired in the gas turbine exceeds 0.8 percent.

Pursuant to 40 CFR 60.335 Test Methods and Procedures:

- (a) To compute the nitrogen oxides emissions, the owner or operator shall use analytical methods and procedures that are accurate to within 5 per-cent and are approved by the Administrator to determine the nitrogen content of the fuel being fired.
- (b) In conducting the performance tests required in 40 CFR 60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided for in 40 CFR 60.8(b). Acceptable alternative methods and procedures are given in paragraph (f) of this section.
- (c) The owner or operator shall determine compliance with the nitrogen oxides and sulfur dioxide standards in 40 CFR 60.332 and 60.333(a) as follows:
- (1) The nitrogen oxides emission rate (NOx) shall be computed for each run using the following equation:

 $NOx = (NOxo) (Pr/Po)^{0.5} e^{19(Ho-0.00633)} (288°K/Ta)^{1.53}$

where:

NOx = emission rate of NOx at 15 percent O2 and ISO standard ambient conditions, volume percent.

NOxo = observed NOx concentration, ppm by volume.

Pr = reference combustor inlet absolute pressure at 101.3 kilopascals ambient pressure, mm Hg.

Po = observed combustor inlet absolute pressure at test, mm Hg.

Ho = observed humidity of ambient air, g H2O/g air.

e = transcendental constant, 2.718.

Ta = ambient temperature, °K.

<u>Department requirement</u>: The owner or operator is not required to have the NOx monitor continuously correct NOx emissions concentrations to ISO conditions. However, the owner or operator shall keep records of the data needed to make the correction, and shall make the correction when required by the Department or Administrator.

[Note: This is consistent with guidance from EPA Region 4.]

(2) The monitoring device of 40 CFR 60.334(a) shall be used to determine the fuel consumption and the water-to-fuel ratio necessary to comply with 40 CFR 60.332 at 30, 50, 75, and 100 percent of peak load or at four points in the normal operating range of the gas turbine, including the minimum point in the range and peak load. All loads shall be corrected to ISO conditions using the appropriate equations supplied by the manufacturer.

<u>Department requirement</u>: The owner or operator is allowed to conduct initial performance tests at a single load because a NOx monitor shall be used to demonstrate compliance with the BACT NOx limits of this permit.

[Note: This is consistent with guidance from EPA Region 4.]

(3) Method 20 shall be used to determine the nitrogen oxides, sulfur dioxide, and oxygen concentrations. The span values shall be 300 ppm of nitrogen oxide and 21 percent oxygen. The NOx emissions shall be determined at each of the load conditions specified in paragraph (c)(2) of this section.

Department requirement: The owner or operator is allowed to make the initial compliance demonstration for NOx emissions using certified CEM system data, provided that compliance be based on a minimum of three test runs representing a total of at least three hours of data, and that the CEMS be calibrated in accordance with the procedure in section 6.2.3 of Method 20 following each run. Alternatively, initial compliance may be demonstrated using data collected during the initial relative accuracy test audit (RATA) performed on the NOx monitor. The span value specified in the permit shall be used instead of that specified in paragraph (c)(3) above.

[Note: These initial compliance demonstration requirements are consistent with guidance from EPA Region 4. The span value is changed pursuant to Department authority and is consistent with guidance from EPA Region 4.]

(d) The owner or operator shall determine compliance with the sulfur content standard in 40 CFR 60.333(b) as follows: ASTM D 2880-71 shall be used to determine the sulfur content of liquid fuels and ASTM D 1072-80, D 3031-81, D 4084-82, or D 3246-81 shall be used for the sulfur content of gaseous fuels (incorporated by reference – see 40 CFR 60.17). The applicable ranges of some ASTM methods mentioned above are not adequate to measure the levels of sulfur in some fuel gases. Dilution of samples before analysis (with verification of the dilution ratio) may be used, subject to the approval of the Administrator.

<u>Department requirement</u>: The permit specifies sulfur testing methods and allows the owner or operator to follow the requirements of 40 CFR 75 Appendix D to determine the sulfur content of liquid fuels.

[Note: This requirement establishes different methods than provided by paragraph (d) above, but the requirements are equally stringent and will ensure compliance with this rule.]

(e) To meet the requirements of 40 CFR 60.334(b), the owner or operator shall use the methods specified in paragraphs (a) and (d) of this section to determine the nitrogen and sulfur contents of the fuel being burned. The analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency.

[Note: The fuel analysis requirements of the permit meet or exceed the requirements of this rule and will ensure compliance with this rule.]

VII. WETLANDS RESOURCE MANAGEMENT

- A. The proposed transmission line from the Stanton Energy Center to the Mud Lake transmission line and the proposed alternate access road to the Stanton Energy Center from the south shall be routed as shown in the supplemental application. Prior to construction, the permittee shall submit drawings on 8.5" by 11" paper, showing the final design, including plan views and cross-sections for each area of filling or clearing in wetlands. The drawings shall show the existing and proposed ground elevations and all existing and proposed structure location, sizes and invert elevations.
- B. All clearing and construction activities shall be confined to the limits of the clear zone necessary for the transmission line as shown on Figures 6.1-5 and 6.1-6 of the application drawings. Within 30 days of the completion of construction, the permittee shall arrange a site visit by DER District personnel from the Central District office in Orlando to verify that no wetland damage has occurred outside the transmission line clear zone. If wetland damage occurs outside the transmission line clear zone during construction, the permittee shall submit to the DEPCentral District Office for review a plan to restore the wetland area which was damaged and to provide mitigation for the damage. The plan shall be implemented within 30 days of the Department approving the restoration and mitigation plan. This condition does not preclude the Department from taking enforcement action if unauthorized activities occur.
- C. Prior to initiating construction, the permittee shall submit a map and aerial photographs showing the location of all staging areas for the transmission line and alternate access road construction to the DEP's Central District Office for review and written approval. These areas shall be upland areas which are not currently providing red-cockaded woodpecker nesting or foraging habitat. The staging areas shall not be used prior to receiving DEP approval.
- D. Drainage structures shall be placed in the transmission line ROW and under the alternate access road at the same locations where drainage structures currently exist under the CSX Railroad berm. The drainage structures shall provide at least the same efficiency as the corresponding drainage structure currently existing in the CSX Railroad berm.
- E. The forested areas to be cleared shall be cleared using low-impact equipment so as to minimize soil disturbance. The rootmats and tree stumps shall be left in place to provide soil stabilization.
- F. During construction, best management practices, including but not limited to staked hay bales and filter cloth, shall be utilized to control erosion and turbidity. All side slopes shall be seeded and mulched within 72 hours of the final grading.
- G. Construction of the transmission line and alternate access road will result in the filling of 4.12 ac. of the herbaceous wetlands the permanent clearing of 13.19 ac. of forested wetlands. The permittee shall provide mitigation to offset the wetland loss and habitat degradation resulting from the construction of this project. Prior to construction, the permittee shall propose a mitigation plan and shall provide the following information to the DEP Central District Office to allow the Department 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 proposed mitigation by mitigation and wetland type;
- 6. documentation providing reasonable assurance that the proposed mitigation will be successful.

If the mitigation submittal is deemed by the Department to provide insufficient information for review, additional information requested by the Department shall be submitted. Upon receiving complete information, the Department will assess the mitigation plan within 90 days.

If the Department, upon review of the proposed mitigation, determines that the proposed mitigation is inadequate to offset the wetland loss and habitat degradation from this project, the permittee shall propose additional mitigation.

H. Combined Cycle Unit A Transmission Line

- 1. Within 90 days after receiving certification, the Permittee shall meet with the DEP Central District Office and Orange County to discuss alternative routes for the on-site transmission line from Unit A to the Stanton Energy Center Substation with the intent to minimize impacts on the cypress dome in Wetland 3.
- 2. Once the final route has been established for the transmission line the applicant/permittee shall proposed mitigation to offset the proposed wetland impacts.
- 3. Prior to construction of work authorized by this certification, the permittee shall provide written notification of the date of commencement of construction to the Central District Office of the Florida Department of Environmental Protection, 3319 Maguire Boulevard, Suite 232, Orlando, FL 32803-3767.
- 4. Turbidity controls shall be utilized around the entire work area. The turbidity controls shall be maintained throughout the duration of the project, and shall be effective in preventing soil from the fill pad from eroding into the adjacent wetlands and conservation easement.
- 5. Within 30 days of completion of work authorized by this certification, the permittee shall provide written notification of the date of completion of construction to the Central District Office of the Florida Department of Environmental Protection, 3319 Maguire Boulevard, Suite 232, Orlando, FL 32803-3767.
- 6. The limits of construction within the wetlands shall be delineated by a continuous plastic flagging tape and with a turbidity barrier/control. The permittee shall bear the responsibility of notifying all construction workers that the flagging and barriers represent the limits of all construction activities. The permittee shall bear the responsibility of keeping all construction workers and equipment out of the wetland or surface water areas, which has not been permitted for impacts.

- 7. There shall be no storage or stockpiling of tools or materials within the wetlands.
- 8. If any damage occurs to wetlands or surface waters as a result of any construction activities, the permittee shall be required to restore the wetland area(s) or surface waters by regrading the damaged areas back to the natural preconstruction elevations and planting vegetation of the size, densities and species that exist in the adjacent areas pursuant to a consent order. The restoration shall be completed within 30 days of completion of the construction and shall be done to the satisfaction of the Department.
- 9. All material used as fill shall be clean material and shall not be contaminated with vegetation, garbage, trash, tires, hazardous, toxic waste or other materials that are not suitable for road construction within waters of the State as so determined by the Department.
- 10. The fill and associated side slopes (for example for the key hole pads) that will be placed in wetlands on the property shall be stabilized with sod immediately (within 48 hours) following completion of the placement and compaction of the fill material.
 - I. The project shall comply with applicable state water quality standards, including:
 - 1. 62-302.500 minimum criteria for all surface waters at all places and at all times,
 - 2. 62-302.500 Surface waters: general criteria,
 - 3. 62-302.400 Class III Waters Recreation, Propagation and maintenance of a healthy, well balanced population of Fish and Wildlife, and
 - 4. 62-302.530(70) Turbidity shall not exceed 29 Nephelometric Turbidity Units above background.
- J. Dredging and filling in association with the installation of the natural gas pipeline shall be limited that only that necessary to install the pipeline.
- 1. All disturbed areas shall be restored to their pre-existing ground surface conditions and elevations.
- 2. Construction techniques necessary for the installation of the gas pipeline, including transport and placement of material shall not disturb adjacent wetlands or surface waters and shall not adversely affect water quality.
- 3. During construction and while conducting normal maintenance activities, the applicant/permittee shall eradicate all Brazilian pepper, Australian pine and Melaleuca trees from the wetland portions of the right-of-way.

