STATE OF FLORIDA

DEPARTMENT

OF

ENVIRONMENTAL PROTECTION

Conditions of Certification

Duke Energy Florida

Hines Energy Complex

PA 92-33L

Modified Month, Day, Year

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SECTION A: GENERAL CONDITIONS

I. SCOPE

A. Pursuant to the Florida Electrical Power Plant Siting Act (PPSA), Sections 403.501-518, Florida Statutes (F.S.), and Chapter 62-17, Florida Administrative Code (F.A.C.), this Certification is issued to Duke Energy Florida (DEF) as owner/operator and Licensee of the Hines Energy Complex (Hines). Subject to the requirements contained in these Conditions of Certification (Conditions), DEF will operate 4 fossil fuel-fired combined cycle units with a combined electric generating capacity of approximately 2,090 megawatts (MW) and associated onsite and offsite Associated Facilities as described in the Site Certification Application (SCA). The electric generating units and their onsite Associated Facilities are located on an 8,200-acre Site at 7700 County Road 555 in Bartow, Polk County, Florida. The UTM coordinates are: Zone 17, 414.4 km East, 3073.9 km North; and the latitude/longitude coordinates are: 27°47'19" North/81°52'10" West.

B. The Certified Facility includes but is not limited to the following major Associated Facilities;

- Four Power Blocks
- Hines Cooling Pond;
- Cooling Pond Water Treatment Facility;
- Lined Brine Evaporation Ponds;
- SA-9 Brine Pond;
- SA-8 Water Crop/Wetlands Treatment System;
- SA-8 Upland Fish Disposal Area;
- Plant Island Ditch (PID) Runoff Collection System, including SA-11, SA-12 and SA-13;
- Water Crop/IWW Alternative Water Supply (AWS) capture and storage areas, including Lake Phosphoria, P-3. P-2. Triangle Lakes, N-15, and N-11 B/C;
- AWS transfer appurtenances within the certified site boundary associated with receipt of reclaimed/IWW used to augment the cooling pond, including those associated with receipt of City of Bartow reclaimed water and IWW from the DEF Tiger Bay Cogen. facility, Mosaic Fertilizer, LLC, and Estech, Inc.;
- Conservation buffer, reclamation, and ACOE mitigation areas, including N-11A, N-13, N-9B, Tiger Bay East & West, and SA-10.
- Barcola-Fort Meade 230 kV transmission line
- Natural Gas Pipeline
- Reclaim Water Pipeline

C. These Conditions, unless specifically modified, are binding upon the Licensee and shall apply to the construction, operation, and maintenance of the Certified Facility. If a conflict should occur between the design criteria of this Certified Facility and the Conditions, the Conditions shall prevail unless modified. In any conflict between any of these Conditions, the more specific Condition governs.

D. Within 60 days after completion of construction of the Electrical Power Plant as defined by Section 403.503(14), F.S., but excluding offsite linear and non-linear Associated Facilities, the Licensee shall provide to the Department in .pdf format: a survey map signed by a professional land surveyor, or acceptable equivalent documentation such as an official legal description, delineating the boundaries of the Site as defined by Section 403.503(29), F.S., and an aerial photograph delineating the boundaries of the Site. The survey map and aerial photograph shall be labelled as the "Site Delineation Map" and incorporated herein as part of Attachment A.

E. Within 120 days following approval of a change to Site boundaries, the Licensee shall submit to the Department an updated survey map (or legal description) and aerial photograph delineating the new boundaries of the Site. The survey and aerial photograph shall be identified as "Site Delineation Map" and incorporated herein as part of Attachment A. Absent the above description/delineation of the Site, the Department will consider the perimeter fence line of the property on which the Certified Facilities are located to be the boundaries of the Site.

F. If both Certified Facilities and non-Certified Facilities lie within the boundaries of the Site, the Licensee shall also comply with the requirements of this paragraph. Within 60 days after completion of construction of the plant and onsite Associated Facilities, but excluding offsite linear and non-linear Associated Facilities, the Licensee shall provide to the Department in .pdf format acceptable documentation identifying the certified and non-Certified Facilities within the Site such as an aerial photograph. Certified Facilities identified within the Site shall include both the certified Electrical Power Plant's generating facilities and its onsite certified Associated Facilities (including onsite linear facilities) as defined by Section 403.503(7), F.S. The document shall be labelled as the "Certified Facilities Identification Map" and incorporated herein as part of Attachment A.

G. Within 120 days after completion of construction of any certified offsite non-linear Associated Facilities, the Licensee shall provide to the Department in .pdf format; a survey map signed by a professional land surveyor, or acceptable equivalent documentation such as an official legal description, delineating the Site boundaries for each offsite non-linear Associated Facility. The survey map or other documents shall be labelled as "Delineation of the Boundaries of the Certified Offsite Non-linear Facilities" and incorporated herein as part of Attachment A.

H. Within 180 days after completion of construction of any new offsite linear Associated Facilities, as defined by Section 403.503(7), F.S., the Licensee shall provide; an aerial photograph or map at a scale of at least 1:400, or acceptable equivalent documentation such as an official legal description or survey map signed by a professional land surveyor, delineating the boundaries of the certified area for the linear Associated Facilities, following acquisition of all necessary property interests and the corridor narrowing as described in Section 403.503(11), F.S., which shall be known as the "Delineation of Certified Offsite Linear Facilities" and incorporated herein as part of Attachment A.

I. Following any post-certification approvals that require a change to the boundaries of the certified area(s) depicted in the Delineation of Certified Offsite Linear

Facilities in Attachment A, the Licensee shall submit an updated aerial photograph, map, survey map, or legal description.

[Sections 403.511,403.5113, F.S.; Rules 62-4.160(1-2) and 62-17.205(2), F.A.C.]

II. APPLICABLE DEPARTMENT RULES

The construction, operation, and maintenance of the Certified Facility shall be in accordance with all applicable non-procedural provisions of Florida Statutes and Florida Administrative Codes, including, but not limited to, the applicable non-procedural portions of the following Department regulations, except to the extent a variance, exception, exemption or other relief is granted in the final order of certification or in a subsequent Modification to the Conditions, under any federal permit or as otherwise provided under Chapter 403:

Florida Administrative Codes:

18-2 (Management of Uplands Vested in the Board of Trustees)
18-14 (Administrative Fines for Damaging State Lands)
18-20 (Florida Aquatic Preserves)
18-21 (Sovereignty Submerged Lands Management)
62-4 (Permits)
62-6 (Standards for Onsite Sewage Treatment and Disposal Systems)
62-17 (Electrical Power Plant Siting)
62-40 (Water Resource Implementation Rule)
62-150 (Hazardous Substance Release Notification)
62-160 (Quality Assurance)
62-204 (Air Pollution Control-General Provisions)
62-210 (Stationary Sources-General Requirements)
62-212 (Stationary Sources-Preconstruction Review)
62-213 (Operation Permits for Major Sources of Air Pollution)
62-256 (Open Burning)
62-296 (Stationary Sources-Emission Standards)
62-297 (Stationary Sources-Emission Monitoring)
62-302 (Surface Water Quality Standards)
62-303 (Identification of Impaired Surface Waters)
62-304 (Total Maximum Daily Loads)
62-330 (Environmental Resource Permitting)
62-340 (Delineation of the Landward Extent of Wetlands and Surface Waters)
62-342 (Mitigation Banks)
62-345 (Uniform Mitigation Assessment Method)
62-520 (Ground Water Classes, Standards and Exemptions)
62-528 (Underground Injection Control)
62-531 (Water Well Contractor Licensing Requirements)
62-532 (Water Well Permitting and Construction Requirements)
62-550 (Drinking Water Standards, Monitoring and Reporting)
62-555 (Permitting, Construction, Operation, and Maintenance of Public Water Systems)
62-560 (Requirements for Public Water Systems That Are Out of Compliance)
62-600 (Domestic Wastewater Facilities)
62-604 (Collection Systems and Transmission Facilities)

62-610 (Reuse of Reclaimed Water and Land Application)
62-620 (Wastewater Facilities and Activities Permitting)
62-621 (Generic Permits)
62-650 (Water Quality Based Effluent Limitations)
62-660 (Industrial Wastewater Facilities)
62-699 (Treatment Plant Classification and Staffing)
62-701 (Solid Waste Management Facilities)
62-709 (Criteria for Organics Processing and Recycling Facilities)
62-710 (Used Oil Management)
62-730 (Hazardous Waste)
62-737 (The Management of Spent Mercury-Containing Lamps and Devices Destined For Recycling)
62-740 (Petroleum Contact Water)
62-761 (Underground Storage Tank Systems)
62-762 (Aboveground Storage Tank Systems)
62-777 (Contaminant Cleanup Target Levels)
62-780 (Contaminated Site Cleanup Criteria)
62-814 (Electric and Magnetic Fields)

III. REVISIONS TO DEPARTMENT STATUTES AND RULES

A. The Licensee shall comply, after a reasonable time, with rules adopted by the Department subsequent to the issuance of the certification under the PPSA which prescribe new or stricter criteria, to the extent that the rules are applicable to Electrical Power Plants. Except when a variance, exception, exemption, or other relief have been granted, subsequently adopted Department rules which prescribe new or stricter criteria shall operate as automatic Modifications to this Certification.

B. Upon written notification to the Department, the Licensee may choose to operate the certified Electrical Power Plant in compliance with any rule subsequently adopted by the Department which prescribes criteria more lenient than the criteria required by the terms and Conditions in the Certification which are not Site-specific.

[Section 403.511(5)(a) and (b), F.S; Rule 62-4.160(10), F.A.C.]

IV. DEFINITIONS

Unless otherwise indicated herein, the meaning of terms used herein shall be governed by the applicable definitions contained in Chapters 373 and 403, F.S., 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 used herein, the following shall apply.

A. "Application" or "SCA" as defined in Section 403.503(6), F.S. For purposes of this License, "Application" shall also include materials submitted for post-certification Amendments and petitions for Modification to the Conditions of Certification, as well as Supplemental Applications.

B. "Associated Facility" or "Associated Facilities" as defined by Section 403.503(7), F.S.

C. "Certified Facility" or "Certified Facilities" means the certified electrical power generation facilities and all onsite or offsite Associated Facilities and structures identified or described in the Application, in the final order of Certification, or in a post-certification Amendment or Modification.

D. "DOC" means the Florida Department of Commerce.

E. "DEM" shall mean the Florida Division of Emergency Management.

F. "DEP" or "Department" means the Florida Department of Environmental Protection.

G. "DHR" means the Florida Department of State, Division of Historical Resources.

H. "DOT" means the Florida Department of Transportation.

I. "Emergency Conditions" or "Emergency Reporting" means urgent circumstances involving potential adverse consequences to human life or property as a result of weather conditions or other calamity.

J. "EPC" means Hillsborough County Environmental Protection Commission

K. "Feasible" or "Practicable" means reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.

L. "FWC" means the Florida Fish and Wildlife Conservation Commission.

M. "IWW" means Industrial Wastewater as defined by DEP.

N. "Licensee" means an Applicant that has obtained a Certification order for the subject project; for this Certification – Duke Energy Florida.

O. "Post-Certification Submittal" shall mean a submittal made by the Licensee pursuant to a Condition of Certification.

P. "Right-of-Way" or "ROW" is defined in Section 403.503(28), F.S.

Q. "Site" is defined in Section 403.503(29), F.S.

R. "State Water Quality Standards" shall mean the numerical and narrative criteria applied to specific water uses or classifications set forth in Chapters 62-302 and 520, F.A.C.

S. "Surface Water Management System" or "SWMS" means a stormwater management system, dam, impoundment, reservoir, appurtenant work, or works, or any combination thereof. The term includes areas of dredging or filling, as those terms are defined in Sections 373.403(13) and (14), F.S.

T. "SWD" means the DEP Southwest District.

U. "SWFWMD" means the Southwest Florida Water Management District.

V. "Wetlands" shall mean those areas meeting the definition set forth in Section 373.019(27), F.S., as delineated pursuant to Chapter 62-340, F.A.C.

V. FEDERALLY DELEGATED OR APPROVED PERMIT PROGRAMS

Subject to the Conditions set forth herein, this Certification shall constitute the sole license of the state and any agency as to the approval of the location of the Site and any Associated Facility and the construction and operation of the proposed Electrical Power Plant, except for the issuance of Department Licenses required under any federally delegated or approved permit program. This Certification is not a waiver of any other Department approval that may be required under federally delegated or approved programs. In the event of a conflict between the Certification process and federally required procedures, the applicable federal requirements shall control.

[Sections 403.5055, 403.508(8), and 403.511(1), F.S.]

VI. DESIGN AND PERFORMANCE CRITERIA

Certification, including these Conditions, is predicated upon preliminary designs, concepts, and performance criteria described in the SCA or in testimony and exhibits in support of Certification. Final engineering design will be consistent and in substantial compliance with the preliminary information described in the SCA or as explained at the Certification hearing (if any). Conformance to those criteria, unless specifically Modified in accordance with Section 403.516, F.S., and Rule 62-17.211, F.A.C., is binding upon the Licensee in the design, construction, operation, and maintenance of the Certified Facility.

[Sections 403.511(2)(a) and 403.516, F.S.; Rules 62-4.160(2) and 62-17.211, F.A.C.]

VII. NOTIFICATION

A. If, for any reason, the Licensee does not comply with or will be unable to comply with any condition or limitation specified in this License, the Licensee shall provide the DEP District Office with the following information:

1. A description of and cause of noncompliance; and

2. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncompliance. The Licensee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this Certification.

3. All notifications which are made in writing shall additionally be provided to the Siting Coordination Office (SCO) via email to SCO@dep.state.fl.us.

[Rule 62-4.160(8), F.A.C.]

B. The Licensee shall promptly notify the SCO in writing (email acceptable) of any previously submitted information concerning the Certified Facility that is later discovered to be inaccurate.

[Rule 62-4.160(15), F.A.C.]

C. Any owner or operator of a facility who has knowledge of any incident reportable to the State Watch Office regarding a Certified Facility shall notify the State Watch Office at (800) 320-0519 as soon as possible, but not later than 24 hours after discovery of the incident.

D. Any owner or operator of a facility who has knowledge of any reportable pollution release shall submit a Public Notice of Pollution by following the instructions at https://prodenv.dep.state.fl.us/DepPNP/user/pnpRequest, as soon as possible, but not later than 24 hours after discovery of the release.

[Section 403.077, F.S.]

E. Within 60 days after Certification of any linear Associated Facility, the Licensee shall file a notice of the certified route with the Department's clerk – Office of General Counsel and the clerk of the circuit court for each county through which the Corridor will pass.

The notice shall consist of maps or aerial photographs in the scale of 1:24,000 which clearly show the location of the certified route and shall state that the Certification of the Corridor will result in the acquisition of Rights-of-Way within the Corridor.

[Section 403.5112, F.S.]

VIII. EMERGENCY CONDITION NOTIFICATION AND RESTORATION

If the Licensee is temporarily unable to comply with any of the Conditions of the License due to breakdown of equipment or destruction by hazard of fire, wind, or other cause, such as an emergency as defined by Sections 252.34(4), (7), (8), or (10), F.S., the Licensee shall immediately notify the Department. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its 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 Department rules. Any exceedances and/or violations recorded during Emergency Conditions shall be reported as such, but the Department acknowledges that it intends to use its enforcement discretion during this timeframe. This acknowledgement by the Department does not constitute a waiver or variance from any requirements of any federal permit. Relief from any federal agency must be separately sought.

[Rule 62-4.130, F.A.C.]

IX. CONSTRUCTION PRACTICES

A. Local Building Codes

Subject to the Conditions set forth herein, this Certification constitutes the sole License of the state and any agency as to the approval of the location of the Site and any Associated Facility and the construction and operation of any Certified Facility. The Licensee is not required to obtain building permits for Certified Facilities. However, this Certification shall not affect in any way the right of any local government to charge appropriate fees or require that construction of installations used by the electric utility that are not an integral part of a generating plant, substation, or control center (such as, office buildings, warehouses, garages, machine shops, and recreational buildings) be in compliance with applicable building construction codes.

[Section 403.511(4), F.S.]

B. Open Burning

Prior to open burning in connection with land clearing, the Licensee shall seek authorization from the Florida Forest Service in accordance with the requirements of Chapters 62-256 and 5I-2, F.A.C.

[Chapters 5I-2 and 62-256, F.A.C.]

C. Vegetation

For areas located in any Florida Department of Transportation (DOT) right-of-way, Chapter 3.18 of the 2017 Florida DOT *Utility Accommodation Manual* available on the DOT website (https://www.fdot.gov/programmanagement/utilities/default.shtm) shall serve as guidelines for best management practices.

[Chapter 14-46, F.A.C.]

D. Existing Underground Utilities

The Licensee must follow all applicable portions of the Underground Facility Damage Prevention and Safety Act, Chapter 556, F.S. The Licensee shall provide the affected local government and the SCO with copies of valid tickets obtained from Sunshine State One Call of Florida upon request. Tickets shall be available for request until the underground work is completed for the affected area.

[Chapter 556, F.S.]

E. Electric and Magnetic Fields (EMF)

Any transmission lines and electrical substations shall comply with the applicable requirements of Chapter 62-814, F.A.C.

[Chapter 62-814, F.A.C.]

F. Existing Wells

Any existing wells to be impacted in the path of construction that will no longer be used shall be abandoned by a licensed well contractor. All abandoned wells shall be filled and sealed in accordance with Rule 62-532.500(5), F.A.C., or with the rules of the authorizing agency, or consistent with these Conditions.

[Rules 62-532.400 and 62-532.500(5), F.A.C.]

G. Abandonment of Existing Septic Tanks

Any existing septic tanks to be impacted by construction and that will no longer be used shall be abandoned in accordance with Rule 64E-6.011, F.A.C., unless these Conditions provide otherwise.

[Chapter 64E-6, F.A.C.]

H. Sanitary Wastes

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

[Rule 62-6.0101, F.A.C.]

X. RIGHT OF ENTRY

A. Upon presentation of credentials or other documents as may be required by law, the Licensee shall allow authorized representatives of the Department or other agencies with jurisdiction over a portion of the Certified Facility and any authorized offsite mitigation/compensation or otherwise associated areas:

1. At reasonable times, to enter upon the Certified Facility in order to monitor activities within their respective jurisdictions for purposes of assessing compliance with this Certification; or

2. During business hours, to enter the Licensee's premises in which records are required to be kept under this Certification; and to have access to and copy any records required to be kept under this Certification.

B. When requested by the Department, on its own behalf or on behalf of another agency with regulatory jurisdiction, the Licensee shall within a reasonable timeframe as may be mutually agreed upon by the Department and the Licensee, furnish any information required by law, which is needed to determine compliance with the Certification.

[Rules 62-4.160(7)(a) and Rule62-4.160(15), F.A.C.]

XI. DISPUTE RESOLUTION

A. General

If a situation arises in which mutual agreement cannot be reached between the Department and the Licensee, and/or an agency with substantive regulatory jurisdiction over a matter, the Department may act as a facilitator in an attempt to resolve the issue. If the dispute is not resolved informally in this manner, Licensee may request one or more meetings in which both Licensee and the agency with substantive regulatory jurisdiction over the matter can participate in an attempt to resolve the issue informally. If, after such meetings, a mutual agreement cannot be reached between the parties, then the matter shall be referred to the Division of Administrative Hearings (DOAH) for disposition in accordance with the provisions of Chapter 120, F.S. The Licensee or the Department may request DOAH to establish an expedited schedule for the processing of such a dispute. Any filing with DOAH shall state with particularity the specific project and geographic location to which the dispute relates. Work unrelated to the specific project and in areas other than the location to which the dispute relates will not be affected by the dispute.

B. Modifications

If written objections are filed regarding a Modification, and the objections address only a portion of a requested Modification, then the department shall issue a final order approving the portion of the Modification to which no objections were filed, unless that portion of the requested Modification is substantially related to or necessary to implement the portion to which written objections are filed.

C. Post-Certification Submittals

If it is determined, after assessment of a Post-Certification Submittal, that compliance with the Conditions will not be achieved for a particular portion of a submittal, the Department may make a separate assessment of other portions of the submittal, unless those

portions of the submittal are substantially related to or necessary to implement that portion for which it has been determined that compliance with the Conditions will not be achieved.

[Section 120.57, F.S. and Rule 62-17.211, F.A.C.]

XII. 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 circumstance is held invalid, the remainder of the Certification or the application of such provision to other circumstances shall not be affected thereby.

XIII. ENFORCEMENT

A. The terms, conditions, requirements, limitations and restrictions set forth in these Conditions are binding and enforceable pursuant to Sections 403.141, 403.161, 403.514, 403.727, and 403.859 through 403.861, F.S., as applicable. Any noncompliance by the Licensee with these Conditions constitutes a violation of Chapter 403, F.S., and is grounds for enforcement action, License termination, License revocation, or License revision. The Licensee is placed on notice that the Department may 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 the Certified Facility which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the Certified Facility and arising under the Florida Statutes or Department rules, subject to the restrictions in Sections 403.111 and 403.73, F.S. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

[Sections 403.121, 403.131, 403.141, 403.151, 403.161, and 403.514, F.S.; Rules 62-4.160(1) and 62-4.160(9), F.A.C.]

XIV. REVOCATION OR SUSPENSION

The Certification shall be final unless revised, revoked or suspended pursuant to law. This Certification may be suspended or revoked pursuant to Section 403.512, F.S, or for violations of any of these Conditions. This Certification is valid only for the specific processes and operations identified in the SCA, or approved in the final order of Certification, indicated in the testimony and exhibits in support of Certification, indicated in a Post-Certification Submittal, or approved in a subsequent Amendment or Modification of the Certification. Any unauthorized deviation from the approved drawings, exhibits, specifications, or Conditions of this approval may constitute grounds for revocation and enforcement action by the Department. Any enforcement action, including suspension and revocation, shall only affect the portion(s) of the Certified Facility that are the cause of such action, and other portions of the Certified Facility shall remain unaffected by such action.

[Section 403.512, F.S.; Rule 62-4.160(2), F.A.C.]

XV. REGULATORY COMPLIANCE

As provided in Sections 403.087(8) and 403.722(5), F.S., except as specifically provided in the final order of Certification, a subsequent Modification or Amendment, or these

Conditions, the issuance of this License does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This license is not a waiver of or approval of any other Department license/permit that may be required for other aspects of the Certified Facility which are not addressed in this License. This License does not relieve the Licensee from liability for harm or injury to human health or welfare, animal, or plant life, or public or private property caused by the construction or operation of this Certified Facility, or from penalties therefore.

[Rules 62-4.160(3) and 62-4.160(5), F.A.C.]

XVI. CIVIL AND CRIMINAL LIABILITY

Except to the extent a variance, exception, exemption, or other relief is granted in the final order of Certification, in a subsequent Modification to these Conditions, or as otherwise provided under Chapter 403, F.S, this Certification does not relieve the Licensee from civil or criminal penalties for noncompliance with any Condition of Certification, applicable rules or regulations of the Department, or any other state statutes or regulations which may apply.

[Sections 403.141, 403.161, 403.511, F.S.]

XVII. USE OF STATE LANDS

A. Except as specifically provided in the final order of Certification a subsequent Modification or Amendment, or these Conditions, the issuance of this License conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.

B. If any portion of the Certified Facility is located on sovereign submerged lands, state-owned uplands, or within an aquatic preserve, then the Licensee must comply with the applicable portions of Chapters 18-2, 18-20, and 18-21, F.A.C., and Chapters 253 and 258, F.S. If any portion of the Certified Facility is located on sovereign submerged lands, the Licensee must submit section F of Form 62-330.060(1), F.A.C., *Application for Individual and Conceptual Approval Environmental Resource Permit and Authorization to Use State-Owned Submerged Lands* to the Department prior to construction. If any portion of the Certified Facility is located on state-owned uplands, the Licensee must submit an Upland Easement Application to the Department prior to construction.

C. If a portion of the Certified Facility is located on sovereign submerged lands or state-owned uplands owned by the Board of Trustees of the Internal Improvement Trust Fund, pursuant to Article X, Section 11 of the Florida Constitution, then the proposed activity on such lands requires a proprietary authorization. Under such circumstances, the proposed activity is not exempt from the need to obtain a proprietary authorization. Unless otherwise provided in the final order of certification a subsequent Modification or Amendment, or these Conditions, the Department has the responsibility to review and take action on requests for proprietary authorization in accordance with Rules 18-2.018 or 18-21.0051, F.A.C.

D. The Licensee is hereby advised that Florida law states: "A person may not commence any excavation, construction, or other activity involving the use of sovereign or other lands of the state, the title to which is vested in the Board of Trustees of the Internal

Improvement Trust Fund under this chapter, until the person has received the required lease, license, easement, or other form of consent authorizing the proposed use." Pursuant to Chapter 18-14, F.A.C., if such work is done without consent, or if a person otherwise damages state land or products of state land, the Board of Trustees may levy administrative fines of up to $10,000 per offense.

E. The terms, conditions, and provisions of any required lease or easement issued by the State shall be met. Any construction activity associated with the Certified Facility shall not commence on sovereign submerged lands or state-owned uplands, title to which is held by the Board of Trustees of the Internal Improvement Trust Fund, until all required lease or easement documents have been executed.

[Chapters 253 and 258, F.S.; Chapters 18-2, 18-14, 18-21, 62-340, and Rules 62-330.060(1) and 62-4.160(4), F.A.C..]

XVIII. PROCEDURAL RIGHTS

Except as specified in Chapter 403, F.S., or Chapter 62-17, F.A.C., no term or Condition of Certification shall be interpreted to preclude the post-certification exercise by any party of whatever procedural rights it may have under Chapter 120, F.S., including those related to rule-making proceedings.

[Section 403.511(5)(c), F.S.]

XIX. AGENCY ADDRESSES FOR POST-CERTIFICATION SUBMITTALS AND NOTICES

Where a Condition requires Post-Certification Submittals and/or notices to be sent to a specific agency, the following agency addresses shall be used unless the Conditions specify otherwise or unless the Licensee and the Department are notified in writing of an agency's change in address for such submittals and notices:

Florida Department of Environmental Protection
Siting Coordination Office, MS 3500
2600 Blair Stone Road.
Tallahassee, FL 32399-3900
SCO@dep.state.fl.us

Florida Department of Environmental Protection
Southwest District Office
13051 N Telecom Parkway
Temple Terrace, FL 33637-0926

Florida Fish & Wildlife Conservation Commission
Conservation Planning Services
620 South Meridian Street
Tallahassee, FL 32399-1600
ConservationPlanningServices@myfwc.com

Florida Department of Transportation
District Administration

605 Suwannee Street
Tallahassee, FL 32399-0450

Southwest Florida Water Management District
Office of General Counsel
2379 Broad Street
Brooksville, FL 34604-6899

Florida Department of State
Division of Historical Resources
500 S. Bronough Street
Tallahassee, FL 32399-0250
compliancepermits@dos.myflorida.com

Polk County
Office of General Council
Post Office Box 9000
Bartow, FL 33831-9000

[Section 403.511, F.S.]

XX. PROFESSIONAL CERTIFICATION

To ensure protection of public health, safety, and welfare, any construction, modification, or operation of an installation which may be a source of pollution, or of a public drinking water supply, shall be in accordance with sound professional engineering practices pursuant to Chapter 471, F.S.; and all final geological papers or documents involving the practice of the profession of geology shall be in accordance with sound professional geological practices pursuant to Chapter 492, F.S. Where required by Chapter 471 or 492, F.S., applicable portions of amendment requests, petitions for modifications, post certification submittals, and supporting documents which are submitted to the Department for public record shall be signed and sealed by the professional(s) who prepared or approved them.

[Rule 62-4.050, F.A.C.]

XXI. PROCEDURES FOR POST-CERTIFICATION SUBMITTALS

A. Purpose of Submittals

Conditions which provide for the Post-Certification Submittal of information to DEP or other agencies by the Licensee are for the purpose of facilitating the agencies' monitoring of the effects arising from the location of the Certified Facility and the construction and maintenance of the Certified Facility. This monitoring is for DEP to assure, in consultation with other agencies with applicable regulatory jurisdiction, continued compliance with these Conditions, without further agency action. A submittal of information or determination of compliance pursuant to a Post-Certification Submittal under this Condition does not provide a point of entry for a third party.

B. Filings

All Post-Certification Submittals of information by Licensee are to be filed with the agency or office that requires the submittal pursuant to these Conditions. The SCO shall be

copied on all Post-Certification Submittals in electronic .pdf format (unless other formats are requested), via email to SCO@dep.state.fl.us. Each submittal shall clearly identify the Certified Facility name, PA#, and the Condition number(s) (i.e. Section X, Condition XX.y.(z)) requiring the submittal. As required by Section 403.5113(2), F.S., each Post-Certification Submittal will be reviewed by each agency with regulatory authority over the matters addressed in the submittal on an expedited and priority basis.

[Section 403.5113, F.S., Rule 62-17.191(3), F.A.C.]

C. Completeness

DEP shall review each Post-Certification Submittal for completeness. This review may include consultation with the other agency/ies receiving the Post-Certification Submittal with regulatory jurisdiction over the matter addressed in the submittal. DEP's finding of completeness shall specify the area of the Certified Facility affected and shall not delay further processing of the Post-Certification Submittal for non-affected areas.

If any portion of a Post-Certification Submittal is found to be incomplete, the Licensee shall be so notified. Failure to issue such a notice within 30 days after filing of the submittal shall constitute a finding of completeness. Subsequent findings of incompleteness, if any, shall address only the newly filed information.

[Rule 62-17.191(1)(c)2, F.A.C.]

D. Interagency Meetings

If a situation arises in which mutual agreement between either the Department and the Licensee, or the Licensee and an agency with substantive regulatory jurisdiction over a matter cannot be reached, the Department may act as a facilitator in an attempt to resolve the issue.

[Rule 62-17.191(1)(c)2, F.A.C.]

E. Determination of Compliance

DEP shall give written notification within 90 days to the Licensee and the other agency/ies to which the post-certification information was submitted of DEP's determination of whether there is demonstration of compliance with these Conditions. If it is determined that compliance with the Conditions has not been provided, the Licensee shall be notified with particularity of the deficiencies and possible corrective measures suggested. Failure to notify Licensee in writing within 90 days of receipt of a complete Post-Certification Submittal shall constitute a determination of compliance. A post-certification compliance review may be the basis for initiating Modifications to the relevant Condition or to other related Conditions.

