



L-2005-057
10 CFR 50.36

3-7-2005

U. S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, D. C. 20555

Re: Turkey Point Units 3 and 4
Docket Nos. 50-250 and 50-251
State 401 Certification Update

In accordance with Section 3.2.2 of the Turkey Point Units 3 and 4 Environmental Protection Plan (Appendix B of Facility Operating Licenses DPR-31 and DPR-41), enclosed is a copy of the Final Order of Certification for Turkey Point Unit 5 Power Plant, approved by the State of Florida Governor and Cabinet on February 8, 2005. The Final Order of Certification for Turkey Point Unit 5 updates the Turkey Point Units 3 and 4 State 401 Certification.

The Final Order of Certification, issued under the Power Plant Siting Act, approves the construction and operation of a new combined cycle generating unit (Turkey Point Unit 5) that will provide approximately 1,150 additional megawatts (MW). Unit 5 will consist of four combustion turbines, four heat recovery steam generators, and a steam turbine/electric generator to create a "four-on-one" combined cycle unit. A cooling tower for the new unit will be added as part of the Project. The blowdown from the cooling tower and stormwater from the industrial area (via an oil/water separator) will be routed to the existing cooling canal system. Construction is scheduled to begin in March 2005 and is expected to be complete by June 2007. Construction stormwater and wastewater produced during construction will be routed to the cooling canal system as authorized under the Unit 5 Site Certification. FPL will submit an Industrial Wastewater (IWW) permit modification request to conform the IWW Permit Number FL0001562 to the Site Certification prior to Unit 5 operation.

Should there be any questions, please contact Walter Parker, Licensing Manager, at (305) 246-6632.

Very truly yours,

A handwritten signature in cursive script that reads "Terry Jones".

Terry O. Jones
Vice President
Turkey Point Nuclear Plant

Enclosure

cc: Regional Administrator, Region II, USNRC
Senior Resident Inspector, USNRC, Turkey Point Plant

A001

**STATE OF FLORIDA
SITING BOARD**

**IN RE: FLORIDA POWER & LIGHT
TURKEY POINT UNIT 5 POWER PLANT
SITING APPLICATION NO. PA03-45**

**OGC CASE NO. 03-2062
DOAH CASE NO. 03-4391EPP**

FINAL ORDER OF CERTIFICATION

On November 18, 2004, an administrative law judge with the Division of Administrative Hearings ("DOAH") submitted his Recommended Order in this site certification proceeding. The Recommended Order indicates that copies were served upon counsel for Florida Power & Light Company ("FPL"), Florida Department of Environmental Protection ("DEP"), Miami-Dade County ("County"), South Florida Water Management District ("District"), and other designated state and regional agencies. A copy of the Recommended Order is attached as Exhibit A. The matter is now before the Governor and Cabinet, sitting as the "Siting Board," for final agency action under the Florida Electrical Power Plant Siting Act ("PPSA") embodied in §§ 403.501-403.518, Florida Statutes.

BACKGROUND

FPL, the largest electric utility in Florida, serves more than four million customers and a population of eight million people in 35 counties along the eastern seaboard and the southern and southwestern portions of the State of Florida. FPL operates various electrical power plants in Florida, including its existing Turkey Point Power Plant in Miami-Dade County (the "Plant"). The Plant site, approximately 11,000 acres in size, is located south of Miami and east of Homestead in an unincorporated area of the County. The nearest residential neighborhood is over five miles away from the Project site.

The existing Units 1 and 2 at the Plant site are fossil fuel-fired steam generating units, with an electrical output of approximately 400 megawatts each. These two units burn residual fuel oil and/or natural gas. The existing Units 3 and 4 at the Plant site are nuclear-fueled steam electric generating units, with a capacity of approximately 700 megawatts each. The Plant site has a current total generating capacity of approximately 2,200 megawatts.

This proceeding involves an application by FPL for the addition of a new combined-cycle generating unit at the existing Plant site ("Unit 5" or the "Project"). The new Unit 5 will consist of four combustion turbines, four heat recovery steam generators, and a steam turbine having a

total generating capacity of approximately 1,150 megawatts. The primary fuel for Unit 5 will be natural gas, and ultra-low-sulfur light oil will be used as a backup fuel. The Project site encompasses approximately 90 acres of land located north of existing Units 1-4 within the current Plant site. The Florida Public Service Commission issued an order pursuant to § 403.519, Florida Statutes, determining the need for the Unit 5 Project as proposed by FPL.

DOAH PROCEEDINGS

In April of 2004, Administrative Law Judge, J. Lawrence Johnston (the "ALJ"), held a land use hearing pursuant to subsections 403.508(1) & (2) of the PPSA. On May 7, 2004, the ALJ entered a Recommended Land Use Order concluding that the Project is consistent and in compliance with the applicable land use plans and zoning ordinances of the County. The ALJ's Recommended Land Use Order was subsequently approved in its entirety by the Siting Board.

On July 14, 2004, DEP issued its Staff Analysis Report on the Project incorporating the reports of other reviewing agencies and recommending certification of Unit 5, subject to certain Conditions of Certification. On September 1, 2004, a Prehearing Stipulation addressing the Unit 5 certification issues was filed with DOAH on behalf of FPL, DEP, the County, the District, the Florida Department of Transportation, and the Florida Department of Community Affairs (the "Parties"). The Parties to this Prehearing Stipulation supported certification of the Project, subject to appropriate Conditions of Certification. The appropriate Conditions of Certification were agreed to by all of the Parties, except for the County. The County contended that the Conditions of Certification in the Prehearing Stipulation needed to be revised and supplemented.

On September 20-21, 2004, the ALJ held a duly-noticed site certification final hearing on the Project as required by § 403.508(3) of the PPSA. The purpose of the certification hearing was to receive evidence on the issue of whether the Project is entitled to site certification pursuant to the criteria set forth in §§ 403.502 of the PPSA. Among the evidence presented by the Parties at the certification hearing was a Joint Exhibit 1 containing revised and updated Conditions of Certification agreed to by the Parties. However, the County asserted at the commencement of the certification hearing that the Conditions of Certification in Joint Exhibit 1 should be supplemented. The County proposed that FPL be required to perform more groundwater modeling to further assess the impact on existing legal users of FPL's proposed withdrawals from the Upper Floridan Aquifer.

On November 18, 2004, the ALJ entered a Recommended Order in this proceeding. The ALJ found that FPL's proposed withdrawals from the Upper Floridan Aquifer will not adversely impact any existing legal users, including the County, and thus no additional groundwater modeling is required. The ALJ also concluded that, based on the evidence presented at the final hearing, FPL had demonstrated that the Project meets all the criteria for certification under the PPSA. The ALJ ultimately recommended that the Siting Board grant final certification of the Unit 5 Project, subject to the Conditions of Certification contained in Joint Exhibit 1.

CONCLUSION

The record is devoid of any objections to site certification of FPL's Unit 5 Project by any state, regional, or local agency, except for the County. Furthermore, no Exceptions to the Recommended Order of certification were filed by any of the Parties or other entities. Consequently, the County failed to object to the portions of the ALJ's Recommended Order rejecting the County's contention that FPL should be required to perform more modeling to further assess the impact of the proposed withdrawals from the Upper Floridan Aquifer. Based on a review of the record in this proceeding, the Siting Board concludes that site certification of the Unit 5 Project meets the criteria established in Section 403.502 of the PPSA, and that site certification should be approved.

It is therefore ORDERED:

A. The ALJ's Recommended Order of certification (Exhibit A) is adopted in its entirety and incorporated by reference herein.

B. Certification of the location, construction, and operation of the Unit 5 Project, as described in FPL's certification application and in the evidence presented at the final hearing, is APPROVED, subject to the Conditions of Certification set forth in Joint Exhibit 1, which are incorporated by reference herein.


C. Authority to assure and enforce compliance by FPL and its agents with all of the Conditions of Certification imposed by this Final Order is hereby delegated to DEP, except that any proposed modification to burn a fuel other than natural gas and/or ultra-low sulfur light oil shall be reviewed by the Siting Board.

Any party to this proceeding has the right to seek judicial review of this Final Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department in the Office of

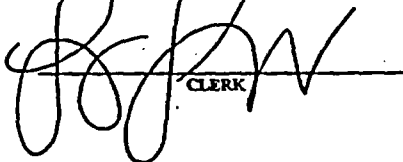
General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida 32399-3000;
and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the
appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from
the date this Final Order is filed with the clerk of the Department.

DONE AND ORDERED this 7th day of February 2005, in Tallahassee, Florida,
pursuant to a vote of the Governor and Cabinet, sitting as the Siting Board, at a duly noticed and
constituted Cabinet meeting held on February 1st, 2005.

THE GOVERNOR AND CABINET
SITTING AS THE SITING BOARD


THE HONORABLE JEB BUSH
GOVERNOR

FILED ON THIS DATE PURSUANT TO § 120.52,
FLORIDA STATUTES, WITH THE DESIGNATED
DEPARTMENT CLERK, RECEIPT OF WHICH IS
HEREBY ACKNOWLEDGED.


CLERK

2/8/2005
DATE

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing Certification Order has been sent by United States Postal Service to:

James V. Antista, Esquire
Florida Fish and Wildlife
Conservation Commission
620 South Meridian Street
Bryant Building, Room 108
Tallahassee, FL 32399-1600

Mary Anne Helton, Esquire
Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Heidi M. Hughes, General Counsel
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, FL 32399-2100

Peter C. Cunningham, Esquire
Douglas S. Roberts, Esquire
Hopping, Green and Sams, P.A.
Post Office Box 6526
Tallahassee, FL 32314-6526

Ann Cole, Clerk and
J. Lawrence Johnston, Administrative Law Judge
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, FL 32399-1550

and by hand delivery to:

Scott A. Goorland, Esquire
Department of Environmental Protection
3900 Commonwealth Blvd.
Mail Station 35
Tallahassee, FL 32399-3000

this 8th day of February, 2005.