- K. The applicants shall diligently and in good faith pursue an agreement with Orange County to obtain surface water from the adjacent Orange County Landfill property for use at the Stanton Energy Center Facility. The route for any necessary pipeline shall avoid and minimize wetland and surface water impacts to the extent practicable. The proposed construction and clearing shall be coordinated with the DEP in accordance with Condition V and shall be conducted in a manner that does not adversely affect threatened or endangered species.
- L. The surface water management system for Unit A will consist of modifications to an existing wet detention system. The control structure will be modified to incorporate a 5" circular orifice with an invert of 75.20 feet NGVD and a rectangular weir with invert elevation of 76.80 feet NGVD.
- M. Before any offsite discharge from the stormwater management system occurs, the detention storage must be excavated to rough grade prior to building construction or placement of impervious surface within the area served by those systems.
- 1. Adequate measures must be taken to prevent siltation of these treatment systems and control structures during construction or siltation must be removed prior to final grading and stabilization.
- 2. The location of at least one bench mark (and it corresponding elevation) per stormwater pond should be placed in the vicinity of each inlet or outlet structure and will be clearly shown on the as-built plans provided to the Department.

VIII. ELECTRIC AND MAGNETIC FIELDS

The associated transmission lines shall comply with the requirements of Ch. 62-814, F.A.C.

IX. COOLING TOWER

A. Makeup Water Constituency

The CHSEC shall utilize treated sewage effluent, treated wastewater, onsite re-use water, landfill stormwater/leachate, stormwater runoff, or direct precipitation to the makeup water supply storage pond, as cooling tower makeup water. The effluent shall have received prior to use in the tower sufficient treatment from the source of cooling water, "a sewage treatment plant", but as a minimum, secondary treatment, as well as-treatment described in Condition IXB. below. Use of waters other than treated sewage effluent, or storm water, i.e., higher quality potable waters, or lower quality less-than-secondarily-treated sewage effluent, will require a modification of conditions pursuant to condition IV.N.3.

B. Chlorination

Treated sewage effluent used as cooling water makeup shall be treated to maintain a 1.0 mg/liter free chlorine residual for a 15 minute contact time, or alternately a demonstration that a viral concentration of less than one PFU per 25 gallons can be achieved at lower levels of chlorination. Chlorine levels shall be monitored continuously at the sewage treatment plants.

C. Special Studies

Upon satisfactory demonstration to the Department that the number of viruses entering the towers in the effluent makeup can be reduced to an undetectable level with the use of a lesser amount of chlorination or alternative treatment, the above requirement may be altered. This demonstration may occur through performance of special studies approved by the Department. Alteration of the chlorination requirements must still insure adequate treatment for the control of bacteria or viruses in the cooling water.

X. WATER DISCHARGES

A. Surface Waters

Any discharges from the site storage ponds or wastewater treatment system via any emergency overflow structure which result from any event LESS than a 25 year, 24 hour storm (as defined by the U.S. Weather Bureau Technical Paper No. 40, or the DOT drainage manual, or similar documents) shall meet State Water Quality Standards, Chapter 62-302, F.A.C.

B. Compliance

Any discharges into any Waters of the State during construction and operation of CHSEC Unit 1 shall be in accordance with all applicable provisions of Chapter 62-302, F.A.C., and 40 CFR, Part 423, Effluent Guidelines and Standards for Stream Electric Power Generating Point Source Category, except as provided herein.

C. Plant Effluents and Receiving Body of Water

For discharges made from the power plant the following conditions shall apply:

1. Receiving Body of Water (RBW)

The receiving body of water has been determined by the Department to be those waters of the Hart Branch, Cowpen Branch, or any other waters affected which are considered to be waters of the State within the definition of Chapter 403, Florida Statutes.

2. Point of Discharge (P.O.D.)

The point of discharge has been determined by the Department to be where the effluent physically enters the waters of the State in Hart Branch or Cowpen Branch.

3. Chemical Wastes

All discharges of low volume wastes (demineralizer, regeneration, floor drainage, lab drains, FGD blowdown and similar wastes) and metal cleaning wastes shall comply with Chapter 62-302. If violations of Chapter 62-302 occur, corrective action shall be taken. These wastewater shall be directed to an adequately sized and constructed treatment and detention facility.

During periods when treated wastewater does not comply with pH discharge limitations, the treated wastewater may be recycled to the recycle basin, except when the recycle pond has insufficient capacity to retain the recycled wastewater and the runoff from a rainfall event equal to or less than a 25 year-24 hour storm.

4. Coal Pile

Coal pile runoff shall be directed to the recycle basin and shall not be directly discharged to surface waters, except that discharge of stormwater runoff from the coal pile is allowed only during periods of high rainfall in excess of the 25 year-24 hour storm.

5. pH

The pH of the combined discharges shall be such that the pH will fall within the range of 6.0 to 9.0.

6. Polychlorinated Biphenyl Compounds

There shall be no net discharge of polychlorinated biphenyl compounds.

7. Metal Cleaning and Bottom Ash Sluice System Blowdown

Blowdown from the metal cleaning wastes and from the bottom ash sluice system shall be treated as appropriate prior to reuse and retention.

8. Solid Waste and Limestone Storage Areas

There shall be no direct discharge of stormwater runoff to surface waters from the solid waste and limestone storage areas prior to treatment.

9. Storm Water Runoff

During plant operation, necessary measures shall be used to settle, filter, treat or absorb silt-containing or pollutant-laden stormwater runoff to limit the suspended solids to 50mg/1 or less at the POD during rainfall periods less than the 25 year, 24 hour rainfall, and to prevent an increase in turbidity of more than 29 Nepthlometric Turbidity Units above background in waters of the State.

Control measures shall consist at the minimum of filters, sediment traps, barriers, berms or vegetative planting. Exposed or disturbed soil shall be protected as soon as possible to minimize silt- and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 8.5 at the POD.

D. WATER MONITORING PROGRAM

The permittee shall monitor and report to the Department the listed parameters on the basis specified herein. The methods and procedures utilized shall receive written approval by the Department. The monitoring program may be reviewed annually by the Department, and a determination may be made as to the necessity and extent of continuation, and may be modified in accordance with Condition No. 1V.N.

1. Chemical Monitoring

The following parameters shall be monitored during operation as shown, commencing with the start of commercial operation of CHSEC and reported quarterly to the Department's Central District Office:

Parameter	Location	Sample Type	Frequency
Flow, groundwater	Wellfield Pipeline	Pump Logs	Continuous
Flow, Cooling	Intake	Pump Logs	Daily
Water Makeup			
TSS			
	Sewage and Treatment Facility	8 Hour Composite	Monthly
Chlorine	CHSES Sewage Treatment	Grab	Weekly
	Plant		

The following parameters shall be monitored quarterly at any on-site generated wastewater discharge pipe into the makeup water storage supply pond and reported using the DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT form or monitored in appropriate groundwater monitoring wells.

Arsenic

Barium

Cadmium

Chromium Fluorides

Lead Mercury Methoxychlor

Nitrate

Chlordane bis- (2-Chloroethyl)- ether

1,2 diphenylhydraxine Dichloromethane

Tetrachloroethylene

1,2 dichloroethane

Radioactive Substances:

Gross Alpha

Combined Ra²²⁶ and Ra²²⁸

Selenium Silver 2,4,-D 2,4,5,-TP Toxaphene

Benzene

1, 1 dichloroethylene 1,1,1 trichloroethane Vinyl Chloride

Trichloroethylene

Chloroform

2. Groundwater Monitoring

The groundwater levels shall be monitored continuously at selected wells as approved by the Department and the St. Johns River Water Management District. Chemical analyses shall be made on samples from all monitored wells identified in Condition XI.E. below. The location, frequency, and selected chemical analyses shall be given in condition XI.E.

The groundwater monitoring program shall be implemented at least one year prior to operation of CHSEC Unit 1 and shall be in conformance to DEP Rules 62-520 and 62-522, F.A.C. The chemical analyses shall be in accord with the latest edition of <u>Standards</u> Methods for the Analysis of Water and Wastewater. The data shall be submitted within 30 days

of collection/ analysis to the St. Johns River Water Management District, and the DEP Central District Office.

Conductivity shall be monitored in wells around all lined solid waste disposal sites, coal piles, and wastewater treatment and sedimentation ponds.

3. Surface Water Monitoring

The surface waters leaving the CHSEC shall be monitored monthly when flowing at on site locations as approved by the Department, the St. Johns River Water Management District and the Orange County Pollution Control Department. The locations shall include Hart Branch and Cowpen Branch which may contain leachate, surface drainage or other surface water discharges.

The surface water monitoring programs shall be implemented at least one year prior to operation of CHSEC Unit 1. Monthly data shall be submitted within 30 days of collection/analysis to the Department, the St. Johns River Water Management District and the Orange County Environmental Protection Department. The chemical analyses shall be in accord with the latest edition of Standards Methods for the Analysis of Water and Wastewater and shall include at least the following chemical water quality parameters.

Conductance

pН

Sulfate

Nitrate

Chloride

Turbidity

Phosphorous

Iron

XI. GROUNDWATER

A. GENERAL

The use of groundwater from the wellfield for plant service water for CHSEC shall be minimized to the greatest extent practicable, but in no case shall withdrawals exceed 2.00 million gallons per day from the Floridan aquifer, nor shall maximum annual withdrawals exceed 321.20 million gallons.

B. Pump Test Program and Well Field Construction

60 days prior to construction of the wellfield the applicant shall submit final wellfield construction plans to the SJRWMD for approval. A pump test program shall be performed to obtain aquifer parameters necessary for proper wellfield planning and construction. The proposed test program shall be submitted with the wellfield construction plans so that the

SJRWMD in conjunction with the DER can approve the adequacy of the program. The utilization of the test well as a production well is allowable provided the well is constructed to the standards provided in 40C-3, Part II, F.A.C.

Construction plans shall incorporate the appropriate aquifer parameters determined in the pump test program. The applicant shall submit all well logs and locate, design and construct all wells in accordance with 40C-3, F.A.C.

C. Water Use Restriction

Groundwater is restricted to uses other than cooling water make up. Any changes in the use of said water will require a modification of this condition.

D. Monitoring and Reporting

OUC shall, within the time limits hereinafter set forth, complete the following items.