F. Commencement of Construction

If DEP does not object within the time period specified in paragraph E. above, Licensee may begin construction pursuant to the terms of these Conditions and the subsequently submitted construction details.

G. Revisions to Design Previously Reviewed for Compliance

If revisions to Site-specific designs occur after submittal, the Licensee shall submit revised plans prior to construction for review in accordance with the post-certification process specified in this Condition.

[Sections 120.569, 373.413, 373.416, and 403.511, F.S.; Rules 62-17.191 and 62-17.205, F.A.C.]

XXII. POST-CERTIFICATION SUBMITTAL REQUIREMENTS SUMMARY

Within 90 days after Certification, and within 90 days after any subsequent Modification or Certification, the Licensee shall provide the Department a complete summary of those Post-Certification Submittals that are identified in these Conditions when due-dates for the information required of the Licensee have been identified. A summary shall be provided as a separate document for each transmission line, if any. Such submittals shall include, but are not limited to, monitoring reports, management plans, wildlife surveys, etc. The summary shall be provided to the SCO, in a sortable spreadsheet, electronically, in the format shown below or equivalent. For subsequent Modifications and Certifications, a Post-Certification Submittal Requirements Summary shall be required for only those resulting in new or altered post-certification requirements.

Condition Number	Requirement and Timeframe	Due Date	Name of Agency or Agency Subunit to whom the submittal is required to be provided

[Section 403.5113, F.S.; Rule 62-17.191(3), F.A.C.]

XXIII. POST CERTIFICATION AMENDMENTS

If, subsequent to Certification, the Licensee proposes any material change to the SCA and revisions or amendments thereto, as certified, the Licensee shall submit a written request for Amendment and a description of the proposed change to the SCA to the Department. Within 30 days after the receipt of a complete request for an Amendment, the Department shall determine whether the proposed change to the Application requires a Modification to the Conditions.

A. If the Department concludes that the change would not require a Modification to the Conditions, the Department shall provide written notification of the approval of the proposed Amendment to the Licensee, all agencies, and all other parties to the Certification.

B. If the Department concludes that the change would require a Modification to the Conditions, the Department shall provide written notification to the Licensee that the proposed change to the SCA requires a request for Modification pursuant to Section 403.516, F.S.

[Section 403.5113, F.S]

XXIV. MODIFICATION OF CERTIFICATION

A. Pursuant to Section 403.516(1)(a), F.S., and Rule 62-17.211, F.A.C., the Siting Board hereby delegates the authority to the Department to modify any Condition which would not otherwise require approval by the Siting Board, after notice and receipt of no objection by a party to the Certification within 45 days after notice by mail to the party's last address of record,

and if no other person whose substantial interests will be affected by the Modification objects in writing within 30 days of public notice.

B. The Department may modify Conditions, in accordance with Section 403.516(1)(b), F.S., which are inconsistent with the terms of any subsequent and separately DEP-issued permits, permit amendments, permit modifications, or permit renewals under a federally delegated or federally approved permit program. Such Modification may be made without further notice if the matter has been previously noticed under the requirements for any federally delegated or approved permit program.

C. In accordance with Section 403.516(1)I, F.S., the Licensee may file a petition for Modification with the Department, or the Department may initiate the Modification upon its own initiative.

D. 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 generating capacity must be reported by submission of an appropriate request for an Amendment, Modification, or Certification.

E. Alteration of Site boundaries may require Modification of the Conditions of Certification.

[Sections 120.569(2)(n), 403.511(5)(a), and 403.516, F.S.; Rule 62-17.211, F.A.C.]

XXV. COASTAL ZONE CONSISTENCY

Pursuant to Sections 373.428 and 403.511, F.S., Certification of the facility constitutes the State's concurrence that the licensed activity or use is consistent with the federally approved program under the Florida Coastal Management Act.

[Sections 373.428, 380.23 and 403.511(7), F.S.]

XXVI. WATER QUALITY CERTIFICATION

Pursuant to the Operating Agreement between the Department, United States Army Corps of Engineers (USACE) and water management districts, the written final order granting certification under the Florida Electrical Power Plant Siting Act, sections 403.501-.518, F.S., also constitutes certification of compliance with State Water Quality Standards pursuant to Section 401 of the Clean Water Act, 33 U.S.C.

[2012 Operating Agreement, Jacksonville District USACOE, DEP and Water Management Districts, Section II.A.1.(f)]

XXVII. TRANSFER OF CERTIFICATION

A. This Certification is transferable in whole or in part, upon Department approval, to an entity determined to be able to comply with these Conditions. A transfer of Certification of all or part of the Certified Facility may be initiated by the Licensee's filing of a Notice of Intent to Transfer Certification with the Department's SCO. The notice of intent shall: identify the intended new Certification holder or Licensee; identify the current and the new entity responsible for compliance with the Certification; and include a written agreement from the intended new Licensee/Transferee to abide by all Conditions, as well as applicable laws and regulations. Upon receiving a complete notice of intent, the transfer shall be approved unless the Department objects to the transfer on the grounds of the inability of the new Licensee to comply with the

Conditions of Certification, specifies in writing its reasons for its objections, and gives notice and an opportunity to petition for an administrative hearing pursuant to Section 120.57, F.S. Upon approval, DEP will initiate a Modification to the Conditions to reflect the change in ownership in accordance with Rule 62-17.211, F.A.C.

B. In the event of the dissolution of the Licensee, the Department may transfer Certification to successor entities which are determined to be competent to construct, operate, and maintain the Certified Facility in accordance with the Conditions of Certification and which are proper Applicants as defined by the PPSA. Upon determination that such a successor entity complies with the requirements for transfer of Certification, DEP will initiate a Modification to the Conditions to reflect the change in ownership in accordance with Rule 62-17.211, F.A.C.

[Chapter 120, F.S.; Rule 62-17.211, F.A.C]

XXVIII. LABORATORIES AND QUALITY ASSURANCE

Chemical, physical, biological, microbiological and toxicological data collected as a requirement of these Conditions must be reliable and collected and analyzed by scientifically sound procedures. Unless otherwise specified in these Conditions, the Licensee shall adhere to the minimum field and laboratory quality assurance, methodological and reporting requirements of the Department as set forth in Chapter 62-160, F.A.C.

[Chapter 62-160, F.A.C.]

XXIX. ENVIRONMENTAL RESOURCES

A. General

1. Submittals for Construction Activities

a. Prior to the commencement of construction of new facilities and/or new Associated Facilities the Licensee shall provide to the appropriate DEP District's Environmental Resource Permitting Section(s) for review, all information necessary for a complete *Application for Individual and Conceptual Approval Environmental Resource Permit* (ERP), DEP Form 62-330.060(1), F.A.C. or other applicable ERP authorization form. A copy of the submittal shall also be provided to the SCO.

b. This form may: 1) be submitted concurrently with a SCA; 2) be submitted as part of an Amendment request or a petition for Modification; or 3) be submitted as a Post-Certification Submittal following approval of a project through Certification, Modification or Amendment. Such ERP submittals, once received, shall be reviewed in accordance with the non-procedural standards and criteria for issuance of an ERP, including all the provisions related to reduction and elimination of impacts, conditions for issuance, additional conditions for issuance, and mitigation contained in Chapter 62-330, F.A.C., as applicable unless otherwise stated in these Conditions. While the information is provided for review via submittal of the ERP form, consistent with Section 403.511, F.S., a separate ERP is not required for Certified Facilities, and therefore, a separate ERP will not be issued.

c. Those forms submitted as part of a SCA, an Amendment, or Modification, shall be processed concurrently with the respective SCA, Amendment, or Modification, in compliance with the applicable PPSA procedures. Those forms submitted as a Post-Certification Submittal (after Certification, Modification, or Amendment and prior to construction) shall be processed in accordance with Section A. General Conditions, Condition

XXI. Procedures for Post-Certification Submittals. Post-Certification Submittal information may be submitted for discrete portions of the Certified Facilities for a determination of compliance with these Conditions of Certification.

d. No construction shall commence on a Project feature, or in a particular segment of a linear facility, until the Department has determined that there is a demonstration of compliance with these Conditions. For Post-Certification Submittal reviews, the Department's determination is governed by Section A. General Conditions, Condition XXI. Procedures for Post-Certification Submittals.

e. Concurrent with submittal of the DEP form required in subparagraph A.1.a., above, the Licensee shall submit, as applicable, a survey of Wetland and surface water areas as delineated in accordance with Chapter 62-340, F.A.C., and verified by appropriate agency staff for Department compliance review. Available DEP-approved Wetland and surface water delineations within the boundaries of a certified Site or a portion thereof may be used and reproduced for this delineation submittal and verification. Formal DEP-approved wetland and surface water delineations are valid only for a period of five years.

[Section 373.416, F.S.; Chapters 62-330 and 62-340, F.A.C.]

2 Construction, operation, and maintenance of the proposed project (including any access roads and structures constructed within Wetlands and other surface waters, and/or Associated Facilities) shall satisfy any applicable non-procedural requirements in the Department rules.

[Section 373.414(1)(a), F.S.]

3. Any delineation of the extent of a Wetland or other surface water submitted as part of the DEP ERP Application Form required by Subparagraph A.1.a. above, including plans or other supporting documentation, shall not be considered binding on the Department unless a specific Condition of this Certification or a formal Wetlands jurisdictional determination under Section 373.421(2), F.S., provides otherwise.

[Sections 373.421 and, 403.504, F.S.]

4. Silt screens, hay bales, turbidity screens/barriers, or other such sediment control measures shall be utilized during construction. The selected sediment control measure shall be installed landward of all protected Wetlands and other surface waters and shall be properly "trenched" etc. All areas shall be stabilized and vegetated immediately after construction to prevent erosion into Wetlands and other surface waters.

[Chapter 62-330, F.A.C.]

B. Surface Water Management

1. Information regarding Surface Water Management Systems (SWMS) will be reviewed for consistency with the applicable non-procedural requirements of Part IV of Chapter 373, F.A.C. following submittal of Form 62-330.060(1), F.A.C., to the DEP District.

2. All construction, operation, and maintenance of the SWMS(s) for the Certified Facilities shall be as set forth in the plans, specifications, and performance criteria contained in the Application and other materials presented during the Certification proceeding, Post-Certification Submittals, and as otherwise approved. If specific requirements are necessary for construction, operation, and/or maintenance of an approved SWMS, those requirements shall be

incorporated into a SWMS Operation and Maintenance Requirements Plan for that SWMS and incorporated herein as Attachment B. Any alteration or modification to the SWMS Plan or the Surface Water Management System as certified shall require prior approval from the Department.

3. To allow for stabilization of all disturbed areas, prior to construction, during construction, and for the period of time after construction of the SWMS, the Licensee shall implement and maintain erosion and sediment control best management practices, such as silt fences, erosion control blankets, mulch, sediment traps, polyacrylamide (PAM), temporary grass seed, permanent sod, and floating turbidity screens to retain sediment onsite and to prevent violations of State Water Quality Standards. These devices shall be installed, used, and maintained at all locations where the possibility exists of transferring suspended solids into the receiving waterbody due to the licensed work, and shall remain in place at all locations until construction in that location is completed and soils are permanently stabilized. All best management practices shall be in accordance with the guidelines and specifications described in *the State of Florida Erosion and Sediment Control Designer and Reviewer Manual* (Florida Department of Transportation and Florida Department of Environmental Protection, by HydroDynamics Incorporated in cooperation with Stormwater Management Academy, June 2007) unless a project-specific erosion and sediment control plan is approved as part of this License. If project-specific Conditions require additional measures during any phase of construction or operation to prevent erosion or control sediments beyond those specified in the approved erosion and sediment control plan, the Licensee shall implement additional best management practices as necessary, in accordance with the guidelines and specifications in *the State of Florida Erosion and Sediment Control Designer and Reviewer Manual*. The Licensee shall correct any erosion or shoaling that causes adverse impacts to the water resources as soon as Feasible. Once project construction is complete in an area, including the re-stabilization of all side slopes, embankments and other disturbed areas, and before conversion to the operation and maintenance phase, all silt screens and fences, temporary baffles, and other materials that are no longer required for erosion and sediment control shall be removed.

4. The Licensee shall complete construction of all aspects of the Surface Water Management System described in the ERP Application Form, submitted as part of a Post-Certification Submittal, Amendment, Modification, or SCA including water quality treatment features, and discharge control facilities prior to use of the portion of the Certified Facility being served by the SWMS.

5. At least 48 hours prior to beginning the authorized activities, the permittee shall submit to the Agency a fully executed Form 62-330.350(1), F.A.C., "Construction Commencement Notice," (October 1, 2013), (http://www.flrules.org/Gateway/reference.asp?No=Ref-02505) incorporated by reference herein, indicating the expected start and completion dates. A copy of this form may be obtained from the Agency, as described in Rule 62-330.010(5), F.A.C., and shall be submitted electronically. However, for activities involving more than one acre of construction that also require a NPDES stormwater construction general permit, submittal of the Notice of Intent to Use Generic Permit for Stormwater Discharge from Large and Small Construction Activities, DEP Form 62-621.300(4)(b), F.A.C., shall also serve as notice of commencement of construction under this chapter and, in such a case, submittal of Form 62-330.350(1), F.A.C., is not required.

6 Each phase or independent portion of the approved SWMS must be completed in accordance with the submitted DEP Form prior to the operation of the portion of the Certified Facility being served by that portion or phase of the SWMS.

7. Within 30 days, or such other date as agreed to by DEP and the Licensee, after completion of construction of any new portions of the Surface Water Management System, the Licensee shall submit to the DEP District, and copy the SCO, a written statement of completion and certification by a registered professional engineer (P.E.), or other appropriate registered professional, as authorized by law, utilizing the required "As-Built Certification and Request for Conversion to Operation Phase" (DEP Form 62-330.310(1), F.A.C.). Additionally, if deviations from the approved drawings are discovered, the As-Built Certification must be accompanied by a copy of the approved drawings with deviations noted.

8. Any substantial deviation from the approved drawings, exhibits, specifications, or Conditions may constitute grounds for revocation or enforcement action by the Department.

9. The operation phase of any new SWMS approved by the Department shall not become effective until the Licensee has complied with the requirements of the Conditions herein, the Department determines the SWMS to be in compliance with the approved plans, and the entity approved by the Department accepts responsibility for operation and maintenance of the SWMS.

10. The DEP District must be notified in advance of any proposed construction dewatering. If the dewatering activity is likely to result in offsite discharge or sediment transport into Wetlands or surface waters, a written dewatering plan must be submitted to and approved by the Department prior to the dewatering event.

[Section 373.414, F.S.; Chapters 62-302, 62-330, and Rule 62-4.242, F.A.C.]

C. Wetland and Other Surface Water Impacts

1. All Certified Facilities shall be constructed in a manner which will eliminate or reduce adverse impacts to onsite and/or adjacent Wetlands or other surface waters to the extent Practicable or otherwise comply with substantive criteria for elimination or reduction. When impacts to Wetlands will occur as a result of a future Amendment, Modification, or Certification, and cannot be Practicably eliminated or reduced, the Licensee may propose and the Department or Board shall consider mitigation to offset such impacts under the ERP review process pursuant to subparagraph A.1., above.

2. Proposed mitigation requirements/plans submitted with the DEP ERP Application forms required in subparagraph A.1.a., above, or submitted and approved as part of an Amendment, Modification, or Certification, and that are deemed acceptable by DEP, shall include applicable construction conditions, success criteria, monitoring plans, and remedial actions (if applicable), and shall be incorporated into these Conditions as Attachment C (Wetland Mitigation Requirements/Plans).

[Sections 373.413, 373.414, 373.4145, 403.511, and 403.814(6), F.S.; Chapters 62-312, 62-330, 62-340 62-342, and 62-345, F.A.C.]

XXX. THIRD PARTY IMPACTS

The Licensee is responsible for maintaining compliance with these Conditions even when third party activities authorized by the Licensee occur in or on the certified Site.

[Section 403.506(1), F.S.]

XXXI. FACILITY OPERATION

The Licensee shall properly operate and maintain the Certified Facility and systems of treatment and control (and related appurtenances) that are installed and used by the Licensee to achieve compliance with these Conditions, as required by the final order of Certification, these Conditions, or a post-certification Amendment or Modification. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the final order of Certification, these Conditions, or a post-certification Amendment or Modification.

[Rule 62-4.160(6), F.A.C.]

XXXII. DECOMMISSIONING

Prior to decommissioning, the Licensee shall submit a plan for decommissioning the Certified Facilities to the Department within 90 days of ceasing operations. The decommissioning plan shall, at a minimum, address the following:

1. The anticipated timeline of decommissioning and demolition activities.

2. A description of demolition activities and potential authorizations necessary to complete demolition.

3. Management and disposal of any known and/or discovered contamination.

4. Management and disposal of known and/or discovered hazardous materials including lead-based paint and asbestos-containing materials.

5. A schedule for when the Site Assessment will be performed and when the Site Assessment Report will be submitted pursuant to the requirements of Rule 62-780.600, F.A.C.

6. Closure of any Surface Water Management System(s)

[Chapters 62-257, 62-701, and 62-780, F.A.C.]

XXXIII. RECORDS MAINTAINED AT THE FACILITY

A. These Conditions or a copy thereof shall be kept at the Site.

B. The Licensee shall hold at the Site, or other location designated by these Conditions, records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation required by these Conditions, copies of all reports required by these Conditions, and records of all data used to complete the SCA for this approval. These materials shall be retained at least 3 years from the date of the sample, measurement, report, or Application unless otherwise specified by Department rule.

C. Records of monitoring information shall include:

1. the date, exact place, and time of sampling or measurements;

2. the person responsible for performing the sampling or measurements;

3. the dates analyses were performed;

4. the person responsible for performing the analyses;

5. the analytical techniques or methods used; and,

6. the results of such analyses.

[Rules 62-4.160(12) and 62-4.160(14)(b), F.A.C]

XXXIV. WATER DISCHARGES

A. Discharges

1. Except as otherwise authorized by a permit issued by the Department under a federally approved or delegated program or to the extent a variance, exception, exemption or other relief is granted or authorized by these Conditions, the Licensee shall not discharge to surface or ground waters of the state, wastes in concentrations which, alone or in combination with other substances, or components of discharges (whether thermal or non-thermal) are carcinogenic, mutagenic, teratogenic, or toxic to human beings (unless specific criteria are established for such components in Rule 62-520.400, F.A.C.) or are acutely toxic to indigenous species of significance to the aquatic community within surface waters affected by the ground water at the point of contact with surface waters.

2. Except as otherwise authorized by a permit issued by the Department under a federally approved or delegated program or to the extent a variance, exception, exemption, or other relief is granted or authorized by these Conditions, all discharges and activities must be conducted so as to not cause a violation of the water quality standards set forth in Chapters 62-4, 62-302, 62-520, 62-550, and 62-620, F.A.C., including the provisions of Rules 62-4.243, 62-4.244, and 62-4.246, F.A.C., the antidegradation provisions of paragraphs 62-4.242(1)(a) and (b), and Rule 62-302.300, F.A.C., and any special standards for Outstanding Florida Waters and Outstanding National Resource Waters set forth in Rules 62-4.242(2-3), F.A.C.

3. Except as otherwise authorized by a permit issued by the Department under a federally approved or delegated program or to the extent a variance, exception, exemption, or other relief is granted or authorized by these Conditions, all dewatering discharges must be in compliance with Rule 62-621.300, F.A.C.

[Chapters 62-4, 62-302, 62-520, 62-550, 62-620, and 62-621, F.A.C.]

B. Wastewater Incident Reporting

The Licensee shall report to the Department any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Licensee becomes aware of the circumstances. A written submission shall also be provided within five days of the time the Licensee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; clean up actions taken and status; and steps taken or planned to reduce, eliminate, and prevent recurrence of the noncompliance. For noncompliance events related to sanitary sewer overflows, bypass events, or unauthorized discharges, these reports must include the data described above (with the exception of time of

discovery) as well as the type of event (e.g., sanitary sewer overflow, bypass, unauthorized discharge); type of sanitary sewer overflow structure (e.g., manhole); the discharge location address and latitude/longitude; type of water discharged; discharge volumes and volumes recovered; volume discharged to surface waters and receiving waterbody name; types of human health and environmental impacts of the sanitary sewer overflow, bypass event, or unauthorized discharge (e.g., beach closure); whether the noncompliance was caused by a third party; and whether the noncompliance was related to wet weather. The written submission may be provided electronically using the Department's Business Portal at http://www.fldepportal.com/go/ (via "Submit" followed by "Report" or "Registration/Notification"). Notice required for public notice of pollution under paragraph (d) may be provided together with the written submission using the Business Portal. All noncompliance events related to sanitary sewer overflows or bypass events submitted after (September 14, 2021), shall be submitted electronically.

1. The following shall be included as information which must be reported within 24 hours under this condition:

a. Any unanticipated bypass which causes any reclaimed water or the effluent to exceed any permit limitation or results in an unpermitted discharge,

b. Any upset which causes any reclaimed water or the effluent to exceed any limitation in the permit,

c. Violation of a maximum daily discharge limitation for any of the pollutants specifically listed in the permit for such notice; and,

d. Any unauthorized discharge to surface or ground waters, except for discharges to ground water of reclaimed water meeting Part III or Part V treatment standards under Chapter 62-610, F.A.C.

2. Oral reports as required by this subsection shall be provided as follows:

a. For unauthorized releases or spills of treated or untreated wastewater reported pursuant to subparagraph 1.d. above, that are in excess of 1,000 gallons per incident, or where information indicates that public health or the environment will be endangered, oral reports shall be provided to the Department by calling the State WATCH OFFICE toll free number (800)320-0519, as soon as Practicable, but no later than 24 hours from the time the Licensee becomes aware of the discharge. The Licensee, to the extent known, shall provide the following information to the State Watch Office:

(1) Name, address, and telephone number of person reporting,

(2) Name, address, and telephone number of Licensee or responsible person for the discharge,

(3) Date and time of the discharge and status of discharge (ongoing or ceased),

(4) Characteristics of the wastewater spilled or released (untreated or treated, industrial or domestic wastewater),

(5) Estimated amount of the discharge,

(6) Location or address of the discharge,

(7) Source and cause of the discharge,

(8) Whether the discharge was contained onsite, and cleanup actions taken to date,

(9) Description of area affected by the discharge, including name of water body affected, if any; and,

(10) Other persons or agencies contacted.

b. Oral reports, not otherwise required to be provided pursuant to subparagraph 2.a., above, shall be provided to the Department within 24 hours from the time the Licensee becomes aware of the circumstances.

3. If the oral report has been received within 24 hours, the noncompliance has been corrected, and the noncompliance did not endanger health or the environment, the Department shall waive the written report.

4. In accordance with Section 403.077, F.S., unauthorized releases or spills reportable to the State Watch Office pursuant to subparagraph 2.a. above shall also be reported to the Department within 24 hours from the time the Licensee becomes aware of the discharge. The Licensee shall provide to the Department information reported to the State Watch Office. Notice of unauthorized releases or spills may be provided to the Department through the Department's Public Notice of Pollution web page at https://floridadep.gov/pollutionnotice or by reporting electronically using the Department's Business Portal at http://www.fldepportal.com/go/ (via "Submit" followed by "Report" or "Registration/Notification").

a. If, after providing notice pursuant to paragraph (d) above, the Licensee determines that a reportable unauthorized release or spill did not occur or that an amendment to the notice is warranted, the Licensee may submit a letter to the Department documenting such determination at pollution.notice@floridadep.gov.

b. If, after providing notice pursuant to paragraph 4. above, the Licensee discovers that a reportable unauthorized release or spill has migrated outside the property boundaries of the installation, the Licensee must provide an additional notice to the Department that the release has migrated outside the property boundaries within 24 hours after its discovery of the migration outside of the property boundaries.

5. Unless discharged to surface waters, a spill, release, discharge, upset or bypass involving reclaimed water meeting Part III or Part V treatment standards under Chapter 62-610, F.A.C., shall not be considered to endanger health or the environment and shall be reported under subsection (21) of Rule 62-610, F.A.C..

[Chapter 403, F.S.; Rule 62-620.610(20), F.A.C.]

C. Bypass Provisions

1. Bypass is prohibited, and the Department may take enforcement action against a Licensee for bypass, unless the Licensee affirmatively demonstrates that:

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage; and,

b. There were no Feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment

should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and,

c. The Licensee submitted notices as required under Section A. General Conditions, Condition XXXIV. Water Discharges, paragraph C.2.

2. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to the Department, if possible at least 10 days before the date of the bypass. The permittee shall submit notice of an unanticipated bypass within 24 hours of learning about the bypass as required in Section A. General Conditions, Condition XXXIV. Water Discharges, paragraph B, above. A notice shall include a description of the bypass and its cause; the period of the bypass, including exact dates and times; if the bypass has not been corrected, the anticipated time it is expected to continue; and the steps taken or planned to reduce, eliminate, and prevent recurrence of the bypass.

3. The Department shall approve an anticipated bypass, after considering its adverse effect, if the Licensee demonstrates that it will meet the three conditions listed in Section A. General Conditions, Condition XXXIV. Water Discharges, paragraph C.1., above.

4. A Licensee may allow any bypass to occur which does not cause reclaimed water or effluent limitations to be exceeded if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provision of Condition Section A. General Conditions, XXXIV. Water Discharges, paragraph C.1., above.

[Chapter 403, F.S.; Rule 62-620.610(22), F.A.C.]

D. Upset Provisions

1. A Licensee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An upset occurred and that the Licensee can identify the cause(s) of the upset,

b. The Certified Facility was at the time being properly operated,

c. The License submitted notice of the upset as required in Section A. General Conditions, Condition XXXIV. Water Discharges, paragraph B.; and,

d. The Licensee complied with any remedial measures required.

2. In any enforcement proceeding, the burden of proof for establishing the occurrence of an upset rests with the Licensee.

3. Before an enforcement proceeding is instituted, no representation made during the Department review of a claim that noncompliance was caused by an upset is final agency action subject to judicial review.

[Chapter 403, F.S.; Rule 62-620.610(23), F.A.C.]

XXXV. SOLID AND HAZARDOUS WASTE

A. Solid Waste

1. The Licensee shall comply with all applicable nonprocedural provisions of Chapter 62-701, F.A.C., for any solid waste generated within the Certified Facility during construction, operation, maintenance, and closure.

2. Any ash residue generated by the Licensee at the Certified Facility shall be disposed of, and/or managed, at a permitted solid waste facility in accordance with Chapter 62-701, F.A.C.

[Chapter 62-701, F.A.C.]

B. Hazardous Waste, Used Oil, Petroleum Contact Water, and Spent Mercury

1. The Licensee shall comply with all applicable non-procedural provisions of Chapter 62-730, F.A.C., for any hazardous waste generated within the Certified Facility. An EPA identification number must be obtained before beginning hazardous waste activities unless the facility is a Conditionally Exempt Small Quantity Generators (CESQGs). CESQGs generate no more than 100 kg (220 lbs) of hazardous waste in any month and have less than 1,000 kg (2,200 lbs) of accumulated hazardous waste at any one time.

2. The Licensee shall comply with all applicable provisions of Chapter 62-710, F.A.C., for any used oil and used oil filters generated within the Certified Facility.

3. The Licensee shall comply with all applicable provisions of Chapter 62-737, F.A.C., for any spent mercury-containing lamps and devices generated within the Certified Facility.

4. The Licensee shall comply with all applicable provisions of Chapter 62-740, F.A.C., for any petroleum contact water located within the Certified Facility.

[Chapters 62-710, 62-730, 62-737, and 62-740, F.A.C.]

C. Hazardous Substance Release Notification

1. Any owner or operator of a facility who has knowledge of any release of a hazardous substance from a Certified Facility in a quantity equal to or exceeding the reportable quantity in any 24-hour period shall notify the Department by calling the State Watch Office, (800) 320-0519, as soon as possible, but not later than one working day of discovery of the release.

2. Any owner or operator of a facility who has knowledge of any release of a hazardous substance from a Certified Facility in a quantity equal to or exceeding the reportable quantity in any 24-hour period shall notify the public by submitting a Public Notice of Pollution, https://prodenv.dep.state.fl.us/DepPNP/user/pnpRequest, as soon as possible, but not later than 24 hours after discovery of the release.

3. Releases of mixtures and solutions are subject to these notification requirements only where a component hazardous substance of the mixture or solution is released in a quantity equal to or greater than its reportable quantity.

4. Notification of the release of a reportable quantity of solid particles of antimony, arsenic, beryllium, cadmium, chromium, copper, lead, nickel, selenium, silver,

thallium, or zinc is not required if the mean diameter of the particles released is larger than 100 micrometers (0.004 inches).

[Chapter 62-150, F.A.C.]

D. Contaminated Site Cleanup

The Licensee shall comply with all applicable non-procedural provisions of Chapter 62-780, F.A.C., for any violations of relevant provisions of Chapter 376 or 403, F.S., that result in legal responsibility for Site rehabilitation pursuant to those chapters. This responsibility for Site rehabilitation does not affect any activity or discharge permitted or exempted pursuant to Chapter 376 or 403, F.S., or rules promulgated pursuant to Chapter 376 or 403, F.S.

[Chapter 62-780, F.A.C.]

XXXVI. STORAGE TANK SYSTEMS

Registration, construction, installation, operation, maintenance, repair, closure, and disposal of storage tank systems within a Certified Site that store regulated substances shall be in accordance with Chapters 62-761 and 62-762, F.A.C., in order to minimize the occurrence and environmental risks of releases and discharges. Mineral acid storage tank systems are subject to Rule 62-762.891, F.A.C.

A. Incident Notification Requirements

Notification of any condition or situation indicating that a release or discharge may have occurred from a storage tank system or system component shall be made to the County in writing or electronic format on Form 62-761.900(6), F.A.C., Incident Notification Form (INF), within 72 hours of discovery or before the close of the County's next business day.

B. Discharge Reporting Requirements

Notification of the discovery of a discharge of a regulated substance shall be made to the county in writing or electronic format on Form 62-761.900(1), F.A.C., Discharge Report Form (DRF) within 24 hours of the discovery or before the close of the County's next business day, unless the discovery is a non-petroleum, de minimis discharge referenced in Rule 62-780.550, F.A.C., or a petroleum or petroleum product de minimis discharge referenced in Rule 62-780.580(1), F.A.C. A de minimis discharge is exempt from the notification requirements as long as discharge is removed and properly treated or properly disposed, or otherwise remediated pursuant to the applicable provisions of Chapter 62-780, F.A.C.