Samuel S. Goren, Esquire
South Florida Water
Management District
3099 East Commercial Boulevard
Suite 200
Hollywood, FL 33021-4311


John D. McInnis, Esquire
Metropolitan Dade County
111 Northwest First Street, Suite 2810
Miami, FL 33128-1930

Sheryl Wood, Esquire
South Florida Water Management District
Post Office Box 24680
West Palm Beach, FL 33416

Harris M. Rosen, Esquire
Corporate Counsel
Florida Power & Light Company
Post Office Box 14000
Juno Beach, FL 33408

Sheanching Yu, Esquire
Department of Transportation
Haydon Burns Building
605 Suwannee Street
Mail Station 58
Tallahassee, FL 32399-0450

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


J. TERRELL WILLIAMS
Assistant General Counsel

3900 Commonwealth Blvd., M.S. 35
Tallahassee, FL 32399-3000
Telephone 850/245-2242

CONDITIONS OF CERTIFICATION**PA 03-45****FLORIDA POWER & LIGHT COMPANY****TURKEY POINT UNIT 5 ELECTRIC POWER GENERATION FACILITY**

I. CERTIFICATION CONTROL

A. Under the control of these Conditions of Certification the Florida Power & Light Company (FPL) may construct and operate a 1,150 MW (nominal) facility consisting of four new 170 MW natural gas fired combustion turbines with light oil as back-up fuel, four heat recovery steam generators and one 470 MW steam turbine. This will bring the total generating capacity of the Turkey Point site to 3,350 MW (nominal). The new unit will be located on approximately 90 acres of the existing 11,000 acres Turkey Point site in Miami-Dade County, Florida.

B. These Conditions of Certification, unless specifically amended or modified, are binding upon the Licensee 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. In any conflict between any of these Conditions of Certification, the more specific condition governs.

II. APPLICABLE RULES

The construction and operation of the certified facility shall be in accordance with all applicable provisions of Florida Statutes and Florida Administrative Code, including, but not limited to, the following regulations: Chapters 403 and 373, Florida Statutes (F.S.), and Chapters 40E-1, 40E-4, 40E-40, 40E-45, 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 Chapters 373 and 403, Florida Statutes, and any regulation adopted pursuant thereto. In the event of any dispute over the meaning of a term used in these conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation

or, in the alternative by the use of the commonly accepted meaning as determined by the Department. In addition, the following shall apply:

A. "DERM" shall mean the Department of Environmental Resources Management of Miami-Dade County, Florida.

B. "DCA" shall mean the Florida Department of Community Affairs.

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

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

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

F. "FWCC" shall mean the Florida Fish and Wildlife Conservation Commission.

G. "TWW Permit" shall mean the Florida Industrial Wastewater permit issued by the Department in accordance with the federal Clean Water Act.

H. "Licensee" shall mean an applicant which has obtained a certification order for the subject electrical power plant.

I. "NPDES permit" shall mean any federal National Pollutant Discharge Elimination System permit issued in accordance with the federal Clean Water Act.

J. "NSPS" shall mean new source performance standards as identified in 40 CFR 60.

K. "Power plant", "facility", or "project" shall mean an electrical power generating plant as defined in Section 403.503(12), F.S. and as described in the Site Certification Application.

L. "PSD permit" shall mean the federal Prevention of Significant Deterioration air emissions permit issued in accordance with the federal Clean Air Act.

M. "Title III permit" shall mean any federal permit issued in accordance with Title III of the federal Clean Air Act (Hazardous Air pollutants).

N. "Title IV permit" shall mean any federal permit issued in accordance with Title IV of the federal Clean Air Act (Acid Rain).

O. "Title V permit" shall mean any federal permit issued in accordance with Title V of the federal Clean Air Act (Operation).

P. "SED" shall mean the Department's Southeast District Office.

Q. "SFWMD" shall mean the South Florida Water Management District.

R. "WASD" shall mean the Water and Sewer Department of Miami-Dade County, Florida.

IV. Facility Operation

The Licensee shall at all times properly operate and maintain the Turkey Point Unit 5 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.

Any directly associated linear facilities connecting the collector yard to the switchyard shall be maintained in accordance with the site certification application and any appropriate state and federal regulations concerning use of herbicides. The Licensee shall notify the Southeast District of the Department and the Siting Coordination Office of the type of herbicides to be used at least 60 days prior to their first use.

V. Records Maintained at the Facility

A. These Conditions of Certification or a copy thereof shall be kept at the work site of the approved activity.

B. The Licensee 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 Licensee shall provide copies of these records to the Department upon request. If the Licensee 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.

VI. Change in Discharges or Emissions

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge or emission 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 discharge or emission of pollutants, change in fuel, or expansion in steam generating capacity must be reported by submission of an appropriate application for certification or modification.

VII. Compliance

A. The Licensee shall comply with all rules adopted by the Department subsequent to the issuance of this certification, which prescribe new or stricter criteria to the extent that the rules are applicable to electric power plants. Except where express variances have been granted, subsequently adopted rules which prescribe new or stricter criteria, which are applicable to electrical power plants, shall operate as a modification pursuant to Section 403.511(5)(a), F.S.

B. Pursuant to Section 403.511(5)(b), F.S., upon written notification to the Department's Siting Coordination Office, the Licensee 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 this certification, so long as this operation causes no violation of standards or these Conditions of Certification.

C. If, for any reason, the Licensee does not comply with or is unable to comply with any limitation specified in this certification, the Licensee shall notify the Southeast District Office of the Department by telephone during the working day that said noncompliance occurs. After normal business hours, the Licensee 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 Licensee shall confirm this situation to the Southeast 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 non-complying event.

D. The Licensee 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 non-complying event.

VIII. Right of Entry

The Licensee shall allow authorized agency personnel, including but not limited to representatives of the Florida Department of Environmental Protection, and/or Water Management District, 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:

A. To enter upon the Licensee'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

B. To have access to and copy any records required to be kept under the conditions of this certification; and

C. To inspect the facilities, equipment, practices, or operations regulated or required under these Conditions; and

D. To sample or monitor any substances or parameters at any location necessary to assure compliance with these Conditions of Certification or Department rules.

IX. Enforcement

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

B. 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.

X. 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.

XI. Civil and Criminal Liability

This certification does not relieve the Licensee from civil or criminal penalties for noncompliance with any conditions of this certification, applicable rules or regulations of

the Department, or any other state statutes or regulations which may apply. As provided in Section 403.511, F.S., the issuance of this certification does not convey neither any vested rights nor any exclusive privileges. Neither does it authorize any injury to human health or welfare, animal or plant life, public or private property or any invasion of personal rights. This certification does not allow any infringement of federal, state, or local laws or regulations, nor does it allow the Licensee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department or these Conditions of Certification.. 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 or approved programs.

XII. Property Rights

The issuance of this certification does not convey any property rights in either real or personal property, or any exclusive privileges thereto. The applicant shall obtain title, lease, easement, or right of use from the State of Florida to any sovereign submerged lands utilized by the project.

XIII. 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.

XIV. Procedural Rights

No term or condition of certification shall be interpreted to preclude the post-certification exercise by the Licensee of whatever procedural rights it may have under Chapter 120, F.S.

XV. Modification of Conditions

Pursuant to Section 403.516(1), F.S., Section 120.569(2)(n), F.S., and Rule 62-17.211, F.A.C., the Siting Board hereby delegates the authority to the Secretary of the Department of Environmental Protection to modify these Conditions of Certification:

A. The certification shall be 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, Underground Injection Control (UIC) permit, or National Pollutant Discharge Elimination System (NPDES) permit for the project. In the event of a conflict, the more stringent of the conditions of such permits or of these Conditions of Certification shall be controlling.

B. The Secretary of the Department may modify any condition of this certification except those pertaining to a change in fuel.

C. The Secretary of the Department may modify any condition of this certification if the Secretary finds that an immediate danger to the public health, safety, or welfare requires the issuance of an immediate final order temporarily modifying these Conditions of Certification. If the Secretary elects to exercise this delegated authority, the Secretary shall prepare an immediate final order that recites with particularity the facts underlying the Secretary's finding of an immediate danger to the public health, safety, or welfare. The immediate final order and the modification to the Conditions of Certification shall be effective only for so long as is necessary to address the immediate danger and shall be applicable or enjoined from the date rendered.

D. In the event of a prolonged [thirty (30) days or more] equipment malfunction or shutdown of pollution control equipment, the Secretary of the Department may allow facility operation to resume and continue to take place under an immediate final order temporarily modifying these Conditions of Certification, provided that the Licensee 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.

XVI. Transfer of Certification

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

XVII. 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.

XVIII. Screening

The Licensee shall provide screening of the site to the extent feasible through the use of acceptable structures, vegetated earthen walls, or existing or planted vegetation.

XIX. Toxic, Deleterious or Hazardous Materials

A. The Licensee 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 Licensee 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 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. Specific criteria are established for such components in Section 62-520.420, F.A.C.

B. The Licensee 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 Licensee 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 Southeast District Office Industrial Wastewater Compliance/Enforcement Section. After normal business hours, the Licensee 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 Material Safety Data 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.

XX. Noise

Construction and operation noise shall not exceed noise criteria or any applicable requirements of Miami-Dade County. The Licensee 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

XXI. Flood Control Protection

The plant and associated facilities shall be protected from flood damage by construction in such a manner as to comply with the appropriate Miami-Dade County flood protection requirements or by flood proofing or by raising the elevation of the facilities above the 100-year flood level, whichever is more stringent.

XXII. Historical or Archaeological Finds

If historical or archaeological artifacts are discovered at any time within the project site, the Licensee shall notify the DEP Southeast District office and the Bureau of Historic Preservation, Division of Historical Resources, R.A. Gray Building, Tallahassee, Florida 32399-0250, telephone number (850) 487-2073.

XXIII. Endangered and Threatened Species

Prior to start of construction, the Licensee shall survey the certified site for species of animal and plant life listed as endangered or threatened by the federal government or listed as endangered by the state. If these species are found, their presence shall be reported to the Siting Coordination Office, the SED, and the Florida Fish & Wildlife Conservation Commission's Office of Environmental Services. These species shall not be disturbed, if practicable. If avoidance is not practicable, the endangered species shall be treated as recommended by the appropriate agency. Entombment of gopher tortoises shall not be allowed.

XXIV. Dispute Resolution

If a dispute situation arises between the Licensee and an agency exercising its regulatory jurisdiction, the Department shall act as mediator to resolve it. If, after mediation, a mutual agreement cannot be reached between the parties, 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.

XXV. Laboratories and Quality Assurance

A. The Licensee shall ensure that all laboratory analytical data submitted to the Department, as required by this certification, are from a laboratory which is approved by the Department and meets the requirements of Chapter 62-160, F.A.C.

B. The Licensee 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. Records of monitoring information shall follow the guidelines in Rule 62-160.600, 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.