- 1. The applicant shall install a flow meter for the production wellfield pipeline at the inlet to the plant service water pretreatment system. The applicant will maintain pump logs for operation of each production well in compliance with SJRWMD specifications. The pump logs will show the rating of each pump and record the length of time each pump is used. Well pumps will be calibrated on a yearly basis, and the calibration certificate shall be submitted to SJRWMD.
- 2. OUC shall submit to SJRWMD, on forms available from the District, a record of pumpage for each log used in D.1 above. Said pumpage shall provide on monthly basis, and shall be submitted by April 15, July 15, October 15 and January 15, for each preceding calendar quarter.
- 3. OUC shall maintain and operate a continuous water level; recorder on either the standby production well or a specially constructed observation well located at the Stanton site in Orange County, Florida. Detailed hydrographs of water level fluctuations shall be constructed with the data collected from the water level recorder and shall be submitted to SJRWMD by April 15, July 15, October 15, and January 15 for each preceding calendar quarter for the year prior to operation and the year after the initiation of operation. From the second year of operation on, water levels shall be reported twice a year (May and September).
- 4. Water quality analysis shall be performed on water withdrawn from each production wellfield pipeline at the inlet to the plant service water pretreatment system. The water samples collected shall be collected after the well field has been pumping for at least 30 minutes. The water quality analysis shall be performed quarterly during the year prior to operation, monthly during the first year of operation, quarterly during the second year and twice each year (May and September) thereafter. Results shall be submitted to the SJRWMD within 45 days after such analyses were performed. If SJRWMD, DEP, or the applicant determines

there is a significant change in water quality, then the applicant shall sample each individual well. The following parameters shall be analyzed:

Calcium

Magnesium

Sodium

Potassium Chloride

Bicarbonate

Sulfate

Nitrate

Total Dissolved Solids

Hardness

Color

Total Phosphate

Gross Alpha

Fe, Ag, Cd, Zn, Cu, Ni, Se, Cr, As, Be, Hg, Pb, Mn, Al, Ba, Mo, V,

Co, SO₃

Specific Conductance

All chemical analyses shall be performed in accordance with the latest edition of Standard Methods for the Analysis of Water and Waste-Water. The staff of the SJRWMD may adjust the parameters and intervals to be analyzed in accordance with hydrologic conditions determined by well logs and operating records.

5. In the event SJRWMD determines there is a sufficient change quality (substantially caused by CHSEC and causing a potentially significant effect on water use), the Department may propose pursuant to Section 403.516, F.S., that the permittee be required to reduce or cease withdrawal from these groundwater sources and/or that additional parameters be monitored.

E. Shallow Aquifer Monitoring Wells

After consultation with the DER and SJRWMD, OUC shall install a monitoring well network to adequately monitor groundwater quality horizontally and vertically from the ground to the bottom of the Hawthorne Formation. Groundwater levels and flow directions will be determined twice a year (May and September) at the site through the preparation of seasonal piezometric contour maps. From these maps, the water quality monitoring well network will be located. Monitoring well locations and designs shall be submitted to the Department and SJRWMD for review and approval. Approval or disapproval of the locations and design shall be granted within 60 days. Monitoring wells of adequate design and number shall be installed up gradient and down gradient from each solid waste disposal area, each liquid waste pond and each coal pile storage area. An additional monitoring well will be placed immediately down gradient of the first section of each solid waste landfill to be utilized. The water samples collected from each of the monitor wells shall be collected immediately after removal by pumping of a quantity of water equal to two casing volumes. The water quality analyses shall be performed monthly during the year prior to commercial operation and quarterly thereafter. Results shall be submitted to the Department and the SJRWMD by the fifteenth (15th) day of the month following the month during which such analyses were performed. Testing for the following constituents is required:

> TDS Conductance PH Sulfate

Zinc Copper Nickel Selenium A program for controlling the groundwater impacts of construction dewatering shall be submitted to the Department and the St. Johns River Water Management District for review and approval prior to implementation.

XII. SOLID WASTES

Solid wastes resulting from construction or operation shall be disposed of in accordance with the applicable regulations of Chapter 62-701, F.A.C. The permittee shall submit a program for approval outlining the methods to be used in handling and disposal of solid wastes. Such a program shall indicate at the least methods for erosion control, covering, vegetation, and quality control.

Open burning in connection with land clearing shall be in accordance with Chapters 62-256 and 5I-2, F.A.C. No additional permits shall be required, but the Orange County Pollution Control Department shall be notified prior to burning. Open burning shall not occur if the Division of Forestry has issued a ban on burning due to fire hazard conditions.

XIII. POTABLE WATER SUPPLY SYSTEM

The potable water supply system shall be designed and operated in conformance with Chapter 62-555, F.A.C. Information as required in 62-4 and 62-555, F.A.C. shall be submitted to the Department prior to construction and operation. The operator of the potable water supply system shall be certified in accordance with Chapters 62-555.35062-602.400, and 62-699, F.A.C.

XIV. TRANSFORMER AND ELECTRIC SWITCHING GEAR

The foundations for transformers, capacitors, and switching gear necessary to connect any CHSEC Unit to existing transmission and distribution system shall be constructed in such a manner as to allow complete collection and recovery of any spills or leakage of oily, toxic, or hazardous substances.

XV. CONSTRUCTION IN WATERS OF THE STATE

- A. No construction on sovereign submerged lands shall commence without obtaining lease, easement or title from the Department and/or Trustees of the Internal Improvement Trust Fund.
- **B**. Construction of pilings, railroad right-of-way, culverts, access roads, pipelines, and transmission towers shall be done in a manner to minimize turbidity. Turbidity screens should be used to prevent turbidity in excess of 29 NTU's above background beyond 40 meters from the excavation, right-of-way, pile driving, or construction site.

All spoil from construction of the CHSEC and related facilities shall be trucked to an upland disposal site of sufficient capacity to retain all material.

XVII. SOLID WASTE LANDFILL

- A. The proposed solid waste landfill area shall be monitored and studied pursuant to an adequately detailed groundwater testing and monitoring program as defined in Condition IV, D. and E. The results of this detailed groundwater testing and monitoring program will be used by the Department in determining whether OUC shall affirmatively demonstrate that Florida Water Criteria (Chapter 62-550, F.A.C.) will not be violated.
- B. Before construction of the solid waste landfill or any expansion thereof commences, Karst features interfering with the hydrogeological integrity of the site in the vicinity of the solid waste landfill shall be adequately stabilized both physically and hydraulically against, respectively, collapse and unusual downward transport of groundwater.
- C. OUC shall select and adopt one or more of the following mitigative measures for controlling water quality beneath the solid waste landfill:
- 1. Use of an adequate chemical fixation process on the solid wastes to achieve a uniform layer at least 18 inches in thickness across the cell with a permeability of 1×10^{-7} cm/sec or less.
- 2. Use of an adequate chemical fixation process on the solid wastes to achieve solid waste permeability of 5 x 10^{-6} cm/sec or less. The top of each completed cell shall be constructed with a slope of 0.75% and an effort will be made to decrease the permeability of the top layer of fixed FGD material to less than 5 x 10^{-6} cm/sec.
- D. Ninety days prior to operation of Unit 1, OUC shall submit a program demonstrating how the fixed FGD waste landfill permeability will be maintained at or below a level of 5 x 10 ⁶cm/sec. The DEP will indicate its approval or disapproval of the program within 60 days. OUC shall implement an approved program.
- E. OUC shall adopt in addition all of the following mitigative measures for further controlling water quality beneath the solid waste landfill:
- 1. Use of adequate ramp-slopes over combustion waste storage cells and an adequate perimeter toe ditch and interceptor ditch system for controlling and concentrating rain runoff within the solid waste landfill area.
- 2. Use of adequate and systematic measures for compacting all solid wastes as they are emplaced within the landfill.
- 3. Maintenance of a soil cover and a viable community of grasses, which would eventually extend over the entire solid waste landfill area.
- F. Prior to the commencement of operation of solid waste disposal areas or expansion thereof, the following shall be submitted to the Department and the St. Johns River District Manager for review and approval consistent with other conditions of this certification:

- 1. Plot Plan should be drawn on a scale not greater than 200 ft. to the inch showing the following:
 - a. Dimensions and legal description of the site
 - b. Location and depth corrected to MSL of soil borings
 - c. Proposed trenching plan
 - d. Cover stockpiles
 - e. Fencing or other measures to restrict access
 - f. Cross sections showing both original and proposed fill elevation
- g. Location, depth corrected to MSL, and construction details of monitoring wells or ditch monitoring points
- 2. Design Drawings and Maps may be combined with plot plan and should be drawn on a scale no greater than 200 ft. to the inch showing the following:
 - a. Topographic map with five foot contour intervals
 - b. Proposed fill areas
 - c. Borrow area
 - d. Access roads
 - e. Grades required for proper drainage
- f. Typical cross sections of disposal site including lifts, borrow areas and drainage controls
 - g. Special drainage devices
- 3. Soil map, Interpretive Guide Sheets and a report giving the suitability of the site for such an operation.
 - 4. Operation plans to direct and control the use of the site.
- 5. An indication by discussion or drawings or both of how the site is designed to meet water quality standards of Chapter 62-302 and 62-550, F.A.C, at the waste site boundary or the boundary of the zone of discharge. Adequate indications above would include discussion of each mitigative water quality control measure that would be employed, including but not limited

to: liners, chemical fixation process, compaction, under drains and chemical treatment facilities, impermeable clay caps, soil and grass communities.

Based on the Department's reviews of the above, additions to or modifications of the overall monitoring program may be required for monitoring of runoff, groundwaters, and surface waters which may be affected by the various land filling operations.

The Department shall indicate its approval or disapproval of the submitted plans, drawings, maps, analyses and contingency plans within 60 days.

XVIII. TRANSMISSION LINES, ACCESS ROAD, NATURAL GAS PIPELINE AND RAIL SPUR

A. GENERAL

- 1. Filling and construction in water of the State shall be minimized to the extent practicable. No such activities shall take place without obtaining lease or title from the Department and/or TIITF where required. Construction and access roads should avoid wetlands and be located in surrounding uplands to the extent practicable.
- 2. Placement of fill in wetland areas shall be minimized by spanning such areas with the maximum span practicable. Borrow pits shall not be located in waters of the State.
- 3. The Department may determine that any fill required in wetlands for construction but not required for maintenance purpose shall be removed and the ground restored to its original contours after transmission line, roadway or rail spur placement. Placement and removal of any such temporary fill shall be coordinated with the DEP District Office.
- 4. Where fill in wetlands is necessary for access, keyhole fills from upland areas should be oriented as nearly parallel to surface water flow lines as possible.
- 5. Sufficient size and number of culverts or other structures shall be placed through fill causeways to maintain substantially unimpaired sheet flow.
- 6. Turbidity control measures, including but not limited to hay bales, turbidity curtains, sodding, mulching, and seeding, shall be employed to prevent violation of water quality standards.
- 7. The Rights-of-Way shall be located so as to minimize impacts in or on streambeds such as the removal of vegetation, to the extent practicable. For transmission lines, within 25 feet of the banks of any streams, rivers or lakes, vegetation shall be left undisturbed, except for selective topping of trees or removal of trees which topping would kill. For transmission lines, if it is necessary to remove such trees within 25 feet of the banks of streams, rivers or lakes, the root mat shall be left undisturbed.