C. Discharge Cleanup

If a discharge of a regulated substance occurs at a Certified Facility, actions shall be taken immediately to contain, remove, and abate the discharge under all applicable Department rules. The Licensee is advised that other federal, state, or local requirements may apply to these activities. If the contamination present is subject to the provisions of Chapter 62-780, F.A.C., corrective action, including free product recovery, shall be performed in accordance with that Chapter.

D. Out of Service and Closure Requirements

Storage tank systems shall be taken out-of-service and/or closed as necessary in accordance with Rules 62-761.800 and 62-762.801, F.A.C., as applicable.

[Chapters 62-761, 62-762, and 62-780, F.A.C.]

SECTION B. SPECIFIC CONDITIONS

I. DEPARTMENT OF ENVIRONMENTAL PROTECTION

A. Groundwater Monitoring

1. The Licensee shall comply with the requirements of the approved DEF-Hines Energy Complex Groundwater Construction, Operation and Monitoring Requirements (GWCOMR) – incorporated herein as Attachment D to these Conditions. A violation of the requirements of the GWCOMR shall be a violation of these Conditions.

The Licensee shall abide by the Conditions of the approved Site-wide GWCOMR and any subsequent revision thereof for the continued authorized discharge of industrial wastewater to ground water. Such provisions shall be fully enforceable as Conditions of this Certification. Any violation of such provisions shall be a violation of these Conditions.

a. The requirements of the GWCOMR shall include, but not be limited to, at least the following:

(1) monitoring well construction requirements;

(2) updated aerial showing all monitoring wells (existing and new);

(3) a description of the complete IWW system including IWW treatment systems, and monitoring wells;

(4) parameters to be sampled at each monitoring well;

(5) monitoring frequencies; and

(6) operation requirements.

b. The GWCOMR shall be revised to comply with the provisions contained in Rules 62-620.325 and 62-620.345, F.A.C., if applicable, or to comply with any applicable effluent standard or limitation issued or approved under Sections 301(b)(2)(C) and (D), 304(b)(2) and 307(a)(2) of the Clean Water Act, as amended, by change in the effluent standards, limitations, or water quality standards previously issued or approved. At a minimum, projects which involve any one of the following shall be reviewed by the Department for a determination on whether a modification to these Conditions will be required and if a modification is required, it shall be processed in accordance with Section 403.516(1)(c), F.S., and Rule 62-17.211, F.A.C., as applicable.

(1) New major sources or deletion of existing major sources of wastewater;

(2) Improvements made to existing, or new wastewater treatment facilities including those which provide for a new or expanded land application system which will result in an increase in the permitted capacity;

(3) Other projects that cause or may cause changes to the quantity and/or quality of discharges to groundwater as a result of solid waste disposal or industrial wastewater treatment. or

(4) Pollutants not addressed in the GWMR or these Conditions;

(5) Applications for a new Water Quality Criteria exemption pursuant to Rule 62-520.500 F.A.C.

c. All other revisions or updates to the GWCOMR shall be submitted to the DEP Southwest District Office Industrial Wastewater Program as appropriate for review and approval with copies to the SCO. Review shall be in accordance with Section A. General Conditions, Condition XXI. Procedures for Post-Certification Submittals, unless it is determined by the DEP to be a Modification or an Amendment. Additionally, the GWCOMR may be updated to adjust effluent limitations or monitoring requirements should future Water Quality Based Effluent Limitation determinations, water quality studies, DEP approved changes in water quality standards, or other information show a need for a different limitation or monitoring requirement. The Department may develop a Total Maximum Daily Load (TMDL) which may be applicable to potential permitted surface water discharges at the Hines Energy Complex. Once a TMDL has been established and adopted by rule, the Department shall revise, if applicable, the GWCOMR or these Conditions to incorporate the final findings of the TMDL

d. The Licensee shall provide verbal notice to the Department as soon as practical after discovery of a sinkhole within an area for the management or application of wastewater or sludge. The Licensee shall immediately implement measures appropriate to control the entry of contaminants and shall detail these measures to the Department in a written report within 7 days of the sinkhole discovery.

2. The Zone of Discharge for the consolidated site boundary, shall be horizontally located 100 feet from the disposal site boundary and as defined by the locations and depths of compliance wells

[Rule 62-520.200(27), F.A.C.]

3. The ground water minimum criteria specified in Rule 62-520.400 F.A.C., shall be met within the zone of discharge.

[Rules 62-520.400 and 62-520.420(4), F.A.C.]

4. If the concentration for any constituent listed in Table 1 of Attachment D (GWCOMR), in the natural background quality of the ground water, is greater than the stated maximum, or in the case of pH is also less than the minimum, the representative background quality shall be the prevailing standard.

[Rule 62-520.420(2)]

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

6. During the period of operation authorized by these Conditions, the Licensee shall complete and submit to the Department Discharge Monitoring Reports (DMRs), Part A of Attachment D, in accordance with the frequencies specified by the REPORT type (i.e. monthly, toxicity, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to these Conditions. Monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below.

REPORT Type on DMR	Monitoring Period	Mail or Electronically Submit by

Monthly or Toxicity	first day of month – last day of month	@28th day of following month
Quarterly	January 1 - March 31 April 1 - June 30 July 1 - September 30 October 1 - December 31	April 28 July 28 October 28 January 28
Semiannual	January 1 - June 30 July 1 - December 30	July 28 January 28
Annual	January 1 - December 31	January 28

The Licensee may submit either paper or electronic DMR forms. If submitting paper DMR forms, the Licensee shall make copies of the attached DMR forms, without altering the original format or content unless approved by the Department, and shall submit the completed DMR forms to the Department postmarked by the twenty-eighth (28th) of the month following the month of operation at the addresses specified below:

Originals to:

Florida Department of Environmental Protection
Compliance Assurance Program
Industrial Wastewater Program
Southwest District Office
13051 N. Telecom Parkway, Suite 101
Temple Terrace, FL 33637-0926

Phone Number - (813) 470-5700
FAX Number - (813) 470-5996
email: swd_iw@floridadep.gov

If submitting electronic DMR forms, the Licensee shall use the electronic DMR system(s) approved in writing by the Department and shall electronically submit the completed DMR forms to the Department by the twenty-eighth (28th) of the month following the month of operation. Data submitted in electronic format is equivalent to data submitted on signed and certified paper DMR forms.

[Rule 62-620.610(18), F.A.C.]

If the facility elects to sign up for eDMR, please visit the following website for additional information and application forms: https://floridadep.gov/water/water-compliance-assurance/content/getting-started-ezdmr

For additional information on wastewater electronic reporting, please contact the eDMR Administrator by email at EzDMRAdmin@dep.state.fl.us or by phone at (850) 245-8567.

[Rules 62-620.610(18) and 62-600.680(1)), F.A.C.]

7. The Licensee shall comply with all other applicable, non-procedural requirements found in Chapter 62-620.610(1-23), F.A.C., as these relate to operation of the Hines Energy Complex industrial wastewater collection and treatment facilities.

B. Water Quality Criteria Exemption

1. The Licensee has been granted a water quality exemption for total dissolved solids (TDS) under Rule 62-520.500, F.A.C. from the primary drinking water standard for TDS as established in Table 1 of Rule 62-550.310, F.A.C.

a. As required by Rule 62-520.500(1), the Licensee has affirmatively demonstrated the following:

(i) Granting the exemption is clearly in the public interest;

(ii) Compliance with such criteria is unnecessary for the protection of present and future potable water supplies;

(iii) Granting the exemption will not interfere with existing uses or the designated use of the waters or of contiguous water

(iv) The economic, environmental, and social costs of compliance with the criteria outweigh the economic, environmental and social benefits of compliance

(v) An adequate monitoring program approved by the Department is established to ascertain the location and approximate dimensions of the discharge plume, to detect any leakage of contaminants to other aquifers or surface waters, and to detect any adverse effect on underground geologic formations or waters; and,

(vi) The Hines IWW discharge to ground water shall not present a danger to the public health, safety or welfare and will not result in any discernable environmental, social or economic effects.

b. The ground water quality criteria exemption for TDS is granted for a duration of five (5) years from the date Modification J to the Hines Conditions of Certification becomes effective (expiration is July 2027). Any future exemptions must be petitioned for by the applicant through the Siting Coordination Office as a Modification to the Conditions of Certification pursuant to the Power Plant Siting Act, Section 403.516(1)(c), F.S. The exemption extends only to the ground water elements of the Hines Site Certification License PA92-33. The exemption will not affect NPDES discharge under the Clean Water Act to surface waters of the state, nor will it alter any permit conditions related to surface waters.

c. The exemption provides relief only from the total dissolved solids standard contained in Rule 62-550.310, F.A.C. as referenced in Rule 62-520.420, F.A.C. All other ground water quality standards, and the minimum criteria contained in Rule 62-520.400, F.A.C., are in effect as applicable to this facility.

d. The Licensee shall monitor ground water quality in accordance with the GWCOMR (Attachment D).

2. In order for the Licensee to seek Conditions of Certification applying any water quality criteria different from those promulgated in rule, in addition to that described in paragraph B. 1. above, the following procedure shall be followed:

a. The Licensee must file a petition for Modification with the DEP SCO including the alternate compliance level and demonstrations listed in Rule 62-520.500, F.A.C.

b. The SCO will coordinate review by the affected DEP Division/District office under the procedures for Modification set forth in Section 403.516, F.A.C.

c. The SCO shall issue a Notice of Intent and draft Final Order granting the petition, denying the petition, or granting the petition in part and modifying the Conditions of Certification accordingly. The Department will provide public notice of its intended action/s in the Florida Administrative Registrar (FAR) along with an opportunity for an administrative hearing under Sections 120.569 and 130.57, F.S. The petitioner shall, on or about the same time that notice is published in the FAR, publish this same notice in a newspaper of general circulation in the area affected.

3. The Licensee shall submit a new request for each alternate compliance level of a water quality standard and provide documentation to support the requested alternative compliance level(s) every 5 years from the time of original approval.

[Rules 62-520.500, and 62-500.510, F.A.C.]

C. Industrial Wastewater

1. No industrial wastewater treatment unit shall be constructed or operated without prior Department approval either through the process of a SCA, Modification or an Amendment.

2. Cooling Pond Design

The Licensee shall ensure that the design and construction of the pond's dams be in accordance with best engineering practices and at least of similar stability as those required under the provisions of Chapter 62-672, F.A.C.

3. Vegetative Cover

The Licensee shall ensure that a vegetative or nonvegetative cover adequate to inhibit wind and water erosion shall be established and maintained on all exposed dam surfaces. Vegetative covering shall be maintained by the Licensee sufficiently low to permit visual inspection of the soil surfaces in critical areas outlined in Section 62-672.400(1), F.A.C.

4. SA-9 Brine Pond

To ensure that the SA-9 brine pond will not be a source of pollution to ground and surface water, the following Site-specific standards shall apply:

a. General

The SA-9 brine pond shall be designed, constructed, operated, maintained, closed and monitored in accordance with the SCA and these Conditions of Certification.

b. Site-Specific Standards

(1) There shall be no discharge of wastewater from the SA-9 brine pond to surface waters of the state.

(2) Groundwater monitoring for the SA-9 brine pond will be performed in accordance with the applicable Conditions included in Attachment D (GWCOMR) of this Certification. If the groundwater monitoring data collected in accordance with these Conditions indicates an exceedance of applicable groundwater standards at the boundary of the zone of discharge due to operation of the SA-9 brine pond, the Licensee will consult with DEP to formulate a mutually agreed upon corrective action plan. If the corrective action plan requires dewatering and construction work in the SA-9 brine pond, the Licensee will be allowed to transfer the brine from SA-9 to a suitable impoundment, and discharge brine to the temporary storage area for a period sufficient to perform the construction in SA-9. The selection of a suitable temporary storage facility and the establishment of the implementation schedule for any required corrective action will be by mutual agreement of DEP and the Licensee.

(3) A seepage collection ditch will be constructed along the west dam of SA-9 to prevent any discharge of seepage to offsite surface waters via the FDOT roadside swale along S.R. 555. The seepage ditch will extend from the northwest corner of SA-9 to the southwest corner, where it will connect to the plant island drainage swale which was constructed during the earthworks phase of the facility construction. The seepage collection ditch will be graded to direct any surface seepage, either natural or as a result of operation of SA-9, to the plant drainage system.

(4) No RCRA hazardous waste as defined by 40 C.F.R. B 261.3 shall be deposited in the SA-9 brine pond.

(5) The Licensee shall continue to maintain an operation plan that provides written instructions for the daily operation and weekly inspection of the SA-9 brine pond. The plan shall be kept at the facility and shall be accessible to the operators. The plan shall be revised and submitted to DEP for review and approval if operational procedures change.

5. Inspection of Dams

a. Inspection of the dams shall be conducted annually by an engineer registered in Florida experienced in the field of construction and maintenance of dams. A copy of the inspection report shall be furnished, upon receipt by the Licensee, to the Department for review (Section 62-672.500(5), F.A.C.)

b. The Licensee shall continue to maintain a detailed dam inspection program plan previously approved by the.

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

6. Management of Waste Oil

The Licensee shall manage, use and dispose of all waste oil collected from the oil/water separator in accordance with all applicable state and federal rules.

7. Non-Hazardous Low Volume Liquid Wastes

Non-Hazardous low volume liquid wastestreams, some of which may have high solids content, will be directed either to the cooling pond or to the SA-9 brine pond. Low volume wastestreams, pursuant to the federal definition found in 40 CFR Part 423.11, include, but are not limited to, water pretreatment filter backwash, reverse osmosis (R.O.) reject, water

treatment system cleaning wastes, boiler blowdown, laboratory and sampling streams, floor drains, treated water (service water), incidental leaks and spills from the power blocks and associated ancillary structures, discharges from power block sumps, and discharge from oil/water separators.

8. Chemical and Biocide Wastes

a. Chemical cleaning wastes resulting from the acid cleaning wash and successive rinses may either be collected and characterized individually to determine if they are hazardous wastes or commingled prior to characterization to determine if the mixture is a hazardous waste. Based on the analytical results, the wastes will be handled in accordance with applicable state or federal rules and the Conditions of Certification, either onsite in the SA-9 brine pond, onsite in the cooling pond, or offsite, as appropriate. Chemical boiler cleaning wastes will be routed to the neutralization basin or to neutralization tanks for hazardous waste characterization. The mixture will then be neutralized, and the residual wastes disposed of appropriately. Any residual non-hazardous wastewaters resulting from onsite treatment may either be disposed of in onsite impoundments or shipped offsite for disposal. Any hazardous wastes not neutralized or otherwise treated onsite will be transported offsite by a licensed hazardous waste disposal contractor for appropriate treatment and disposal at a licensed hazardous waste facility.

b. If hazardous wastes are treated onsite in tanks or containers regulated under 40 CFR 262.34, the Licensee will comply with applicable waste analysis plan and notification requirements under 40 CFR 268.7(a)(4) and 268.9(d). Boiler cleaning wastes treated in a wastewater treatment unit as defined in 40 CFR 260.10 are not subject to these requirements.

D. Drinking Water Facilities

Any new or modified component of the potable water supply system shall be designed, staffed and operated in conformance with applicable Chapters of 62-550, 62-555, 62-560, 62-602, and 62-699, F.A.C. Information as required in Chapter 62-555, F.A.C, shall be submitted to the Polk Department of Health prior to construction and operation of any new or modified components of the system. The operator of the potable water supply system shall be certified in accordance with Chapter 62-602, F.A.C.

[Chapters 62-550, 62-555, 62-560, 62-602, and 62-699, F.A.C.]

E. Domestic Wastewater Treatment

1. Operation of an existing 0.010 MGD Annual Average Daily Flow (AADF), extended aeration domestic wastewater treatment plant consisting of aeration, secondary clarification and chlorination with: one (1) aeration basin totaling 10,000 gallons, one (1) clarifier of 2,500 gallons with a surface loading rate of 200 gallons per day per square foot, one (1) chlorine contact tank of 260 gallons and one (1) digestor of 3,000 gallons. This plant is operated to provide secondary treatment with basic disinfection.

2. Land Application: An existing zero-discharge cooling water recirculation impoundment (R-001) of approximately 1,200 surface acres. R-00l is located approximately at latitude 27° 47’ 15” N, longitude 81° 52’ 21” W.

The limitations, monitoring, and other requirements are set forth in the following conditions.

a. Reuse and Land Application Systems

(1) The Licensee is authorized to direct reclaimed water to Reuse System R-001. Such reclaimed water shall be limited and monitored by the Licensee as specified below and reported in accordance with condition 2.b.(8) below:

			Reclaimed Water Limitations				Monitoring Requirements			
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Flow, to R-001	MGD	Maximum	0.010	Report	-	-	5 Days/Week	Flow meter and totalizer	FLW-01	See Cond.I.A.3
BOD, Carbonaceous 5 day, 20C	MG/L	Maximum	20.0	30.0	-	60.0	Monthly	Grab	EFA-01	
Solids, Total Suspended	MG/L	Maximum	20.0	30.0	-	60.0	Monthly	Grab	EFA-01	
pH	SU	Range	-	-	-	6.0 to 8.5	5 Days/Week	Grab	EFA-01	
Coliform, Fecal	#/100ML	Maximum	200	-	-	800	Monthly	Grab	EFA-01	See Cond.I.A.4
Total Chlorine Residual (For Disinfection)	MG/L	Minimum	-	-	-	0.5	5 Days/Week	Grab	EFA-01	See Cond.I.A.5
Nitrogen, Nitrate, Total (as N)	MG/L	Maximum	-	-	-	12.0	Monthly	Grab	EFA-01	

(2) Reclaimed water samples shall be taken at the monitoring site locations listed and described below:

Monitoring Location	Description of Monitoring Location
EFA-01	Effluent sampling point after treatment and prior to Reuse system R-001.
FLW-01	Flow meter and totalizer located at V –notch weir in the chlorine contact chamber.

(3) A flow meter shall be utilized to measure flow and calibrated at least annually.

[Rule 62-600.200(25), F.A.C.]

(4) The arithmetic mean of the monthly fecal coliform values collected during an annual period shall not exceed 200 per 100 mL of reclaimed water sample. The geometric mean of the fecal coliform values for a minimum of 10 samples of reclaimed water, each collected on a separate day during a period of 30 consecutive days (monthly), shall not exceed 200 per 100 mL of sample. Any one sample shall not exceed 800 fecal coliform values per 100 mL of sample.

[Rules 62-610.510 and 62-600.440(5)(a), F.A.C.]

(5) A minimum of 0.5 mg/L total chlorine residual must be maintained for a minimum contact time of 15 minutes based on peak hourly flow.

[Rules 62-610.510 and 62-600.440(5)(c), F.A.C.]

b. Other Limitations and Monitoring and Reporting Requirements

(1) The treatment facility shall be limited and monitored by the Licensee as specified below and reported in accordance with Section B. Specific Conditions, Condition I. DEP, paragraph E.2.b.(8) below:

			Limitations				Monitoring Requirements			
Parameter	Units	Max/Min	Annual Average	Monthly Average	Weekly Average	Single Sample	Monitoring Frequency	Sample Type	Monitoring Location Site Number	Notes
Flow, Total Plant	MGD	Maximum	0.010 AADF	Report	-	-	5 Days/Week	Flow meter and totalizer	FLW-01	See Cond.I.B.3, 5
Percent Capacity, (3MADF/Permitted Capacity) x 100	%	Maximum	-	Report	-	-	Monthly	Calculation	FLW-01	
BOD, Carbonaceous 5 day, 20C	MG/L	Maximum	-	Report	-	-	Annually[1]	Grab	INF-01	See Cond.I.B.4
Solids, Total Suspended	MG/L	Maximum	-	Report	-	-	Annually[1]	Grab	INF-01	See Cond.I.B.4

* The annual sample shall be taken in the month of February.

(2) Samples shall be taken at the monitoring site locations listed and described below:

Monitoring Location	Description of Monitoring Location
FLW-01	Flow meter and totalizer located at V–notch weir in the chlorine contact chamber.
INF-01	Influent sampling point prior to treatment and ahead of the return activated sludge line.

(3) The annual average daily flow to the treatment plant shall not exceed 0.010 MGD.

(4) Influent samples shall be collected so that they do not contain digester supernatant or return activated sludge, or any other plant process recycled waters.

[Rule 62-600.660(4)(a), F.A.C.]

(5) A flow meter shall be utilized to measure flow and calibrated at least annually.

[Rule 62-600.200(25), F.A.C.]

(6) Parameters which must be monitored as a result of a surface water discharge shall be analyzed using a sufficiently sensitive method in accordance with 40 CFR Part 136. Parameters which must be monitored as a result of a ground water discharge (i.e., underground injection or land application system) shall be analyzed in accordance with Chapter 62-601, F.A.C. All monitoring shall be representative of the monitored activity.

[Rule 62-620.610(18), F.A.C.]

(7) The Licensee shall provide safe access points for obtaining representative influent, reclaimed water, and effluent samples which are required by these Conditions.

[Rule 62-600.650(2), F.A.C.]

(8) During the period of operation authorized by these Conditions, the Licensee shall complete and submit to the Department Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e., monthly, toxicity, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to these Conditions. Unless specified otherwise, monitoring results for each monitoring period shall be submitted in accordance with the associated DMR due dates below.

REPORT Type	Monitoring Period	Due Date
Monthly or Toxicity	first day of month – last day of month	28th day of following month
Quarterly	January 1 - March 31 April 1 – June 30 July 1 – September 30 October 1 – December 31	April 28 July 28 October 28 January 28
Semiannual	January 1 – June 30 July 1 – December 31	July 28 January 28
Annual	January 1 – December 31	March 28

DMRs shall be submitted for each required monitoring period including months of no discharge. The Licensee may submit either paper or electronic DMR forms. If submitting paper forms, the Licensee shall utilize exact format of the attached DMR forms, without altering the original format or content unless approved by the Department and shall mail the completed DMR forms to the Department's Southwest District Office at the address specified below by the twenty-eighth (28th) of the month following the month of operation.

Copies to:
Florida Department of Environmental Protection
Domestic Wastewater Program
Southwest District Office
13051 N. Telecom Parkway, Suite 101
Temple Terrace, FL 33637-0926

Email – swd_dw@floridadep.gov

If submitting electronic DMR forms, the Licensee shall use the electronic DMR system(s) approved in writing by the Department and shall electronically submit the competed DMR forms to the Department by the twenty-eighth (28th) of the month following the month of operation. Data submitted in electronic format is equivalent to data submitted on signed and certified paper DMR forms.

If the facility elects to sign up for eDMR, please visit the following website for additional information and application forms: https://floridadep.gov/water/water-compliance-assurance/content/getting-started-ezdmr

For additional information on wastewater electronic reporting, please contact the eDMR Administrator by email at EzDMRAdmin@dep.state.fl.us or by phone at (850) 245-8567.

[Rules 62-620.610(18) and 62-600.680(1), F.A.C.]

(9) Unless specified otherwise in these Conditions, all reports and other information required by the Conditions under this Section, including 24-hour notifications, shall be submitted to or reported to, as appropriate, the Department's Southwest District Office at the address specified below with electronic copies to the Siting Office:

Southwest District Office
13051 N. Telecom Parkway
Temple Terrace, FL 33637-0926
Phone Number - 813-470-5700
FAX Number - 813-632-7662
Email – swd_dw@floridadep.gov

3. Residual Management Requirements

a. The method of residuals use or disposal by this facility is transport to a Residual Management Facility (RMF) or disposal in a Class I or II solid waste landfill. Transportation of the residuals to an alternative RMF requires a copy of the agreement pursuant to Rule 62-640.880(1)(c), F.A.C., along with a written notification to the Department at least 30 days before transport of the residuals.

[Rule 62-620.320(6), 62-640.880(1), F.A.C.]

b. The Licensee shall be responsible for proper treatment, management, use, and land application or disposal of its residuals.

[Rule 62-640.300(5), F.A.C.]

c. The Licensee shall not be held responsible for treatment, management, use, or land application violations that occur after its residuals have been accepted by a permitted residuals management facility with which the source facility has an agreement in accordance with Rule 62-640.880(1)(c), F.A.C., for further treatment, management, use or land application.

[Rule 62-640.880(1) (b), F.A.C.]

d. Disposal of residuals, septage, and other solids in a solid waste landfill, or disposal by placement on land for purposes other than soil conditioning or fertilization, such as at a monofill, surface impoundment, waste pile, or dedicated site, shall be in accordance with Chapter 62-701, F.A.C.

[Rule 62-640.100(6)(b)&(c), F.A.C.]

e. If the Licensee intends to accept residuals from other facilities, an Amendment or Modification is required pursuant to Rule 62-640.880(2)(d), F.A.C.

[Rule 62-640.880(2)(d), F.A.C.]

f. The Licensee shall keep hauling records to track the transport of residuals between facilities. The hauling records shall contain the following information:

Required of Source Facility	Required of RMF
1. Date and Time Shipped	1. Date and Time Received
2. Amount of Residuals Shipped	2. Amount of Residuals Received
3. Degree of Treatment (if applicable)	3. Name and ID Number of Source Facility
4. Name and ID Number of Residuals Management Facility or Treatment Facility	4. Signature of Hauler
5. Signature of Responsible Party at Source Facility	5. Signature of Responsible Party at Residuals Management Facility or Treatment Facility
6. Signature of Hauler and Name of Hauling Firm	

These records shall be kept for five years and shall be made available for inspection upon request by the Department. A copy of the hauling records information maintained by the source facility shall be provided upon delivery of the residuals to the residuals management facility or treatment facility. The RMF licensee shall report to the Department within 24 hours of discovery any discrepancy in the quantity of residuals leaving the source facility and arriving at the residuals management facility or treatment facility.

[Rule 62-640.880(4), F.A.C.]

4. Additional Reuse and Land Application Requirements- Rapid Rate Land Application System (R-001)

a. All ground water quality criteria specified in Chapter 62-520, F.A.C., shall be met at the edge of the zone of discharge. The zone of discharge for this project shall extend horizontally 100 feet from the application site or to the facility's property line, whichever is less, and vertically to the base of the surficial aquifer.

[Rules 62-520.200(23), 62-522.400 and 62-522.410, F.A.C.]

b. Advisory signs shall be posted around the site boundaries to designate the nature of the project area.

[Rule 62-610.518, F.A.C.]

e. Routine aquatic weed control and regular maintenance of storage pond embankments and access areas are required.

[Rules 62-610.414(8), F.A.C.]

5. Operation and Maintenance Requirements

a. During the period of operation, the Hines Energy Complex domestic wastewater facilities shall be operated under the supervision of an operator certified in accordance with Chapter 62-602, F.A.C. In accordance with Chapter 62-699, F.A.C., this facility is a Category III, Class D facility and, at a minimum, operators with appropriate certification must be on the site as follows:

b. A Class D or higher operator for 3 nonconsecutive days/week for 1½ hour/week. The lead operator must be a Class D operator, or higher.

[Rules 62-620.630(3), 62-699.310 and 62-610.462, F.A.C.]

c. An operator meeting the lead operator classification level of the plant shall be available during all periods of plant operation. "Available" means able to be contacted as needed to initiate the appropriate action in a timely manner. Daily checks of the plant shall be performed by the Licensee or his representative or agent 5 days per week. On those days when the facility is not staffed by a certified operator, the Licensee shall ensure that Flow, pH, Total Chlorine Residual (For Disinfection) are monitored in accordance with applicable parts of this section.

[Rule 62-699.311(1), (6) &(10) F.A.C.]

d. The Licensee shall maintain the following records and make them available for inspection on the Site of the permitted facility:

(1) A copy of the current operation and maintenance manual as required by Chapter 62-600, F.A.C.;

(2) A copy of the facility record drawings;

(3) Copies of the licenses of the current certified operators; and

(4) Copies of the logs and schedules showing plant operations and equipment maintenance for three years from the date of the logs or schedules. The logs shall, at a minimum, include identification of the plant; the signature and certification number of the operator(s) and the signature of the person(s) making any entries; date and time in and out; specific operation and maintenance activities; tests performed and samples taken; and major repairs made. The logs shall be maintained onsite in a location accessible to 24-hour inspection, protected from weather damage, and current to the last operation and maintenance performed.

[Rule 62-620.350, F.A.C.]

6. Other Specific Conditions

a. Florida water quality criteria and standards shall not be violated as a result of any discharge or land application of reclaimed water or residuals from this facility.

[Rules 62-610.850(1)(a) and (2)(a), F.A.C.]

b. The treatment, management, use or land application of residuals shall not cause a violation of the odor prohibition in Rule 62-296.320(2), F.A.C.

[Rules 62-600.410(5) and 62-640.400(6), F.A.C.]

c. The deliberate introduction of stormwater in any amount into collection/transmission systems designed solely for the introduction and conveyance of domestic/industrial wastewater; or the deliberate introduction of stormwater into

collection/transmission systems designed for the introduction or conveyance of combinations of storm and domestic/industrial wastewater in amounts which may reduce the efficiency of pollutant removal by the treatment plant is prohibited, except as provided by Rule 62-610.472, F.A.C.

[Rule 62-604.130(3), F.A.C.]

d. Collection/transmission system overflows shall be reported to the Department in accordance with Chapter 62-620.200(20) F.A.C.

e. The operating authority of a collection/transmission system and the licensee of a treatment plant are prohibited from accepting connections of wastewater discharges which have not received necessary pre-treatment or which contain materials or pollutants other than normal domestic wastewater constituents:

(1) Which may cause fire or explosion hazards; or

(2) Which may cause excessive corrosion or other deterioration of wastewater facilities due to chemical action or pH levels; or

(3) Which are solid or viscous and obstruct flow or otherwise interfere with wastewater facility operations or treatment; or

(4) Which result in the wastewater temperature at the introduction of the treatment plant exceeding 40°C or otherwise inhibiting treatment: or

(5) Which result in the presence of toxic gases, vapors, or fumes that may cause worker health and safety problems.

[Rule 62-604.130(54), F.A.C.]

f. The treatment facility, storage ponds, rapid infiltration basins, and/or infiltration trenches shall be enclosed with a fence or otherwise provided with features to discourage the entry of animals and unauthorized persons.

[Rules 62-610.518(1) and 62-600.400(2)(b), F.A.C.]

g. Screenings and grit removed from the wastewater facilities shall be collected in suitable containers and hauled to a Department approved Class I landfill or to a landfill approved by the Department for receipt/disposal of screenings and grit.