XXVI. Post-certification Submittals

A. Post-certification Submittals shall be handled pursuant to Rule 62-17.191, F.A.C.

B. 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.

XXVII. 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. The site plan layout shall be consistent with or have wetland impacts less than the plan attached hereto as Exhibit A. Any subsequent revisions to the site plan shall avoid and minimize wetland impacts at least to the same extent as is accomplished in Exhibit A. Specific DEP Southeast 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 Licensee shall present specific plans for these facilities for review by the DEP Southeast 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 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 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 these Conditions of Certification.

3. Ninety (90) days prior to the anticipated date of first operation, the Licensee shall provide the Department with an itemized list of any changes made to the facility design and operation plans that would affect a change in discharge, as referenced in Condition VI, subsequent to the time of issuance of this Certification. This pre-operational review of the final design and operation shall demonstrate continued compliance with Department rules and standards.

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 or significant degradation of

Outstanding Florida Waters in violation of Rule 62-4.242, F.A.C. 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 Licensee shall comply with the applicable nonprocedural requirements in Rules 40B-4, 40C-42, 40D-4 and/or 40E-4, 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 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 62-256, F.A.C., shall be approved by the DEP Southeast 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.

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

5. The Licensee 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.

6. The Licensee shall develop the site so as to retain the buffer of natural vegetation as described in the application and in Condition XVIII, Screening.

7. 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 is detected during construction, the Licensee shall notify the DEP District Office as required by Condition VII, Compliance.

D. Reporting

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

XXVIII AIR

A. General

1. The construction and operation of the Turkey Point Unit 5 project shall be in accordance with all applicable provisions of any permit required under a federal program such as Prevention of Significant Deterioration (PSD) Permit, Title III permit, Title IV permit, and/or Title V permit issued for Turkey Point Unit 5 and of any updates or modifications thereto, and of Chapters 62-210 through 62-297, F.A.C

2. All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Compliance Authority at

Air Quality Division
DEP Southeast District Office
400 North Congress, Suite 200
West Palm Beach, Florida 33401

Copies of all such documents shall also be submitted to Miami-Dade County at

Air Quality Management
Department of Environmental Resources Management
33 Southwest 2nd Avenue, Suite 900
Miami, Florida 33130-1540

All documents related to applications for permits to construct, operate or modify an emissions unit shall be submitted to

Bureau of Air Regulation
Florida Department of Environmental Protection
2600 Blair Stone Road (MS #5505)
Tallahassee, Florida 32399-2400

and notice of all applications for permits to construct, operate or modify an emissions unit shall be submitted to

Siting Coordination Office
Florida Department of Environmental Protection
2600 Blair Stone Road (MS #48)
Tallahassee, Florida 32399-2400

B. Equipment

1. The licensee is authorized to install, tune, operate, and maintain four General Electric Model PG7241FA gas turbine-electrical generator sets each with a generating capacity of 170 MW (nominal). Each gas turbine shall include the Speedtronic™ automated gas turbine control system and have dual-fuel capability. Ancillary equipment includes an inlet air filtration system and an evaporative inlet air-cooling system. The gas turbines will utilize the "hot nozzle" DLN combustors, which require natural gas to be preheated to 290 °F before combustion to increase overall unit efficiency. This will be accomplished by feedwater heat exchangers. The new emissions units regulated by these Conditions of Certification are identified as follows:

ID	Emission Unit Description
005	Unit 5A gas turbine (170 MW) with supplementary-fired heat recovery steam generator
006	Unit 5B gas turbine (170 MW) with supplementary-fired heat recovery steam generator
007	Unit 5C gas turbine (170 MW) with supplementary-fired heat recovery steam generator
008	Unit 5D gas turbine (170 MW) with supplementary-fired heat recovery steam generator
009	One distillate fuel oil storage tank for Unit 5 gas turbines
010	Mechanical draft cooling tower for Unit 5

2. Gas Turbine NO_x Controls

a. The licensee shall operate and maintain the General Electric DLN 2.6 combustion system (or better) to control NO_x emissions from each gas turbine when firing natural gas. Prior to the initial emissions performance tests required for each gas turbine, the dry low NO_x (DLN) combustors and automated gas turbine control system shall be tuned to achieve the permitted levels for CO and sufficiently low NO_x values to meet the NO_x limits with the additional SCR control technology described below. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations.

b. The licensee shall install, operate, and maintain a water injection system to reduce NO_x emissions from each gas turbine when firing distillate

fuel oil. Prior to the initial emissions performance tests required for each gas turbine, the water injection system shall be tuned to achieve the permitted levels for CO and sufficiently low NO_x values to meet the NO_x limits with the additional SCR control technology described below. Thereafter, each system shall be maintained and tuned in accordance with the manufacturer's recommendations.

c. The licensee shall install, tune, operate, and maintain a selective catalytic reduction (SCR) System to control NO_x emissions from each gas turbine when firing either natural gas or distillate fuel oil. The SCR system consists of an ammonia (NH₃) injection grid, catalyst, ammonia storage, monitoring and control system, electrical, piping and other ancillary equipment. The SCR system shall be designed, constructed and operated to achieve the permitted levels for NO_x and NH₃ emissions.

d. In accordance with 40 CFR 60.130, the storage of ammonia shall comply with all applicable requirements of the Chemical Accident Prevention Provisions in 40 CFR 68.

3. The licensee is authorized to install, operate, and maintain four new heat recovery steam generators (HRSGs) with separate HRSG exhaust stacks. Each HRSG shall be designed to recover heat energy from one of the four gas turbines (5A-5D) and deliver steam to the steam turbine electrical generator through a common manifold. Each HRSG may be equipped with supplemental gas-fired duct burners having a maximum heat input rate of 495 MMBtu per hour (LHV). The duct burners shall be designed in accordance with the following specifications: 0.04 lb CO/MMBtu and 0.08 lb NO_x/MMBtu. The four HRSGs deliver steam to a single steam turbine-electrical generator with a generating capacity of 470 MW.

4. The licensee is authorized to install, operate, and maintain one, 4.3 million gallon distillate fuel oil storage tank designed to provide ultra low sulfur fuel oil to the Unit 5 gas turbines.

5. The licensee is authorized to install one new 22-cell mechanical draft cooling tower with the following nominal design characteristics: a circulating water flow rate of 306,000 gpm; design hot/cold water temperatures of 105° F/87° F; a design air flow rate of 1,500,000 per cell; a liquid-to-gas air flow ratio of 1.045; and drift eliminators. The licensee shall submit the final design details within 60 days of selecting the vendor.

C. Performance Restrictions

1. The maximum heat input rate to each gas turbine is 1,608 MMBtu per hour when firing natural gas and 1,830 MMBtu per hour when firing distillate fuel oil (based on a compressor inlet air temperature of 59° F, the lower heating value (LHV) of each fuel, and 100% load). Heat input rates will vary depending upon gas turbine characteristics, ambient conditions, alternate methods of operation, and evaporative cooling. The licensee shall provide manufacturer's performance curves (or equations) that correct for site conditions to the Permitting and Compliance Authorities within 45

days of completing the initial compliance testing. Operating data may be adjusted for the appropriate site conditions in accordance with the performance curves and/or equations on file with the Department.

2. The total maximum heat input rate to the duct burners for each HRSG is 495 MMBtu per hour based on the lower heating value (LHV) of natural gas. Only natural gas shall be fired in the duct burners.

3. Subject to the restrictions and requirements of these conditions of certification, the gas turbines may operate under the following methods of operation.

a. The gas turbines may operate throughout the year (8760 hours per year).

b. Each gas turbine shall fire natural gas as the primary fuel, which shall contain no more than 2.0 grains of sulfur per 100 standard cubic feet of natural gas. As a restricted alternate fuel, each gas turbine may fire ultra low sulfur distillate fuel oil containing no more than 0.0015% sulfur by weight. Each gas turbine shall fire no more than 500 hours of fuel oil during any calendar year.

c. Each gas turbine/HRSG system may operate to produce direct, shaft-driven electrical power and steam-generated electrical power from the steam turbine-electrical generator as a four-on-one combined cycle unit. In accordance with the specifications of the SCR and HRSG manufacturers, the SCR system shall be on line and functioning properly during combined cycle operation or when the HRSG is producing steam.

d. In accordance with the manufacturer's recommendations and appropriate ambient conditions, the evaporative cooling system may be operated to reduce the compressor inlet air temperature and provide additional direct, shaft-driven electrical power. This method of operation is commonly referred to as "fogging."

e. When firing natural gas, each HRSG system may fire natural gas in the duct burners to provide additional steam-generated electrical power. The total combined heat input rate to the duct burners (all four HRSGs) shall not exceed 5,702,400 MMBtu (LHV) during any consecutive 12 months.

f. When firing natural gas, and only while practicing duct firing, each gas turbine may operate in a high-temperature peaking mode to generate additional direct, shaft-driven electrical power to respond to peak demands. When firing natural gas, and only while practicing duct firing, steam may be injected into each gas turbine expansion section to generate additional direct, shaft-driven electrical power to respond to peak demands. To qualify as "power augmentation," the combustion turbine must operate at a load of 95% or greater than that of the manufacturer's maximum base load rate adjusted for the compressor inlet air conditions. Prior to activating and after deactivating the power augmentation mode, the operator shall log the date, time, and new

mode of operation. The gas turbines shall not operate simultaneously in peaking and power augmentation modes. Total hours of power augmentation plus the total hours of peaking shall not exceed 400 hours per gas turbine during any consecutive 12 months.

4. Within 60 days of commencing operation, the licensee shall certify that the cooling tower was constructed to achieve the specified drift rate of no more than 0.0005 percent of the circulating water flow rate.

D. Emissions Standards

1. Emissions from each gas turbine shall not exceed the following standards.

Pollutant	Fuel	Method of Operation	Stack Test, 3-Run Average		CEMS Block Average
			ppmvd @ 15% O ₂	lb/hr ^a	ppmvd @ 15% O ₂
CO ^a	Oil	Combustion Turbine (CT)	8.0	37.8	8.0, 24-hr
	Gas	CT, Normal	4.1	16.3	
		CT & Duct Burner (DB)	7.6	38.3	
		CT & DB & PK	NA	NA	
		CT & DB & PA	NA	NA	14.0, 24-hr
NO _x ^b	Oil	CT	8.0	62.1	8.0, 24-hr
	Gas	CT, Normal	2.0	13.0	2.0, 24-hr
		CT & DB	2.0	18.8	
		CT & DB & (PA or PK)	NA	NA	
PM/PM ₁₀ ^c	Oil/Gas	All Modes	Fuel Specifications		
			Visible emissions shall not exceed 10% opacity for each 6-minute block average.		
SAM/SO ₂ ^d	Oil/Gas	All Modes	2 gr S/100 SCF of gas, 0.0015% sulfur fuel oil		
VOC ^e	Oil	CT	2.8	7.5	NA
	Gas	CT, normal	1.3	2.9	
		CT & DB	1.9	5.0	
Ammonia ^f	Oil/Gas	CT, All Modes	5	NA	NA

Notes:

- ^a Continuous compliance with the continuous 24-hour CO standards shall be demonstrated based on data collected by the required CEMS. The initial and annual EPA Method 10 tests associated with the certification of the CEMS instruments shall also be used to demonstrate compliance with the

individual standards for natural gas, fuel oil, and basic duct burner mode. Compliance with the 24-hour CO CEMS standards shall be determined separately for the Duct Burner/Power Augmentation mode and all other modes based on the hours of operation for each mode. A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data.