- 8. Any necessary water quality certifications which must be made to the Corps of Engineers shall be made at the time of a finding of compliance for specific work at specific locations.
- 9. Construction activities should proceed as much as practicable during the dry season.

B. OTHER CONSTRUCTION ACTIVITIES

- 1. Maintenance roads under control of the permittee shall be planted with native species to prevent erosion and subsequent water quality degradation where drainage from such roads would impact waters of the State significantly.
- 2. Good environmental practices such as described in <u>Environmental Criteria for Electric Transmission Systems</u> as published by the U.S. Department of Interior and the U.S. Department of Agriculture shall be followed to the extent practicable.
- 3. Compliance with the most recent version of the National Electric Safety Code adopted by the Public Service Commission is required.
- 4. Fences running parallel to the transmission line which may become conductive shall be grounded at appropriate intervals; fences running perpendicular to the line shall be grounded at the edge of the right-of-way.
- 5. Field reconnaissance of rare and endangered species shall be performed in order to minimize impacts on these species.
- 6. Open burning in connection with land clearing shall be in accordance with the applicable rules of the Department of Agriculture and Consumer Services. No additional permits shall be required, but the Orange County Pollution Control Board shall be notified prior to burning. Open burning shall not occur if the Division of Forestry has issued a ban on burning due to fire hazard conditions.

C. MAINTENANCE

- 1. Vegetative clearing operations for maintenance purposes to be carried out within the corridor shall follow the general standards for clearing right-of-way for overhead transmission lines as referenced in Sections XIV.A.7 and XIV.B.2. Selective clearing of vegetation is preferred over clearing and grubbing or clear cutting.
- 2. If chemicals or herbicides are to be used for vegetation control, the name, type, proposed use, locations, and manner of application shall be provided to the Department prior to their application for assessment of compliance with applicable regulations.

D. ARCHAEOLOGICAL SITES

Any archaeological sites discovered during construction of the transmission lines, access roads or rail spurs shall be disturbed as little as possible and such discovery shall be communicated to the Department of State, Division of Historical Resources (DHR). Potentially affected areas will be surveyed, and if a significant site is located, the site shall be avoided, protected, or excavated as directed by DHR.

E. ROAD CROSSING

For all locations where the transmission line, the rail spur or gas pipeline will cross State highways, the applicant will submit materials pursuant to the Department of Transportation's (DOT) "Utility Accommodation Guide" to DOT's district office for review and approval. All applicable regulations pertaining to roadway crossings by rail or transmission lines shall be complied with. Crossing of county roads shall be coordinated with the County Engineer.

F. EMERGENCY REPORTING

Emergency replacement of previously constructed right-of-way or transmission lines shall not be considered a modification pursuant to Section 403.516, F.S. A verbal report of the emergency shall be made to the Department as soon as possible. Within fourteen (14) calendar days after correction of the emergency, a report to the Department shall be made outlining the details of the emergency and the steps taken for its temporary relief. The report shall be a written description of all of the work performed and shall set forth any pollution control measures or mitigative measures which were utilized or are being utilized to prevent pollution of waters, harm to sensitive areas or alteration of archaeological or historical resources.

G. FINAL RIGHT-OF-WAY LOCATION

A map of 1:24000 scale showing final location of the right-of-way shall be submitted to the Department upon completion of acquisition.

H. COMPLIANCE

Construction and maintenance shall comply with the applicable rules and regulations of the Department and those agencies specified in 62-17.54 (2)(a) and (b), F.A.C.

I. CONSTRUCTION PLANS

All proposed transmission line ROW areas, plant access roads and railroad lines which are designed to traverse a stream, lake, pond, canal, swamp, marsh or other natural or artificial system which functions to store or convey water and would require a permit under Chapter 40C-4 or 40C-6, F.A.C., shall have said design plans and specifications reviewed by the SJRWMD or SFWMD staff. The staff shall determine if such plans are consistent with the Site Certification Application, the Recommended Conditions of Certification and applicable District

rules. To determine such consistency, information to include but not be limited to the following items shall be submitted to the District 60 days prior to construction:

- 1. A centerline profile of existing topographic features along proposed access road (s).
 - 2. Preliminary design of proposed access road (s) with elevations marked.
 - 3. Typical cross-section of access road (s).
- 4. Cross-section of each stream of creek at those points to be crossed by access road (s) or other facilities.
- 5. Specifications showing size and type of water control structure (pipe, culvert, etc.) to be placed within or on waters of the District, with proposed flowline elevations marked.
- 6. Specifications showing design capacity of all water control structures to be employed.
- 7. Specifications showing location and type of each transmission tower and access road (s) to be constructed within or on the waters of the District.
- 8. Computer rates of flow for streams or water courses before and after construction during a one hundred (100) year flood.
- 9. Any other information needed by OUC to show compliance with standards in Rule 40C-4 and 40C-6, Florida Administrative Code.

XIX. FLOOD CONTROL PROTECTION

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

XX. RAILROAD SPUR LINE

Modifications to the railroad spur line proposal as presented in the Site Certification Application would require that the modifications be reviewed by the South Florida Water Management District's staff for concurrence, and approved by the Secretary.

XXI. RED COCKADED WOODPECKER MANAGEMENT PLAN

The management plan for the Red-Cockaded Woodpecker as described in Section 5.7 and Appendix 5.7A of the application shall be implemented for the life of the facility. The monitoring program shall be extended to cover the first five years of plant operation unless the Florida Fish and Wildlife Conservation Commission should recommend a termination of the monitoring program.

XXII. NITRATE

OUC shall monitor nitrate levels in Hart Branch at the site boundary during construction to establish background levels of that parameter. Monitoring of nitrate shall continue during plant operation. If nitrate levels exceed 1.0 mg/l or if preoperational background levels of NO₃ exceed 1.0 mg/l and plant operation causes the NO₃ levels to rise more than 25% above background, OUC shall take appropriate action to control the NO₃. Nitrate and other contaminants from the water supply pond will be monitored at incremental distances from the pond in a program to be submitted by OUC and approved by the DER and SJRWMD to determine the dispersion and diluting characteristics of nitrate in the non-artesian groundwater aquifer. Based on the results of the monitoring, a projection of nitrate concentration at 500 feet from the pond will be made. If these projections indicate that at 500 feet from the pond the ground water nitrate concentrations will be at or above 10 mg/l, then OUC will develop a program of corrective action. Such corrective action will be prepared by OUC and implemented after approval of the DEP, SJRWMD, and Orange County. Other contaminants shall be allowed a zone of discharge 50 feet deep extending 250 feet from the pond.

XXIII. FISH AND WILDLIFE MANAGEMENT

OUC shall consult with the Florida Fish and Wildlife Conservation Commission and, if possible, implement a fish and wildlife management plan as discussed in the Commission's letter of February 12, 1982.

XXIV. COAL PILE

The coal pile shall be lined with a material with a permeability not greater than 1×10^{-7} cm/sec. or the leachate shall be controlled to prevent violation of water quality criteria beyond the zone of discharge.

XXV. FISH AND WILDLIFE CONSERVATION COMMISSION

A. WILDLIFE SURVEY

Prior to the construction of the proposed facility, a wildlife survey, consistent with methodology prescribed by the FFWCC, shall be conducted for the presence of listed species (endangered, threatened, or species concern) and suitable habitat for same within the site. The results of said survey shall be submitted to the DEP, the FFWCC, and the United States Fish and Wildlife Service. If construction of the proposed facility will impact any listed species, other than the previously identified impact on the foraging habitat of the red-cockaded woodpecker resulting from the clearing of the transmission line right-of-way, the Permittee shall consult with the DEP and the FFWCC to determine the appropriate steps to avoid, minimize, mitigate, or otherwise appropriately address any adverse impacts within each agency's respective jurisdiction.

B. NESTING SANDHILL CRANES

Nesting sandhill cranes shall be avoided by limiting installation of transmission lines over wetlands utilized by nesting cranes to periods outside of the nesting season, which runs from January through June.

C. MANAGEMENT PLAN

Before construction, a management plan for the preserved areas shall be presented to the FFWCC for review and approval. At a minimum, this plan shall include a statement of what habitat function the preserve is expected to provide; a schedule of fire management through a certified burn specialist and including, but not limited to, burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures taken to remove exotic vegetation from both wetlands and uplands; and the responsible entity.

D. NATURAL GAS PIPELINE

In order to minimize impacts to the red-cockaded woodpecker, we recommend that the construction of the natural gas pipeline in the vicinity of the red-cockaded woodpecker cavity trees occur outside the nesting season (April through June), or a determination be made by a qualified biologist that nesting is not occurring in any cavity tree within 200 feet of the edge of the construction right-of-way prior to initiation of pipeline construction activities.

XXVI. SOUTH FLORIDA WATER MANAGEMENT DISTRICT - LEGAL/ADMINISTRATIVE CONDITIONS

A. GENERAL

1. Compliance Requirements

This project must be constructed, operated and maintained in compliance with and meet all non-procedural requirements set forth in Chapter 373, F.S., and Chapter 40E-4 (Surface Water Management), F.A.C.

2. Off-Site Impacts

It is the responsibility of the Permittee to ensure based on information provided that adverse off-site water resource related impacts do not occur during the construction, operation, and maintenance of the transmission line and associated transmission line access roads within SFWMD.

3. Post Certification Information Submittals

Information submitted to the SFWMD subsequent to Certification, in compliance with the conditions of this Certification, shall be for the purpose of the SFWMD determining the Permittee's compliance with the Certification conditions and the non-procedural criteria contained in Chapter 40E-4, F.A.C., as applicable, prior to the commencement of the subject construction, operation and/or maintenance activity covered thereunder.