[Rule 62-701.300(1)(a), F.A.C.]

h. The Licensee shall provide verbal notice to the Department as soon as practical after discovery of a sinkhole within an area for the management or application of wastewater, wastewater residuals (sludges), or reclaimed water. The Licensee shall immediately implement measures appropriate to control the entry of contaminants and shall detail these measures to the Department in a written report within 7 days of the sinkhole discovery.

[Rule 62-4.070(3), F.A.C.]

i. The Licensee shall provide adequate notice to the Department of the following:

(1) Any new introduction of pollutants into the facility from an industrial discharger which would be subject to Chapter 403, F.S., and the requirements of Chapter 62-620, F.A.C. if it were directly discharging those pollutants; and

(2) Any substantial change in the volume or character of pollutants being introduced into that facility by a source which was identified in the permit Application and known to be discharging at the time the permit was issued.

Adequate notice shall include information on the quality and quantity of effluent introduced into the facility and any anticipated impact of the change on the quantity or quality of effluent or reclaimed water to be discharged from the facility.

[Rule 62-620.625(2), F.A.C.]

7. General Conditions

The Licensee shall comply with all the applicable, non-procedural requirements found in Chapter 62-620.610 (1-23) F.A.C. as these relate to operation of the Hines Energy Complex domestic wastewater collection and treatment facilities.

[Rule 62-620.610, F.A.C.]

F. Solid Waste Storage and Disposal

1. General

The solid waste disposal areas (SWDAs) shall be designed, constructed, operated, maintained, closed, and monitored in accordance with acceptable waste disposal practices providing environmental protection equivalent to those described in Chapter 62-701, F.A.C. and these Conditions of Certification. The prohibitions of Chapter 62-701, F.A.C. shall not be violated.

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

b. The facility shall have a comprehensive operation plan that provides written, detailed instructions for the daily operation of the solid waste disposal areas. The plan shall be kept at the facility and shall be accessible to the operators. The plan shall be revised if operational procedures change. A schedule for routine maintenance of the leachate collection and removal system shall be established to ensure operation of the system. The maintenance schedule shall be a part of the operational procedures for the plan. The initial operation plan shall include the SA-8 solid waste disposal area and shall be submitted for approval to the Solid Waste Section prior to operation of the solid waste disposal area.

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

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

e. A trained supervisor shall be responsible for maintaining the solid waste disposal areas in an orderly, safe, and sanitary manner. Sufficient personnel shall be employed for adequate operation. In the event of damage to any portion of the solid waste disposal area or failure of any portion of the solid waste disposal area or failure of any portion of the related systems, the Department's SWD and Solid Waste Section shall receive notification in accordance with Section A. General Conditions, Condition VII. Notification.

f. The groundwater monitoring requirements for the solid waste disposal areas are incorporated into the Facility Groundwater Monitoring Plan as described in Section B. Condition I. DEP, Paragraph A. [Groundwater Monitoring] of these Conditions, and Attachment D (GWCOMR). As new solid waste disposal areas are put into use, revisions to the Facility Groundwater Monitoring Plan shall be submitted by the Licensee to the SWD and Solid Waste Section for review and approval as well as to monitor the new disposal areas.

g. If groundwater concentrations significantly above both the background concentration and the applicable groundwater standard due to Solid Waste Disposal Area leachate are detected and verified by appropriate resampling, the Licensee shall submit a contamination assessment plan to the Department's SWD within 150 days of knowledge of exceedance. The contamination plan shall provide a detailed plan for evaluating the vertical and horizontal extent of affected soils and groundwater.

h. The onsite burial of fish resulting from unforeseen fish kills within the Site cooling pond shall be allowed in the upland area of SA-8 following review and approval of a specific construction, operation, and monitoring plan submitted to the Department in advance of construction and operation of such a fish burial facility. No other solid wastes are allowed to be buried with dead fish.

2. Site Specific Standards - Water Treatment Wastes

Water treatment plant sludge shall be separated from the gasifier slag in a separate solid waste disposal area. The sludge disposal area shall be provided with a minimum two-foot sand or equivalent drainage blanket. Prior to use of the SWDA for disposal of coal gas slag, leachate from the sludge disposal area will drain to the remaining area within the SA-8 impoundment. This leachate will be allowed to drain from the perimeter of the sand blanket and to commingle with surface water within the remainder of the impoundment as part of the water crop for the cooling pond. After development of the remainder of the SWDA for disposal of coal slag, leachate from the sludge disposal area will be collected in the perimeter leachate collection system for disposal or transfer to the cooling pond, as appropriate.

3. Additional Information Requirements

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

4. Processing Additional Information

The Licensee shall send all appropriate submittals to both the Solid Waste Section and the SWD of the DEP to the following addresses:

Florida Department of Environmental Protection
Solid Waste Section
2600 Blair Stone Road
Tallahassee, FL 32399

Florida Department of Environmental Protection
Southwest District Office
13051 N Telecom Parkway
Temple Terrace, FL 33637-0926

G. Conservation Easement

A conservation buffer area has been established incorporating former mining parcels N-11A, N-9B and N-13. A conservation easement agreement between the State of Florida and Florida Power Corp., and its successor companies, executed in May 2002, as provided in Attachment C (Mitigation Plans & Conservation Easements), shall be maintained.

H. Construction of Linear Facilities

1. Right-of-Way Selection Procedures

a. Prior to finalization of any ROW locations, three copies of blue-line reproductions of the aerial photographs taken within the last year prior to submittal shall be submitted to DEP. The photographic reproductions shall delineate and show the Corridor at a scale of 1"= 400' with Wetland locations generally identified, and shall show the certified Corridor, designated ROWs, structure locations and access road locations. In addition, the Licensee shall note on the aerial photographs new development in the Corridors. The Licensee shall notify all parties of such filing. This information may be submitted in segments. The agencies receiving copies of the aerial photographs from the Licensee shall have 30 days from receipt of the photographs to review the photographs and to notify DEP of any apparent conflicts with the requirements of the Conditions of Certification. However, this paragraph shall not operate to avoid the need for Post-Certification Submittals and compliance reviews otherwise required by the Conditions of Certification.

b. After review of the aerial photographs and comments from the other reviewing agencies, if DEP has reason to believe that the proposed construction within the Licensee's designated ROW cannot be accomplished in compliance with the Conditions of Certification, the Licensee shall be so notified in writing within 30 days from receipt of the aerial photographs. Such notice shall specify with particularity the basis for DEP s conclusion, and possible corrective measures shall be suggested. If such notice is provided, the Licensee may relocate the ROW within the certified corridor to address the specified concern, or the Licensee may proceed with design of the natural gas pipeline, reclaimed water pipeline, or transmission line on the noticed ROW at its own risk that construction can be accomplished in compliance with the Conditions of Certification.

2. Pipeline and Transmission Line Construction Activities

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

3. Natural Gas Pipeline Location

To minimize the impacts of the natural gas pipeline to the South Prong of the Alafia River the pipeline shall cross the river immediately adjacent to the south side of Jameson Road.

4. Offsite Impacts

It is the responsibility of the Licensee to ensure that adverse offsite water resource related impacts do not occur during construction. All Wetland areas or water bodies that are outside of the specific limits of construction authorized by this Certification shall be protected from erosion, siltation, scouring or excess turbidity, and dewatering. The Licensee shall prevent adverse offsite water resource related impacts during construction through the compaction of fill, the use of hay bales or turbidity screens, or by any other method acceptable to DEP. In determining the acceptability of other methods of control, DEP shall consult with SWFWMD. Offsite discharges during construction and development shall not violate State Water Quality Standards.

5. Erosion/Runoff Control

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

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

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

6. Transmission Line Wetlands Clearing

The Licensee shall use only restrictive clearing practices during construction and maintenance of the Barcola-Fort Meade 230 kV transmission line where it crosses Wetlands. Restrictive clearing, as used in this Condition, is the cutting and removal of vegetation from the Wetland by hand, usually with chain saws, or with low-ground-pressure shear or rotary machines to reduce soil compaction and damage to ground cover. These-methods may be used alone or in combination, as may be appropriate for specific sites. Restrictive clearing includes the removal of vegetation from areas extending from the transmission line centerline to 20 feet on each side of the outer conductors and in work areas approximately 100 feet by 150 feet around structure sites. In areas where the Licensee may need to create access to particular structure sites via finger roads rather than a continuous access road, a path

approximately 20 to 25 feet wide may be cleared to reach the site from an existing access road. If necessary, the work area around the structure and the access areas may be destumped. Removable construction matting may be used in these areas to support equipment. The stumps shall not be removed in the portion of the ROW outside of the work area and the access areas. The remainder of the ROW in Wetland areas, beyond 20 feet on either side of the outer conductors, shall not be cleared to the ground; however, these areas may be restrictively cleared in that vegetation that has an expected mature height greater than 14 feet may be removed. All cut vegetation shall be removed from the restrictively cleared areas by hand if Practicable. All invasive exotic species listed in Attachment E (Vegetation Planting Plan & Exotic Species List) shall be removed from the ROW. Herbicides shall not be applied to the cut stumps of native tree species during the initial clearing.

7. Mitigation for Wetland Impacts

Construction of the transmission line in the corridor shown in the SCA using the construction methods described in the SCA will not have Wetland impacts that would require mitigation. However, if the corridor is modified new corridors proposed, or construction techniques other than the ones described in the original SCA are proposed, a reevaluation of the need for mitigation for any additional Wetland impacts will be necessary. The Licensee shall provide mitigation as necessary to offset the Wetland loss and habitat degradation resulting from the construction of the pipelines associated with this project. Prior to construction, the Licensee shall propose a mitigation plan, if necessary, and shall provide the following information to the Southwest District Office's Environmental Resource Permitting Section to allow DEP to review the proposed mitigation plan including:

a. detailed description of each Wetland impact area;

b. acreage of the type and quality of Wetland being impacted at each site;

c. narrative, drawing and aerial photographs showing and explaining the proposed mitigation;

d. detailed description of the existing conditions at the mitigation area;

e. acreage of the total proposed mitigation area, broken down by acreage of each mitigation type and Wetland type; and

f. documentation providing-reasonable assurance that the proposed mitigation will be successful.

If the mitigation submittal is deemed by DEP to provide insufficient information for review, additional information requested by DEP shall be submitted. If DEP, upon review of the proposed mitigation, determines that the proposed mitigation is inadequate to offset the Wetland loss and habitat degradation from this project, the Licensee shall propose additional mitigation. If the proposed mitigation plan is deemed acceptable by DEP, DEP shall establish construction conditions, success criteria and a monitoring plan to be carried out for the approved mitigation. These conditions, criteria and monitoring plan shall be incorporated into the Conditions as Attachment C (Mitigation Plans & Conservation Easements).

No construction within Wetland areas in the pipeline ROWs shall commence until DEP approves a mitigation plan, and mitigation construction conditions, success criteria and a monitoring plan. As approved, such plans and conditions shall be implemented.

I. Surface Water Management

1. The DEF Hines Energy Complex Site, excluding the buffer area, the associated linear facilities, and the offsite area (Estech plant site) proposed for water quantity mitigation purposes will operate as a zero-discharge facility. All surface water or stormwater falling within the Site boundaries, excluding the buffer areas and associated offsite areas will be contained within the Hines Energy Complex Site and not discharged offsite except as specifically authorized by these Conditions. However, the Conditions of Certification apply to the SWMS both onsite and for those areas constructed in association with the facility that are located offsite. Final project information, construction plans, and other information illustrating the Surface Water Management System and stormwater treatment facilities for the project shall be submitted to the DEP for review prior to construction of any such systems or facilities in accordance with Section A. General Conditions. XXIX. Environmental Resources and XXI. Procedures for Post Certification Submittals.

2. Offsite discharge of surface water during construction and development shall be made only through the facilities authorized by this certification. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream stages. Stages may be subject to operating schedules satisfactory to the DEP.

3. Within 60 days after completion of construction of the Cooling Pond Water Treatment Facility and the evaporative spray brine ponds, a detailed diagram and elevation map of the cooling pond and adjacent Wetlands, including stormwater flow, shall be submitted to the Southwest District, with a copy to the Siting Coordination Office.

[Rule 62-330.054, F.A.C.]

J. Triangle Lakes

Any discharges from the Site storage ponds or wastewater treatment system via any emergency overflow structure which result from any event LESS than a 25-year, 24-hour storm (as defined by the U.S. Weather Bureau Technical Paper No. 40, or the DOT drainage manual, or similar documents) shall meet State Water Quality Standards, Chapter 62- 302, F.A.C. There shall be no discharge of wastewater to the surface waters of the State except for non-contact stormwater as authorized by this Certification. For purposes of this condition, treated wastewater diverted for reuse from Mosaic Green Bay Outfall D-001 in accordance with the requirements of DEP Permit No. FL0000752, to the Hines Energy Complex for makeup cooling water, shall not be considered industrial wastewater.

[Chapters 62-302 and 62-620, F.A.C.]

K. Odors

The Licensee shall employ proper odor-control techniques to minimize odor emissions, and to prevent nuisance conditions on adjoining property

[Rule 62-296.320, F.A.C.]

L. Lined Brine Evaporation Ponds

1. Prior to commencing construction of the lined brine evaporation ponds, the following information shall be submitted to the Department for review and approval in accordance with Condition XXI. Procedures for Post-Certification Submittals:

a. Construction drawings signed and sealed by a registered professional engineer showing complete dam embankment design and Best Management Practices such as silt fencing for the entire project area,

[ERP Applicant's Handbook Volume I, Sections 5.9, and 10.2.7]

b. Stormwater narrative and supporting calculations signed and sealed by a registered professional engineer,

[SWFWMD ERP Applicant's Handbook Volume II, Section 2.2]

c. Soil boring logs which indicate the seasonal high-water level at the N-11 sand borrow pit,

[ERP Applicant's Handbook Volume I, Section 4.2.3, and Rule 62-330.301, F.A.C.]

d. A map depicting the proposed location of the N-11 sand borrow pit and conservation easement boundaries. No construction activities are authorized within the boundaries of the conservation easement,

[ERP Applicant's Handbook Volume I, Section 4.2.3, and Rule 62-330.301, F.A.C.]

e. Uniform composition descriptions and labels of excavated materials proposed to be used for dam construction,

[SWFWMD ERP Applicant's Handbook Volume II, Section 5.9]

f. Final design drawings, dam/embankment construction specifications, and support design documentation for the proposed brine pond dams including borrow area geotechnical engineering data, embankment soil material analysis, lift layer and compaction design requirements, vegetative or other cover specifications and supportive details.

[SWFWMD ERP Applicant's Handbook Volume II, Section 5.9]

2. Prior to commencing operation of the lined brine evaporation ponds, the Licensee shall submit a revised GWCOMR to the Department for review and approval in accordance with Condition XXI. Procedures for Post-Certification Submittals.

[Chapter 62-620, F.A.C.]

3. Dried salts generated in the lined brine evaporation ponds shall be disposed of at an authorized off-site landfill in accordance with the provisions of Chapter 62-701, F.A.C.

II. SOUTHWEST FLORIDA WATER MANAGEMENT DISTRICT

A. Water Use Regulation Conditions

Existing Facilities

SWFWMD ID No.	DEF ID No.	Surface Diameter	Casing Depth	Total Depth
1	P-1	20	335	788
2	P-2	20	370	800
6	P-6	4	200	300
153	P-1 FMW	8	330	780
21	AR-21	20	315	614

1. If any of the statements in the Application and in the supporting data are found to be untrue and/or inaccurate, or if the Licensee fails to comply with all of the provisions of Chapter 373, F.S., Chapter 40D, F.A.C., or the Conditions set forth herein, the Southwest Florida Water Management District (SWFWMD) shall initiate action for suspension or revocation of Certification.

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

3. The Licensee shall not deviate from any of the water use related terms or Conditions of Certification without written approval by SWFWMD.

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

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

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

7. The Licensee shall practice water conservation to increase the efficiency of transport, application, and use, as well as to decrease waste and to minimize runoff from the property. At such time as the Governing Board adopts specific conservation requirements for the Licensee's water use classification, SWFWMD shall initiate any required action to make this certification subject to those requirements upon notice and after a reasonable period for compliance.

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

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

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

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

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

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

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

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

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

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

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

12. The Licensee must notify SWFWMD within 30 days of the sale or transfer of permitted water withdrawal facilities or the land on which the facilities are located.

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

Southwest Florida Water Management District
Tampa Service Office, Water Use Permit Bureau
7601 Highway 301 North
Tampa, Florida 33637-6759

Unless submitted online or otherwise indicated in the specific Condition, three copies of each plan or report, with the exception of pumpage, rainfall, water level or water quality data which require one copy, are required.

14. The water balance for Ultimate Site Capacity (approximately 3,000 MW of generating capacity) at DEF's Hines Energy Complex demonstrates a requirement of 23.6 MGD from offsite and Upper Floridan aquifer sources for process, cooling, domestic and sanitary purposes.

a. The Licensee shall obtain 6.1 MGD of this amount from a combination of treated wastewater effluent from the City of Bartow's Douglas H. Allen Reclaimed Water Facility and other offsite nonpotable sources of water. To the extent that the Licensee obtains more than 6.1 MGD through reuse of treated wastewater effluent from offsite

sources, the excess amount shall serve to reduce the use of 17.5 MGD of water from the Upper Floridan aquifer which is authorized by paragraph A.14.b., below.

b. The Licensee is authorized to withdraw from the Upper Floridan aquifer and use for process, cooling, domestic and sanitary purposes, in support of Ultimate Site Capacity at its Hines Energy Complex, an amount of water not to exceed 17.5 MGD, subject to the following conditions:

(1). Except as approved by SWFWMD under circumstances constituting an emergency, or per an interim water supply shortage as defined in Section B. Specific Conditions, Condition II. SWFWMD, paragraph A.23., no process or cooling water shall be withdrawn from the Upper Floridan aquifer in support of the first 1,000 MW of generating capacity. The Licensee is authorized to withdraw up to 19,000 gpd Annual Average Daily and 35,000 gpd Peak Month Daily from the Upper Floridan aquifer for domestic and sanitary purposes for the life of the facility from SWFWMD ID No. 6, DEF ID No. P-6. The Licensee is authorized to withdraw up to 317,000 gpd Annual Average Daily and 475,000 gpd Peak Month Daily from the Upper Floridan aquifer as the source water to the reverse osmosis system from SWFWMD ID No. 153, DEF ID No. P-1 FMW. The authorized sources of process and cooling water in support of such generating capacity shall consist of existing water onsite, onsite rainwater and stormwater capture, reuse of internal wastewater streams, and other alternative water supply sources including, but not limited to, industrial wastewater from the DEF Tiger Bay Cogen Facility; treated industrial wastewater from the adjacent Mosaic Fertilizer, LLC – Green Bay and Hookers Prairie facilities; stormwater transfer from the adjacent Estech, Inc. Agricola site; and treated wastewater (reclaimed water) from the Douglas H. Allen Water Reclamation Facility of the City of Bartow or other reuse sources.

(2). The total quantity of water that the Licensee is authorized to withdraw from the Upper Floridan aquifer shall be limited to 17.5 MGD Annual Average Daily, which amount is determined by SWFWMD not to have an adverse effect on other legal existing users provided, however, that withdrawal for process or cooling purposes of any water from the Upper Floridan aquifer shall be subject to the following additional Conditions, which shall be applied during review pursuant to Section 403.517, F.S., of any Supplemental Application for the construction and operation of a further increment of generating capacity at the Hines Energy Complex :

i. The Licensee shall demonstrate that any incremental quantity of process or cooling water which it proposes to withdraw from the Upper Floridan aquifer in support of that increment of generating capacity will be minimized to the greatest extent Practicable by prudent technologically and economically Feasible water conservation practices consistent with those generally required within the Southern Water Use Caution Area (SWUCA) of SWFWMD, including but not limited to the following:

1) Minimization of loss of water from the Site during construction;

2) Use of water-conserving electric generation and pollution control technologies;

3) Onsite rainwater and stormwater capture and management;

4) Reuse of internal wastewater streams of technologically suitable quality;

5) Reuse of treated wastewater of technologically suitable quality available from other sources, such as publicly-owned sewage treatment facilities, which the Licensee shall diligently pursue; and

6) Use of other available sources of nonpotable water of technologically suitable quality, such as treated industrial wastewater from nearby phosphate mining operations.

ii. To the extent that maximum total groundwater use in the SWUCA is fixed in a manner which limits the withdrawal of Upper Floridan aquifer water for DEF's Hines Energy Complex, withdrawal by the Licensee from that source of any quantity greater than 5 MGD AADF, which amount is determined not to have an adverse effect on regional water resources, must be either:

1) Offset by mandatory retirement of permitted quantities which are actively used within the SWUCA, to the extent such quantities are eligible to provide offset, pursuant to agreements between the Licensee and other Permittees which are subject to review by SWFWMD for conformity with generally applicable standards; or

2) Approved as a "competing application" under the applicable standards of Section 373.233, F.S.

iii. To the extent that maximum total groundwater use in the SWUCA is not fixed in a manner which limits the withdrawal of Upper Floridan aquifer water for DEF's Hines Energy Complex, the Licensee may withdraw from that source up to 17.5 MGD subject to the requirements of Section B. Specific Conditions, Condition II. SWFWMD, paragraphs A.14.a., A.14.b.(2).i., and A.14.b.(2).ii.1).

(3) The Licensee's current development schedule for Ultimate Site Capacity at the Hines Energy Complex estimates incremental additions of generating capacity at an approximate average rate of 500 MW (range of 450 to 550 MW) every four years for the period 1998 through 2018, both inclusive, for a total of approximately 3,000 MW. The following additional requirements shall apply in order to ensure that the Licensee's actual water needs are accurately reflected within this Condition and do not unnecessarily deprive other users of groundwater:

i. In each Supplemental Application for the construction and operation of a further increment of generating capacity at the Hines Energy Complex, the Licensee shall indicate (i) whether it has determined not to install any prior or subsequent increment of generating capacity, (ii) the basis for delay in the installation of any increment of generating capacity for more than 5 years beyond the estimated schedule, and (iii) the quantity of groundwater from the Upper Floridan aquifer which any such increment of capacity that has been eliminated or delayed would have required.

ii. If the Licensee has determined not to install any increment of generating capacity or in the absence of a reasonable basis for a delay greater than 5 years, the quantity of groundwater which the Licensee is authorized to withdraw from the Upper Floridan aquifer in support of Ultimate Site Capacity may be reduced accordingly.

c. Onsite rainwater and stormwater capture and use, reuse of internal wastewater streams, reuse of available treated wastewater sources, and use of other sources (excluding the Upper Floridan aquifer and intermediate aquifers) of nonpotable water shall constitute reasonable and beneficial uses of water; as such uses are set forth in the SCA and approved in the Site Certification process, and are hereby authorized as required in support of ultimate capacity at DEF's Hines Energy Complex ; provided, however, that use or reuse of nonpotable water shall be deemed unreasonable if it will result in degradation of cooling pond water quality below the levels proposed by the Licensee in support of the Ultimate Site Capacity Certification or any water quality standard made applicable by federal or state law.

15. The Licensee shall continue to investigate the feasibility of using reclaimed water and/or other alternative water supply sources as a water source and submit a report to SWFWMD describing the feasibility no later than March 31, 2005, and every two years thereafter. The Licensee shall also submit an alternative water supply feasibility report to SWFWMD in connection with each subsequent Supplemental Application submitted pursuant to paragraph A.14. of this condition, except when such application is filed within six months of submittal of the last biennial feasibility report required by this Condition. If the subsequent application is submitted within six months of submittal of the last biennial feasibility report required by this Condition, the application shall reference the previous feasibility report and provide any updates of alternative water supply feasibility. All feasibility reports the Licensee submits shall contain an analysis of alternative water supply sources, including, but not limited to, reclaimed water sources, for the area, including the relative location of these sources to the Licensee's property, the quantity of alternative water supplies available, the projected date(s) of availability, costs associated with obtaining these alternative supplies, an explanation of the Licensee's efforts to obtain such water, names of individuals the Licensee has contacted at each alternative water supply provider, a description of any impediments to obtaining that water and the Licensee's efforts to overcome those impediments, and a schedule for implementation, if Feasible. Infeasibility to obtain alternative water supply sources shall be supported with a detailed explanation.

16. The Licensee shall meter all groundwater withdrawals from ground water resources. Meter readings from each withdrawal shall be recorded on a monthly basis within the last week of the month. The meter reading(s) shall be reported to the Water Use Permit Bureau on or before the tenth day of the following month for which the data is being submitted. The Licensee shall submit meter readings online using the Permit Information Center at www.swfwmd.state.fl.us/permits/epermitting/ or on SWFWMD-supplied scanning forms unless another arrangement for submission of this data has been approved by the SWFWMD. If a metered withdrawal is not utilized during a given month, the report shall be submitted to SWFWMD indicating the same meter reading as was submitted the previous month. The following withdrawals shall be metered as applicable:

a. The Licensee shall install a meter on SWFWMD ID No. 153, DEF ID No. P-1 FMW, within 90 days of completion of construction of the withdrawal and associated surface appurtenances.

b. The Licensee shall continue to maintain and operate existing, non-resettable, totalizing flow meters or other flow measuring devices as approved by the Water Use Permit Bureau on SWFWMD ID Nos. 1, 2, 6, and 21, DEF ID Nos. P-1, P-2, P-6, and AR-21.

c. The meters shall adhere to the following requirements and shall be installed or maintained as follows:

(1) The meters shall be non-resettable, totalizing flow meter(s). If other measuring device(s) are proposed, prior to installation, approval shall be obtained in writing from the Water Use Permit Bureau.

(2) Meters shall be installed on all stand-by withdrawal facilities prior to activation.

(3) The flow meters or other approved devices shall have and maintain an accuracy within five percent of the actual flow as installed.

(4) The meters shall either be tested for accuracy onsite, as installed, every five (5) years beginning from the date of installation unless the Licensee demonstrates to the satisfaction of SWFWMD that a longer period of time for testing is warranted, or alternatively, the meter may be replaced with a factory calibrated or re-calibrated meter. If testing is performed as the means of ensuring accuracy of in-service metering, the test shall be performed by a person certified in the equipment used. If the actual flow is found to vary greater than 5% from the measured flow, the Licensee shall have the meter re-calibrated or replaced, whichever is necessary. Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration using SWFWMD Form LEG R.021.01 (04/09).

(5) The meters shall be installed in a straight length of pipe where there is a least an upstream length equal to ten (10) times the outside pipe diameter and a downstream length equal to two (2) times the outside pipe diameter. Where there is not at least a length equal to ten (10) times the diameter upstream available, flow straightening vanes shall be used in the line.

(6) If the meter or other flow measuring device has malfunctioned or has to be removed from the withdrawal for maintenance or repair, the Licensee shall notify SWFWMD within 30 days of discovering the necessity to replace or repair the meter and shall replace it with a repaired or new meter, subject to the same specifications as provided herein, within 30 days of its removal from the withdrawal.

(7) When the meter has malfunctioned or has been removed the withdrawal, the Licensee shall request instruction on how to estimate use from the Water Use Permit Bureau. The estimate of the number of gallons used each month during that period shall be submitted according to the instructions received from SWFWMD.

(8) In the event a new meter is installed to replace a broken meter, the new meter and its installation shall meet the specifications of this Condition. The Licensee shall notify SWFWMD of the replacement with the first submittal of meter readings from the new meter.

17. Water quality samples shall be collected and analyzed, for the parameters, and frequency specified below. Water quality samples from the production well shall be collected whether or not the well is being used, unless infeasible. If sampling is infeasible, the Licensee shall indicate the reason for not sampling on the water quality data form. Water quality samples shall be analyzed by a laboratory certified by the Florida Department of Health utilizing the standards and methods applicable to the parameters analyzed and to the water use pursuant to

Chapter 64-E-1, F.A.C., "Certification of Environmental Laboratories". At a minimum, water quality samples shall be collected after pumping the well at its normal rate for a pumping time specified in the table below, or to a constant temperature, pH, and conductivity. In addition, the Licensee's sampling procedure shall follow the handling and chain of custody procedures designated by the certified laboratory which will undertake the analysis. Any variance in sampling and/or analytical methods shall have prior approval of the Water Use Permit Bureau. Reports of the analyses shall be submitted to the Water Use Permit Bureau (using SWFWMD forms) on or before the tenth day of the second month following data collection and shall include the signature of an authorized representative and certification number of the certified laboratory which undertook the analysis. The parameters and frequency of sampling and analysis may be modified by the Water Use Permit Bureau, as necessary to ensure the protection of the resource.

SWFWMD ID No.	DEF ID No.	Minimum Pumping Time (minutes)	Parameter	Sampling Frequency
1	P-1	30	Chlorides, Sulfates, Total Dissolved Solids (TDS)	Feb., May, Aug. & Nov.

Water quality samples shall be collected based on the following timetable:

Quarterly Same week of months specified

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

18. The Licensee shall maintain a continuous recording rain gauge at Latitude 27° 48' 42.5" N and Longitude 81° 52' 16.4" W, SWFWMD ID No. 154, DEF ID No. RGCP. Total daily rainfall shall be recorded at this station and submitted to the Water Use Permit Bureau on SWFWMD forms on or before the tenth day of the following month. The reporting period for each report shall begin on the first day of each month and end on the last day of each month.

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

20. The Licensee shall continue to maintain SWFWMD-approved staff gauge(s) and report measurements of water levels, as indicated in the table below. Water levels shall be recorded and reported to the Water Use Permit Bureau (on SWFWMD forms) on or before the tenth day of the following month. To the maximum extent possible, water levels shall be recorded as indicated in the table below. The frequency of recording may be modified by the Water Use Permit Bureau, as necessary to ensure the protection of the resource.

SWFWMD ID No.	DEF ID No.	Water Body/Wetland	Latitude/ Longitude	Recording Frequency
121	HSG-1	Cooling Pond	27o47'31"/81o52'03"	2 /mo.
122	SG-P-1	Rain Cropping Area	27°49'02"/81°54'39"	2 /mo.
123	SG-WC-1	Rain Cropping Area	27°49'30"/81°53'14"	2 /mo.
124*	SG-WC-2	Rain Cropping Area	27°47'33"/81°50'45"	2 /mo.
125	SG-WC-3	Rain Cropping Area	27°47'02"/81°51'54"	2 /mo.
126	SG-MC-1	Rain Cropping Area	27°46'52"/81°52'32"	2 /mo.
127	SG-CB-1	Rain Cropping Area	27°47'31"/81°50'13"	2 /mo.

Water Level Recording Timetable: 2nd and 4th weeks of the month during the same day each week.