- b. Continuous compliance with the NO_x standards shall be demonstrated based on data collected by the required CEMS. The initial and annual EPA Method 7E or Method 20 tests associated with demonstration of compliance with 40 CFR 60, Subpart GG or certification of the CEMS instruments shall also be used to demonstrate compliance with the individual standards for natural gas, fuel oil, and duct burner modes during the time of those tests. NO_x mass emission rates are defined as oxides of nitrogen expressed as NO₂. A 24-hour compliance average may be based on as little as 1-hour of CEMS data or as much as 24-hours of CEMS data.
- c. The sulfur fuel specifications established in Condition No. 8 of this section combined with the efficient combustion design and operation of each gas turbine represents (BACT) for PM/PM₁₀ emissions. Compliance with the fuel specifications, CO standards, and visible emissions standards shall serve as indicators of good combustion. Compliance with the fuel specifications shall be demonstrated by keeping records of the fuel sulfur content. Compliance with the visible emissions standard and Section 24.41.1 of the Miami-Dade County Code shall be demonstrated by conducting tests in accordance with EPA Method 9.
- d. The fuel sulfur specifications effectively limit the potential emissions of SAM and SO₂ from the gas turbines and represent BACT for these pollutants. Compliance with the fuel sulfur specifications shall be determined by the requirements in Condition No. 25 of this section. Compliance with the SO₂ BACT also insures compliance with Section 24.41.3 of the Miami-Dade County Code.
- e. Compliance with the VOC standards shall be demonstrated by conducting tests in accordance with EPA Method 25A. Optionally, EPA Method 18 may also be performed to deduct emissions of methane and ethane. The emission standards are based on VOC measured as methane.
- f. Each SCR system shall be designed and operated for ammonia slip limit of no more than 5 ppmvd corrected to 15% oxygen based on the average of three test runs. Compliance with the ammonia slip standard shall be demonstrated by conducting tests in accordance with EPA Method CTM-027.
- g. The mass emission rate standards are based on a turbine inlet condition of 59° F and may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department.

{"DB" means duct burning. "PA" means power augmentation. "PK" means peaking. "SCR" means selective catalytic reduction. "NA" means not applicable. The mass emission rate standards are based on a turbine inlet condition of 59° F and may be adjusted to actual test conditions in accordance with the performance curves and/or equations on file with the Department.}

2. If the steam-electrical turbine generator is off line, the licensee is authorized to operate the gas turbine/HRSG systems by dumping steam to the condenser. This is not considered a separate mode of operation with respect to emission limits. When operating in this manner, each unit shall comply with the respective standards given in Condition XXVIII.D.1 for each mode of operation indicated therein.

3. The duct burners are also subject to the provisions of Subpart Da of the New Source Performance Standards (NSPS) in 40 CFR 60. The Best Available Control Technology (BACT) limits applicable during duct firing are much more stringent than the standards of NSPS Subpart Da for duct burners. Therefore compliance with the BACT limits insures compliance with the emission limitations in Subpart Da.

4. The distillate fuel oil tanks are subject to NSPS Subpart Kb.

E. Excess Emissions

1. The BACT determinations established in the PSD permit process rely on good operating practices to reduce emissions. Therefore, all operators and supervisors shall be properly trained to operate and maintain the gas turbines, HRSGs, and pollution control systems in accordance with the guidelines and procedures established by each manufacturer. The training shall include good operating practices as well as methods of minimizing excess emissions.

2. Excess emissions caused 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. All such preventable emissions shall be included in any compliance determinations based on CEMS data.

3. Visible emissions due to startups, shutdowns, and malfunctions shall not exceed 10% opacity except for up to ten, 6-minute averaging periods during a calendar day, which shall not exceed 20% opacity.

4. Excess emissions resulting from startup, shutdown, oil-to-gas fuel switches and documented malfunctions are allowed provided that operators employ the best operational practices to minimize the amount and duration of emissions during such incidents. A "documented malfunction" means a malfunction that is documented within one working day of detection by contacting the Compliance Authority by telephone, facsimile transmittal, or electronic mail. For each gas turbine/HRSG system, excess emissions resulting from startup, shutdown, or documented malfunctions shall not exceed two hours in any 24-hour period except for the following specific cases.

a. For cold startup of the steam turbine system, excess emissions from any gas turbine/HRSG system shall not exceed six hours in any 24-hour period. Cold startup of the steam turbine system shall be completed within twelve hours. A cold "startup of the steam turbine system" is defined as startup of the 4-on-1 combined cycle system following a shutdown of the steam turbine lasting at least 48 hours.

b. For shutdown of the combined cycle operation, excess emissions from any gas turbine/HRSG system shall not exceed three hours in any 24-hour period.

c. For cold startup of a gas turbine/HRSG system, excess emissions shall not exceed four hours in any 24-hour period. "Cold startup of a gas turbine/HRSG system" is defined as a startup after the pressure in the high-pressure (HP) steam drum falls below 450 psig for at least a one-hour period.

d. For oil-to-gas fuel switching excess emissions shall not exceed 1 hour in any 24-hour period.

e. Ammonia injection shall begin as soon as operation of the gas turbine/HRSG system achieves the operating parameters specified by the manufacturer. As authorized by rule 62-210.700(5), F.A.C., the above conditions allow excess emissions only for specifically defined periods of startup, shutdown, fuel switching, and documented malfunction of the gas turbines.

5. CEMS data collected during initial or other major DLN tuning sessions shall be excluded from the CEMS compliance demonstration provided the tuning session is performed in accordance with the manufacturer's specifications. A "major tuning session" would occur after completion of initial construction, a combustor change-out, a major repair or maintenance to a combustor, or other similar circumstances. Prior to performing any major tuning session, the licensee shall provide the Compliance Authority with an advance notice that details the activity and proposed tuning schedule. The notice may be by telephone, facsimile transmittal, or electronic mail.

F. Emissions Performance Testing

1. Any required tests shall be performed in accordance with the following reference methods:

Method	Description of Method and Comments
CTM-027	Procedure for Collection and Analysis of Ammonia in Stationary Source {Notes: This is an EPA conditional test method. The minimum detection limit shall be 1 ppm.}
7E	Determination of Nitrogen Oxide Emissions from Stationary Sources

9	Visual Determination of the Opacity of Emissions from Stationary Sources
10	Determination of Carbon Monoxide Emissions from Stationary Sources {Notes: The method shall be based on a continuous sampling train.}
18	Measurement of Gaseous Organic Compound Emissions by Gas Chromatography {Note: EPA Method 18 may be used (optional) concurrently with EPA Method 25A to deduct emissions of methane and ethane from the measured VOC emissions.}
20	Determination of Nitrogen Oxides, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines
25A	Determination of Volatile Organic Concentrations

Note: Method CTM-027 is published on EPA's Technology Transfer Network Web Site at "<http://www.epa.gov/ttn/emc/ctm.html>". The other methods are described in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department.

2. Each gas turbine shall be stack tested to demonstrate initial compliance with the emission standards for CO, NO_x, VOC, visible emissions, and ammonia slip. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup of each unit configuration. Each unit shall be tested when firing natural gas, when using the duct burners and when firing distillate fuel oil. Stack test data collected during the required Relative Accuracy Test Assessments (RATA) may be used to demonstrate compliance with the initial CO and NO_x standards. With appropriate flow measurements (or fuel measurements and approved F-factors), CEMS data may be used to demonstrate compliance with the CO and NO_x mass rate emissions standards. CO and NO_x emissions recorded by the CEMS shall also be reported for each run during tests for visible emissions, VOC and ammonia slip. The Department may require the licensee to conduct additional tests after major replacement or major repair of any air pollution control equipment, such as the SCR catalyst, DLN combustors, etc.

3. After initial compliance with the VOC standards is demonstrated, annual compliance tests for VOC emissions are not required. Compliance with the continuously monitored CO standards shall indicate efficient combustion and low VOC emissions.

5. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

6. The licensee shall demonstrate continuous compliance with the 24-hour CO and NO_x emissions standards based on data collected by the certified CEMS. Within 45 days of conducting any Relative Accuracy Test Assessments (RATA) on a CEMS, the licensee shall submit a report to the Compliance Authority summarizing results of the RATA. Compliance with the CO emission standards also serves as an indicator of efficient fuel combustion, which reduces emissions of particulate matter and volatile organic compounds. The Department also reserves the right to use data from the continuous monitoring record and from annual RATA tests to determine compliance with the short term CO and NO_x limits for each method of operation given in Condition XXIII.D.1.

7. During each federal fiscal year (October 1st to September 30th), each gas turbine shall be tested to demonstrate compliance with the emission standards for visible emissions. Annual testing to determine the ammonia slip shall be conducted while firing the primary fuel. NO_x emissions recorded by the CEMS shall be reported for each ammonia slip test run. CO emissions recorded by the CEMS shall be reported for the visible emissions observation period.

G. Continuous Monitoring Requirements

1. The licensee shall install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) to measure and record the emissions of CO and NO_x from the combined cycle gas turbine in a manner sufficient to demonstrate continuous compliance with the CEMS emission standards of this section. Each monitoring system shall be installed, calibrated, and properly functioning prior to the initial performance tests. Within one working day of discovering emissions in excess of a CO or NO_x standard (and subject to the specified averaging period), the licensee shall notify the Compliance Authority.

2. The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of section seven shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The RATA tests required for the CO monitor shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately considering the allowable methods of operation and corresponding emission standards.