B. PROCESSING OF INFORMATION REQUESTS

1. Right-of-way Modifications

At least ninety (90) days prior to the commencement of construction of any portion of the transmission line, the Permittee shall submit any proposed modifications to the transmission line right-of-way, identified on Exhibits 2, 3 and 4 (Figures 6.1-2, 6.1-3, and 6.1-4), to the SFWMD staff for review and approval. If the SFWMD staff does not issue a written request for additional information and/or an objection to the proposed right-of-way modification within thirty (30) days, the modification shall be presumed to be complete and acceptable.

2. Completeness and Review

At least ninety (90) days prior to the commencement of construction of any portion of the linear facilities located in the SFWMD, the Permittee shall submit to SFWMD staff, for a completeness and sufficiency review, any pertinent additional information required under the SFWMD's Conditions of Certification for that portion proposed for construction. If SFWMD staff does not issue a written request for additional information within thirty (30) days, the information shall be presumed to be complete and sufficient.

3. Compliance Review and Confirmation

Within sixty (60) days of the determination by SFWMD staff that the submitted information is complete and sufficient, the SFWMD shall determine and notify the Permittee in writing whether the proposed activities conform to SFWMD criteria, as required by Chapter 40E-4, F.A.C., and

the Conditions of Certification. If necessary, the SFWMD shall identify what items remain to be addressed. No construction activities shall begin until the SFWMD has determined either in writing, or by failure to notify the Permittee in writing, that the activities are in compliance with the applicable SFWMD criteria.

4. Revisions to Site Specific Design Authorizations

The Permittee shall submit, consistent with the provisions of Condition IV/I.B, any proposed revisions to the site specific design authorizations specified in this Certification to the SFWMD for review and approval prior to implementation. The submittal shall include all the information necessary to support the proposed request, including detailed drawings, topographic maps, average wet season water table elevations, calculations and/or any other applicable data. Such requests may be included as part of the appropriate additional information submittals required by this Certification provided they are clearly identified as a requested modification to the previously authorized design.

5. Dispute Resolution

Since this Certification is the only form of permit required from any agency, it is understood that the Permittee and the SFWMD shall strive to resolve disputes by mutual agreement.

6. Objections

Objections to modifications of the terms and conditions of this Certification shall be resolve through the process established in Section 403.516, F.S.

7. Changes to Information Requirements
The SFWMD and the Permittee may jointly agree to vary the informational requirements.

XXVII. SFWMD SURFACE WATER MANAGEMENT CONDITIONS

A. GENERAL CONDITIONS

1. Professional Engineer Certificate

The operation of the surface water management system authorized under this certification shall not become effective until a Florida Registered Professional Engineer certifies, upon completion of each phase, that these facilities have been constructed in accordance with the design approved by the SFWMD. Within 30 days after completion of construction of the surface water management system, the Permittee or authorized agent shall submit the engineer's certification and notify the SFWMD Field Engineering Division that the facilities are ready for inspection and approval. Such notification shall include as-built drawings of the site which shall include elevations, locations, and dimensions of components of the surface water management system.

2. Impacts of Fish, Wildlife, Natural Environment Values and Water Quality
The Permittee shall prosecute the work authorized under this Certification in a manner so
as to minimize any adverse impacts of the authorized works on fish, wildlife, natural
environment values, and water quality. The Permittee shall institute necessary measures during
the construction period, including necessary compaction of any fill material placed around newly

installed structures and/or the use of silt screens, hay bales, seeding and mulching, and/or other similar techniques, to reduce erosion, turbidity, nutrient loading and sedimentation in the receiving waters.

3. Correction of Water Quality Problems

The Permittee shall be responsible for the correction of any sedimentation, turbidity, erosion, shoaling and/or maintenance of the works authorized under this Certification.

4. Off-Site Conveyances

All off-site conveyances during construction and development of the transmission line and associated access roads shall be made only through the conveyance facilities authorized by this Certification. No roadway or structure pad construction shall commence on-site unless in conjunction with the construction of the permitted conveyance facilities and any associated detention areas. Water conveyed from the project shall be through facilities having a mechanism suitable for regulating upstream water stages. Stages may be subject to operating schedules satisfactory to the SFWMD.

5. Additional Water Quality Requirements

The Permittee may be required to incorporate additional water quality treatment methods into the surface water management system if such measures are shown to be necessary.

6. Access Roads

The Permittee shall, whenever available, utilize adjacent existing roads for access to the transmission line right of way for construction, operation and/or maintenance purposes. Finger roads connecting the existing roads to the structure pads and access roads which must be constructed in areas where an existing road is not available shall be constructed in a manner which does not impede natural drainage flows and minimizes impacts to on-site and adjacent wetlands.

7. Correction of Drainage Problems

The Permittee shall be responsible for the correction of any adverse on-site, upstream, and/or downstream drainage and/or wetland impacts which may occur as a result of the construction of the proposed access road and/or structure pads. These may include the placement and/or removal of culverts and/or other structures to remedy the impact.

8. Modifications

Subsequent modifications to the drawings and supporting calculation submitted to the SFWMD which may alter the quantity and/or quality of waters discharged off-site shall be made pursuant to Section 403.516, F.S., and Rule 17-17.211, F.A.C. They shall also be submitted to the SFWMD for a determination that the modifications are in compliance with the non-procedural requirements of Chapters 40E-2 and 40E-4, F.A.C., prior to the commencement of construction.

B. SITE SPECIFIC DESIGN AUTHORIZATIONS

1. Access/Maintenance Road and Structure Pads

The Permittee is authorized to construct an access/maintenance road and associated conveyance facilities for the transmission line in the areas specifically identified on Exhibits 2, 3, and 4 (Figures 6.1-2, 6.1-3, and 6.1-4). Areas where an access/maintenance road is not proposed will be accessed from existing roads.

- 2. Authorized Receiving Water (Transmission Line Access Maintenance Roads only)
 - 3. Adjacent Wetlands

C. ADDITIONAL INFORMATION REQUIREMENTS

- 1. Access/Maintenance Road and Structure Pad Construction Plans
 Prior to the commencement of construction of any portion of the transmission line which
 affects the movement of waters, the Permittee shall submit plans for any construction activities
 for that portion of the transmission line which may obstruct, divert, control, impound or cross
 waters of the state, either temporarily or permanently, to the SFWMD, consistent with the
 provisions of Condition IV/I.B, for a determination of compliance with the non-procedural
 requirements of Chapter 40E-4, F.A.C., in effect at the time of submittal. "Construction
 activities" in this situation shall include the placement of access/maintenance roads, culverts,
 and/or fill materials, excavation activities, and any related activities. All plans, detail sheets and
 calculations shall be signed and sealed by a Florida Registered Professional Engineer. For all
 construction activities, the following information, referenced to NGVD, shall be submitted:
 - (1) A centerline profile of existing topographic features along the proposed access/maintenance road(s);
 - (2) A design of the proposed access/maintenance and finger road(s) with finished elevations marked;
 - (3) A typical cross-section of the proposed access/maintenance and finger road(s), including relative dimensions and elevations;
 - (4) A cross-section of each stream or creek at the point(s) to be crossed by the proposed access/maintenance and finger road, and/or other facility;
 - (5) Identification of wet season water table elevations for each basin in which facilities will be located:
 - (6) Specifications, including supporting assumptions and calculations, showing the type and size of water control structures (pipe, culvert, equalizer, etc.) to be used, with proposed flowline elevations marked, drainage areas identified, and design capacity verified;
 - (7) A cross-section of any proposed excavation areas showing the proposed depth of excavation;
 - (8) Calculations and supporting documentation which demonstrate that the proposed construction and/or excavation activities associated with the transmission line

will not have an adverse water quantity and/or water quality impact on adjacent wetlands and/or permitted surface water management systems;

(9) If construction of the transmission line contributes to the necessity for future modifications to adjacent/existing roads, water quality treatment requirements of the requested road modifications must be addressed in the surface water management system design for the transmission line.

XXVIII. SFWMD ENVIRONMENTAL CONDITIONS

A. GENERAL

1. Wetland Avoidance

The Permittee shall avoid impacting wetlands within the transmission line corridor wherever practicable. Where necessary and feasible, the location of the structure pads, other related facilities and/or the transmission line alignment shall be varied to eliminate or reduce wetland impacts. The Permittee shall work in accordance with the submitted plans in the supplemental site certification application as supplemented by final approved construction plans. Clearing and construction activities shall be confined to the limits of the clearing zone.

2. Fill Materials

No fill materials shall be obtained from excavated wetlands or within 200 feet of functional wetlands, unless in accordance with a mitigation plan submitted in compliance with the conditions of this Certification.

3. Additional Wetlands Mitigation

The Permittee may be required to provide additional mitigation and/or other measures if wetland monitoring and/or other information demonstrates that adverse impacts to protected, restored, incorporated, and/or mitigated wetlands have occurred as a result of project-related activities.

4. Additional Environmental Review

The Permittee shall submit any proposed changes in land use, project design, and/or the treatment of on-site wetlands to the SFWMD for additional environmental review in order to determine whether any additional mitigation activities will be required.

5. Mitigation Areas

Mitigation credits shall be given for mitigation areas within both the SFWMD and the SJRWMD. Mitigation credits shall be given for acreages and activities which have also been accepted by the DER as mitigation for impacts in areas of joint jurisdiction. Any acreages or activities proposed by the mitigation plan and its addendum which exceed the mitigation requirements of the SJRWMD, and meet the non-procedural requirements for wetland mitigation of the SFWMD, shall be credited as mitigation for impacts within the SFWMD. If required by SFWMD, OUC agrees to provide additional acreages and activities to offset impacts within SFWMD not credited by the Mitigation Plan (June 1991) and its addendum (Sept 1991).

B. SITE SPECIFIC DESIGN AUTHORIZATIONS

1. Authorized Wetland Impacts

The Permittee is authorized to construct an access/maintenance road and associated conveyance facilities for the transmission line and structure pads in the wetland areas specifically identified on Exhibits 2, 3, and 4 (Figures 6.1-2, 6.1-3, and 6.14).

2. Sandhill Crane Nest Protection

The Permittee shall protect the active sandhill crane nest located in the 0.58-acre marsh situated between stations 125 and 126 in accordance with the following requirements:

- (1) The transmission line poles and structure pads shall be positioned so that the transmission line spans the marsh;
- (2) Construction shall be scheduled to avoid the nesting season for sandhill cranes:
 - (3) The marsh shall not be disturbed in any way;
- (4) The access road shall be located in the swale adjacent to the railroad rather than in the marsh.