* This location may be removed when this area is incorporated into the Cooling Pond.

21. The Licensee shall record meter readings from each reuse line on a monthly basis within the last week of the month. The meter reading(s) shall be reported to the Water Use Permit Bureau (using SWFWMD scanning forms, unless SWFWMD has approved another arrangement for submission of this data) on or before the tenth day of the following month. If a metered reuse line is not utilized during a given month, the meter report shall be submitted to SWFWMD indicating the same meter reading as was submitted the previous month. The following reuse lines shall be metered:

a. The Licensee shall record and report meter readings on existing reuse line, SWFWMD ID No. 52, DEF ID No. ATB-1. In metering and reporting the quantities conveyed through this line, The Licensee shall meter or estimate the amount of reuse water contributed by each of the following components: industrial wastewater from ALCOA; industrial wastewater from the Tiger Bay Cogeneration Facility; fresh groundwater for pipe flushing; and fresh groundwater for water supply shortage at the Hines Energy Complex. The Licensee shall submit two copies of the report, one for the Hines Energy Complex, and one for the Tiger Bay Cogeneration Facility.

If there is more than one episode of conveyance in one month for any of the flow components, the report should contain the corresponding information (meter readings, quantities, and dates, related to each episode in addition to the net quantities conveyed during the month for the each of the flow components.

b. The Licensee shall record and report meter readings on existing reuse line SWFWMD ID No. 51, DEF ID No. BED. The meter at the City of Bartow's Douglas H. Allen Reclaimed Water Facility used to monitor flows directed to the Hines Energy Complex is sufficient to meet this requirement.

c. The meters shall adhere to the following requirements and be maintained as follows:

(1) The meters shall be non-resettable, totalizing flow meter(s). If other measuring device(s) or other accounting methods are proposed, the Licensee shall submit documentation that the other measuring devices or accounting methods meet the stipulations listed in this Condition, prior to installation. Approval for other measuring devices or accounting methods shall be obtained in writing from the Water Use Permit Bureau.

(2) The flow meters or other approved devices shall have and maintain an accuracy within five percent of the actual flow as installed.

(3) The meter shall be tested for accuracy onsite, as installed, every five (5) years beginning from the date of issuance, unless the Licensee submits documentation to the satisfaction of SWFWMD that a longer period of time for testing is warranted. The test shall be performed by a person certified to use the test equipment. If the actual flow is found to vary than 5% from the measured flow, the Licensee shall have the meter re-calibrated or replaced, whichever is necessary. Documentation of the test and a certificate of re-calibration, if applicable, shall be submitted within 30 days of each test or re-calibration. If the alternative accounting method involves a meter belonging to another entity or to the reclaimed water supplier, the Licensee shall submit documentation from the owner/ supplier that the meter readings continue to be accurate to 5% of the actual flow as installed. Such documentation is subject to approval by SWFWMD.

(4) The meter shall be installed in a straight length of pipe where there is at least an upstream length equal to ten (10) times the outside pipe diameter and a downstream length equal to two (2) times the outside pipe diameter. Where there is not at least a length of ten diameters upstream available, flow straightening vanes shall be used in the upstream line.

(5) If the meter or other flow measuring device malfunctions or has to be removed from the reuse line for maintenance or repair, the Licensee shall notify SWFWMD within 30 days of discovering the necessity to replace or repair the meter, and shall replace it with a repaired or new meter, subject to the same specifications given above, within 30 days of its removal from the reuse line.

(6) While the meter is off the reuse line, the Licensee shall request instructions on how to estimate use from the Water Use Permit Bureau. The estimate of the number of gallons used each month during that period shall be submitted according to the instructions received from SWFWMD.

(7) In the event a new meter is installed to replace a broken meter, the new meter and its installation shall meet the specifications of this Condition. The Licensee shall notify SWFWMD of the replacement with the first submittal of meter readings from the new meter.

22. The Licensee shall submit by April 1 of each year a Cooling Pond Performance Report for the preceding calendar year. The report shall include graphs and narratives describing and analyzing the performance of the cooling pond in terms of the pond water level in relation to precipitation, evaporation, ambient temperature, water quality, itemized estimates of inflows, itemized estimates of outflows (including seepage losses), and electric power production. Based on these reports, limits on groundwater pumpage into the Cooling Pond in relation, but not limited, to precipitation and Cooling Pond water elevation levels may be adjusted or introduced by SWFWMD.

23. An interim water supply shortage as used in paragraph A.14.b. of this condition, shall mean a shortage of previously authorized process and cooling water sources which results in the inability of the Licensee to prevent the operational water level of the Hines cooling pond from being lowered below an elevation of 158.5 feet National Geodetic Vertical Datum (NGVD). If the water level becomes less than 158.5 feet NGVD, despite all reasonable efforts by the Licensee to prevent such lowering of water level by utilizing all previously authorized water sources to the greatest extent Practicable, as identified in paragraph A.14.b.(2).i. of this condition, the Licensee is authorized until November 30, 2005, unless an alternate date is agreed to by SWFWMD, to transfer Upper Floridan aquifer groundwater authorized to be used at DEF's Tiger Bay facility pursuant to PA 97-37 Conditions of Certification, to the Hines cooling pond, subject to the following:

a. The Licensee must notify SWFWMD Water Use Permit Bureau, in writing, that a water supply shortage has occurred or is expected to occur and that it intends to transfer Tiger Bay groundwater to the Hines cooling pond. This notification must be provided at least ten (10) days in advance of the actual transfer of Tiger Bay groundwater.

b. The Licensee must concurrently provide a copy of the notification to DEP’s SCO.

c. The Licensee shall include in its notification documentation that all previously authorized sources of water, as identified in paragraph A.14.b.(2).i. of this condition are being used to the greatest extent Practicable. Additionally, such notification shall include details on any water conservation measures which were being implemented in an effort to avoid a water supply shortage and which will be continued in order to reduce the amount of transferred withdrawals needed to alleviate the water supply shortage. The Licensee will account in its Tiger Bay monthly pumpage reports any groundwater quantities used for transfer to Hines to alleviate the interim water supply shortage.

d. The Licensee shall equip the water transfer pipeline from Tiger Bay to the Hines cooling pond with non-resettable totalizing flow meters, or other flow measuring devices as approved by SWFWMD Water Use Permit Bureau and shall monitor and record the amount of transferred groundwater used to alleviate the water supply shortage. The flow meter(s) shall comply with the content of paragraph A.16. of this condition and be capable of separately calculating transferred Tiger Bay groundwater from other sources of water or wastewater to be conveyed via the pipe to the Hines cooling pond. The reporting of the quantities thus measured shall be in accordance with paragraph A.21.a. of this condition.

e. When the water level in the Hines cooling pond rises to an elevation of 158.5 feet NGVD, and the Licensee is able to successfully maintain the water level at or above 158.5 feet NGVD for seven (7) consecutive days, the water supply shortage shall be

considered to have ended and the Licensee shall discontinue the use of transferred groundwater from Tiger Bay.

f. Within 30 days of cessation of groundwater transfers during a water supply shortage, the Licensee shall provide written notification to SWFWMD Water Use Permit Bureau of the cessation of these transfers. This notification shall provide the number of days that Tiger Bay groundwater was transferred to the Hines cooling pond and the total volume of groundwater transferred. Additionally, this notification shall include a report, including tabulated data and a graph showing the rate at which water was supplied compared to the change occurring in the cooling pond level, through the entire duration of the groundwater transfer. The pond water level during a water shortage event shall be measured daily. The graphic report shall present these measurements for the entire duration of the water supply shortage.

g. The quantity of groundwater authorized for use at the Tiger Bay facility shall be reduced by the amount of that source being transferred to the Hines cooling pond during the water supply shortage. At no time will the groundwater quantities produced at the Tiger Bay facility exceed the permitted quantities for that facility. The monthly groundwater pumpage reports required to be submitted to SWFWMD per Section B. Specific Conditions, Condition II. SWFWMD, paragraph C. Meter Readings of the Siting Certification No. PA 97-37 for the Tiger Bay Cogeneration Facility shall include a breakdown of quantities produced for use at the Tiger Bay facility, water shortage transfer to the Cooling Pond at the Hines Energy Complex, and for flushing the pipelines associated with water conveyance to the Hines Energy Complex.

h. The Licensee shall undertake diligent efforts to investigate and, if Feasible, modify the Hines Energy Complex watercrop system or otherwise locate sources of water, other than potable groundwater, to eliminate or substantially reduce the need to transfer groundwater from the Tiger Bay facility. The Licensee's diligent efforts shall include, but not be limited to, investigating the feasibility of the following: modifying or making changes to the Hines Energy Complex's watercrop system to increase runoff or storage; transferring industrial wastewater from the Tiger Bay facility; obtaining industrial wastewater from US Agri-Chemicals Corporation (USAC), Mosaic Fertilizer, LLC, or Estech, Inc. to transfer to the Hines Energy Complex; increasing the amount of impervious surface at the Plant Island portion of the Hines Energy Complex to increase surface water runoff flows into the cooling pond; transferring industrial wastewater from the nearby ALCOA facility; withdrawing water from surface water sources; and locating and using other sources of reclaimed domestic wastewater and/or treated industrial wastewater.

i. As a water supply shortage contingency, the Licensee is authorized to transfer groundwater quantities from the Tiger Bay Cogeneration Facility to the Hines Energy Complex, not to exceed Tiger Bay’s total authorized groundwater withdrawal quantities as specified in Tiger Bay Cogeneration Facility Site Certification No. PA 97-37.

24. Within 90 days of construction of the withdrawal facility, the Licensee shall install and maintain a backflow prevention system on SWFWMD ID Nos. 1, 2, and 21, DEF ID Nos. P-1, P-2, and AR-21.

25. Within 90 days of construction of the withdrawal facility, an automated flow control system shall be installed and maintained on the groundwater flow from SWFWMD ID Nos. 1, 2, 3, 4, and 5, DEF ID Nos. P-1, P-2, P-3, P-4, and P-5.

The automated flow control system (i.e., the automated shutoff device) shall be properly maintained at all times to control the wells' water flow into the Cooling Pond, such that no discharge into the pond would take place when the elevation in the Cooling Pond is at or above 160.0 feet NGVD.

26. The Licensee shall continue implementation of a measurement and monitoring plan for the existing onsite rainwater/IWW capture and reuse system (known as the watercrop system) approved by this Condition in paragraph A.14.c. The watercrop system measurement and monitoring plan is designed to obtain information that can be used to establish accurate estimates of water production yields from the watercrop system under various rainfall events and to determine flows leaving the site to supply natural systems (including runoff discharges from buffer areas). The Licensee shall submit an updated watercrop system measurement and monitoring plan within 60 days of implementing any new alternative water supply project used to augment cooling pond supplies via the watercrop storage areas.

By April 1 of each year, the Licensee shall submit an "Annual Water Crop System Report for the Hines Energy Complex" summarizing the data collected per the approved "Measurement and Monitoring Plan for the Water Crop System". The report shall document estimates of water production yields from the watercrop system under various rainfall events and estimates of flows leaving the Site to supply natural systems (including runoff discharges from buffer areas). The report shall present an overall evaluation of the functioning of the system and recommendations for its improvement.

27. The Annual Average Daily (AAD) and Peak Month Daily (PMD) quantities for each of SWFWMD ID Nos. 1, 2, and 21, DEF's ID Nos. P-1, P-2, and AR-21, shall be limited to an AAD quantity of 5,000,000 gallons per day (gpd) and a PMD quantity of 8,800,000 gpd. The Licensee may make adjustments in pumpage distribution as necessary up to the quantities indicated specifically for each withdrawal provided that the combined total quantities will not exceed 5,000,000 gpd on an AAD basis and 8,800,000 gpd on a PMD basis, as long as adverse environmental impacts do not result, and other Conditions of this Certification are complied with. In all cases, the total average annual daily withdrawal and the total peak monthly daily withdrawal are limited to the quantities set forth above.

28. The Licensee shall only utilize groundwater through the withdrawals SWFWMD ID Nos. 1, 2 and 21, DEF's ID Nos. P-1, P-2 and AR-21, and only when the elevation of the water level in the Cooling Pond, as measured weekly at SWFWMD ID No. 121, DEF ID No. HSG-1, is below 160.00 feet NGVD. Minor withdrawals associated with routine pump maintenance and water quality sampling are exempt from this requirement.

29. For Power Blocks 1, 2, 3, and 4, the Licensee shall not utilize groundwater through SWFWMD ID Nos. 1, 2 and 21, DEF's ID Nos. P-1, P-2 and AR-21, at the PMD rate of 8,800,000 gpd except when the elevation of the water level in the Cooling Pond, as weekly measured at SWFWMD ID No. 121, DEF ID No. HSG-1, is below 159.00 feet NGVD.

30. In the event that the Licensee exceeds during a drought year the Annual Average Daily (AAD) quantity of 5,019,000 gpd and the Peak Month Daily (PMD) quantity of 8,835,000 gpd from the onsite groundwater withdrawals after PB 3 and PB 4 become operational, the Licensee shall submit a report, subject to SWFWMD approval, the Conditions under which those quantities were exceeded. The Licensee shall not discharge any amount of groundwater into the Cooling Pond at the Hines Energy Complex when the water level in the Cooling Pond is at or above 160.0 feet NGVD. If the Licensee demonstrates that the recurrence

of over-pumpage is unlikely and no adverse impacts have occurred, no action will be taken. If the Licensee continues to exceed the quantities permitted without obtaining a modification, SWFWMD may take appropriate enforcement action.

B. Surface Water Management

1. Any system alteration, including for augmentation into or withdrawal of water from the certified Surface Water Management System, other than as specifically authorized by this certification, will require additional SWFWMD certification consideration. The water level of detention ponds (not including the cooling pond, other industrial wastewater ponds or water crop areas) shall not be augmented by pumping or diversion of water into the ponds to artificially control their level above the design normal or beginning storage level.

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

3. The Licensee shall provide the SWFWMD with an evaluation of the potential for utilizing some of the increased mass flows anticipated in the cooling pond to offset groundwater withdrawal requirements. However, the amount of water diverted to the cooling pond shall not result in a mass flow discharge to either McCullough Creek or Camp Branch that is below 100 percent of the pre-mining condition mass flows for both the mean annual and the 25 year - 24 hour storm event. This information shall be submitted to the SWFWMD for review and approval prior to commencement of construction.

[Chapter 373, F.S., Chapter 40D, F.A.C.]

C. Central Florida Water Initiative (CFWI)

1. By December 31, 2024, if the Licensee's authorized allocation extends beyond 2025 and the projected water demand at the end of the term exceeds the allocation authorized under Section 2.8 of the Central Florida Water Initiative (CFWI) Supplemental Applicant's Handbook, then the Licensee shall submit a plan to SWFWMD describing how the remainder of its demand will be met (e.g. offsets, substitution credits, land use transitions, redistributed uses, alternative water supply development). The plan shall propose projects and identify a schedule for implementation. Annual updates shall be due on December 31 of each subsequent year detailing progress and shall be provided to SWFWMD. The annual status reports shall include work completed to date, expenditures, and any anticipated changes in timelines.

[Sections 373.016, 373.0465, 373.219 and 373.223, F.S.; Rules 40D-2 and 62-41, F.A.C.]

2. The Licensee shall develop and maintain an Annual Conservation Goal Implementation Plan (ACGIP) pursuant to Section 2.7 of the CFWI Supplemental Applicant's Handbook for Consumptive Use Permitting. The ACGIP shall outline conservation goals for no less than 5 years. The Licensee shall submit the ACGIP upon request by SWFWMD, during a

10-year compliance report, and with an application for Modification of this Certification if there are any changes in authorized withdrawals.

[Sections 373.016, 373.0465, 373.219 and 373.223, F.S.; Rules 40D-2 and 62-41, F.A.C.]

III. DEPARTMENT OF COMMERCE

A. Structures for the associated Barcola-Fort Meade 230 kV transmission line shall be designed to withstand hurricane force winds of 120 miles an hour. The lines shall be designed to de-energize if they come loose from the structures so that any lines that do fall to the ground will not be "live" and pose a hazard to the public.

B. The Licensee shall make all Practicable efforts to market sulfur and slag by-products of coal gasification.

C. The office/administration buildings at the Hines Energy Complex shall be included in the Department of Economic Opportunity's Florida Radon Research Program (FRRP) and Construction Standards Development activities, specifically the FRRP Radon Proposed Standards Demonstration Study in Large Buildings. Additionally, the Licensee shall conduct a pre-construction, site-specific soil gas radon test in accordance with the FRRP protocol to identify the radon potential of the office/administration building construction site(s). If the test results indicate that the office/administration buildings construction site(s) have a high radon potential, the Licensee shall (1) integrate improved slabs and sub-slab depressurization systems construction design criteria developed through the FRRP in the office/administration building; (2) conduct post-construction tests in accordance with the FRRP protocols to evaluate the proposed design criteria, and (3) make test results available to the FRRP program.

D. To the extent Practicable, the Licensee shall locate the proposed linear facilities within existing rights-of-way.

E. The Licensee shall investigate all complaints and provide appropriate mitigation for all impacts to radio and television reception caused by the proposed Barcola-Fort Meade 230 kV transmission line.

F. The Licensee shall implement the following three conditions during construction of the natural gas pipeline lateral near residences along Jameson Road in Hillsborough County and along Agricola Road near Bradley Junction in Polk County:

1. For residences located within 50 feet of the construction easement, the Licensee shall avoid removal of mature trees and landscaping between the residence and the edge of the construction easement, wherever Practicable, and shall immediately restore all lawn areas and landscaping within the construction easement.

2. For residences located between 25 and 50 feet from the edge of the construction easement, the Licensee shall temporarily fence the edge of the construction easement adjacent to the residence for a distance of 25 feet on either side of the residence to ensure that construction equipment and materials, including the spoil pile, remain within the construction easement.

3. For residences located between 0 and 25 feet from the edge of the construction easement, the Licensee shall temporarily fence the edge of the construction easement and, if Practicable, reduce the construction easement as necessary to maintain a

minimum distance of 25 feet between the residence and the edge of the construction easement for a distance of 25 feet on either side of the residence. In no case shall the edge of the temporary construction easement be located within 10 feet of a residence unless the landowner agrees in writing. If placement of the pipeline will be within 25 feet of a residence, the Licensee shall ensure that the trench is not excavated until the pipe is ready for installation and the trench is backfilled immediately after pipe installation.

[Final Order Certification Power Block 1, 01/27/1994 – formerly Department of Community Affairs]

G. The Licensee shall update its current Hines Energy Complex hurricane preparation and recovery plan to include Power Blocks 1, 2, 3, and 4. The updated plan shall be submitted to the Department of Economic Opportunity and the Polk County Office of Emergency Management no later than completion of building construction code compliance review of Hines Power Block 4 by Polk County. The Licensee shall formally update the plan every 5 years following commercial operation of Power Block 4 or whenever an additional electrical generating unit is brought into commercial service at the Hines Plant Site and shall submit these updated versions of the plan to the Department of Economic Opportunity and the Polk County Office of Emergency Management. These updating and submittal requirements should be noted in the plan. If the Department of Economic Opportunity deems the plan or any of its periodic updates not to be in compliance with the requirements of this Condition, it may petition for enforcement of this Condition pursuant to the Florida Electrical Power Plant Siting Act.

[Final Order Certification Power Block 3, 09/11/2003 – formerly Department of Community Affairs]

IV. FLORIDA FISH AND WILDLIFE CONSERVATION COMMISSION

A. General Listed Species Surveys

1. The Licensee shall follow the current survey protocols for all listed species that may occur within the Certified Facility area to be impacted, as well as accessible appropriate buffers within the Licensee property or rights-of-way as defined by the listed species survey protocols, prior to conducting detailed surveys. Guidance related to general and species-specific survey protocols can be found in FWC's Florida Wildlife Conservation Guide (FWCG) at http://myfwc.com/conservation/value/fwcg/.

2. Surveys shall be conducted prior to clearing and construction in accordance with the survey protocols. The results of those surveys shall be provided to the FWC in a report and coordination shall occur with the FWC on appropriate impact avoidance, minimization, or mitigation methodologies. Reports may be sent to: ConservationPlanningServices@MyFWC.com.

[Article IV, Section 9, Florida Constitution; Sections 379.2291, 403.507, F.S.; Chapter 68A-27 and Rule 62-17.191, F.A.C.]

B. Specific Listed Species Surveys

1. For any new construction, or associated land clearing within a Certified Facility(ies) area to be impacted, the Licensee shall conduct an assessment for terrestrial listed species and shall note all habitat, occurrence, or evidence of listed species. Wildlife surveys shall be conducted during the reproductive or "Active" season for each species that falls before the

projected clearing activity schedule unless otherwise approved by the FWC. For species that are difficult to detect, the Licensee may make the assumption that the species is present and plan appropriate avoidance/mitigation measures for FWC post-Certification review and approval at least 60 days prior to commencing clearing or construction activities within the surveyed area. The surveys required by these Conditions of Certification may also be conducted prior to issuance of the final order of certification, in which case this Condition would be considered satisfied.

2. These surveys shall be conducted in accordance with U.S. Fish and Wildlife Service (USFWS) or FWC guidelines and methodologies by a person or firm that is knowledgeable and experienced in conducting flora and fauna surveys for each potentially occurring listed species. FWC's survey protocols may be downloaded from https://myfwc.com/wildlifehabitats/wildlife/species-guidelines/.

3. FWC's permitting guidelines for the gopher tortoise (*Gopherus polyphemus,* State Threatened) contain appropriate survey protocols for the species and may be downloaded from https://myfwc.com/media/11854/gt-permitting-guidelines.pdf.

4. These surveys shall identify locations of breeding sites, nests, and burrows for listed wildlife species. Nests and burrows shall be recorded with global positioning system (GPS) coordinates, identified on an aerial photograph, and submitted with the final listed species report. Locations should be physically marked so that clearing and construction shall avoid impacting them.

5. These surveys shall include an estimate of the acreage and percent cover of each existing vegetation community that is contained within the Certified Site area to be impacted prior to land clearing and construction activities using a geographic information system (GIS). Examples of such wildlife-based habitat classification schemes include Florida's State Wildlife Action Plan[1] (FWC 2019) or the Natural Communities Guide[2] (Florida Natural Areas Inventory 2010).

[Article IV, Section 9, Florida Constitution; Sections 379.2291, F.S.; Chapters 68A-4, 68A-16, 68A-27, and Rule 62-17.191, F.A.C.]

1 Florida Fish and Wildlife Conservation Commission (FWC). 2019. Florida's Wildlife Legacy Initiative: Florida's State Wildlife Action Plan. Tallahassee, Florida.
2 Florida Natural Areas Inventory. 2010. Guide to the Natural Communities of Florida: 2010 edition. Florida Natural Areas Inventory, Tallahassee, Florida.

C. Listed Species Locations

1. Where any suitable habitat and evidence is found of the presence of listed species within the Certified Facility, the Licensee will report those locations to, and confer with, the FWC to determine whether additional pre-clearing surveys are warranted and to identify potential avoidance, minimization, or mitigation recommendations. If pre-clearing surveys are required, they shall occur in the reproductive season prior to the anticipated date for the start of construction within the Certified Site to be impacted. The Licensee will not construct in areas where evidence of listed species was identified during the initial survey until the particular listed species issues have been resolved.

2. If listed wildlife species are found, their presence shall be reported to the DEP Siting Coordination Office, the FWC's Office of Conservation Planning Services, and the USFWS.

3. If avoidance is not Feasible, the Licensee shall consult with DEP, FWC, and, if necessary, the USFWS for listed wildlife species to determine the steps appropriate for the species involved which are to be taken to avoid, minimize, mitigate, or otherwise appropriately address impacts within each agency's respective jurisdiction. These steps shall be memorialized in a Wildlife Management Plan and submitted to DEP and FWC.

[Article IV, Section 9, Florida Constitution; Section 379.2291, F.S.; Chapter 68A-27and Rule 62-17.191, F.A.C.]

V. DEPARTMENT OF TRANSPORTATION

A. Prior to commencing the hauling of fuel oil to the Site, a specific haul route shall be submitted to the DOT, Polk County and any other affected jurisdiction for review for compliance with generally applicable requirements. The Licensee may revise the haul route with notice to the affected jurisdiction(s). In the event DOT or any county road agency approves a work program that includes a structural repair or structural improvement along the haul route, the Licensee shall provide its proportionate share of the cost of the repair/improvement. Proportionate share shall be defined as the average annual fuel oil truck traffic to and from the DEF Hines Energy Complex divided by the average annual total traffic on the haul route for the most recent five-year period. The Licensee's proportionate share shall be calculated and paid within six months of the beginning of the fiscal year in which the repair or improvement is commenced. It shall be the responsibility of DOT or the appropriate county road agency to notify the Licensee of the inclusion of the repair/improvement of the work program.

B. When the number of construction and operating employees reporting to the site at the same shift exceeds 350, the Licensee shall begin a traffic monitoring program at the intersection of SR 37 and CR 640 for determining the need to install a traffic signal or to make geometric improvements. Intersection monitoring shall consist of conducting turning movement counts and a signal warrant analysis. The monitoring shall be conducted once per year in January, February, or March, until the number of employees has peaked or a signal and appropriate intersection improvements are installed, whichever comes first. The Licensee shall provide its proportionate share of the cost of the improvements required. Proportionate share shall be defined as actual project traffic divided by actual total traffic volume at the intersection at the time the improvement is determined to be needed.

C. Prior to the time when the number of construction and operating employees reporting to the Site at the same shift exceeds 150, the Licensee shall add a signal phase for westbound left-turns, which operates as a protected/permissive at the intersection of CR 555 and SR60. Modifications to the transportation system must conform to the requirements of the DOT. Geometric improvements required to accommodate this signal phase shall be part of the signal modification. This does not include the re-aligning of CR 555 at the southbound approach.

D. Prior to the time when the number of construction and operating employees reporting to the Site at the same shift exceeds 700, the Licensee shall add a second westbound left-turn lane by restriping the existing pavement at the intersection of US 98 and SR 60A. The restriping process shall include the milling of existing pavement, repaving, and providing new pavement markings within the construction area.

E. All utility work/construction with the state rights-of-way shall conform to the minimum requirements of the Utility Accommodation Manual (Document 710-020-001), or as may be amended. For all work normally requiring a Utility Permit, DOT shall issue the permit

within 90 days, or as may be required by the Utility Accommodation Manual, of the submission of a satisfactorily completed Utility Permit (Form 710-010-85, or as may be amended).

F. Modifications to existing intersections with state roads shall be in compliance with Chapters 14-96 and 14-97, F.A.C. For all modifications to existing intersections with state roads, DOT shall issue a Connection Permit within 90 days of the submission of a satisfactorily completed Connection Permit [Form #850-040-10-a (12/89)], or as may be amended.

G. Any new public rail/highway at-grade crossings which may be deemed necessary for this Site by the Licensee must adhere to the non-procedural standards of Rule 14-46.003, F.A.C. In the -event the Licensee determines it is necessary to create a new public rail/highway at-grade crossing, the Licensee shall include the crossing as part of either a modification of certification or supplemental application, which shall include notices for public hearings or stipulations of all parties as required by Chapter 403, Part II, F.S., and Chapter 62-17, F.A.C.

H. Access management to the State Highway System: No new access to the State Highway System is proposed in the supplemental SCA for Power Blocks 2 3, and 4. If new access is later proposed, access permitting as defined in Rule chapters 14-96, State Highway System Connection Permits, Administrative Process, and 14-97, State Highway System Access Management Classification System and Standards, F.A.C., will be required.

I. Overweight or Overdimensional Loads: Operation of overweight or overdimensional loads by the applicant on State transportation facilities during construction and operation of the utility facility will be subject to permitting as defined in Chapter 316, Florida Statutes, and Chapter 14-26, Safety Regulations and Permitting Fees for Overweight and Overdimensional Vehicles, F.A.C.

J. Use of State of Florida Right of Way or Transportation Facilities: Any use of State of Florida rights-of-way and certain activities on State transportation facilities will be subject to the requirements of the Florida Department of Transportation’s Utility Accommodation Manual (Document 710-020-001) and rule chapter 14-46, Railroads/Utilities Installation or Adjustment, F.A.C.

K. Best Management Practices

1. Traffic control will be maintained during plant construction and maintenance in compliance with the standards contained in the Manual of Uniform Traffic Control Devices, Chapter 14-94, Statewide Minimum Level of Service Standards, F.A.C.; Florida Department of Transportation's Roadway and Traffic Construction Design Standards; and Florida Department of Transportation's Standard Specifications for Roads and Bridges, whichever is more stringent.

2. If the applicant uses contractors for the delivery of any overweight or overdimensional loads to the Site during the construction of the additional unit, the applicant should ensure that its contractors adhere to the necessary standards and receive the necessary permits required under Sections 316, F.S., and Chapter 14-26, Safety Regulations and Permitting Fees for Overweight and Overdimensional Vehicles, F.A.C.

[Chapter 316, F.S.; Chapters 14-26, 14-46, 14-94, and 14-97, F.A.C.]

VI. DEPARTMENT OF STATE – DIVISION OF HISTORICAL RESOURCES

A. The Licensee shall conduct a survey of sensitive cultural resource areas, as determined in consultation with the Department of State, Division of Historical Resources (DHR). A qualified cultural resources consultant will identify an appropriate work plan for this project based on a thorough review of the Certified Facility. Prior to beginning any field work, the work plan will be reviewed in consultation with DHR. Upon completion of the survey, the results will be compiled into a report which shall be submitted to DHR. If Feasible, sites considered to be eligible for the National Register shall be avoided during construction of the project and access roads, and subsequently during maintenance. If avoidance of any discovered sites is not Feasible, impact shall be mitigated through archaeological salvage operations or other methods acceptable to DHR, as appropriate.

B. If historical or archaeological artifacts or features are discovered at any time within the Certified Facility, the Licensee shall notify the appropriate DEP District office (s) and the DHR, R.A. Gray Building, 500 S. Bronough Street, Rm 423, Tallahassee, Florida 32399-0250, telephone number (850) 245-6333, and the Licensee shall consult with DHR to determine appropriate action.

[Sections 267.061, 403.531, and 872.02, F.S.]

VII. DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

Only herbicides registered by the U.S. Environmental Protection Agency and the Florida Department of Agriculture and Consumer Services shall be used at Certified Facilities. Herbicide applications will be in accordance with label directions and will be carried out by a licensed applicator, in compliance with all federal, state and local regulations. Herbicide applications shall be selectively applied to targeted vegetation. Broadcast application of herbicide shall not be used unless effects on non-targeted vegetation are minimized.