3. Each NO_x monitor shall be certified, operated, and maintained in accordance with the requirements of 40 CFR 75. Record keeping and reporting shall be conducted pursuant to Subparts F and G in 40 CFR 75. The RATA tests required for the NO_x monitor shall be performed using EPA Method 20 or 7B in Appendix A of 40 CFR 60. In addition to the requirements of Appendix A of 40 CFR 75, the NO_x monitor span values shall be set appropriately considering the allowable methods of operation and corresponding emission standards.

4. The oxygen (O₂) or carbon dioxide (CO₂) content of the flue gas shall be monitored at the location where CO and NO_x are monitored to correct the measured emissions rates to 15% oxygen. If a CO₂ monitor is installed, the oxygen content of the flue gas shall be calculated using F-factors that are appropriate for the fuel fired. Each monitor shall comply with the performance and quality assurance requirements of 40 CFR 75.

5. Hourly average values shall begin at the top of each hour. Each hourly average 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). If less than two such data points are available, the hourly average value is not valid. An hour in which any oil is fired is attributed towards compliance with the permit standards for oil firing. The licensee shall use all valid measurements or data points collected during an hour to calculate the hourly average values. The CEMS shall be designed and operated to sample, analyze, and record data evenly spaced over an hour. If the CEMS 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 CEMS shall be expressed as ppmvd corrected to 15% oxygen. The CEMS shall be used to demonstrate compliance with the CEMS emission standards for CO and NO_x as specified in this permit. For purposes of determining compliance with the CEMS emissions standards of this permit, missing (or excluded) data shall not be substituted. Upon request by the Department, the CEMS emission rates shall be corrected to ISO conditions to demonstrate compliance with the applicable standards of 40 CFR 60.332.

6. A 24-hour block shall begin at midnight of each operating day and shall be calculated from 24 consecutive hourly average emission rate values. If a unit operates less than 24 hours during the block, the 24-hour block average shall be the average of available valid hourly average emission rate values for the 24-hour block. For purposes of determining compliance with the 24-hour CEMS standards, missing (or excluded) data shall not be substituted. Instead, the 24-hour block average shall be

determined using the remaining hourly data in the 24-hour block. There may be more than one 24-hour compliance demonstration required for CO and NO_x emissions depending on the use of alternate methods of operation.

7. Each CEMS shall monitor and record emissions during all operations including episodes of startup, shutdown, malfunction, fuel switches and DLN tuning. CEMS emissions data recorded during some of these episodes may be excluded from the corresponding CEMS compliance demonstration subject to the provisions of Conditions XXVIII.E.4 and 5 of this section. All periods of data excluded shall be consecutive for each such episode. The licensee shall minimize the duration of data excluded for such episodes to the extent practicable. Data recorded during such episodes shall not be excluded if the 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 such episodes. 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.

8. Monitor availability for the CEMS shall be 95% or greater in any calendar quarter. The quarterly permit excess emissions report shall be used to demonstrate monitor availability. In the event 95% availability is not achieved, the licensee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The licensee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of these Conditions of Certification, except as otherwise authorized by the Department's Compliance Authority.

9. In accordance with the manufacturer's specifications, the licensee shall install, calibrate, operate and maintain an ammonia flow meter to measure and record the ammonia injection rate to the SCR system by the time of the initial compliance tests. The licensee shall document and periodically update the general range of ammonia flow rates required to meet permitted emissions levels over the range of load conditions allowed by this permit by comparing NO_x emissions recorded by the CEM system with ammonia flow rates recorded using the ammonia flow meter. During NO_x monitor downtimes or malfunctions, the licensee shall operate at the ammonia flow rate and, as applicable for fuel oil firing, the water-to-fuel ratio, which is consistent with the documented flow rate for the combustion turbine load condition.

H. Records and Reports

1. The licensee shall monitor and record the operating rate of each gas turbine and HRSG duct burner system on a daily average basis, considering the number of hours of operation during each day (including the times of startup, shutdown and malfunction). Such monitoring shall be made using a monitoring component of the CEM system required above, or by monitoring daily rates of consumption and heat

content of each allowable fuel in accordance with the provisions of 40 CFR 75 Appendix D.

2. By the fifth calendar day of each month, the licensee shall record the following for each fuel in a written or electronic log for each gas turbine for the previous month of operation: fuel consumption, hours of operation, hours of power augmentation, hours of peaking, hours of duct firing, and the updated 12-month rolling totals for each. Information recorded and stored as an electronic file shall be available for inspection and printing within at least three days of a request by the Department. The fuel consumption shall be monitored in accordance with the provisions of 40 CFR 75 Appendix D.

3. In conjunction with the provisions of 40 CFR 75 Appendix D, the licensee shall demonstrate compliance with the fuel sulfur limits specified in this certification by maintaining the following records of the sulfur contents:

a. Compliance with the fuel sulfur limit for natural gas shall be demonstrated by keeping reports obtained from the vendor indicating the average sulfur content of the natural gas being supplied from the pipeline for each month of operation. Methods for determining the sulfur content of the natural gas shall be ASTM methods D4084-82, D3246-81 or more recent versions.

b. Compliance with the distillate fuel oil sulfur limit shall be demonstrated by taking a sample, analyzing the sample for fuel sulfur, and reporting the results to each Compliance Authority before initial startup. Sampling the fuel oil sulfur content shall be conducted in accordance with ASTM D4057-88, Standard Practice for Manual Sampling of Petroleum and Petroleum Products, and one of the following test methods for sulfur in petroleum products: ASTM D129-91, ASTM D1552-90, ASTM D2622-94, or ASTM D4294-90. More recent versions of these methods may be used. For each subsequent fuel delivery, the licensee shall maintain a permanent file of the certified fuel sulfur analysis from the fuel vendor. At the request of a Compliance Authority, the licensee shall perform additional sampling and analysis for the fuel sulfur content. The above methods shall be used to determine the fuel sulfur content in conjunction with the provisions of 40 CFR 75 Appendix D.

4. Within one working day of a malfunction that causes emissions in excess of a standard (subject to the specified averaging periods), the licensee shall notify the Compliance Authority. The notification shall include a preliminary report of: the nature, extent, and duration of the emissions; the probable cause of the emissions; and the actions taken to correct the problem. If requested by the Compliance Authority, the licensee shall submit written quarterly reports summarizing the malfunctions.

5. Within 30 days following the end of each calendar quarter, the Licensee shall submit a report to the Compliance Authority summarizing periods of CO and NO_x emissions in excess of the limits contained in these Conditions of Certification following the NSPS format. The report shall follow the format specified by NSPS. For

purposes of reporting emissions in excess of NSPS Subpart GG, excess emissions from the gas turbine are defined as: any CEMS hourly average value exceeding the NSPS NO_x emission standard identified in NSPS Subpart GG; and any monitoring period during which the sulfur content of the fuel being fired in the gas turbine exceeds the NSPS standard identified in NSPS Subpart GG. For purposes of reporting emissions in excess of NSPS Subpart Da, excess emissions from duct firing are defined as: NO_x or PM emissions in excess of the NSPS standards except during periods of startup, shutdown, or malfunction; and SO₂ emissions in excess of the NSPS standards except during startup or shutdown. Such information shall be summarized for all exceedances including startups, shutdowns, malfunctions, and major tuning sessions. In addition, the report shall summarize the CEMS systems monitor availability for the previous quarter.

6. The licensee shall keep readily accessible records showing the dimension of each storage vessel and an analysis showing the capacity of each storage tank. Records shall be retained for the life of the facility. The licensee shall also keep records sufficient to determine the annual throughput of distillate fuel oil for each storage tank for use in the Annual Operating Report.

7. The Licensee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year.

8. All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request.

I. Emissions and Controls

Unless otherwise specified in these conditions of certification, the following conditions apply to all emissions units and activities at this facility:

1. If temporarily unable to comply with any of these Conditions of Certification due to breakdown of equipment or destruction by fire, wind or other cause, the Licensee shall notify the Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; 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 Licensee from any liability for failure to comply with these Conditions of Certification or the regulations

2. The Licensee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly.

3. Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

4. Excess emissions caused 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.

5. In case of excess emissions resulting from malfunctions, the Licensee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

6. The Licensee shall not store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.

7. The Licensee shall not cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance.

8. The Licensee shall not cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity.

9. 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

J. Testing Requirements

1. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs

must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard.

2. Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

3. For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.

4. Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.

a. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.

b. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.

c. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

K. Determination of Process Variables

1. The Licensee shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards of an emissions unit for which compliance tests are required.

2. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight 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.

3. The Licensee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.

4. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

5. When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department.

6. The Licensee shall file a report with the Department on the results of each such test of an emissions unit for which a compliance test is required. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

- a. The type, location, and designation of the emissions unit tested.
- b. The facility at which the emissions unit is located.
- c. The owner or operator of the emissions unit.
- d. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
- e. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
- f. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure

drops, total operating current and GPM scrubber water), and their operating parameters during each test run.

g. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.

h. The date, starting time and duration of each sampling run.

i. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.

j. The number of points sampled and configuration and location of the sampling plane.

k. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.

l. The type, manufacturer and configuration of the sampling equipment used.

m. Data related to the required calibration of the test equipment.

n. Data on the identification, processing and weights of all filters used.

o. Data on the types and amounts of any chemical solutions used.

p. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.

q. The names of each individual who furnished the process variable data, conducted the test, analyzed the samples or prepared the report.

r. All measured and calculated data required to be determined by each applicable test procedure for each run.

s. The detailed calculations for one run that relate the collected data to the calculated emission rate.

t. The applicable emission standard, and the resulting maximum allowable emission rate for the emission unit, plus the test result in the same form and unit of measure.

u. A certification that all submitted data are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

XXIX. WETLANDS

A. Mitigation – Mitigation shall include on-site restoration and enhancement, purchase of credits in a mitigation bank, and contribution of wetlands for conservation purposes, as described in the document "Turkey Point Expansion Project, Refined Mitigation Proposal, FPL, April 2004" or as subsequently amended or modified.

1. Initial mitigation, by planting wetland plant species and hydrologic improvements, shall occur within 30 days of completion of construction; at this time the Licensee shall submit to the Department a baseline ("time zero") report. The report shall include details on the progress of the hydrologic improvements, a list of species planted, the number of individuals planted, and the date of the plantings. The report shall contain photographs, taken from referenced locations, to represent the entire site. Additionally, a drawing shall be included to show the location and direction of the camera. Subsequent monitoring reports shall be submitted quarterly, the first report being due 90 days after the baseline report. The quarterly reports shall include the number of plants surviving from the initial planting, additional seedlings planted, and explanations if survivorship is trending toward failure. The reports shall include photographs from the locations referenced in the baseline report.