C. ADDITIONAL INFORMATION REQUIREMENTS

1. Wetlands Protection

Prior to the commencement of construction of any portion of the transmission line which will be located adjacent to the wetlands identified for preservation, the Permittee shall:

- (1) Stake and rope off the protected wetlands and buffer zones to prevent encroachment during construction. The stakes and ropes shall remain in place until all adjacent construction activities have been completed. Verification of staked areas by SFWMD staff shall be required prior to the commencement of and upon completion of any construction activities.
- (2) Install silt screens, turbidity barriers and/or hay bales prior to any construction in or alteration of any wetlands within the project site in order to prevent adverse water quality impacts to wetlands. These barriers shall remain in place until fill material is stabilized and turbidity has returned to background levels.

2. Mitigation Plan

Prior to the commencement of construction of any portion of the transmission line which may affect wetlands, the Permittee shall submit a mitigation and monitoring plan to the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-4, F.A.C., including Appendix 7 (Isolated Wetlands Rule) of the Basis of Review for Surface Water Management Permit Applications in the SFWMD, in effect at the time of submittal. At a minimum, the plan shall include the following information:

- (1) Locations and sizes of all proposed mitigation areas, species to be planted, planting densities, details of the proposed hydrologic regime, cross-sections showing the proposed elevations and water depths, and an estimated time schedule for completion of the construction of the mitigation areas.
- (2) A wetland mitigation and/or restoration work schedule which details each specific mitigation task (e.g. grading to proper elevation, mulching, planting, regularly

scheduled maintenance and monitoring, etc.) and the calendar dates for the start and completion of each task.

- (3) Provisions for both quantitative and qualitative observations of wildlife utilization and the vegetative community, monthly water level readings, panoramic photographs documenting the condition of the mitigation areas, and evaluation of the success of the mitigation effort, and an annual report incorporating this information and any other relevant information. The water level readings will be taken weekly for sampling points that are accessible until demonstrated to the appropriate agency that less frequent water level readings are sufficient to demonstrate compliance.
- (4) Documentation that sufficient areas have appropriately worded conditions of certification within the SFWMD and/or the SJRWMD to compensate for the proposed wetland impacts with both the water management district.

XXIX. ST. JOHNS RIVER WATER MANAGEMENT DISTRICT

A. WATER SHORTAGES

Nothing in this certification shall be construed to limit the authority of the SJRWMD to declare a water shortage and issue orders pursuant to Section 373.175, Florida Statutes or to formulate a plan for implementation during periods of water shortage, pursuant to Section 373.246, Florida Statutes. Pursuant to Section 403.516, Florida Statutes, in the event of a water shortage as declared by the the SJRWMD governing board, DEP may seek a modification of the terms and conditions of this certification to implement the water shortage declaration and the permittees must adhere to reductions in water withdrawals as specified.

B. WELL CONSTRUCTION, MODIFICATION, OR ABANDONMENT

Prior to the construction, modification, or abandonment of an on-site well, the Licensees must submit a completed application form for a Water Well Construction Permit to DEP and SJRWMD. All construction, modification, or abandonment of water wells must be conducted under the supervision of a licensed water well contractor and must be performed in accordance with Chapter 40C-3, F.A.C. Construction of a well will require modification of the certification when such construction is other than that specified and described in the Site Certification Application. Prior to modification or abandonment of a well, the Licensees must file an amendment to the site certification application with DEP and SJRWMD. Upon completion of the construction, modification or abandonment of each well, the Licensees must submit to SJRWMD and DEP a completion report for the well.

C. WELL MAINTENANCE

Leaking or inoperative well casings, valves, or controls must be repaired or replaced as required to put the system back in an operative condition acceptable to the SJRWMD. Failure to make such repairs will be cause for deeming the well abandoned in accordance with with Part II of chapter 373, F.S., and chapter 40C-3, F.A.C., and the rules promulgated thereunder.

D. MITIGATION OF WITHDRAWAL IMPACTS ON EXISTING LEGAL USERS

OUC, et al., must mitigate any adverse impact caused by withdrawals permitted herein on legal uses of water existing at the time of the initial application for the Stanton Energy Center. If unanticipated significant adverse impacts occur, the DEP has the right to curtail permitted withdrawal rates or water allocations if the withdrawals of water cause an adverse impact on legal uses of water which existed at the time of application. Adverse impacts are exemplified by but not limited to:

- 1. Reduction of water levels in an adjacent surface water body resulting in a significant impairment of the use of water in that water body.
- 2. Saline water intrusion or introduction of pollutants into the water supply of an adjacent water use resulting in a significant reduction of water quality; and
- 3. Change in water quality resulting in either impairment or loss of use of a well or water body.

E. MITIGATION OF IMPACTS ON ADJACENT LAND USES

OUC, et al., must mitigate any adverse impact caused by withdrawals permitted herein on an adjacent land use which existed at the time of Supplemental Site Certification Application for Stanton 2. If unanticipated significant adverse impacts occur, the DEP has the right to curtail permitted withdrawal rates or water allocations unless the impacts can be mitigated by OUC, et al. Adverse impacts are exemplified by, but not limited to:

- 1. Significant reduction in water levels in an adjacent surface water body;
- 2. Land collapse or subsidence off-site caused by a reduction in water levels; or
- 3. Damage to crops and other types of off-site vegetation.

F. IDENTIFICATION TAGS

A SJRWMD-issued identification tag must be prominently displayed at each withdrawal site by permanently affixing such tag to the pump, headgate, valve or other withdrawal facility as provided by Section 40C-2.401, Florida Administrative Code. OUC, et al., must notify the SJRWMD in the event that a replacement tag is needed.

G. MAXIMUM ANNUAL WITHDRAWALS

Maximum annual withdrawals from the Floridan Aquifer for demineralizer/steam cycle makeup, general service water, heat recovery steam generation, washdown, injection and power augmentation, and domestic uses combined must not exceed 321.2 million gallons per year.

H. MAXIMUM DAILY WITHDRAWALS

Maximum daily withdrawals from the Floridan aquifer for demineralizer/steam cycle makeup, general service water, heat recovery steam generation, washdown, injection and power augmentation, and domestic uses combined must not exceed 2.00 million gallons per day.

I. LIMITATION ON USES OF WATER

- 1. The maximum annual ground water withdrawals from the Floridan Aquifer for fire protection (essential use) must not exceed 2.48 million gallons per day
- 2. The annual allocation of reclaimed water from the Orange County Easterly Water Reclamation Facility and surface water (stormwater and surficial groundwater) from the Orange county Landfill for power plant cooling and other power plant uses is:

3719.35 million gallons in 2001, and

4745.00 million gallons in 2002 and beyond.

Licensees must use available surface water to the maximum extent possible prior to using reclaimed water.

- 3. Withdrawals from the Floridan aquifer wells must not be used directly for cooling tower make-up water. The CHSEC shall utilize treated sewage effluent, treated wastewater, onsite re-use water, landfill stormwater/leachate, stormwater runoff, or direct precipitation to the makeup water supply storage pond, as cooling tower makeup water.
- 4. If unacceptable saline water intrusion occurs at the on-site wellfield as a result of the withdrawal authorized by this certification, DEP will revoke the allocation of ground water in this certification in whole or in part to curtail or abate the impact caused by the saline water intrusion.
- 5. Licensees shall diligently and in good faith pursue an agreement with Orange County to transfer up to 8.0 million gallons per day of surface water (including stormwater/surficial groundwater) from the adjacent Orange County Landfill property for use at the Stanton Energy Center facility. Once an agreement is entered into by Licensees and Orange County, Licensees shall utilize surface water from the Landfill to the maximum extent feasible to meet the water needs of the facility. The Licensees shall submit written reports to the Department and the SJRWMD six months from the date of certification and every six months thereafter until a final agreement is reached, regarding the status of negotiations and any draft or final agreements with Orange County.

J. DEWATERING

All withdrawals from the surficial aquifer for dewatering to facilitate construction of Unit A must be retained within the Unit A stormwater detention pond

K. OFF-SITE DISCHARGES

No off-site discharges are approved from this facility, except as provided for by the overflow structure in the make-up water supply pond and the natural drainage for the duration of this certification.

L. DISCHARGES FROM MAKE-UP WATER SUPPLY POND

All off-site discharges, as provided for by the overflow structure in the make-up water supply pond (#20, OUC, et al.'s Figure 3.2-1), must be in compliance with water quality standards as set forth in Chapter 62-302, F.A.C., or such standards as issued through a variance by DEP.

M. WELL WATER QUALITY SAMPLING

Water quality samples must be taken in April and October of each year from each production well. The samples must be analyzed for the following parameters:

Calcium Magnesium Sodium Chloride Sulfate Carbonate

Potassium

Bi-Carbonate (or alkalinity if pH is

6.9 or lower)

All major ion analyses must be checked for anion-cation balance and must balance within 5% prior to submission. It is recommended that duplicates be taken to allow for laboratory problems or loss. The sample analyses must be submitted to the SJRWMD by May 15 and November 15 of each year. Prior to sample collection, a minimum of 3-5 casing volumes must be removed from each well. All sampling and water quality analyses shall be performed by organizations with approved comprehensive or generic quality assurance plans on file with the DEP or a laboratory having HRS certification.

N. WATER TREATMENT PLANT REPORTS

By January 31 of each year, OUC, et al., must submit to the SJRWMD copies of the previous year (12 months) DER monthly water treatment plant operating report data showing total flow from the 2 Floridan wells going to the potable water treatment plant on-site. The project name and certification number must be attached to all reports.

O. WELL WATER FLOW MONITORING

1. OUC, et al., must maintain the continuous recorder on the Floridan aquifer monitor well. Copies of the previous year (12 months) recorder charts must be forwarded to the SJRWMD on a yearly basis. The charts must be submitted by January 31 of each year. Well nos. 1 and 2 and all reclaimed water and stormwater delivery points must have in-line totalizing flow meters installed prior to use (not including well development). The totalizing flow meters must maintain 95% accuracy, be verifiable, and be installed according to manufacturer specifications. Documentation of proper installation of flow meters (e.g. photograph) shall be submitted to the

SJRWMD within 30 days of meter placement. A site visit by SJRWMD staff can also fulfill this documentation requirement.

2. Total withdrawal from well nos, 1 and 2 and all reclaimed water and stormwater delivery points, as listed on the application, must be recorded continuously, totaled monthly, and reported to DEP and SJRWMD at least every six months using SJRWMD Form No. EN-50. The reporting dates each year will be as follows:

Reporting Period

Report Due Date

January - June July 31 July - December

January 31

P. CONSERVATION PLAN

OUC, et al., must implement the conservation plan submitted to the SJRWMD in accordance with the schedule contained therein.