[Chapter 487, F.S.]

VIII. POLK COUNTY

A. Permits

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

[CUP 92-06 Condition No. 1]

B. Fuel

The project shall be restricted to the burning of natural gas, coal gas, coal, or oil unless a Conditional Use Permit (CUP) modification providing an analysis of the impact of any proposed change in fuel types is reviewed and approved by the Polk County Board of County Commissioners in accordance with Polk County procedures for conditional use permits.

[CUP 92-06 Condition No. 2]

C. Fire Protection Plan

Following Site Certification, and prior to completion of building construction code compliance review, the Licensee shall submit an acceptable fire protection plan to the Polk

County Fire Codes Inspector outlining specific measures to be taken to meet all local fire codes and regulations. As part of this plan, the Licensee shall install on the fuel oil tanks either subsurface foam systems or outside foam systems and shall maintain foam onsite for operation of these systems.

[CUP 92-06 Condition No. 3]

D. Emergency Management and Response Plans

Following Site Certification, and prior to completion of building construction code compliance review, the Licensee shall submit an acceptable Emergency Management and Response Plan (EMR Plan) to the Polk County Office of Public Safety. The EMR Plan will detail emergency management and response procedures for any project-related, onsite incidents, including hurricane, fire, and hazardous materials release, so as to ensure minimum response time and maximum effectiveness and efficient response in or DEP to protect the public s health, safety, and welfare. The plan shall be consistent with the requirements of 29CFR 1910.38. In the event of a project-related onsite incident which has the potential to result in offsite impacts, the Licensee shall promptly ascertain the extent of the impact and take appropriate steps to remedy the situation or mitigate such offsite impacts.

[CUP 92-06 Condition No. 4]

E. Emergency Notice

The Licensee shall immediately contact Polk County's Office of Public Safety when it becomes aware of project related onsite incidents which have the potential for affecting the public's health, safety, and welfare.

[CUP 92-06 Condition No. 5]

F. Landscape Buffer

Landscaping shall be installed in accordance with the landscape plan included in the SCA. Installation shall be completed prior to commercial operation of the first unit. The Licensee shall guarantee 80 percent survival of landscape plant materials for a period of one year following the completion of installation.

[CUP 92-06 Condition No. 6]

G. Tall Structure Compliance

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

[CUP 92-06 Condition No. 7]

H. Transportation

1. Following certification, but prior to the completion of building code compliance review, the Licensee shall submit to the Polk County Planning Division Director a plan for monitoring the number of employees reporting to the Site at the same shift time and reporting this information to the Polk County Planning Division. The data collected through this monitoring program shall be the basis for determining the need for transportation improvements.

[CUP 92-06 Condition No. 8A]

2. Prior to the completion of building construction code compliance review, the Licensee shall be required to construct a Case III intersection at the main driveway connection to CR 555 in accordance with Polk County subdivision regulations, including left-turn storage and acceleration/deceleration lanes.

[CUP 92-06 Condition No. 8B]

3. Prior to the completion of building construction code compliance review, the Licensee shall be required to construct a Case II (balanced) intersection at the secondary or northern-most driveway connection to CR 555 in accordance with Polk County's subdivision regulations.

[CUP 92-06 Condition No. 8C]

4. Prior to the time when the number of construction and operating employees reporting to the Site at the same shift time exceeds 150, the Licensee shall add a signal phase for westbound left-turns which operates as protected/permissive at the intersection of CR 555 and SR 60. Modifications to the transportation system must conform to the requirements of the FDOT.

[CUP 92-06 Condition No. 8D]

5. Prior to the time when the number of construction and operating employees reporting to the Site at the same shift exceeds 700, the Licensee shall add a second westbound left-turn lane by restriping the existing pavement at the intersection of US 98 and SR 60A. Modifications to the transportation system must conform to the requirements of the FDOT.

[CUP 92-06 Condition No. 8E]

6. When the number of construction and operating employees reporting to the Site at the same shift exceeds 350, the Licensee shall begin a traffic monitoring program at the intersection of SR 37 and CR 640 for determining the need to install a traffic signal or to make geometric improvements. Intersection monitoring shall consist of conducting turning movement counts and a signal warrant analysis. The monitoring shall be conducted once per year in January, February, or March, until the number of employees has peaked, a signal is installed, or other necessary intersection improvements are made.

[CUP 92-06 Condition No. 8F]

7. When the number of construction and operating employees reporting to the Site at the same shift time exceeds 350, the Licensee shall begin a traffic monitoring program at the intersection of CR 555 and CR 40 for determining the need to install a traffic signal or to make geometric improvements. Intersection monitoring shall consist of conducting turning movement counts and a signal warrant analysis. The monitoring shall be conducted once per year in January, February, or March, until the number of employees has peaked, a signal is installed, or other necessary intersection improvements are made.

[CUP 92-06 Condition No. 8G]

8. Following Site Certification and prior to the completion of building construction code compliance review, the Licensee shall submit an acceptable Transportation Demand Management Plan to the Polk County Planning Director outlining specific measures to

be taken to minimize the impacts of both construction and operations traffic on the surrounding transportation network.

[CUP 92-06 Condition No. 8H]

9. The Site shall be limited to the two access points on CR 555 shown on Figures 3.2.1-1 and 3.2.1-2 in the SCA. The entrances shall be built for use during the construction phase of this project. All construction traffic shall park inside the Site, well away from the road right-of-way.

[CUP 92-06 Condition No. 8I]

I. Solid Waste Disposal

1. The Licensee shall be responsible for proper disposal of slag and/or ash by-products produced in the power generation process at locations other than at Polk County landfills.

[CUP 92-06 Condition No. 9A]

2. The Licensee shall monitor groundwater in relation to solid waste disposal areas and make available-to the Polk County Water Resources Director all data produced from the groundwater monitoring system. Upon prior notice, the Licensee shall allow county staff members access to the Site for purposes of examining the condition of' the groundwater monitoring equipment, observing the sampling procedures and collection of samples as deemed necessary for Polk County.

[CUP 92-06 Condition No. 9B]

J. Hazardous Materials Storage

The Licensee shall annually report their storage and usage of hazardous material to Polk County as required by SARA Title III and upon prior notice shall allow county staff members access to the Site for purposes of determining compliance with reporting requirements. As part of the first report, the Licensee shall specifically address with narrative descriptions, data and maps, as appropriate, the location of the Hines Energy Complex, as a facility at which hazardous materials may be used, handled or stored, with respect to the following:

1. Access from the Site to major transportation routes for ease and safety of transporting hazardous materials.

[CUP 92-06 Condition No. 10A]

2. Access and reasonable response time to the Site for properly-trained and equipped personnel to service potential hazardous materials accidents

[CUP 92-06 Condition No. 10B]

3. The nearness and degree of sensitivity of surrounding land uses.

[CUP 92-06 Condition No. 10C]

4. The compatibility of the proposed use with respect to the nature of hazardous materials stored or used on adjacent sites.

[CUP 92-06 Condition No. 10D]

5. The existence of surface water features, including drainage patterns and basin characteristics.

[CUP 92-06 Condition No. 10E]

6. The location of potable water supplies, private wells, public well fields, sinkholes, and other conduits for potential migration of contaminants.

[CUP 92-06 Condition No. 10F.

7. Atmospheric conditions, including but not limited to prevailing wind patterns.

[CUP 92-06 Condition No. 10G]

K. Spill Prevention Control and Countermeasure Plan

The Licensee shall be required to submit a preliminary Spill Prevention Control and Countermeasure Plan (SPCC) to the Polk County Public Safety Department and the Polk County Planning Department as part of the building construction code compliance review. The final SPCC Plan shall be submitted to Polk County for compliance review six months prior to the date the first unit begins commercial operation and shall be implemented when the first unit begins commercial operation. The SPCC Plan shall be updated in the event of a change in design, construction, operation, technology, or maintenance, which materially affects the facility's potential for the discharge of oil into or upon the navigable waters of the U.S. or adjoining shore line. This Plan shall be prepared and updated in accordance with requirements of the Clean Water Act, as in 40 CFR Part 112 and submitted to Polk County for review and comment prior to implementation.

[CUP 92-06 Condition No. 11]

L. Flood Study

1. The Licensee shall submit a flood study to the Federal Emergency Management Agency (FEMA) in support of a Letter of Map Amendment or Revision, whichever is appropriate, in accordance with National Flood Insurance Program Rules and Regulations, within one year of release of reclamation of the site.

[CUP 92-06 Condition No. 12]

2. The Licensee shall construct and maintain adequate flood protection berms to assure that the Homeland area will not receive flood waters in the event of a dam failure.

[Polk Ordinance 88-04]

3. The Licensee shall perform and provide to Polk County a detailed analysis of dam failure flood conditions including alternatives for minimizing obstruction and damage to roadways.

[Polk Ordinance 88-04]

M. Stack Emissions Monitoring

The Licensee shall make available to the Polk County Environmental Services Director all data produced from the emissions monitoring systems for the exhaust stack(s) when requested and report on a quarterly basis any excess emissions. The Licensee shall allow

designated county staff: members' access to the site for purposes of examining the condition of this equipment and the monitoring program upon prior notice.

[CUP 92-06 Condition No. 13]

N. Compliance with Applicable Air Quality Regulations

The Licensee shall comply with applicable air quality regulations in effect at the time of filing of each SCA or supplemental application for each phase of development of the Hines Energy Complex.

[CUP 92-06 Condition No. 14]

O. Transmission Lines

The Licensee shall apply to Polk County for a Modification to CUP 92-06 at the time it submits a supplement to or modification of their SCA to the state regarding a defined, proposed Corridor route for any new, proposed transmission lines associated with the DEF Hines Energy Complex.

[CUP 92-06 Condition No. 15]

P. Wildlife Habitat Management Plan

A wildlife habitat management plan for the buffer areas shown on SCA Figure 2.1.3-1 shall be required and must be approved by the FWC and Polk County prior to commercial operation of the first unit at the Hines Energy Complex. Revegetation and planting in the buffer areas shall be in accordance with applicable approved non-mandatory reclamation plans. If no non-mandatory reclamation plans are approved for the buffer areas, revegetation and planting shall be in accordance with the plan presented in the SCA process and with federal agency input if required. The wildlife habitat management plan shall include a map of the buffer areas and shall describe the type and objectives of habitat management activities to be performed within the buffer areas. Such management activities may include water level management, habitat diversification, and removal of exotic and unwanted vegetation (e.g., Brazilian pepper).

[CUP 92-06 Condition No. 16]

Q. Water Use and Conservation Reporting

Following the start of commercial operation, the Licensee shall:

1. supply a quarterly report on ground water use quantities, ground water level measurements, and water quality analysis results.

2. supply an annual report on methods of water conservation and estimates of water conservation (if available).

These reports shall be submitted to the Polk County Planning and Water Resource Division Directors. The quarterly report shall be submitted 45 days after each quarter. The annual report(s) summarizing the year's results shall be submitted by March 31, for the preceding calendar year.

[CUP 92-06 Condition No. 17]

R. Ambient Air Quality Testing

To the extent not already provided for through the DEP Title V funded statewide air quality monitoring network or other means, the Licensee shall provide up to two ambient air quality monitoring stations concurrent with the operation of the first unit to the Hines Energy Complex. The purpose of this Condition is to provide reasonable assurance that sufficient monitoring apparatus will be put in place to determine actual air quality conditions in the area affected by DEF's Hines Energy Complex. Monitoring requirements, such as station location, parameters to be monitored, number of monitoring stations and quality assurance procedures shall be determined by the Florida Department of Environmental Protection in consultation with the Polk County air program manager and the Licensee.

[CUP 92-06 Condition No. 18]

S. Protection of Wells

The Licensee shall remediate any potable water well located on lands at the northwest corner of CR 555 and CR 640 owned by Mr. Donald Haag which has been determined by the Polk County Water Resources Director to have been adversely impacted by the Licensee s operation.

[CUP 92-06 Condition No. 19]

T. Non-Designated Area

The non-designated area on the Generalized Project (Site Plan, SCA Figure 2.1.3-l) shall be designated as undeveloped, with the exception of the existing transmission line and substation.

[CUP 92-06 Condition No. 20]

U. Consumptive Use

The Licensee shall investigate the possible reuse of available treated municipal and county effluent, and other potential-sources of water (such as deeper aquifer water) as cooling pond makeup in order to reduce the use of potable ground water. The Licensee shall investigate alternative methods to reduce the amount of potable water needed for use as cooling pond makeup water, such as, but not limited to conservation and treatment/ use of lower quality water. The investigation shall include all municipal and county sewage treatment facilities within Polk County. As a goal, the Licensee shall seek to develop and implement a program to maximize the use of alternative water sources. The results of the investigation and compliance shall be included in each supplemental application.

In subsequent applications for this site, if technically and economically Feasible, the Licensee shall incorporate reuse of treated effluent or alternative lower quality water sources into its design. It is the intent that to the extent that it is technically and economically Feasible, the Licensee shall in subsequent applications include in its design that reuse/alternative water sources shall constitute an increasing proportion of the Licensee total cooling water makeup requirements.

[CUP 92-06 Condition No. 23. Polk Comprehensive Plan Policy 2.306-Bl, 2.306-B2, and 3.105D-2]

V. Sinkhole Response and Clean-up Plan

The Licensee shall develop and submit to Polk County for approval six months prior to commencing operation of the first commercial unit, a plan detailing the emergency measures to be implemented if such an event occurs, and a remedial action plan to clean-up the impacted aquifer(s) and surface water(s) if a sinkhole occurs on the DEF site.

[CUP Finding 20-2]

W. Inspection and Permit Compliance Fees

Polk County shall be allowed to inspect any and all construction, operating, monitoring, sampling and remediation activities which the Licensee conducts onsite. Polk County shall provide notice to the Licensee prior to performing any such inspection. The Licensee shall be required to pay Polk County all generally applicable Building Code compliance and inspection fees; provided, however, that such fees shall be adjusted to reasonably reflect actual cost to the County.

[Polk County Building Codes]

X. Building Construction Code Compliance Review Agreements

Prior to the commencement of construction, Polk County and the Licensee shall enter into an agreement on the following items:

1. responsibility for inspections.
2. types of inspections:
    a. site preparation
    b. installation of facilities
    c. need for threshold inspection
3. fees to be paid by the Licensee to Polk County for the Building Code Compliance Review.

[Polk County Building Codes]

Y. Reporting

The Licensee shall submit all reports and submissions to the Director of the Polk County Community Services Department for information purposes.

Z. Noise

The Licensee shall comply with applicable local noise ordinances, if any, during construction and operation of the Certified Facility.

[Polk County Noise Control Ordinance (Ordinance Number 2014-030 as amended)]

IX. HILLSBOROUGH ENVIRONMENTAL PROTECTION COMMISSION, HILLSBOROUGH COUNTY AND TAMPA PORT AUTHORITY

A. Alafia River Crossing

The crossing of the Alafia River by the natural gas pipeline lateral shall be accomplished underneath the riverbed so as not to interfere with flow or use of the river for boating, swimming or other recreational activities. No vegetation will be cleared along the banks

of the Alafia River at the pipeline river crossing for a distance of 25 feet back from the stream bank.

B. Buffering and Screening

1. Landscape Buffer

A 10 foot landscape buffer, as required for a Group 1 use adjacent to a single family residential use, or such other buffer as may be appropriate based on the surrounding land use, site layout and the height and bulk of the metering station facilities, shall be provided for the metering station site. If deemed appropriate by the County, the 10-foot landscape buffer shall include screening in accordance with Section 2.5.14.2.1 of the Hillsborough County Land Development Code (dated March 4, 1992). In no case shall the buffering and screening requirements exceed those for a Group 2 use adjacent to a single family residential use, as specified in Table 2.5.3, Buffer Matrix, and Section 2.5.14.2.4 of the Hillsborough County Land Development Code. Notwithstanding this Condition, provisions of Section 2.5.14.7 and 2.5.14.8 dealing with "Alternative Buffers and Screening" and "Existing Vegetation", respectively, shall also be allowed if existing site conditions are such that the provisions would be applicable. Landscaping within the buffer area shall be provided in accordance with section 3.6.3, Landscaping Standards and Guidelines, of the Hillsborough County Land Development Code.

2. Radio Tower

Any radio or other communications tower located on the metering station site whose purpose is to provide communications for the operation of the natural gas pipeline and metering station shall meet the setback requirements and height limitations of the AR zoning district and shall comply with the standards listed in Sections 2.6.4.95.1 through 2.6.4.95.5.

C. Land Alteration Review

1. Exemption

Once the Right-of-Way for the natural gas pipeline lateral and the specific site for the metering station have been selected, the Licensee shall determine, in consultation with the County and EPC, whether construction of the pipeline or the metering station will adversely impact any environmentally sensitive area, as defined in Division 7.3 of the Hillsborough County Land Development Code (including Wetlands pursuant to Chapter 1-11, Rules of the EPC). In the event the Licensee so determines, and the County and EPC concur, that pipeline or metering station construction will not adversely impact an environmentally sensitive area, that facility shall be exempt from land alteration review as provided in Section 3.5.1.3.3.(7) of the Hillsborough County Land Development Code. Pipeline crossings of environmentally sensitive areas accomplished by drilling or boring underneath the surface, such that the land surface or bottom of inundated portions of the environmentally sensitive area is not disturbed, shall not constitute an adverse impact to the environmentally sensitive area. For purposes of verification that environmentally sensitive areas will not be adversely impacted, the Licensee shall submit aerial photographs (at scale of l" = 400' or greater) of the pipeline Right-of-Way and metering station site showing the locations of proposed uses of drilling or boring construction techniques to the Hillsborough County Administrator and the Executive Director of EPC.

2. Tree Replacement

Even if the pipeline or metering station is determined exempt from land alteration review as provided in Section 3.5.1.3.3.7 of the Hillsborough County Land Development Code, the Licensee shall be required to comply with Section 3.5.3.3.5, requiring replacement of 50 percent of the total DBH of any tree having a DBH of 24 inches or greater or any clump of trees, as defined in Section 7.3, that is to be removed from the metering station site or the pipeline Right-of-Way. A tree survey shall be conducted in accordance with Section 3.5.2.2.17.5 of the Hillsborough County Land Development Code, except that it shall only identify those trees requiring replacement under this Condition. The survey shall be accomplished in conjunction with the ecological survey provided for in paragraph D. [Ecological Survey] and shall be limited to the area where the pipeline Right-of-Way crosses Sections 5, 8 and 9 of Township 31S, Range 22E. As provided in Section 3.5.3.3.5 of the Hillsborough County Land Development Code, "total DBH removed" shall be the sum of the DBH's of all trees being removed from the metering station site or pipeline Right-of-Way that require replacement. DBH shall mean Diameter at Breast Height, as defined in Section 7.3 of the Hillsborough County Land Development Code. Replacement of trees in accordance with this Condition may occur offsite or outside the pipeline Right-of-Way and shall be accomplished in accordance with Sections 3.5.3.3.6 through 3.5 3.3.10 dealing with replacing, relocating, planting and transplanting of trees. As provided in Section 3.5.4 of the Hillsborough County Land Development Code, the Licensee may contribute money, as approved by the County under generally applicable criteria, to the Environmental Restoration Fund in lieu of or as part of the tree replacement requirements of this Condition.

3. Information Submittal for Land Alteration Review

In the event the Licensee determines, in consultation with the County and EPC, that pipeline and/or metering station construction will adversely impact an environmentally sensitive area, the Licensee shall submit information necessary to demonstrate compliance with Hillsborough County's land alteration review standards. This information filing shall be on the form provided by the County for an application for a Land Alteration Permit. Submission requirements specified in Section 3.5.2.2 of the Hillsborough County Land Development Code shall be met, except for:

a. Item #2 - Evidence that the applicant is the authorized agent of the owner will be provided for the metering station site but not for the pipeline Right-of-Way. Prior to the initiation of pipeline construction, the Licensee shall provide the County with evidence of its legal right to construct the pipeline.

b. Item #5 - The legal description, section, township and range, folio number and street address, if any, will be provided for the metering station; however, only the section, township and range and folio numbers will be provided for the pipeline Right-of-Way.

c. Item #12 requiring a project compatibility plan for a development project proposed adjacent to a public or private, non-profit natural preserve is not applicable.

d. Item #14 - Soil boring obtained for purposes of detailed engineering required for the pipeline and metering station will be provided to the County.

e. Item #17(1) through (4) and (6) through (8) shall be provided for the metering station only. Item #17 (9) (typical cross section of the area to be excavated) shall be provided for the pipeline trench and jack and bore construction.

4. Land Alteration Review Standards and Guidelines

Land alteration standards and guidelines as listed in Section 3.5.3 shall be followed, except it is recognized that:

a. Trees having a DBH of 5 inches or greater within the area between 25 feet and 100 feet of the Alafia River bank may need to be removed for construction of the pipeline lateral and such construction in support of a certified electric power generating facility would constitute a case of overriding public interest for purposes of Section 3.5.3.3.(4).

b. Planting of replacement trees or preservation of significant or essential upland habitat, if required, may not be possible onsite, i.e., within the boundary of metering station site or the pipeline Right-of-Way. If required, planting of replacement trees and/or preservation of significant or essential upland habitat may be accomplished offsite in accordance with Section 3.5.3.4.2.6. As provided in Section 3.5.4 of the Hillsborough County Land Development Code, the Licensee may contribute money as approved by the County under generally applicable criteria, to the Environmental Restoration Fund in lieu of or as part of the tree replacement requirements of this Condition.

c. Criteria, exceptions or exemptions in Section 3.5 for utility installation or installation of utility lines, such as Section 3.5.3.4.1.2.4 concerning setbacks, Section 3.5.3.5.2 concerning retention of natural plant community vegetation, and Section 3.5.3.4.2.2.4(c) concerning protection of xeric and mesic habitats shall be applicable to the natural gas pipeline lateral.

d. For purposes of determining compliance with Section 3.5.3.4.2.2.3 concerning preservation of significant wildlife habitat, the clearing for and underground construction of the natural gas pipeline lateral shall be considered a design feature that allows for the safe passage of wildlife and shall not be considered to result in fragmentation of a wildlife corridor.

D. Ecological Survey

1. No later than 120 days prior to the initiation of clearing activities within the gas pipeline lateral Right-of-Way, an ecological survey shall be conducted to identify the presence of threatened or endangered species (plants and animals), as defined in the SCA in Tables 2.3.6.9 and 2.3.6.10, in the Right-of-Way based on range and habitat. This survey shall also identify the location of any wading bird colonies. Results of this survey shall be submitted to the Hillsborough County Administrator and the Hillsborough County EPC at the same time the survey results are submitted to the Florida DEP and FWC. If it is determined that any of those species will be adversely affected by the construction of the pipeline lateral, the Licensee shall consult with DEP, the County and FWC to determine the appropriate steps to be taken to avoid, minimize, mitigate or otherwise appropriately deal with, any adverse impact to resources within those agencies' respective jurisdictions. The results of this survey shall be considered sufficient to meet the submission requirements of Hillsborough County's land alteration standards review.

2. Procedure for Review

The County shall complete review of the Licensee's land alteration submittal, ecological survey and affected environmentally sensitive area within the same time frame and generally applicable procedure established for such review in the Conditions of Certification for other agencies.

E. Inspections

Per Section 3.5.2.1.2.2.9 of the Hillsborough County Land Development Code, the County Administrator may conduct periodic inspections of the metering station site and pipeline Right-of-Way to determine compliance with these Conditions.

F. Site Plan Review

1. Information Submittal for Site Plan Review

Prior to construction, the Licensee shall submit information on the natural gas metering station site as appropriate for administrative review of a Limited Use. Submission of such information shall be for the purpose of determining compliance with applicable Hillsborough County review standards and criteria for approval of a Limited Use, as provided in the Hillsborough County Land Development Code, Division 2.6. Applicable Limited Use Permit submission requirements, as listed in Section 2.7.9.7.3 of the Hillsborough County Land Development Code, including completion of the Hillsborough County Limited Use application form attached as Attachment F (Checklist of Submittal Requirements for Limited Use), shall be met.

2. Procedure for Review of Site Plan

Hillsborough County shall promptly review for completeness the information submitted by the Licensee for a site plan review. For the purposes of this Condition, completeness shall mean that the information submitted is both complete and sufficient. If the information is found to be incomplete, Hillsborough County shall notify the Licensee within 30 days of the date the submittal is filed. Failure to so notify the Licensee constitutes a finding of completeness. The Licensee shall send Hillsborough County a reminder notice 20 days after the submittal is filed.

Within 90 days of the Licensee's complete information submittal, Hillsborough County shall determine whether there is reasonable assurance of compliance with the County's site plan review standards and criteria for approval of a Limited Use. If it is determined that reasonable assurance has not been provided, the Licensee shall be notified with particularity and possible corrective measures suggested. Failure to notify the Licensee in writing within 90 days of receipt of the complete information submittal shall constitute a compliance verification. The Licensee shall send Hillsborough County a reminder notice 70 days after the submittal is filed.

If Hillsborough County does not object within the time period specified above, the Licensee may begin construction pursuant to the terms of the Conditions of Certification and the subsequently submitted construction details.

Neither the information specified in this Condition, nor referral of a site plan-related issue for dispute resolution pursuant to paragraph J. [Dispute Resolution] shall affect other Conditions or operate as a stay on the construction or other activities of the Licensee which are not in dispute.

G. Hillsborough County Right-of-Way Use

Hillsborough County shall authorize each natural gas pipeline road right-of-way crossing or use within 30 days of the submission of a complete use permit application for such natural gas pipeline. In construction of the natural gas pipeline lateral, the Licensee shall follow

the standards of Hillsborough County for a right-of-way use permit unless the Licensee and Hillsborough County subsequently agree to the contrary.

H. Environmental Protection Commission Review

1. Pipeline crossing of jurisdictional Wetlands or open water habitat accomplished by drilling or boring underneath the surface, such that the land surface of the Wetland or the bottom of the open water habitat is not disturbed, shall not constitute destruction or degradation of the Wetland or open water habitat under EPC's regulations. EPC shall review any such crossings as identified by the Licensee, along with their related construction plans, and if EPC agrees and also determines that the proposed construction methods will avoid adverse impact to waters of the County, no further EPC review will be required for those crossings. Temporary clearing with restoration of natural contours and opportunity for natural revegetation shall not constitute destruction or degradation of the Wetland or open water habitat, provided the vegetation does re-establish, and shall not be subject to EPC review except to verify that the vegetation has re-established. The Licensee shall provide a letter of commitment to EPC to ensure re-establishment of the natural vegetation. If pipeline construction is accomplished in a different manner such that Wetlands or open water habitat may be degraded or destroyed, such pipeline construction shall be subject to full EPC review in accordance with this Condition and the County's land alteration review in accordance with paragraph C. [Land Alteration Review].

2. EPC and the Licensee agree to abide by the approval of the Corridor through the State Site Certification process and the Right-of-Way through the Post-Certification Process, both of which may weigh other public issues than Wetlands protection. The Licensee may, at its own discretion, propose a Right-of-Way or a narrowing of the Corridor prior to completion of the State Site Certification process. In the event, EPC and the Licensee agree to abide by the approval of the narrowed Corridor or Right-of-Way through the State Site Certification process.

3. To initiate the EPC review process, the Licensee will submit to EPC the equivalent of the appropriate fee, as established in Chapter 1-6.05(10) of EPC's rules, and a request that a Wetland delineation be performed by EPC for all Wetlands within the Corridor using EPC's aerial photographic delineation method or field delineation method. EPC shall complete the Wetland delineation within 30 days of receipt of a complete Wetland delineation request and payment of the fee. EPC sign-off on the Wetland delineation shall be provided in writing within 30 days of a satisfactory completion of the delineation survey.

4. To minimize impact to Wetlands, the Licensee agrees that it shall consult with EPC as a part of its selection of a Right-of-Way within the certified Corridor, and, to the extent Practicable, avoid locating the Right-of-Way in Wetlands.

5. EPC shall review the Licensee's Right-of-Way selection and decide whether Wetland impacts have been avoided to the extent possible, given environmental, land use and engineering considerations. The Licensee's Right-of-Way selection shall be depicted on the same aerial photographs as were used for the Wetland delineation. If the Licensee elects to propose a Right-of-Way prior to the completion of the State Site Certification process as provided above, this review shall be completed in sufficient time to resolve through the certification hearing any Wetland avoidance issues remaining between EPC and the Licensee. If EPC reviews the Licensee's Right-of-Way selection as part of a post-certification review process, EPC's review shall be completed within 30 days following submittal of aerial photographs showing the Right-of-Way location. The results of this post-certification review process shall be

an agreed upon Right-of-Way, and, thereafter, Right-of-Way location shall not be an issue in the EPC review process.

6. Upon completion of the Wetland delineation and review of the Right-of-Way by EPC, the Licensee will submit the equivalent of the appropriate fees, as established in Chapter 1-6.05(11) of EPC's rules for Wetland mitigation, and submit a Development and Mitigation Approval package in accordance with EPC guidelines, providing a complete explanation and justification of the proposed method of construction and any proposed mitigation to EPC asking that EPC consider all impacts within a designated Right-of-Way. This submittal and EPC's consideration of it may include other public issues than Wetlands protection.

7. EPC will review the submittal and decide whether Wetland impacts within the Right-of-Way have been minimized given the environmental, land use and engineering considerations. EPC shall notify the Licensee of its decision in writing within 30 days of receipt of a complete submittal. Such notice shall specify the basis for EPC's conclusion, and possible corrective measures shall be suggested, if considered necessary.

8. The Licensee shall provide construction plans for the Right-of-Way and suitable kind for-kind, acre-for-acre Wetland mitigation or upland mitigation, where appropriate under Chapter 1-11, for all Wetland impacts. This mitigation can be proposed either on the Licensee's own property or by written consent of the property owner, on the property of others in a mitigation bank according to EPC's standard mitigation criteria.

9. Upon review of the mitigation proposal required by paragraph H.6 above and any modification that may be necessary to bring any required mitigation proposal into compliance with EPC's non-procedural standards, EPC will approve (by letter) the mitigation proposal and forward the attached Mitigation Agreement (see Attachment G – Approval & Mitigation Agreement Form) to the Licensee for execution. Review of the mitigation proposal and any modifications shall be accomplished with 30 days of the Licensee's submittal of all necessary information.