2. Mitigation will be deemed successful when all of the following criteria have been continuously met on the mitigation site for a period of at least two growing seasons (but no earlier than two years after the initial planting), without intervention in the form of irrigation, dewatering, removal of undesirable vegetation, or replanting of desirable vegetation:

a. The percent cover of the mitigation wetland area exceeds 80% of native wetland plants

b. Nuisance and exotic species are limited to 5% or less of the total cover.

c. The desirable plants are reproducing naturally, either by normal, healthy vegetative spread, or through seedling establishment, growth and survival.

d. The size distribution of the desirable species increases with time.

e. The functional assessment scores indicate that the functional value of the wetlands have made up for the functional loss of the project's impacts.

3. The Licensee shall notify the SED whenever the Licensee believes the mitigation is successful, but in no event earlier than two years after the mitigation is implemented.

a. The notice shall include a copy of the most recent Annual Progress and Mitigation Success Report and a narrative that describes how the reported data support the claim that each of the mitigation success criteria has been met. The Licensee shall allow SED personnel the opportunity to schedule and conduct an on-site inspection of the mitigation site.

b. Within 60 days of receipt of the notice, the SED shall notify the Licensee by certified mail that:

(1) That the mitigation has been successfully completed, or

(2) That the mitigation is not successful, identifying specifically those elements of the mitigation that do not meet the success criteria, or

(3) That the mitigation cannot be determined to be successful at this time, identifying specifically those elements of the mitigation that prevent the SED from determining whether the mitigation is successful.

c. When the SED notifies the Licensee that the mitigation is successful, or, if the SED fails to notify the Licensee within the time period prescribed by this condition, then the Licensee's mitigation obligation under the terms of this certification shall be deemed satisfied.

4. The Licensee shall prepare a revised mitigation plan if, three (3) years after completion of planting, it is determined by the SED or the Licensee that the mitigation site will not meet the success criteria. The revised plan shall be submitted to the SED for review and approval and shall include the following:

a. The plan shall discuss why the mitigation site is not meeting the success criteria and propose a plan of action by which to correct any deficiencies in the original plan.

b. The Licensee shall propose a schedule for implementation and completion of the provisions of the revised mitigation plan. Upon approval by the SED, the Licensee shall begin implementing the revised plan within 60 days of SED approval. The approved revised plan shall be copied to the Siting Coordination Office and shall be made a part of these Conditions of Certification.

B. Narrative progress reports shall be submitted every 6 months indicating the status of the mitigation efforts. The cover page shall indicate the certification number, project name and the Licensee name. The first semi-annual progress report shall be submitted six months after the date of certification issuance. Reports shall be submitted every six (6) months thereafter until all mitigation work required by these conditions of certification has been completed. The reports shall include the following information:

1. The date activities were begun. Indicate whether work has begun on-site.
2. A brief description of the extent of work (i.e., dredge, fill, monitoring, mitigation, management, maintenance) completed since the previous report or since this certification was issued. Show on copies of the site drawings those areas where work has been completed.
3. A brief description and the extent of work (i.e. dredge, fill, monitoring, mitigation, management, maintenance) anticipated to be accomplished within the next six months. Indicate on copies of the site drawings those areas where it is anticipated that work will be done.
4. The reports shall include photographs taken from the permanent stations, some of which must be in the vegetation sampling areas, a description of problems encountered and solutions undertaken, and anticipated work for the next six months.
5. The reports shall include, on the first page and just below the title, a signed certification by the individual who supervised preparation of the report the following statement: "This report represents a true and accurate description of the activities conducted during the six month period covered by this report."

C. Best management practices for erosion control shall be implemented and maintained at all times during construction to prevent siltation and turbid discharges in excess of State water quality standards pursuant to Rule 62-302, F.A.C., or in excess of the ambient turbidity levels of Outstanding Florida Waters. Methods shall include, but are not limited to the use of staked hay bales, staked filter cloth, sodding, seeding, and mulching; staged construction; and the installation of turbidity screens around the immediate project site.

D. The Licensee shall be responsible for ensuring that erosion control devices/procedures are inspected and maintained daily during all phases of construction authorized by these Conditions of Certification until all areas that were disturbed during construction are sufficiently stabilized to prevent erosion, siltation, and turbid discharges.

E. The following measures shall be taken immediately by the Licensee whenever turbidity levels within waters of the State surrounding the project site exceed 29 NTUs above background or exceed the ambient water quality levels of Outstanding Florida Waters:

1. Immediately cease all work contributing to the water quality violation. Operations may not resume until the SED gives authorization to do so.
2. Notify the SED Environmental Resource Compliance/Enforcement Section at 561/681-6643 within 24 hours of the time the violation is first detected.
3. Stabilize all exposed soils contributing to the violation. Modify the work procedures that were responsible for the violation, install additional turbidity containment devices and repair any non-functioning turbidity containment devices.

F. The Licensee shall be responsible for ensuring that the construction and operation of the Project results in no significant degradation of the adjacent Biscayne National Park, an Outstanding Florida Water, in violation of Rule 62-4.242 and 62-302, F.A.C.

XXX. DOMESTIC AND INDUSTRIAL WASTE

A. The construction and operation of the Turkey Point Unit 5 project shall be in accordance with all applicable provisions of any permit required under a federal program such as any NPDES permit issued for Turkey Point Unit 5 and of any updates or modifications thereto.

B. The Licensee is hereby authorized to operate water and wastewater facilities as shown or described in the Turkey Point Unit 5 Site Certification Application and other documents on file with the Department and made a part hereof. The Licensee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment.

XXXI. STORMWATER

A. Prior to construction, the Licensee shall submit a revised analysis to demonstrate that:

1. The post-development peak discharge rate does not exceed the pre-development discharge rate for the 25-year, 72-hour design storm, and

2. That the volume of the water quality treatment facility for off-site discharges is adequate to handle the post-development peak flow.

B. Final drainage plans illustrating all stormwater treatment facilities and conveyances for construction phase and for the operational phase of the Unit 5 site shall be submitted to the SED for review and approval prior to construction of any such conveyance or facility. The SED shall indicate its approval or disapproval within 60 days of the submittal or the submittal shall be considered approved.

C. Site construction activities shall be conducted in a manner which does not cause violations of state water quality standards. The Licensee shall implement best management practices for erosion and pollution control to prevent violation of state water quality standards. Temporary erosion control measures shall be implemented prior to any construction, and installation of permanent control measures shall be completed within seven (7) days of the start of any construction activity.

D. Turbidity barriers shall be installed and maintained at all locations where the possibility of transferring suspended solids into a receiving water body exists. Turbidity barriers shall remain in place at all locations until construction is completed, soils are stabilized, and vegetation has been established. The Licensee shall correct any erosion or shoaling that causes adverse impacts to water resources.

E. 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 SED acceptance of plans will be required based upon a determination of consistency with approved design concepts, regulations, and these conditions prior to initiation of construction of the stormwater management system. Review and approval or disapproval shall be accomplished in accordance with Chapter 120, F.S., or these conditions of certification as applicable.

F. Within 30 days after completion of construction of the Stormwater management system, the Licensee shall submit a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the form "Environmental Resource Permit As-Built Certification by a Registered Professional" (Form No. 62-343.900(5), F.A.C.). The statement of completion and certification shall be based on on-site observation of construction or review of as-built drawings for the purpose of determining if the work was completed in compliance with permitted plans and specifications. This submittal shall serve to notify the Department that the system is ready for inspection. Additionally, if deviation from the approved drawings is discovered during the certification process, the certification must be accompanied by a copy of the approved permit drawings with deviations noted. Both the original and revised specifications must be clearly shown. The plans must be clearly labeled as "as-built" or "record" drawing. All surveyed dimensions and elevations shall be certified by a registered surveyor.

XXXII SOLID AND HAZARDOUS WASTE

No solid or hazardous waste is to be permanently stored onsite. Any hazardous waste generated on site shall be contained and transferred for disposal to a properly licensed contractor in accordance with the Department's rules and regulations.

XXXIII WATER MANAGEMENT DISTRICT

A. GENERAL

1. If this Certification is transferred, pursuant to Condition XVI, from the Licensee to another party, the Licensee from whom the Certification is transferred shall remain liable for corrective actions that may be required as a result of any violations that occurred prior to the transfer.

2. This Certification is based in part on the Licensee's submitted information to the SFWMD which reasonably demonstrates that harm to the site water resources will not be caused by the authorized activities. The plans, drawings and design specifications submitted by the Licensee shall be considered the minimum standards for compliance with conditions XXXIII.

3. 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 Chapters 40E-2 (Consumptive Use), 40E-3 (Water Wells), and 40E-20 (General Water Use Permits), F.A.C.

4. It is the responsibility of the Licensee to ensure that harm to the water resources does not occur during the construction, operation, and maintenance of the project.

5. The Licensee shall hold and save the SFWMD harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, alteration, operation, maintenance, removal, abandonment and/or use of any system authorized by this Certification, to the extent allowed under Florida law.

6. The Licensee shall be responsible for the construction, operation, and maintenance of all facilities installed for the proposed project.

7. SFWMD representatives shall be allowed reasonable escorted access to the power plant site, the water withdrawal facilities and any associated facilities to inspect and observe any activities associated with the construction of the proposed project and/or the operation and/or maintenance of the on-site wells in order to determine compliance with these Conditions of Certification. The Licensee shall not refuse entry or access to any SFWMD representative who, upon reasonable notice, requests entry for the purpose of the above noted inspection and presents appropriate credentials.

8. Information submitted to the SFWMD subsequent to Certification, in compliance with these Conditions of Certification, shall be for the purpose of the SFWMD determining the Licensee's compliance with conditions XXXIII and the non-procedural criteria contained in Chapters 40E-2, 40E-3, and 40E-20, F.A.C., as applicable, prior to the commencement of the subject construction, operation and/or maintenance activity covered by this Certification.

9. The SFWMD may take any and all lawful actions that are necessary to enforce any condition of this Certification based on the authorizing statutes and rules of the SFWMD. Prior to initiating such action, the SFWMD shall notify the Siting Coordination Office of DEP of the proposed action.

10. At least ninety (90) days prior to the commencement of construction of any portion of the project, the Licensee shall submit to SFWMD staff, for a completeness and sufficiency review, any pertinent additional information required under conditions XXXIII for that portion of project. 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.