Q. MAINTENANCE AND CALIBRATION OF FLOW METERS

- 1. The Licensees must maintain the meters. In case of failure or breakdown of any meter, DEP and SJRWMD must be notified in writing within 5 days of its discovery. A defective meter must be repaired or replaced within 30 days of its discovery.
- 2. OUC, et al., must have all flow meter (s) calibrated once every 3 years within 30 days of the anniversary date of certification issuance, and recalibrates if the difference between the actual flow and the meter reading is greater than 5%. SJRWMD form EN-51 must be submitted to DEP and SJRWMD within 10 days of the inspection/calibration.

R. OFF-SITE DISCHARGES

- 1. No off-site discharges from this facility are approved, except as provided for by the overflow structure in the makeup water supply pond, and the natural drainage patterns for the duration of this certification.
- 2. All off-site discharges, as provided for by the overflow structure in the makeup water pond, must be in compliance with water quality standards as set forth in Chapters 62-4 and 62-302, F.A.C., or such other standards, which may be imposed pursuant to a variance issued by DEP.

S. USE OF LOWEST QUALITY WATER

The lowest quality water source, such as reclaimed water and surface/storm water, must be used when deemed feasible pursuant to District rules and applicable state law.

T. ENHANCEMENT

1. DELINEATION OF LIMITS OF CONSTRUCTION

Prior to construction, OUC, et al., must clearly delineate the limits of construction onsite. OUC, et al., must advise the contractor that any work within the Riparian Habitat Regulation Zone outside the limits of construction, including clearing, is a violation of this certification order.

2. BACKGROUND ASSESSMENT PLAN

Prior to commencement of construction, a Background Assessment Plan of the areas to be enhanced or mitigated must be submitted to the SJRWMD, DEP, and SFWMD for review and joint approval. Data obtained through the Background Assessment Plan must include the following: (a) site specific topographic survey information referenced to NGVD; (b) survey of historic and existing ordinary high, normal or chronic pool water elevations referenced to NGVD based upon biological/physical wetland indicators; (c) a narrative describing the species composition, health and extent of pre-enhanced areas; and (d) quantitative information regarding the species composition including coverage and composition of understory, midcanopy and canopy species.

3. COMPLETION OF BACKGROUND ASSESSMENT

The background assessment must be completed pursuant to the approved Background Assessment plan prior to construction.

4. INITIATION AND COMPLETION OF ENHANCEMENT MITIGATION PLAN

Following completion of the background assessment, and prior to the commencement of construction associated with the transmission line or the access roads, planting and construction associated with the approved Enhancement Mitigation Plan must be initiated, and then must be completed within 12 months after initiation.

5. CRITERIA FOR SUCCESS OF ENHANCEMENT AND MITIGATION

Following completion of the background assessment, before any planting in the mitigation and enhancement areas, OUC, et al., must submit for the joint approval of SJRWMD, DEP, and SFWMD a plan setting forth appropriate criteria for determining success of all wetland and upland enhancement and mitigation areas. OUC, et al., shall implement and maintain the mitigation and enhancement areas to ensure that the success criteria are achieved.

6. MONITORING PLAN FOR ENHANCEMENT AND MITIGATION

Within 30 days of completion of the initial planting, OUC, et al., must submit to the SJRWMD, DER, and SFWMD for review and joint approval, two copies of a monitoring plan detailing the site specific methods to be used for monitoring the enhancement and mitigation areas, so that the achievement of the success criteria can be quantitatively and qualitatively demonstrated. The monitoring plan must include the location, size and number of monitoring quadrants or transect lines, the location and number of photographic stations, the location of the wetland(s) to be enhanced and mitigated, the location of staff gauges and/or piezometers, and other pertinent factors. OUC, et al., shall monitor the enhancement and mitigation areas until the approved success criteria has been achieved.

7. SURVEY OF ENHANCEMENT AREAS

OUC, et al., must submit to the SJRWMD, DER, and SFWMD two (2) copies of an asbuilt survey of the enhancement areas certified by a registered surveyor or professional engineer showing dimensions of all planted areas, invert (s) elevation of the proposed culvert in enhancement area 3.6 (A), and the final grade of all plugged ditches. An inventory of the planted species within the wetland enhancement areas will be shown on the survey. In areas where planting occurs, the inventory must include the type, number, distribution, and size of the planted vegetation, and must be referenced to the as-built survey. The as-built survey must be submitted to the referenced agency parties within thirty (3) days of completion of the initial planting.

8. MONITORING REPORTS FOR THE ENHANCEMENT AND MITIGATION AREAS

Following joint approval of the plan referenced in Condition No. 26, OUC, et al., must furnish the SJRWMD, DER, and SFWMD with two copies of all Monitoring Reports for the enhancement and mitigation areas describing the status of the mitigation and enhancement areas until the enhancement and mitigation areas achieve the success criteria.

9. REVISIONS TO ENHANCEMENT AND MITIGATION

If it is determined that successful enhancement is not occurring based on the monitoring reports or trends, OUC, et al., must, within 30 days, provide the SJRWMD, DER and SFWMD with a narrative describing the type and causes of failure with a complete set of plans for the redesign and/or replacement planting of the mitigation and enhancement areas demonstrating that the success criteria can be achieved. Within 30 days of joint agency approval of the amended plans, OUC, et al., must implement the redesign and/or replacement planting. Following completion of such work, the success criteria as stated above or as modified by subsequent approval of the plan must again be achieved. In addition, the monitoring required by the conditions of this permit must be conducted.

U. EROSION AND SEDIMENT CONTROL DURING CONSTRUCTION

OUC, et al., must select, implement, and operate all erosion and sediment control measures required to retain sediment on-site and to prevent violations of water quality standards

as specified in Chapters 62-302 and 627-4, F.A.C. OUC, et al., is encouraged to use appropriate Best Management Practices for erosion and sediment control as described in the "Florida Land Development Manual: A Guide to Sound Land and Water Management" (DER 1988). All erosion and sediment control measures must remain in place at all locations until construction is completed and the soils are stabilized. Thereafter, OUC, et al., will be responsible for the removal of the control measures (except for the control measures in the areas of fill for the unpaved access road which shall be permanent).

V. EROSION AND SEDIMENT CONTROL DURING OPERATION

Following the completion of construction, OUC, et al., must construct and maintain a permanent protective vegetative and/or artificial cover for erosion and sediment control on all land surfaces exposed or disturbed by construction or alteration of the certified project. A permanent vegetative cover must be established within 60 days after planting or installation.

W. INCORPORATION OF MITIGATION PLAN

The proposed mitigation plan submitted to SJRWMD by OUC for the Curtis H. Stanton Energy Center, Unit 2, dated June 21, 1991, July 20, 1991, September 11, 1991, September 18, 1991, and September 19, 1991 is incorporated as a condition of this certification except where specifically superseded by certification conditions.

X. COMPLETION OF SURFACE WATER MANAGEMENT SYSTEM

Construction or alteration of the surface water management system must be completed and all disturbed areas must be stabilized in accordance with the submitted plans and certification conditions prior to use of the infrastructure for its intended purpose.

Y. RETENTION/DETENTION STORAGE AREAS

At a minimum, all retention/detention storage areas must be constructed to rough grade prior to the placement of impervious surface within the area to be served by those facilities. To prevent reduction in storage volume and percolation rates, all accumulated sediment must be remove from the storage areas prior to final grading and stabilization.

Z. ACCESS ROAD AND TRANSMISSION LINE CONSTRUCTION PLANS

Final Access Road and Transmission Line construction plans must be submitted to the SJRWMD al least 30 days prior to commencement of construction. The final plans must be consistent with the plans and calculations received by the SJRWMD on July 22, 1991, such that the requirements of Chapters 40C-4, 40C-41 and 40C-42, F.A.C. continue to be met.

AA. ACCESS ROAD FILL

The fill material for the access roads must satisfy the soil properties assumed in the calculations received by the SJRWMD on July 22, 1991. If fill is to be acquired on site, a plan depicting the location of the area to be used for fill for the Access Roads must be submitted to the SJRWMD at least 30 days prior to commencement of construction. Access to the on-site fill material must be shown on the plan.

BB. CONTRACTOR REVIEW AND POSTING OF CONDITIONS OF CERTIFICATION

OUC, et al., must require the contractor to review and maintain a copy of this document, complete with all conditions, attachments, and exhibits, in good condition and posted on the construction site.

CC. LANDFILL GAS AND CONDENSATE PIPELINE CONSTRUCTION

OUC and its contractors will maintain *in situ* flow conditions within the upland cut ditches located approximately at stations 42+50 and 44+75 during construction of the landfill gas and gas condensate pipelines. Upon completion of construction at each of these locations, OUC and its contractors shall restore the banks of the ditches to natural grade and will allow the ditches to revegetate naturally.

XXX. FLORIDA DEPARTMENT OF TRANSPORTATION

A. CONSTRUCTION IMPACT MITIGATION PROGRAM

OUC et al shall develop and implement at its own expense a construction traffic impact mitigation program, after consultation with DOT, and report that will be submitted to DOT prior to commencement of construction of Stanton Unit 2. The program will detail the actions that OUC et al will take to reduce the impacts of construction traffic, which report shall address the following actions:

- 1. OUC et al shall actively promote and encourage car-pooling by construction companies and workers, including contractors and subcontractors, from whom it obtains construction services, and OUC shall further explore with appropriate public mass-transportation providers in the area the possibility of park-and-ride service to the site.
- 2. OUC et al shall utilize to the extent practicable the existing railway access to the Stanton site for the delivery of equipment and materials needed for the project construction.
- 3. OUC et al will explore with its contractors and subcontractors the practicability of staggering construction employee work schedules, and encourage the staggering of shifts to the extent feasible to mitigate peak hour traffic congestion problems.

- 4. OUC et al will consult with the appropriate Winter Park DOT personnel regarding the practicality of providing temporary traffic control devices and alteration of signal times to assist in maintaining proper traffic flow at the most affected intersections which are the intersections of Alafaya Trail with both the East-West Expressway and State Road 50.
- 5. OUC et al shall suggest and encourage the use by construction personnel of alternate public road access to the Stanton site as appropriate to alleviate traffic congestion.

B. UNIT A - POST CERTIFICATION REVIEW OF SPECIFIC PROBLEMS

1. Pipeline Crossing of State Highway System: The applicant will comply with the requirements of the Florida Department of Transportation's Utility Accommodation Manual, Chapter 14-46, Railroad/Utilities Installation or Adjustment, Florida Administrative Code, specifically to the alignment of the pipeline in conjunction with limited access facilities, method and techniques of road crossings, requirements for permits, materials used, pavement cutting, mitigation of damages to and restoration of the facility and its environment, maintenance and safety of traffic flow and operations.