10. Once the Mitigation Agreement is executed and recorded, the Licensee may proceed with construction.

11. EPC shall make every effort to conform as closely as possible to-the procedures and timetables established in the Conditions of Certification for other Wetland review agencies.

I. Submerged Lands

The Tampa Port Authority (TPA) or its staff shall issue the appropriate concurrence for a natural gas pipeline crossing of lands and waterways under the jurisdiction of the TPA within 30 days of the submission of a complete application for such natural gas pipeline crossing demonstrating compliance with applicable provisions of the TPA's Rules for Sovereignty Lands Management (January 4, 1984). In the construction of the natural gas pipeline lateral, the Licensee shall follow the applicable standards of the TPA's Rules for Sovereignty Lands Management (January 4, 1984), unless the Licensee and TPA subsequently agree to the contrary.

J. Dispute Resolution

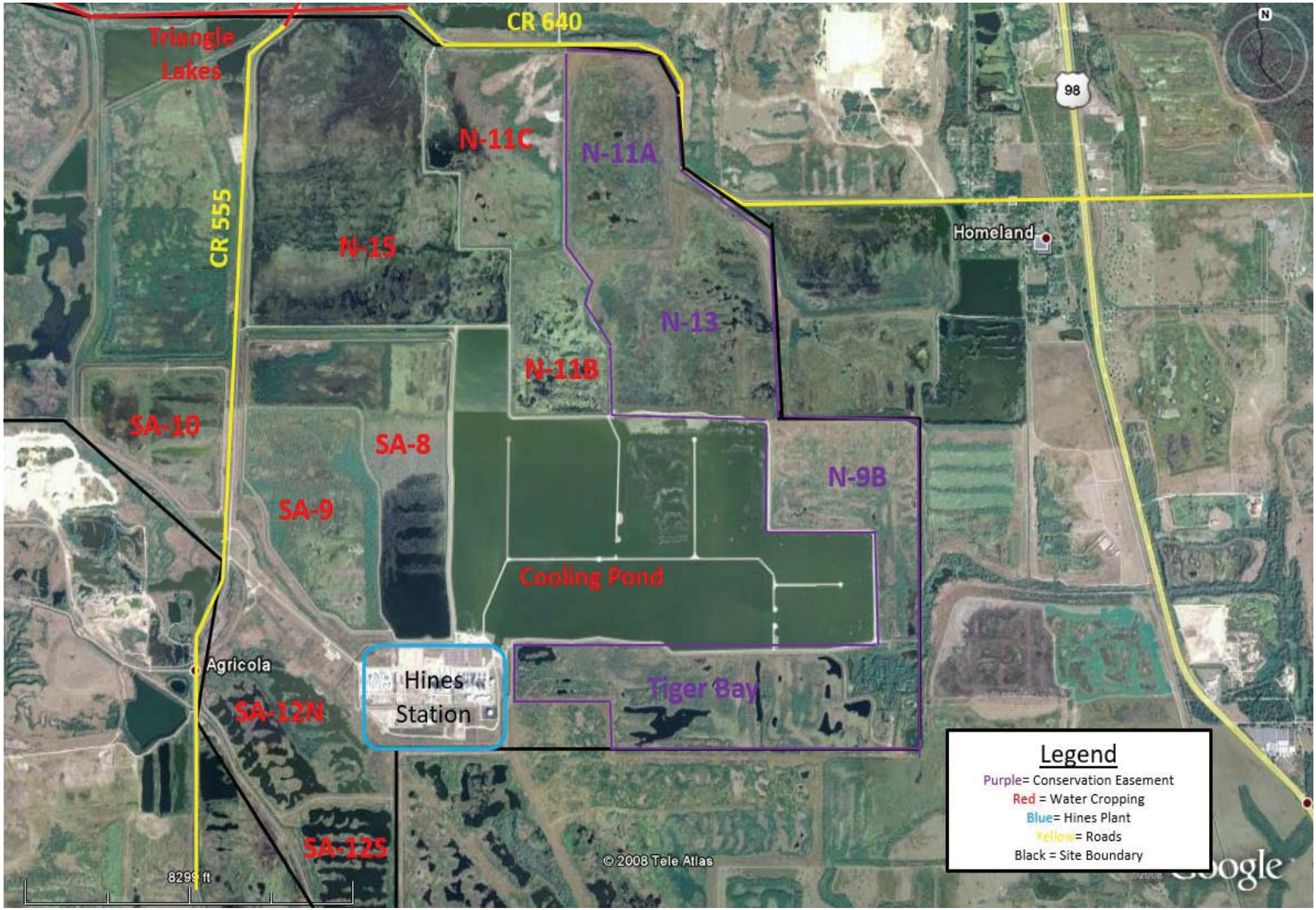
It is understood that the Licensee, the County, EPC, and TPA shall strive to resolve disputes by mutual agreement. All parties to this stipulation may take whatever position(s) they deem appropriate with respect to any dispute resolution mechanism to be incorporated in Conditions of Certification imposed by the Governor and Cabinet sitting as the Siting Board.

[Final Order of Certification, 1/27/1994]

HISTORY

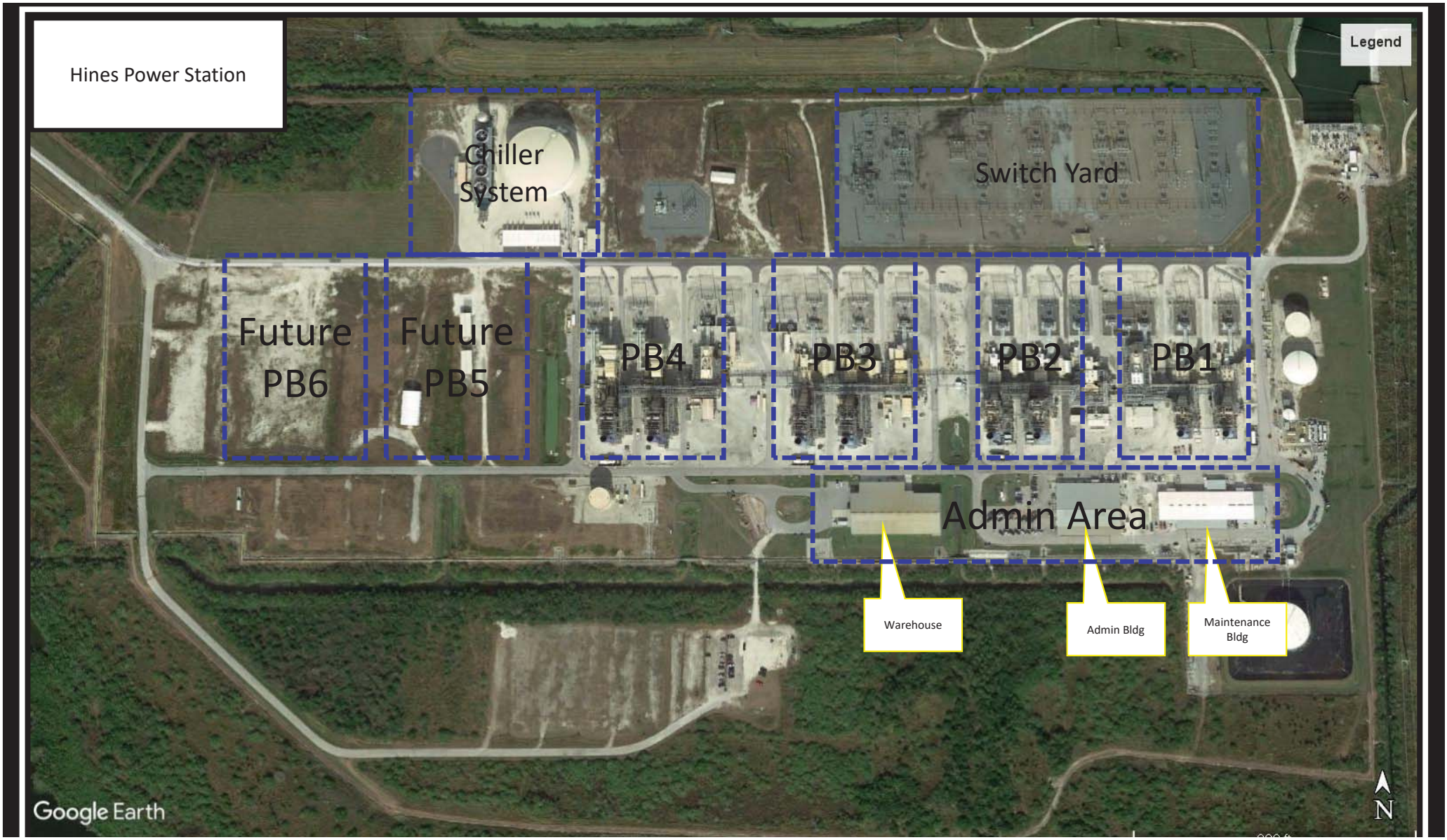
Certification Issued 01/27/94; signed by Governor Chiles
Modification (A) 05/18/95; signed by Secretary Wetherell
Modification (B) 12/21/95; signed by Secretary Wetherell
Modification (B) 08/18/97; signed by Secretary Wetherell
Modification (C) 12/24/97; signed by Secretary Wetherell
Modification (D) 01/27/99; signed by Acting Secretary Green
Supplemental Certification issued 06/04/01; signed by Governor Bush
Modification (E) 07/08/03; signed by Program Administrator Oven
Supplemental Certification issued 09/11/03; signed by Governor Bush
Modification (F) 06/10/05; signed by Program Administrator Oven
Supplemental Certification issued 06/08/05; signed by Governor Bush
Modification (G) 03/29/07; signed by Program Administrator Halpin
Modification (H) 02/12/09; signed by Program Administrator Halpin
Modification (I) 07/31/12; signed by Program Administrator Mulkey
Modification (J) 07/06/2022; signed by Program Administrator Mulkey
Modification (K) 01/09/2025; signed by Deputy Director Mulkey
Modification (L) XX/XX/2026; signed by Program Administrator Robertson

ATTACHMENT A: MAPS



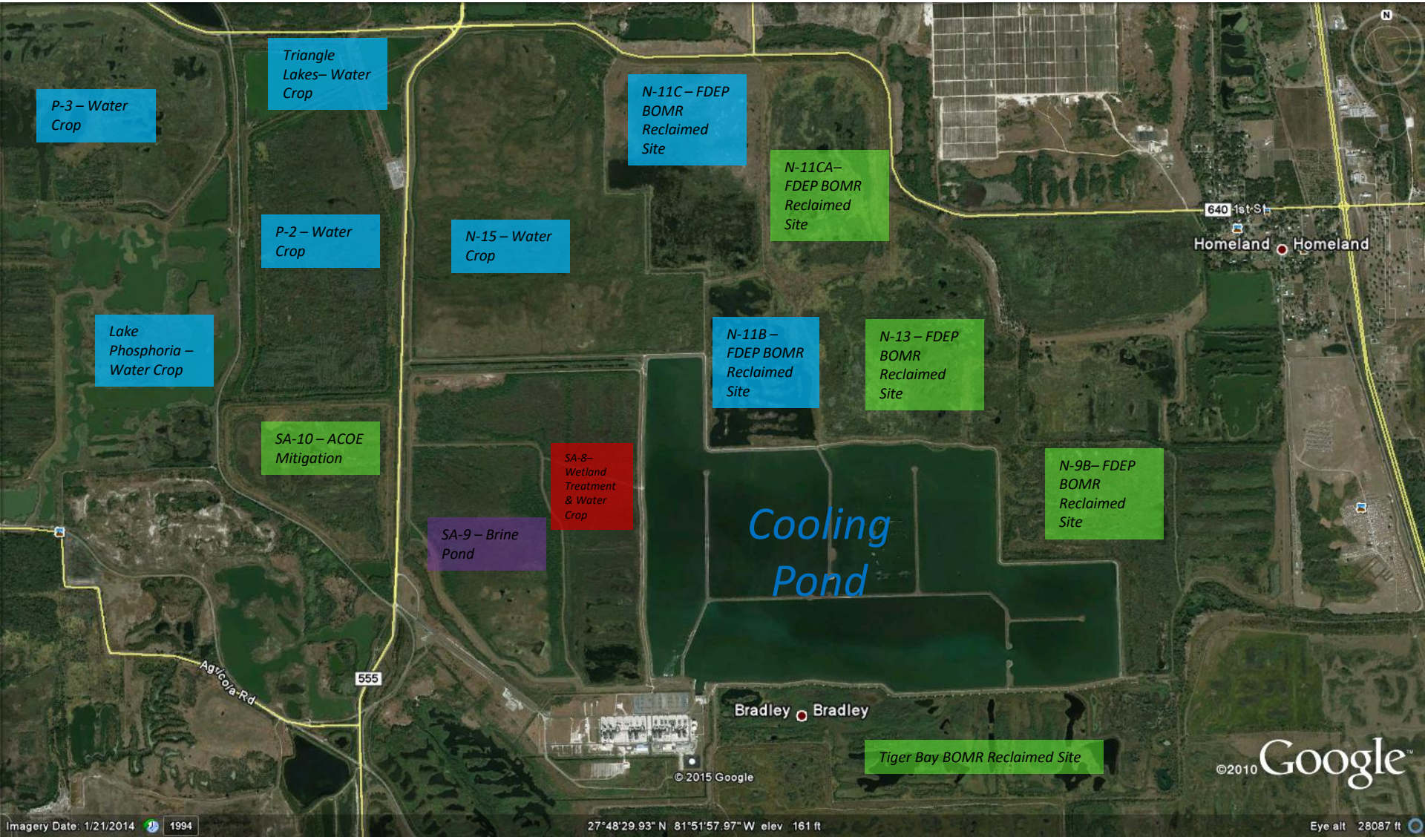
Please note that Site Boundary to the west and south is not fully shown due to constrains with the Google Maps aerial.

TRIANGLE LAKES
P-3
N-15
N-11C
N-11A
P-2
LAKE PHOSPHORIA
N-13
N-11B
SA-8
SA-10
SA-9 (BRINE POND)
COOLING POND
N-9B
N-16
HINES ENERGY STATION
TIGER BAY CONSERV. EASE.
SA-12N
SA-12S
TIGER BAY STATION
NORTH
Progress Energy Florida, Inc. - Hines Energy Facility Ortho
PICKETT
SURVEYING & PHOTOGRAMMETRY
GRAPHIC SCALE
(IN FEET)
1 inch = 1000 ft.

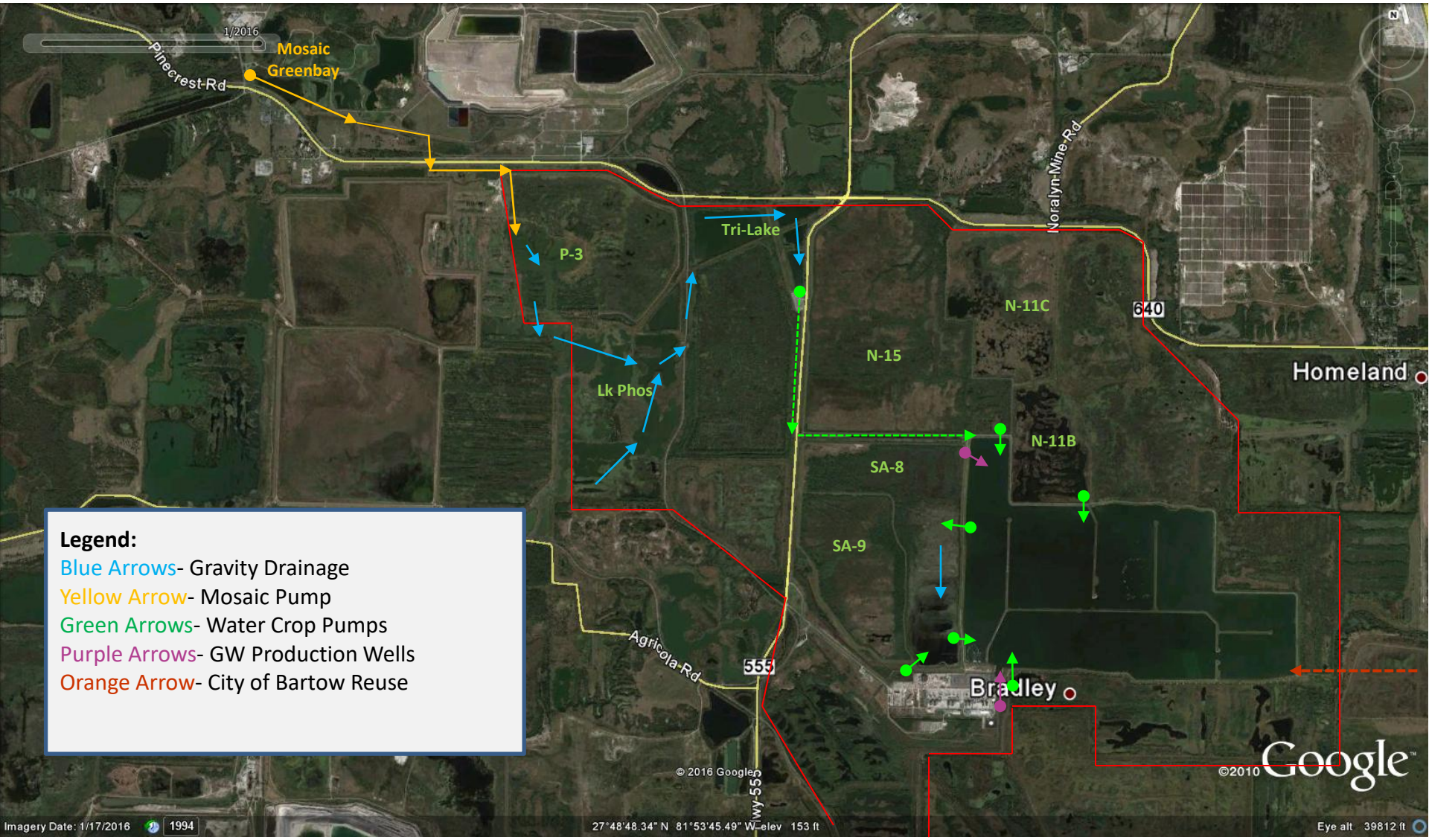

Hines Power Station
Legend
Chiller System
Switch Yard
Future PB6
Future PB5
PB4
PB3
PB2
PB1
Admin Area
Warehouse
Admin Bldg
Maintenance Bldg
Google Earth
N

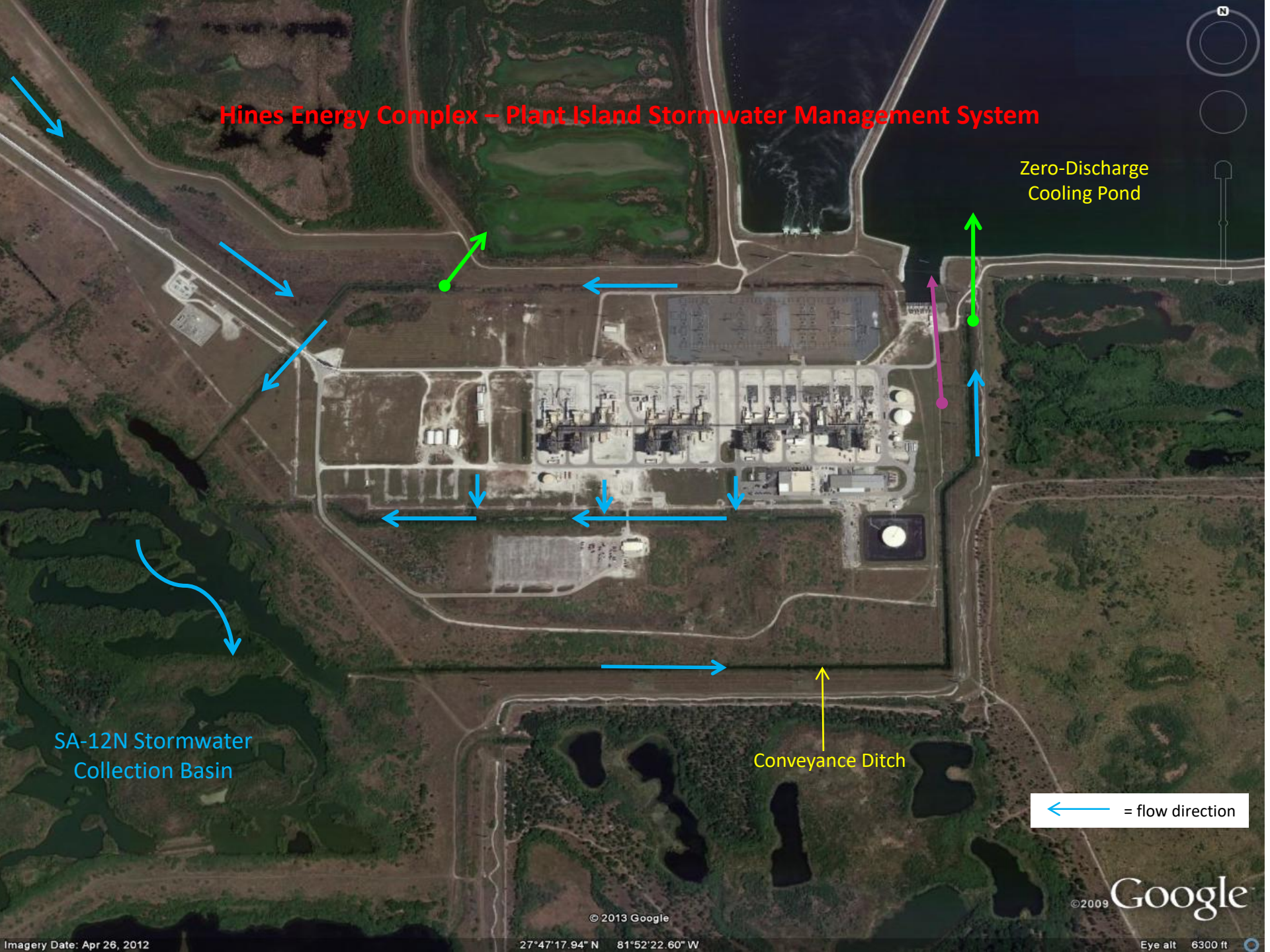
ATTACHMENT B: STORMWATER MANAGEMENT SYSTEM PLAN

Hines Energy Complex Impoundments

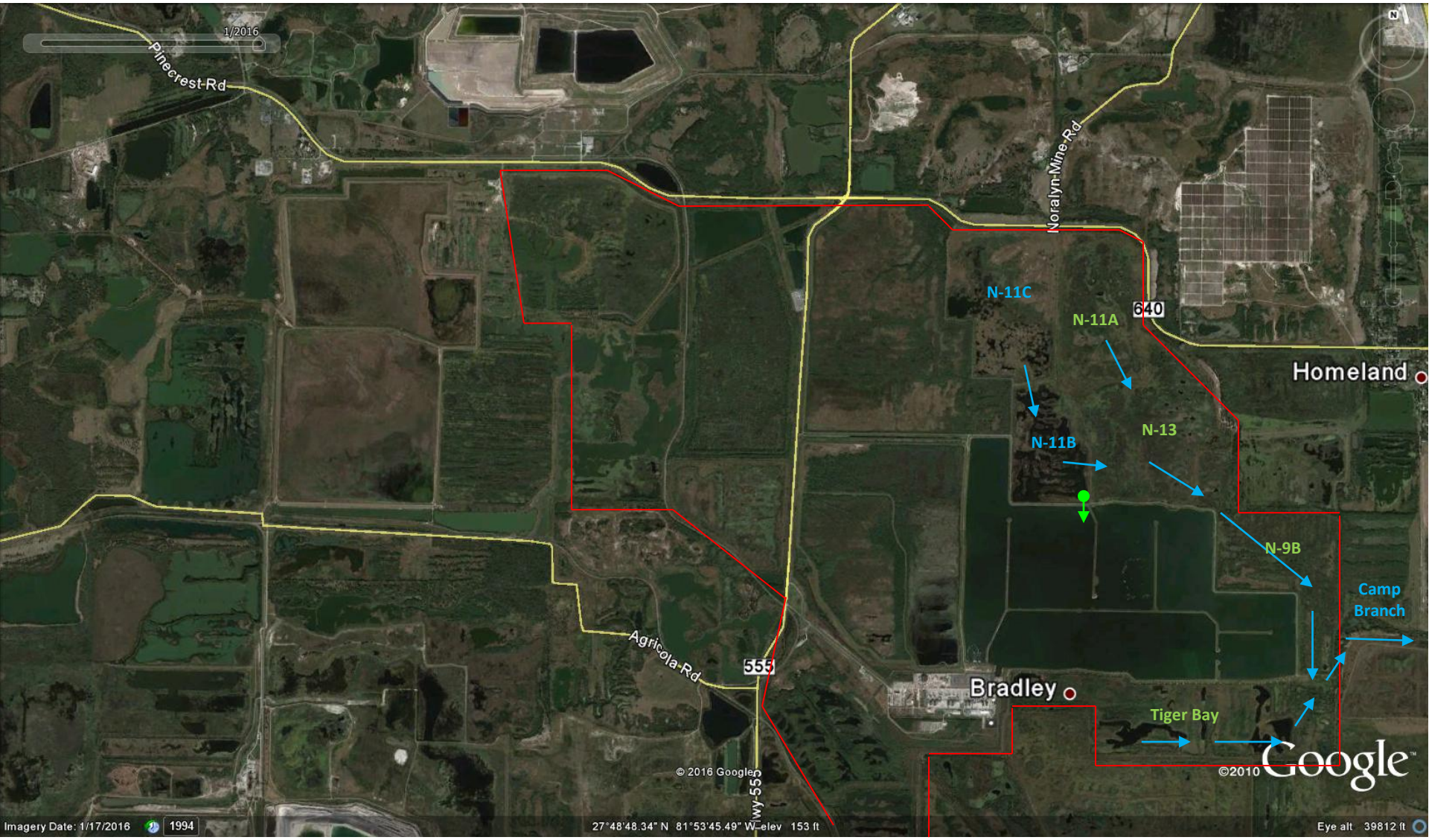


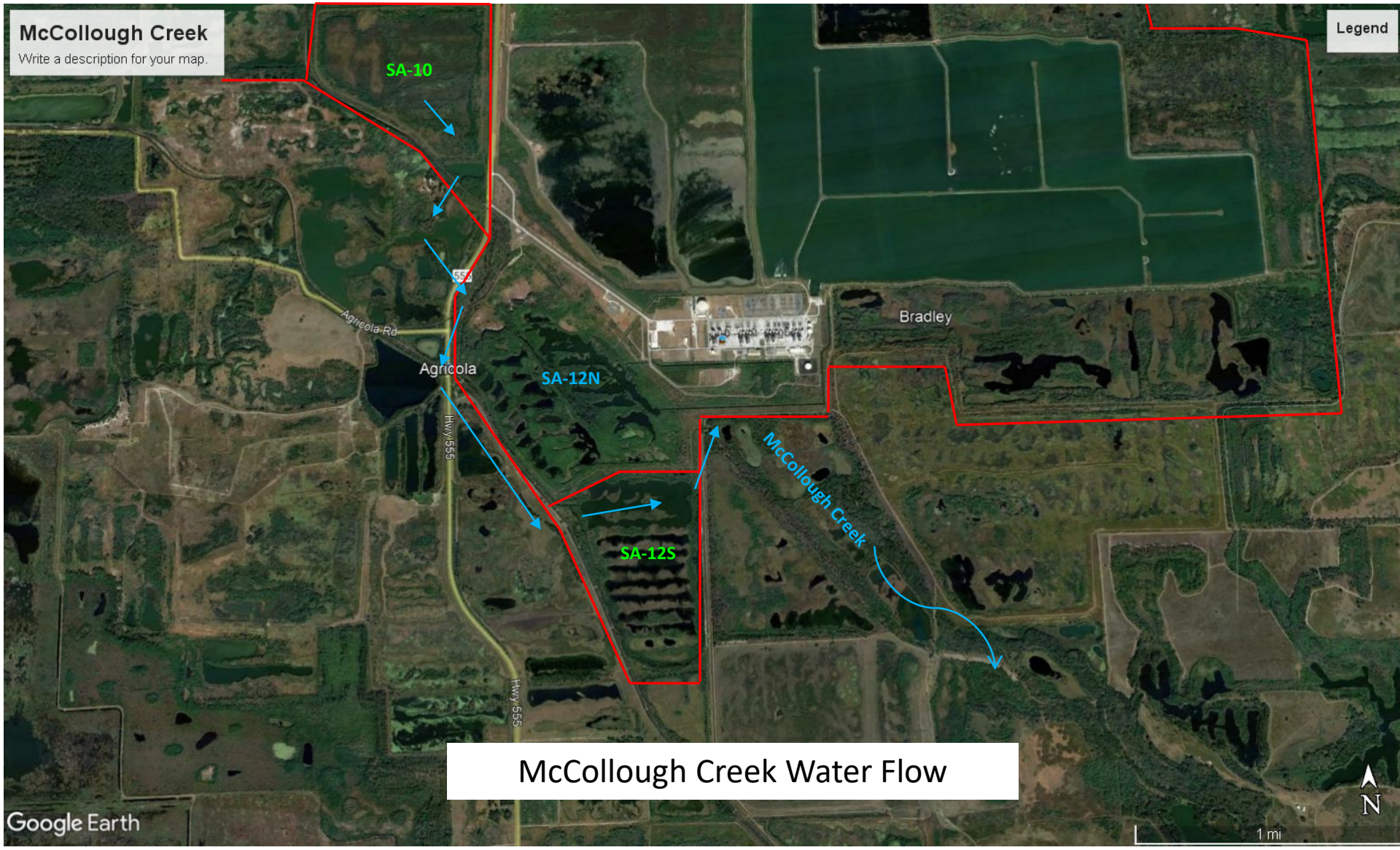
Hines Energy Water Flow




Hines Energy Complex – Plant Island Stormwater Management System
Zero-Discharge Cooling Pond
SA-12N Stormwater Collection Basin
Conveyance Ditch
= flow direction
© 2013 Google
©2009 Google
Imagery Date: Apr 26, 2012
27°47'17.94" N 81°52'22.60" W
Eye alt 6300 ft

Camp Branch Water Flow

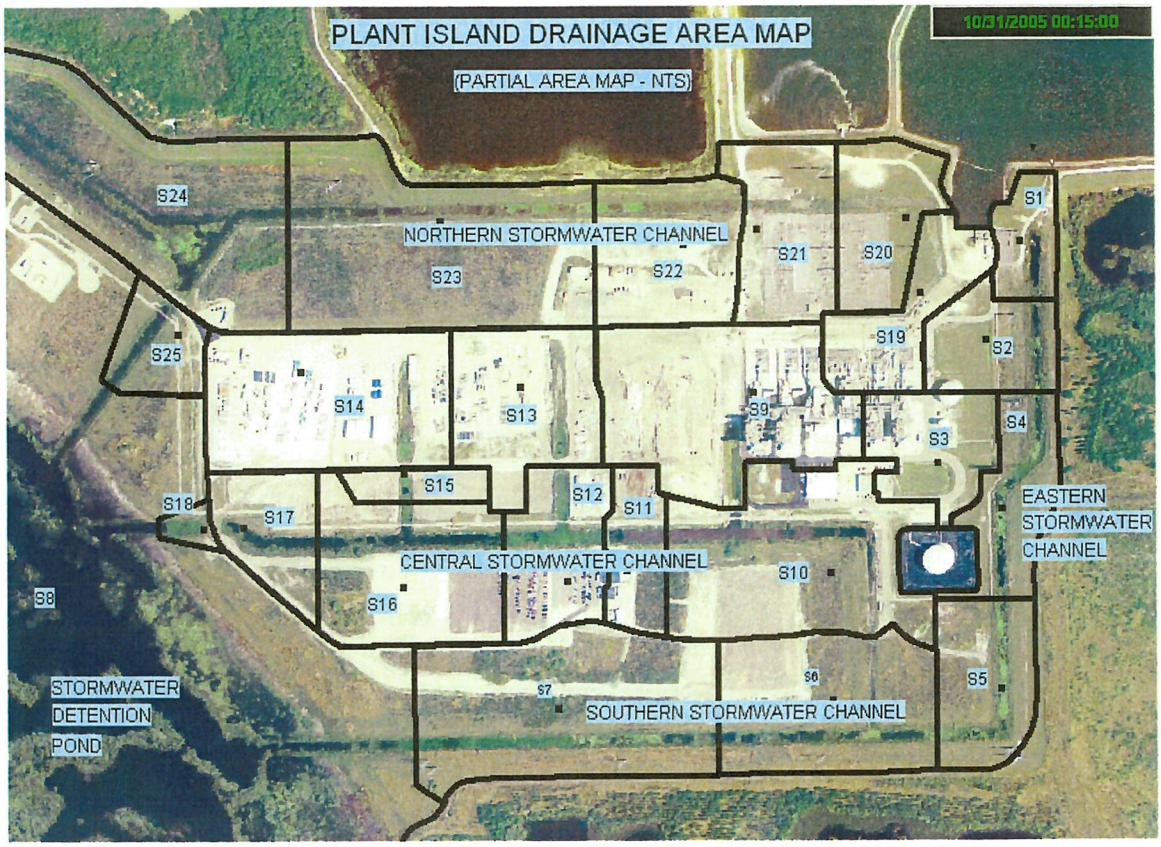



McCollough Creek
Write a description for your map.
Legend
SA-10
Agricola Rd
Agricola
Hwy 555
SA-12N
Bradley
McCollough Creek
SA-12S
Hwy 555
McCollough Creek Water Flow
Google Earth
1 mi
N

PROGRESS ENERGY FLORIDA INC.
- HINES ENERGY COMPLEX -

FINAL REPORT

PLANT ISLAND AREA STORMWATER MANAGEMENT MASTER PLAN ANALYSIS



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Fax: (813) 977-3722

February 2007

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1 Introduction

1.1 Project Location and Description

The Hines Energy Complex (HEC) is owned and operated by Progress Energy Florida Inc. (PEF), and is located in the southwest portion of Polk County, just southwest of Bartow, Florida. The site on which the facility is situated was formerly used for phosphate mining. County Road 640 parallels the northern berm of the HEC site, while County Road 555 (from which the power plant operations areas can be accessed) traverses the HEC site property in a general north-south direction (refer to Appendix A, Location Map).