11. Within sixty (60) days of the determination by SFWMD staff that any additional information is complete and sufficient, the SFWMD shall determine and notify the Licensee in writing whether the proposed activities conform to SFWMD rules, as required by Chapters 40E-2, 40E-3, and 40E-20, F.A.C., and these Conditions of Certification. If the information is not complete or sufficient, the SFWMD shall identify what items remain to be addressed. No construction activities shall begin until the SFWMD has notified the Licensee in writing that the activities are in compliance with the applicable SFWMD criteria, or failed to notify the Licensee in writing within sixty (60) days of finding the information to be complete and sufficient.

12. The Licensee shall submit 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, calculations and/or any other applicable data. Such requests may be included as part of an appropriate additional information submittal required by this Certification provided they are clearly identified as a requested amendment or modification to the previously authorized design

B. Water Use Authorizations

1. In the event of a declared water shortage, the Licensee must comply with any water withdrawal reductions ordered by the SFWMD in accordance with the Water Shortage Plan, Chapter 40E-21, F.A.C.

2. The Licensee shall mitigate interference with existing legal uses that were caused in whole or in part by the Licensee's withdrawals, consistent with the approved mitigation plan. As necessary to offset the interference, mitigation will include

pumpage reduction, replacement of the impacted individual's equipment, relocation of wells, change in withdrawal source, or other means. Interference to an existing legal use is defined as an impact that occurs under hydrologic conditions equal to or less severe than a 1 in 10 year drought event that results in the:

a. Inability to draw water consistent with provisions of the permit, such as when remedial structural or operational actions not materially authorized by existing permits must be taken to address the interference; or

b. Change in the quality of water pursuant to primary State Drinking Water Standards to the extent that the water can no longer be used for its authorized purpose, or such change is imminent.

3. The Licensee shall mitigate harm to existing off-site land uses caused by the Licensee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the SFWMD will require the Licensee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to these Conditions of Certification includes:

a. Significant reduction in water levels on the property to the extent that the designed function of the water body and related surface water management improvements are damaged, not including aesthetic values. The designed function of a water body is identified in the original permit or other government authorization issued for the construction of the water body. In cases where a permit was not required, the designed function shall be determined based on the purpose for the original construction of the water body (e.g., fill for construction, mining, drainage canal, etc.);

b. Damage to agriculture, including damage resulting from reduction in soil moisture resulting from consumptive use;

c. Land collapse or subsidence caused by reduction in water levels associated with consumptive use.

4. The Licensee shall mitigate harm to natural resources caused by the Licensee's withdrawals, as determined through reference to the conditions for permit issuance. When harm occurs, or is imminent, the SFWMD will require the Licensee to modify withdrawal rates or mitigate the harm. Harm, as determined through reference to the conditions for permit issuance includes:

a. Reduction in ground or surface water levels that results in harmful lateral movement of the fresh water/salt water interface;

b. Reduction in water levels that harm the hydroperiod of wetlands;

c. Significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond;

d. Harmful movement of contaminants in violation of state water quality standards; or

e. Harm to the natural system including damage to habitat for rare or endangered species.

5. At any time, if there is an indication that the well casing, valves, or controls associated with the on-site well system leak or have become inoperative, the Licensee shall be responsible for making the necessary repairs or replacement to restore the well system to an operating condition acceptable to the SFWMD. Failure to make such repairs shall be the cause for requiring that the well(s) be filled and abandoned in accordance with the procedures outlined in Chapter 40E-3, F.A.C.

C. Site Specific Design Authorizations

1. Authorization to commence withdrawals from the Upper production zone of the Floridan Aquifer for cooling water will not be granted until the Aquifer Performance Test (APT) currently underway is completed, evaluated by the SFWMD, and a determination is made by the SFWMD that reasonable assurances have been provided confirming that interference to existing legal users will not occur. The report submitted to the SFWMD on the APT shall include the following and shall be signed and sealed by a Florida Registered Professional Geologist:

a. The transmissivity and storage of the proposed pumping zone of the Floridan aquifer.

b. An analysis of the potential impacts to existing legal users.

c. An impact mitigation analysis, if potential impacts to existing legal users are identified.

d. A request for a maximum daily withdrawal rate associated with filling the cooling tower from cold start-up.

2. Upon submittal of the technical report, the SFWMD shall have 30 days to review the report for completeness. If the information is not complete, accurate or fully documented, the SFWMD shall, within the 30 day time period, request additional information needed to complete the review of the technical documents. Once the report is deemed complete, the SFWMD shall evaluate the potential for impacts to existing legal users in accordance with the applicable criteria in Rule 40E-2 and the Basis of Review for Water Use Permit Applications in the SFWMD.

a. If the SFWMD determines that the results of the additional site-specific test data confirms the initial conclusion that interference to existing legal users will not occur, then the SFWMD shall provide the Licensee and DEP with written

confirmation of this finding within 30 days of submittal of a complete report to the SFWMD on the APT. Such written confirmation shall constitute authorization of an average daily withdrawal of 14.06MGD (which represents the average expected 90-day water demand of the heat dissipation system for the cooling tower) and an average annual withdrawal of 4,599 MGY from the Upper production zone of the Floridan aquifer for cooling water.

b. If the SFWMD determines that the potential exists for interference with existing legal users as a result of the site-specific test data, then the SFWMD will advise the Licensee and DEP, within 30 days of submittal of a complete report to the SFWMD on the APT, of this conclusion. The SFWMD will review additional submittals of data such as additional modeling, alternative water supplies, and mitigation plans that may be proposed by the Licensee to provide reasonable assurances that interference with existing legal users will not occur. The SFWMD shall have 30 days to review the additional submittals for completeness. Upon completion of the evaluation, the SFWMD will provide the Licensee and DEP with notification of authorization to commence withdrawals from the Floridan aquifer at acceptable rates and will require mitigation, as necessary and appropriate, pursuant to the Basis of Review for Water Use Permits in the SFWMD, to prevent interference with existing legal users.

3. Upon written notification from the SFWMD that a reliable source of reclaimed water is available at the project site to serve Unit 5 in a quantity and quality acceptable to the Licensee for cooling purposes for Unit 5, the Licensee shall provide the SFWMD with a schedule for use of reclaimed water, for the SFWMD's review and approval, within 90 days of such notification. Once the use of reclaimed water has been established, the use of Floridan Aquifer water shall be reduced in proportion to the volume of reclaimed water made available to Unit #5, such that the combined sources meet the total demand of a 90-day average withdrawal of 14.06 MGD and an average annual withdrawal of 4,599 MGY. Should reclaimed water become temporarily unavailable, the Licensee shall notify the SFWMD within 24 hours of commencing temporary withdrawals from the Floridan aquifer.

4. The Licensee is authorized to construct four withdrawal wells as follows:

ID	Casing Diameter (inches)	Cased Depth (feet)	Max. Depth (feet)	Max Flow (gpm)
1	36	1,100	1,400	5,000
2	36	1,100	1,400	5,000
3	36	1,100	1,400	5,000
4	36	1,100	1,400	5,000

5. The Licensee shall maintain records of the calibrated daily withdrawals from each pump. These records shall be available for review upon request by

SFWMD staff. Monthly withdrawals for each pump shall be submitted to the SFWMD quarterly. Maximum daily withdrawals for each month for the entire system shall be submitted to the SFWMD quarterly. The water accounting method and means of calibration shall be stated on each report. Every two years from the date of Certification, the Licensee shall submit re-calibration data for each water pumping accounting facility if the accounting method(s) require re-calibration.

6. Modifications

a. Within five years of Certification and every five years thereafter, unless extended by mutual agreement between the Licensee and the SFWMD, the Licensee shall submit to the SFWMD a report on the project's consistency with the consumptive water use requirements contained within Chapter 40E-2, F.A.C. in effect at that time. Within 90 days after receipt of the completed report, the SFWMD shall evaluate the information contained therein and issue a written notification to the DEP and the Licensee as to whether the groundwater withdrawals for consumptive use authorized by this Certification remain in compliance with the provisions of Chapter 373, F.S., and Chapter 40-2, F.A.C., in effect at that time. If the notification indicates that the withdrawals are not in compliance with these provisions, it shall recommend possible alternatives for bringing the withdrawals into compliance or otherwise meeting the minimum consumptive water use needs of the power plant. If mutual agreement cannot be reached within 90 days after issuance of the written notification on whether the withdrawals of groundwater for consumptive use remain in compliance, then the written notification shall be immediately referred to the Division of Administrative Hearings (DOAH) for resolution in accordance with the procedural provisions of Condition XXIV.

b. The SFWMD retains the right to petition for a modification of the groundwater withdrawals for consumptive use authorized by this Certification, in accordance with the provisions of Condition XV. Any request for an increase in water withdrawals shall be made pursuant to the provisions of Condition XV.

7. Prior to the commencement of construction of those portions of the project which involve dewatering activities, the Licensee shall submit a detailed plan for the proposed dewatering activities to the SFWMD for a determination of compliance with the non-procedural requirements of Chapters 40E-2, 40E-3 and 40E-20, F.A.C., in effect at the time of submittal. The following information, referenced to NGVD where appropriate, shall be submitted:

- a. A detailed site plan which shows the location(s) for each proposed dewatering area;
- b. The method(s) used for each dewatering operation;
- c. The maximum depth for each dewatering operation;
- d. The location and specifications for all proposed wells and/or pumps associated with each dewatering operation;

- e. The duration of each dewatering operation;
- f. The discharge method, route, and location of receiving waters generated by each dewatering operation, including the measures (Best Management Practices) that will be taken to prevent water quality problems in the receiving water(s);
- g. An analysis of the impacts of the proposed dewatering operations on any existing on and/or off-site legal users, wetlands, or existing groundwater contamination plumes;
- h. The location of any infiltration trenches and/or recharge barriers; and
- i. All plans must be signed and sealed by a Professional Engineer or a Professional Geologist registered in the State of Florida.

8. If, during the control of these conditions of certification, any on-site wells require repair, replacement, and/or abandonment, the Licensee shall submit the information described in Chapter 40E-3, F.A.C. for review by the SFWMD prior to initiating such activities.

9. Prior to construction of the proposed on-site wells, the Licensee shall submit the drilling plans and other pertinent information required by Chapter 40E-3, F.A.C. to the SFWMD for review and approval. If the final well locations are different from those originally proposed in the site certification application, the Licensee shall also submit to the SFWMD for review and approval an evaluation of the impacts of the proposed pumpage from the alternate well location(s) on adjacent existing legal users, pollution sources, environmental features, and water bodies.