Detailed construction plans have not been provided. According to State law as well as the October 3, 1983 agreement between Orlando Utility Commission (OUC) and Orlando-Orange County Expressway Authority (OOCEA), these plans must be submitted by the applicant prior to the review and permitting of the proposed gas pipeline under State Road 528. The detailed construction plans must be submitted to the Florida Department of Transportation and OOCEA and shall demonstrate compliance with all requirements of the Department Utility Accommodation Manual and other requirements of the Department and OOCEA.

Please note the following in the preparation of the detailed construction plans for the pipeline:

- a. The pipeline should be placed as far as possible from any structural components of the bridge. It appears that the rail lines are currently located under Span 3 and are offset to the west. If so, it is recommended that the pipeline be located to the east side of the rail right of way.
 - b. Due care will need to be exercised when excavating beneath the bridges. The minimum vertical clearance is 23 feet.
 - c. Any damage to the bridge structure caused by construction activity shall be repaired by the OUC at its expense.

2. Traffic Control

Traffic control will be maintained during natural gas pipeline construction and maintenance in compliance with the standards contained in the Manual of Uniform Traffic

Control Devices, Chapter 14-94, Florida Administrative Code; Florida Department of Transportation's Roadway and Traffic Design Standards; and Florida Department of Transportation's Standard Specifications for Road and Bridge Construction, whichever is more stringent.

3. Access Roads

No access roads which create new connections to the State Highway System will be created for the construction and maintenance of the natural gas pipeline. Existing access roads and temporary construction roads shall be upgraded and maintained by the applicant during construction. If such upgrading results in an alteration to the connection (i.e. a change in design, configuration or location), the alteration shall adhere to the nonprocedural standards of access management contained in Chapters 14-96, State Highway System Connection Permits, and 14-97, Access Management Classification System and Standards, Florida Administrative Code. Right of way cannot be used for staging, parking or other activities associated with construction and maintenance of the pipeline without special use permission.

4. Crossing Federal Facilities

All crossings and encroachments of limited access, federally funded facilities are variances from standards and policy and will be subject to the review and approval of the Federal Highway Administration. (U.S.C. 23)

5. Standards

The Manual on Uniform Traffic Control Devices, Florida Department of Transportation's Roadway and Traffic Design Standards, the Florida Department of Transportation's Standard Specifications for Road and Bridge Construction, and pertinent sections of the Florida Department of Transportation's Project Development and Environment Manual will be adhered to in all circumstances involving the State Highway System and other transportation facilities. (Chapters 14-96 and 14-97, Florida Administrative Code)

6. Monitoring

The Florida Department of Transportation will monitor the construction of the pipeline for procedural compliance of usage and impact on the State Highway System. The Florida Department of Transportation will be compensated by the applicant for such monitoring.

7. Placement

If the pipeline is placed in any area designated for development, improvement or expansion and has been identified as such in a Master Plan or approved environmental documents have been filed at the time of such placement, the subsequent cost of moving the pipeline shall be at the cost of the applicant.

8. Oversight

Oversight for the permitting of individual crossings or any type of encroachment on the State Highway System shall rest with the Florida Department of Transportation.

9. Natural Gas Pipeline Location

a. The natural gas pipeline shall not be located nearer than 2,500 feet from the nearest point of any runway of an airport licensed by the State of Florida, listed in the Florida section of the current edition of "United States Government Flight Information Publication, Airport/Facility Directory Southeast United States", or operated by an agency of the Federal Government. The pipeline will not be located nearer than 1,500 feet from the nearest point of take-off and landing area, listed in the preceding documents. Any above-ground facility associated with the pipeline shall be located no closer than 5,000 feet from any of the aviation facilities referenced above.

b. If the final chosen alignment for the pipeline necessarily traverses an existing fixed-guideway transit facility, the pipeline shall be buried and the applicant shall comply with the requirements of the American Railway Engineering Association for uncased gas pipelines (Manual for Railway Engineering, Chapter 1, Part 5, Pipelines) unless stipulated to be encased by the Florida Department of Transportation.

c. If the final chosen alignment for the pipeline necessarily traverses a Florida Department of Transportation owned and operated or abandoned rail corridor, the applicant shall comply with the Florida Department of Transportation's Utility Accommodation Manual and the American Railway Engineering Association, Manual for Railway Engineering, Chapter 1, Part 5, Pipelines, for uncased gas pipelines unless otherwise stipulated to be encased by the Florida Department of Transportation.

10. Borings

All borings under state roadways will maintain a minimum depth of cover as stipulated in each site permit. If the bore should fail, the applicant will abandon the effort and backfill the entire bore with materials as specified by the Florida Department of Transportation. If the bore should fail, the applicant shall stop all efforts and appraise the Florida Department of Transportation District Maintenance Engineer of the situation and any proposed action prior to attempting to recover equipment or initiating another bore.

11. Transportation Projects

Attention must be given to transportation projects currently being designed and likely to being under construction at the same time as the pipeline. Special provisions must be included in the transportation project contractor's contract to allow any utilities on the right of way.

12. Access Management to the State Highway System:

If new access is proposed, access permitting as defined in Rule Chapters 14-96, State Highway System Connection Permits, Administrative Process, and 14-97, Access Management Classification System and Standards, Florida Administrative Code, will be required.

13. Drainage:

Any drainage onto State of Florida right of way and transportation facilities will be subject to the requirements of Rule Chapter 14-86, Drainage Connections, Florida Administrative Code.

14. Overweight/Overdimensional Vehicles:

Operation of overweight/overdimensional vehicles by the applicant on State transportation facilities during construction and operation of the utility facility will be subject to the requirements of Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permitting Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code.

XXXI. RED-COCKADED WOODPECKER MANAGEMENT AREA IDENTIFICATION

All lands depicted on Figure 4.2 of the August 1981, red-cockaded woodpecker (RCW) Management Plan, except for the area specifically identified as "construction impact of proposed generating Units 1, 2, 3, and 4" constitute the red-cockaded woodpecker management area subject to the Management Plan specified in Condition XXXI of the Site Certification granted OUC by the Siting Board on December 14, 1982. (DOAH Case No. 81-1431).

XXXII. USE AND LIMITATIONS OF THE RCW AREA

With regard to the RCW management area, in addition to Condition XXXI of the December 14, 1982 Order of the Florida Siting Board:

- A. OUC may conduct activities within the RCW management area described in Condition XXXI which are provided for in the Siting Board's certification orders for Units 1 and 2, including without limitation the execution of habitat restoration, enhancement, and creation required as mitigation.
- B. OUC may conduct management, including maintenance in their existing configuration and condition, of existing unpaved private roads utilized by OUC, maintenance of existing water and sewer lines, of existing transmission lines and substation, and other maintenance and management activities within the area of Condition XXXI which are consistent with its purposes.
- C. OUC shall take appropriate action to manage the RCW management area to achieve the purposes required by Condition No. XXXI with regard to the red-cockaded woodpecker, and in general to preserve the natural conditions of the area, including other protected species of

native wildlife, vegetation, wetlands, and particularly the tributaries and headwaters of the Econlockhatchee River. OUC may act to implement the red-cockaded woodpecker management plan, to monitor its effectiveness, and to react to fire, flood, or other unforeseeable natural or manmade disturbances. Any reports generated by OUC concerning activities within or management of the RCW management area shall be provided to the Florida Game and Fresh Water Fish Commission.

D. OUC shall allow only those activities of others within the RCW Management Area which are consistent with its management in a natural state. Such activities shall be limited to environmental restoration, scientific research, habitat management (such as controlled burning) and nature study.

E. Unless specifically authorized by an order of the Siting Board, dredging, filling, construction of buildings, road-ways, dumping of debris, excavation, and clearing of native vegetation shall be prohibited in the area defined by Condition XXXI. The provisions of Sections 403.516 (1) (a) and (b) notwithstanding, OUC agrees that any activity prohibited in this paragraph within the area described in the RCW management area shall be authorized only by affirmative vote of the Siting Board.

F. OUC hereby stipulates as a factual matter, which shall be binding on it, and all of its officers, agents, attorneys, and employees, that the "alternate access road" authorized by this supplemental certification completes the necessary roadway access for Units 1 and 2, to allow the full development thereof. Any additional access for electric power generation, and any additional facilities necessary for the construction of Units 3 and 4 will be the subject of a comprehensive Supplemental Certification Application or applications for Units 3 and 4.

G. If OUC determines to pursue a modification of its certification with regard to the easement recorded December 30, 1987, at ORB 3946, Page 3187, Orange County, Florida, it shall do so as a ministerial act only and shall not actively utilize its resources, funds or personnel to support such an application.

XXXIII. ORANGE COUNTY

A. BUILDING AND CONSTRUCTION REQUIREMENTS

The permittee shall comply with the building and construction requirements of Chapter 9, Orange County Code. The permittee shall pay all appropriate fees for required building and construction permits, including inspection fees. The permittee shall not commence operations of Unit A until it receives a Certificate of Occupancy from Orange County.

B. CONSERVATION AREA

Prior to initiation of construction (including any impacts to wetlands), the permittee shall have a formal conservation area determination approved by Orange County.

C. MITIGATION

Within 60 days of receipt of a formal conservation area determination and prior to initiation of construction of Unit A, including impacts to any wetlands, the permittee shall submit to Orange County Environmental Protection Division a habitat compensation proposal or a mitigation plan to offset all wetland impacts associated with the construction of Unit A facilities. All mitigation must occur within the Econlockhatchee River Hydrologic Basin in Orange County.

XXXIV. DEPARTMENT OF COMMUNITY AFFAIRS

The Permittee shall develop a comprehensive hurricane preparation and recovery plan for the Stanton Unit A generating unit as a component of the Stanton Energy Center. The plan shall be submitted to the Department of Community Affairs and the Orange County Office of Emergency Management no later than commencement of construction of Unit A. The Permittee shall formally update the plan every 5 years following commercial operation of Unit A or whenever an additional electrical generating unit is brought into commercial service at Stanton Energy Center and shall submit these updated versions of the plan to the Department of Community Affairs and the Orange County Office of Emergency Management.

If the Department of Community Affairs deems the plan or any of its periodic updates not to be in compliance with the requirements of this condition, it may petition for enforcement of this condition pursuant to the Florida Electrical Power Plant Siting Act.