10. Groundwater Monitoring Plan

a. Within three months of issuance of this Certification, a preliminary groundwater monitoring plan shall be submitted to the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-2, F.A.C. In developing the monitoring plan, the Licensee shall consider well locations, depth and method of construction, types of screens, and frequency of data collection.

b. Within six months of issuance of this Certification, the Licensee shall implement the groundwater monitoring plan.

11. Water Conservation Plan

a. Prior to the commencement of construction, the Licensee shall submit a water conservation plan, as described in Chapter 40E-2, F.A.C., for review and approval by SFWMD staff.

b. The water conservation plan shall incorporate the following components:

(1) An audit of the amount of water needed in the Licensee's operational processes. The following measures shall be implemented within one year of audit completion if found to be cost effective in the audit:

(a) Implementation of a leak detection and repair program;

(b) Implementation of a recovery/recycling or other program providing for technological, procedural or programmatic improvements to the Licensee's facilities; and

(c) Use of processes to decrease water consumption.

(2) Development and implementation of an employee awareness program concerning water conservation.

XXXIV. TRANSPORTATION

A. Traffic control is to be maintained during plant construction and operations in compliance with the standards in the *Manual on Uniform Traffic Control Devices*; *Statewide Minimum Level of Service Standards*, Rule Chapter 14-94, F.A.C.; Florida Department of Transportation's *Roadway and Traffic Design Standards*; and Florida Department of Transportation *Standard Specifications for Road and Bridge Construction*, whichever is more stringent.

B. Operation of overweight or overdimensional vehicles by the applicant on State transportation facilities during the construction and operation of Turkey point Unit 5, shall be subject to safety and permitting requirements of Chapter 316, F.S., and *Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles*, Rule Chapter 14-26, F.A.C.

C. Any new access to the State Highway System shall follow the provisions of, *State Highway System Connection Permits, Administrative Process*, Chapter 14-96, F.A.C. and *State Highway Access Management Classification System and Standards*, Rule Chapter 14-97, F.A.C.

D. Any use of State of Florida right of way and certain activities on State transportation facilities will be subject to the requirements of the Department of

Transportation's *Utility Accommodation Manual* (Document 710-020-001) and *Utilities Installation or Adjustment*, Rule Chapter 14-46, F.A.C.

E. Any drainage onto State of Florida right of way and transportation facilities will be subject to the requirements of *Drainage Connections*, Rule Chapter 14-86, F.A.C.

F. Any structures proposed in the application which exceed 200 feet in height will be subject to an aeronautical study by the Federal Aviation Authority under the provisions of 14 CFR Part 77. The Licensee must obtain any necessary variances.

XXXV. EMERGENCY MANAGEMENT

A. FPL shall incorporate the Unit 5 site into the Comprehensive Hurricane Preparation and Recovery Plan for the overall Turkey Point Power Plant Site.

B. FPL shall submit a formal update of the Comprehensive Hurricane Preparation and Recovery Plan to the Department of Community Affairs, the Miami-Dade County Office of Emergency Management every five (5) years following commencement of commercial operation of the Unit 5 and whenever an additional electrical generating unit is brought into service at the Turkey Point Plant site.

XXXVI. MIAMI-DADE COUNTY

A. Construction and operation of the certified facilities shall be in accordance with all applicable nonprocedural requirements of the laws and ordinances of Miami Dade County in effect on November 14, 2003, including, but not limited to, the Miami Dade Comprehensive Development Master Plan and Chapters 8, 11C, 14, 18A, 24, and 33 of the Code of Miami Dade County, Florida.

B. Protection of Existing Legal Water Users

1. As provided in Condition XXXIII.B.2., if SFWMD determines that the potential exists for Licensee's proposed Floridan Aquifer withdrawals to cause interference with existing legal users, authorization for such withdrawals shall be contingent upon SFWMD establishing acceptable withdrawal rates and requiring necessary and appropriate mitigation, pursuant to SFWMD's Basis of Review for Water Use Permits, to prevent interference with existing legal users. Licensee shall submit copies of any reports on additional modeling, alternative water supplies, and mitigation plans to WASD.

2. Licensee shall provide a copy to WASD of any notice received from SFWMD pursuant to Condition XXXIII.C.3., that a reliable source of reclaimed water is available at the Project site to serve Unit 5.

3. If reclaimed water from the South District Wastewater Treatment Plant is used as a source of makeup to the Unit 5 cooling tower, blowdown from the cooling tower shall be returned to the South District Wastewater Treatment Plant for treatment and disposal. The requirements of Section 24-11(9) of the Code of Miami Dade County, as revised in March 2004, or as subsequently revised pursuant to federal or state law, shall apply to such blowdown returned to the South District Wastewater Treatment Plant.

C. The following detailed plans must be submitted to Miami Dade County Department of Environmental Resources Management (DERM) prior to initiation of work in tidal waters or wetlands:

1. The site plan layout shall be consistent with, or have wetland impacts less than, the plans described in the document *"Turkey Point Expansion Project, Refined Mitigation Proposal, FPL, April 2004"* or as subsequently amended or modified.

2. Two or more sets of construction drawings and engineering calculations signed and sealed by a professional engineer registered in the State of Florida and a land survey sealed by a licensed land surveyor registered in the State of Florida for those elements of the project that involve wetlands. These plans must include sufficient detail and be prepared at a scale that clearly identifies the limits of filling in wetlands and tidal waters, on-site mitigation areas, structures other than fill in tidal waters or wetlands, and typical cross-sections of all elements of the project that affect wetlands.

3. A construction management plan which shall include methods or best management practices for preventing or controlling secondary impacts from turbidity, siltation, fugitive dust, unpermitted impacts to adjoining waters or wetlands, fill or excavated material, construction debris, noise, or artificial lighting.

4. A plan for further assessment of materials proposed to be used for filling tidal water and wetlands, including physical, chemical and biological effects tests as determined in cooperation with local and state environmental agencies. Placement of fill shall not commence until additional testing and analysis of physical, chemical, and biological characteristics of fill material have been completed in accordance with requirements of DERM.

5. A water quality and biological monitoring plan for documenting compliance with narrative and numerical water quality targets during construction.

6. A post-construction long-term water quality and biological monitoring plan for areas near or downstream of the built areas, on-site mitigation areas, and on-site restoration areas.

7. A detailed on-site mitigation and restoration plan including signed and sealed construction drawings (plan views and cross-sections), planting configuration

and species list, hydraulic or tidal exchange calculations, exotic control and maintenance methods, and success criteria. This plan shall be consistent with the document "*Turkey Point Expansion Project, Refined Mitigation Proposal, FPL, April 2004*" or as subsequently amended or modified.

8. A plan for monitoring and responding to the occurrence of endangered (or other listed species) in the construction area.

9. A stormwater management plan, including calculations and construction drawings.

10. A plan for training all on-site construction-related workers with respect to environmental resource protection requirements.

D. The applicant shall mark in a conspicuous fashion the boundaries or limits of all work/fill areas, mitigation areas, preservation areas, or protected species habitat. This may be accomplished with fencing, flagging, buoys, silt barriers, hay bales, or other forms of durable demarcation. Field markers shall include survey benchmarks or reference points that can be compared to approved construction plans and drawings. Prior to construction in wetlands or tidal waters, the layout must be approved by DERM. The markers shall be maintained for the entirety of construction to facilitate compliance inspections and also to reduce the chance of unauthorized impacts to resources.

E. Seven days prior to the start of construction in wetlands or tidal waters, the Licensee shall allow prior approved third party access for the salvage of desirable native vegetation occurring within the areas to be filled or cleared.

F. Dredging and filling of coastal wetlands shall be limited to the minimum amount for public necessity or enhancement of biological, chemical or physical characteristics of adjacent waters.

G. On-site mitigation and restoration areas shall be maintained free (less than 1% cover) of invasive exotic vegetation in perpetuity.

H. Within 90 days of the start of construction, the Licensee shall convey title of 307 acres of wetland, as defined in the "*Turkey Point Expansion Project, Refined Mitigation Proposal, FPL, April 2004*" or as subsequently amended or modified, to the appropriate federal, state, or local resource management agency for conservation or restoration purposes consistent with the goals of ongoing regional restoration plans.

I. Unconsolidated shorelines created as a result of the project shall be stabilized with native vegetation, such as but not limited to mangroves. If seawalls or bulkheads are constructed in or adjacent to tidal waters, they shall include the use of rip-rap or similar wave attenuation devices in their design.

J. Construction of on-site mitigation shall be initiated within 90 days of the beginning of filling of coastal wetlands or tidal waters. Construction of on-site mitigation shall be completed within 90 days of the completion of filling of wetlands except areas to be restored after completion of project construction.

K. Restoration of temporarily filled wetlands shall commence within 60 days of completion of construction on the power block or by January 2010, whichever first occurs.

L. Should upland construction damage or require removal of upland trees, the Licensee shall be required to preserve specimen trees (trunk > 18 in. DBH) and replace upland tree canopy in accordance with the requirements of Article III. Tree Preservation and Protection Sec. 24-60 of the Code of Miami-Dade County. This requirement includes trees along entrance roads and existing landscaped areas, and shall be in addition to establishment of coastal hammocks proposed as part of on-site mitigation.

M. Exotic pest plant species on the development site uplands shall be removed prior to development.

N. Temporary and permanent fill pads shall be graded to slope away from tidal waters and wetlands.

O. Construction of permanent parking areas, walkways, and amenities shall use semi-pervious materials to reduce runoff where feasible and compatible with safety requirements.

P. This Certification does not replace or eliminate the need for appropriate annual operating permits from Miami-Dade County for any existing, new or improved facilities located at the Turkey Point Power Plant site but not within the area covered by this Certification as delineated in the Site Certification Application. If reclaimed water is used as makeup to the Unit 5 cooling tower and cooling tower blowdown is returned to the South District Wastewater Treatment Plant, FPL shall apply for such permit from DERM as may be required under Chapter 24 of the Code of Miami-Dade County for such disposal pursuant to federal law.

ATTACHMENT A
CONDITIONS OF CERTIFICATION
PA 03-45

FLORIDA POWER & LIGHT COMPANY
TURKEY POINT UNIT 5 ELECTRIC POWER GENERATION FACILITY

ATTACHMENT A
CONDITIONS OF CERTIFICATION

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FLORIDA POWER & LIGHT COMPANY
TURKEY POINT UNIT 5 ELECTRIC POWER GENERATION FACILITY