Several water storage areas and a large, bermed "cooling pond" have been created from the reclaimed phosphate mining digs, and several old mining areas remain within the HEC site boundaries. The Cooling Pond (parcel N-16 – refer to Appendix A, Figure 2.1.2-1) supports a phased project that includes six combustion turbines (Power Blocks), each rated at 500 MW. Currently, Power Blocks 1, 2 and 3 are on-line, and the construction of Power Block 4 is in progress. Two additional Power Blocks may also be constructed at the HEC site in the future.

The Plant Island area, which contains the power plant operations facilities, includes the SA-11, SA-12N and SA-13 parcels within the HEC site (refer to Appendix A, Figure 2.1.3-1B). All Power Blocks are located in the SA-11 area. The Stormwater Detention Pond (Detention Pond) for Plant Island is located in SA-12N. (Note: the original SA-12 was subdivided into SA-12N and SA-12S during the construction of Power Block 1.) The SA-13 area contains the HEC Entrance Road and a portion of the Switchyard Area.

The Plant Island Stormwater Management System (PI-SMS) was designed and constructed during the Power Block 1 Phase. Two parallel channels (Northern Stormwater Channel and Central Stormwater Channel), along with a few laterals were constructed to collect and convey the stormwater from most of the Plant Island area to the site's Detention Pond (refer to Appendix B, Plant Island Drainage Area Maps; and Appendix I, Drainage Area Map). The Detention Pond was constructed in the southwestern portion of the site. Another channel (Southern Stormwater Channel) was constructed to convey the stormwater from the Detention Pond to a fourth constructed channel (Eastern Stormwater Channel), where a pump station was installed at the northern end. From this northeast corner of the Plant Island site, the stormwater is pumped into the adjacent HEC Cooling Pond (N-16) as a source of "make-up" water. The PI-SMS is a self-contained, "no offsite discharge" system.

Each Power Block has its own internal drainage system that discharges into the PI-SMS. The main stormwater collection and conveyance systems within the Plant Island site have undergone minor modifications during the construction of Power Blocks 2 and 3, and will be further modified according to the final design for Power Block 4.

1.2 Purpose and Scope

The HEC site is within the jurisdiction of the Southwest Florida Water Management District (SWFWMD). Although the HEC Site Certification and Supplemental Site Certifications were/are ultimately approved by the Florida Department of Environmental Protection (FDEP), all aspects related to stormwater issues have been, and are being reviewed and approved by SWFWMD in support of FDEP. One of the Power Block 3 Post Site Certification requirements from SWFWMD/FDEP is for PEF to submit a master stormwater management plan and supporting calculations for the Plant Island Stormwater Management System.

Jacobs Engineering (JE) has been retained by PEF to perform this work that includes conducting an hydraulic analysis of the PI-SMS, as originally designed and subsequently modified; and developing a set of drawings to represent the Plant Island Area Stormwater Management Master Plan (PIA-SMMP).

In order to accomplish the first task, JE has evaluated the capacity of Plant Island's originally designed and modified primary stormwater drainage and storage system, as well as the operation of the existing stormwater transfer pumps by applying the U.S. Environmental Protection Agency's (EPA's) Storm Water Management Model, Version 5 (SWMM 5) to the stormwater system. The SWMM 5 hydraulic analysis includes assessment of the system's responses to the 25-year/24-hour, 50-year/24-hour, 100-year/24-hour and 500-year/24-hour design storm events, as well as to the Probable Maximum Precipitation (PMP) event.

In order to accomplish the second task, JE has compiled and merged existing design/construction plans developed by others, and has supplemented this information by referencing as-built drawings and data where design information was not available. The plan set produced during this project is intended for information only, and should not be used for any construction purposes.

The analysis of the PI-SMS, and the production of the PIA-SMMP are documented in this report. Recommendations are also provided for improving the operation and usefulness of the PI-SMS.

2 Evolution and Description of the Stormwater Management System for the Plant Island Area

The Plant Island area consists of the SA-11, SA-12N, and SA-13 parcels. Prior to the mining of the area by others, a majority of the Plant Island area drained south to McCullough Creek, which is contained in the Peace River Basin (refer to Appendix B, Figure 2.3.4-2). Only a very small portion of the site, at the northwest corner of the SA-12N parcel, once drained to the Alafia River. This small portion of SA-12N now drains to McCullough Creek, while the remainder of Plant Island is self-contained or internally drained, with no offsite discharge expected (refer to Appendix B, Dwg. No. swppp-1).

Please refer to Appendix I, PIA-SMMP Drawings, for details of the significant features of the PI-SMS to be described below.

2.1 Original Design Information (Power Block 1)

During the Power Block 1 Site Certification process that began in 1992, the conceptual design of the primary stormwater management system was initially developed with the Detention Pond located in the southern portion of the SA-12 parcel (now known as the SA-12S area) [refer to Appendix C, Section C-1, Figure 3.8.3-1 & 3.8.3-2]. During the permitting process, however, the Detention Pond was relocated to the northern portion of the SA-12 parcel (now known as the SA-12N area) [refer to Appendix C, Section C-1, Exhibit SN-2]. A dam (the SA-12 Separator Dam) was eventually constructed to isolate the current Plant Island area (SA-11, SA-12N and SA-13) from the proposed McCullough Creek Watershed Enhancement Area (SA-12S). The McCullough Creek Watershed Enhancement Transfer Ditch was also constructed along CR 555 and the CSX Railroad to carry stormwater from the SA-10 area, around SA-12N, to SA-12S, and eventually to the McCullough Creek Headwaters Area .

The current Plant Island Detention Pond was constructed in the SA-12N area, as indicated above, and the primary network of stormwater channels was also constructed within SA-11 and SA-13 at this time. The set of plans entitled: "Earthwork Plan and Construction Drawings for Plant Island Area & N-16 Initial Phase Cooling Pond," as designed by Dames & Moore (and dated 1994) provided the details of the original PI-SMS, as well as the site's original mass grading details. The Plant Island Containment Boundary (a.k.a., the outer drainage area boundary) was identified/established with the implementation of these plans. The minimum ground elevation along this boundary was/is elevation $165^{+/-}$ feet, NGVD.

Three channels were constructed in a general east-west direction along the northern berm and the southern berm, as well as within the central portion of the Plant Island site. These channels are respectively referred to as the Northern Stormwater Channel, the Southern Stormwater Channel and the Central Stormwater Channel (also refer to Appendix B, Plant Island Drainage Area Maps). A fourth channel, the Eastern Stormwater Channel, was also constructed in a general north-south direction along the eastern berm. The

Northern Stormwater Channel and Central Stormwater Channel were constructed to collect and convey stormwater runoff from the plant area to the Detention Pond. The Southern Stormwater Channel was constructed to convey stormwater from the Detention Pond to the Eastern Stormwater Channel. The Eastern Stormwater Channel was constructed to then convey stormwater flows northerly to its terminus, where a main pump station was installed. The pump station location at this northeast corner of the Plant Island area was just south of the Cooling Pond (N-16), the ultimate receiving waters for the pump and PI-SMS outflows.

The stormwater runoff from most of the SA-13 parcel and the "Switch Yard Area" portion of the SA-11 parcel was collected and conveyed by the Northern Stormwater Channel, through an 8-ft x 10-ft RCBC under the HEC Entrance Road, and into the Detention Pond. Most of the "Power Block Area" portion, and the northern half of the "Future Use Area" portion of the SA-11 parcel was drained by the Central Stormwater Channel, which at that time discharged by direct open channel into the Detention Pond. The Southern Stormwater Channel also drained the southern half of the "Future Use Area" portion of the SA-11 parcel, in addition to conveying the Detention Pond outflows. The Eastern Stormwater Channel also drained the eastern "Power Block Area" and "Future Use Area" portions of the SA-11 parcel, in addition to conveying the Southern Stormwater Channel outflows. The SA-12N parcel and a small portion of the SA-13 parcel, finally, drained directly into the Detention Pond.

The Site Certification documents for Power Block 1 indicate that the Detention Pond was originally intended to be maintained at a normal water elevation of 154 feet, NGVD (refer to Appendix C, Section C-1). The 500-year/24-hour-storm runoff volume was intended to be contained within the pond below the original top-of-bank elevation of 160 feet, NGVD. Also, the runoff from a Probable Maximum Precipitation event, which was estimated to be 31 inches of rainfall within a 6-hour duration, was intended to be completely contained within the Plant Island site below elevation 163 feet, NGVD. All critical roads and facilities were to be constructed above elevation 163 feet, NGVD.

In addition to the overall Plant Island site development, the Power Block 1 site was constructed, and is in operation today. The northern one-third of the Power Block 1 area drains to the north into the Northern Stormwater Channel, and about one-half of the remaining area drains easterly into the Eastern Stormwater Channel. The other portion of the Power Block 1 area drains either southerly into the Central Stormwater Channel, or westerly into the Central Channel Lateral Ditch 1 (located west of the Power Block 2 site). (Note that all Central Channel Lateral Ditches discharge directly into the Central Stormwater Channel.)

During this time, either a new dirt road (trail) was installed across the Northern Stormwater Channel to provide access to the SA-8/Cooling Pond Berm, or an existing trail was preserved. In either case, twin 30"-diameter CMP's were installed under the trail. Additionally, construction of the perimeter fence along the northern side of the "Switch Yard Area" also resulted in the installation of twin 30"-diameter CHDPE pipes under the fence crossing near the upstream end of the Northern Stormwater Channel.

2.2 Existing System Modifications (Power Blocks 2 & 3)

Currently, both Power Blocks 2 and 3 are in operation. There were no changes in the configuration of the Detention Pond during the Power Block 2 and Power Block 3 Phases.

According to the Supplemental Site Certification documents for Power Block 2, developed in 2000, the Detention Pond was to be maintained at a normal water level of 156 feet, NGVD (refer to Appendix C, Section C-2). This new operating level was 2-feet higher than the normal water elevation established in the Site Certification Application for Power Block 1, described above. It was reported, however, that: "Under normal conditions, the Plant Island area has adequate storage volume to retain the entire runoff volume from a PMP event." The PI-SMS main outflow pumps, then, were to be operated to transfer the stormwater from the Eastern Stormwater Channel into the Cooling Pond in a manner that would maintain the normal water level of the Detention Pond at elevation 156 feet, NGVD. These PI-SMS's operating conditions have not been formally changed since that time.

The Power Block 2 area, itself, drains to the Central Channel Lateral Ditch 1, which is located between Power Block 2 and Power Block 3. The northern portion of this Lateral was regraded to provide a more effective conveying capacity during the Power Block 2 Phase.

There were no changes in the design of the Detention Pond, or in the operational conditions for Power Block 3, per the associated 2002 Supplemental Site Certification documents (refer to Appendix C, Section C-3). The Power Block 3 area was designed to drain easterly into the Central Channel Lateral Ditch 1. The southern end of this Lateral was reconfigured during the Power Block 3 construction, to accommodate the extension of a paved access road from Power Block 2 to Power Block 3. Twin 48"-diameter CHDPE pipes were installed under the road to provide stormwater conveyance. The northern end of this Lateral was also eliminated and replaced with pipes to allow for continued stormwater conveyance.

Other changes were made to the PI-SMS during this timeframe. The Future Use Area Access Road was constructed across the Central Stormwater Channel (near its western end), with twin 48"-diameter CHDPE pipes installed under the road to allow for stormwater conveyance. A pedestrian access trail was constructed across this same Channel, on the southwest side of Power Block 3, and twin 48"-diameter CHDPE pipes were also installed under this feature. A construction site access trail was installed across Central Channel Lateral Ditches 2 & 3, along with the standard twin 48"-diameter CHDPE pipes for stormwater conveyance. Another construction access trail to a stockpile area was constructed across the highpoint of the Southern Channel Lateral. No pipes were placed beneath this trail. Finally, a temporary berm was constructed at the southern end of Central Channel Lateral Ditch 1 to isolate this Lateral from the main Central Stormwater Channel. Temporary pumps were also installed to allow for the discharge of

stormwater collected on the upstream side of this berm. These temporary facilities have been subsequently removed.

2.3 Proposed System Modifications (Power Block 4)

No modifications to the design of the Detention Pond or to the normal PI-SMS operating water level are proposed with the Power Block 4 project, according to the 2004 Supplemental Site Certification documents (refer to Appendix C, Section C-4). The final Power Block 4 design, including the grading for the site, has been developed by Bibb & Associates. Proposed internal, paved access roads, as well as the extension of a paved access road from Power Block 3 to Power Block 4, will create the need to relocate the northern portion of the existing Central Channel Lateral Ditch 2 to the western side of the Power Block 4 site. (These proposed access roads will also create the need to regrade the southern portion of this Lateral.) The relocated ditch will then receive the majority of the stormwater runoff from the Power Block 4 area. The relocated ditch is designed to discharge southwesterly into the Central Channel Lateral Ditch 3 through twin 48"-diameter CMP pipes with risers on all ends. A small portion of the Power Block 4 site also discharges directly into the southern portion of the Central Channel Lateral Ditch 3.

2.4 Future System Modifications (Power Blocks 5 & 6)

The future Power Blocks 5 and 6 are expected to be constructed in the area north of the Central Stormwater Channel and west of Power Block 4. The Power Block Area Access Road and Future Use Area Access Road also form the respective northern and western boundaries of this area. The site is currently occupied by construction trailers, and is used for construction staging and materials storage. The stormwater runoff from this future Power Block area is expected to drain to both the Central Stormwater Channel and its Lateral Ditch 3. Other anticipated changes to the PI-SMS include the conversion, from temporary trail to permanent pavement, of the construction access road currently crossing the Central Channel Lateral Ditch 3. Also, one or more temporary or permanent crossings of the Central Stormwater Channel could be constructed to connect the Power Block Area with the Future Use Area, as the HEC site is completed.

3 Stormwater Modeling Methodology

3.1 General Methodology and Database Development

In order to assess the ability of the PI-SMS and Plant Island site design to contain extreme storm events, and to evaluate the associated potential for internal flooding, a stormwater model was developed for the site. In general, a stormwater model uses physical site and climate characteristics (Hydrologic Data) to determine the portion of a rainfall event that will be converted to runoff; and then uses physical descriptions of the site's surface water conveyance and storage system (Hydraulic Data) to determine how runoff will be transmitted through the system. The results of a site's stormwater model are projected flow rates and water surface elevations at various points-of-interest throughout the site.

The development of a site-specific stormwater model (the Plant Island Stormwater Management Model – PI-SMM – in this case) begins with the selection of the computer software that will perform the various, necessary mathematical processes on the site data. The U.S. Environmental Protection Agency's Storm Water Management Model, Version 5 (SWMM 5) was chosen to analyze the stormwater management system for the Plant Island area. The SWMM 5 model is a Windows-based, public domain software whose previous versions have been in constant use since the early 1970's; and have had widespread application in the U.S and abroad. In Central Florida, the various SWMM model versions have been used extensively to develop stormwater and surface water management plans for large drainage basins.

The site-specific stormwater model's Hydrologic and Hydraulic Data are normally obtained from various sources. The particular data sources for the PI-SMM are identified below in the data-type discussions. In general, though, local soils survey data; aerial photographs; site topographic surveys; design/construction reports, plans and data; as-built plans and data; site operation data and site reconnaissance data; as well as regulatory/local agency data and common water resources engineering data; are the most typical sources of model information.

Given that not all data included in the PI-SMM is supported by a plan or document, assumptions have been made for some SWMM 5 input data. In particular, the sizes and invert elevations for some pipes that are known to exist were not identified in the available construction drawings. In such cases, verbal information from knowledgeable PEF staff or subcontractors, and/or educated interpretations of the site data, were relied upon to make appropriate data judgments. In no case, though, did these types of assumptions have any significant bearing on the assessment of the capability of the overall system to contain extreme storm events. These assumptions are discussed below in the data-type sections.

3.2 SWMM 5 Model: PI-SMM

The SWMM 5 software is a dynamic rainfall-runoff-routing simulation model, used for this project to evaluate the PI-SMS's performance during single-event or Design Storm simulations for the 25yr/24hr, 50yr/24hr, 100yr/24hr, 500yr/24hr and PMP/6hr events. The Plant Island area has been divided into a number of subbasins for which the software has estimated runoff quantities, and has transported or routed these quantities through the PI-SMS. The subbasins are identified, defined and assigned to correspond to the nodes or junctions (described below) established for the PI-SMM .

Please refer to Appendix D, Link-Node Map, for a graphic depiction of the PI-SMM network.

The subbasin is the SWMM 5 model element for which Hydrologic input data is required. This Hydrologic input data accounts for the geometry, terrain, surface characteristics and soils properties of the Plant Island area and the individual subbasins. The data includes estimates of subbasin area, impervious area, subbasin width, subbasin slope, surface roughness, depression storage, and soil infiltration. Design Storm rainfall depths and time-distribution data are also required. However, potential evaporation losses are not a consideration for Design Storm modeling, due to the short time-scales involved. The Hydrologic Data for the PI-SMM is described in greater detail in Section 3.3 below.

The U.S. Natural Resources Conservation Service (NRCS) Runoff Curve Number (CN) option of SWMM 5 has been used to estimate the soil infiltration potential for each subbasin. The CN method, for each time step of the simulation, converts rainfall depth to expected stormwater runoff depth (and is based on the subbasin's soil and land cover characteristics). The Hydrologic component of the software further routes the computed runoff depths through the subbasin to generate the subbasin's stormwater runoff hydrograph. The subbasin routing is achieved by representing the subbasin as a nonlinear reservoir for which a water balance is continuously maintained throughout the storm event, and by computing reservoir outflows via the Manning Equation. The stormwater runoff hydrographs for the subbasins are then the inflow hydrographs for the Hydraulic component of SWMM 5.

The node (or junction) and link (or reach) are the SWMM 5 model elements for which Hydraulic input data are required. These elements define the features of the PI-SMS. A link is a segment of a site's conveyance system, and could be a channel, pipe, pump, weir or orifice. A node represents a stormwater storage facility for a site, or a particular point-of-interest within the site's conveyance system, such as the location of a significant inflow point or the transition from one type of link to another. The Hydraulic input data accounts for the physical and engineering properties of the links, and for the storage/boundary conditions of the nodes. The data includes the types, sizes, lengths, surface roughness coefficients and energy loss coefficients of the links; and the storage facility surface areas, initial system conditions and system outfall conditions of the nodes. The Hydraulic Data for the PI-SMM is described in greater detail in Section 3.4 below.

The Hydraulic component of SWMM 5 takes the inflow hydrographs from the subbasins, via the particular node assignments, and performs a dynamic routing of the inflows through the link-node system. At each model time step (which must be small for dynamic routing – i.e., 1 to 30 seconds), the software solves the complete Saint-Venant equations that define theoretical fluid flow. Both momentum and mass are conserved and balanced (within specified tolerances) for the entire model network at each time step. The SWMM 5 program iteratively adjusts the water surface elevations at the nodes to increase or decrease the flows in the links, as the storage volumes at the nodes are simultaneously increased or decreased, until the balance tolerances are achieved. In essence, from the beginning of a time step, the system inflows are conveyed and stored within, and discharged from, the model network as allowed by the link and node data, in order to create the necessary mass and momentum balances and move to the next time step.

The most important output data from a SWMM 5 simulation of a Design Storm are the peak flow rates and maximum water surface elevations projected throughout the system. The PI-SMM results are discussed in Section 4.0 below.

3.3 Hydrologic Data

All hydrologic data used in the PI-SMM are documented as follows. Please refer to Appendix E, Hydrologic Data, for a summary of subbasin parameters and other support data described below; and to Appendix G, PI-SMM Input Data, for a copy of the actual SWMM 5 Hydrologic input data. Appendix D, Link-Node Map, and Appendix I, Drainage Area Map, also contain graphical data pertinent to the discussions below. Data source references are provided in Section 6.0.

3.3.1 Subbasin Characteristics

The subbasin locations were established after the PI-SMM nodes and links were identified. A subbasin was defined for each node, and each subbasin extended to one-half the distance along each adjoining link, per custom for this type of modeling. The subbasin drainage areas were then delineated after review of the existing construction plans and as-built drawings. Field reviews were also conducted to confirm the drainage areas and to observe if the existing stormwater management system deviated significantly from the existing drawings. The drainage areas were measured from the existing drawings or from the aerial maps using MicroStation V-8 (which is compatible with AutoCAD).

Subbasin width and average slope are parameters used by SWMM 5 to account for the effects of the time-of-concentration parameter used in other methods to represent runoff travel-time through a subbasin. These parameters affect the peak flow value for the subbasin's stormwater runoff hydrograph. Subbasin width is defined as the subbasin area divided by the length of the longest flowpath for the subbasin. Therefore, a larger width for a particular subbasin would indicate a shorter relative travel-time and higher peak flow value. The effects of slope are obvious, in that steeper slopes indicate shorter relative travel-times and higher peak flow values. For the PI-SMM, flowpath lengths and

average subbasin slopes have been generally determined from the individual site grading and drainage plans for the developed Power Block areas, and from the mass grading plans for the remainder of the Plant Island site. A schematic of the estimated subbasin flowpaths is provided in Appendix E, Section E-1.

Surface roughness for a subbasin is another SWMM 5 parameter that affects the peak flow for that subbasin's stormwater runoff hydrographs. Higher surface roughness values lead to lower peak flow values. Surface roughness is split into an impervious roughness and a pervious roughness, and overland-flow-magnitude roughness coefficients are required. The Manning's roughness coefficients (n values) for the Plant Island area have been estimated based on photographs, site visits, the Site Certification documents, design/construction plans and general knowledge of the area. A Manning's roughness coefficient of 0.016 has been utilized for all impervious areas, and 0.15 for all pervious areas in the PI-SMM. The impervious value is for rough-texture asphalt that is the dominant impervious surface in the Power Block area. The pervious value is for short grass prairie, which is indicative of the less dense ground cover found around most of the site. Tables of typical Manning n values are provided in Appendix E, Section E-1.

Depression storage represents the amount of rainfall that can be expected to "puddle" due to uneven ground surfaces. The SWMM 5 model considers that an impervious surface will likely have a different depression storage characteristic than a pervious surface, allowing for separate values. For the PI-SMM, a depression storage value of 0.05-inch is used for impervious surfaces (excluding existing water surfaces), while a value of 0.2-inch is used for the pervious surfaces. The pervious surface value is for pasture ground cover. A table of typical depression storage values is provided in Appendix E, Section E-1.

3.3.2 Runoff Curve Numbers

As indicated earlier, the NRCS CN method has been used to convert rainfall depths to runoff depths within the SWMM 5 program. The required input data for this method is an individual CN value for each subbasin. The CN values are normally determined from NRCS tables on the basis of the soil type characteristics (Hydrologic Soil Group [HSG] classifications) and land cover categories associated with the individual subbasins.

The NRCS soils maps for Polk County indicate there are two types of soils within the Plant Island site: Arents-Water complex soils (#11) and Arents soils (#68). Both soil types are associated with phosphate mining activities, and neither belongs to a specific HSG (due to the high variability of these soils). The NRCS assigns the Arents-Water complex label to lands occupied by open phosphate pits that are filled with water and paralleled by steep, long mounds of spoil material. This is the soil type that covers about 80% of the Plant Island site, per the soils map. The Arents label is assigned to reclaimed phosphate land. The appropriate soils map panel and supporting documents are provided in Appendix E, Section E-2.

The required HSG data could not be obtained directly from the soils maps or the

associated Polk County Soil Survey. However, the Power Block 1 Site Certification Application documents clearly identify that most of the HEC area soils had high clay content, since much of the area was used for clay-settling during mining. Soils with higher clay content tend to be classified as HSG D. Also, the stormwater calculations included in the Power Block 1 Site Certification Application (refer to Appendix C, Section C-1) assumed that the Plant Island site soils were classified as HSG D. Therefore, the HSG D classification has been assumed for all site soils for the PI-SMM.

The Plant Island area is currently covered primarily with grass, brush, exotic plants, gravel, roadway pavement, power plant facilities, channels, and a large stormwater detention pond. With the intent of the PI-SMMP to cover ultimate site conditions, consideration has been given to potential future development within the site. Therefore, the normal, general land cover categories of pervious area (pasture or prairie land), impervious area and water area have been used to establish CN values. In addition, "developed" land cover categories identified as Switch Yard Area, Power Block Area and Future Use Area, have been included in these determinations.

The CN values assigned to the normal, general land cover categories, for HSG D soils, were based on the values established in the stormwater calculations included in the Site Certification Application for Power Block 1 (refer to Appendix C, Section C-1). Thus, a CN value of 89 has been used for pervious areas, including areas covered with grass and exotic plants; a CN value of 95 has been used for impervious areas, including paved roadways and parking lots, and buildings; and a CN value of 100 has been used for the normal pool surface areas of the detention pond and channels. Additionally a CN value of 95 was assigned to the Power Block Area (corresponding to 100% impervious), a CN value of 91 was assigned to the Switch Yard Area that is normally covered in gravel (corresponding to 35% impervious), and a CN value of 92 was assigned to the Future Use Area (assuming 50% impervious). A table of typical CN values is provided in Appendix E, Section E-2, along with a sketch of the site areas designated for development.

In order to determine an individual subbasin CN value, then, the percentage of each land cover category occurring in the subbasin was estimated, and a composite CN value was computed. An individual subbasin "% impervious" value was also determined in a similar composite fashion, considering the % impervious values assigned/assumed for each land cover category.

3.3.3 Rainfall Data

In keeping with the original, conceptual stormwater management design for the Plant Island area, identified in the Power Block 1 Site Certification Application, the 25yr/24hr, 100yr/24hr, 500yr/24hr and PMP/6hr storm events will be evaluated with the PI-SMM. The rainfall depths of 8-inches, 10.1-inches 12.5-inches and 31-inches for the respective events, were obtained from the original design. The 50yr/24hr storm event has also been added to the suite of storms considered in this analysis. A rainfall depth of 9-inches has been estimated for this event. All of these rainfall depths have been confirmed by either the SWFWMD Rainfall Maps or the PMP Isohyetal Map. Copies of these maps are included in Appendix E, Section E-3.

The rainfall distribution used for the design storms, except for the PMP event, is the NRCS 24-hour Type II Florida Modified Rainfall Distribution, A "uniform" 6-hour distribution is used for the PMP storm. A table containing the rainfall distribution data for each storm event is included in Appendix E, Section E-3. This data comprises the time-series rainfall input data for the PI-SMM.

3.4 Hydraulic Data

All hydraulic input data used in the PI-SMM is discussed below, and includes node data and link data. The link data descriptions are provided in terms of the conduit data, the pump data, and the weir data. Please refer to Appendix F, Hydraulic Data, for the support information identified below; and to Appendix G, PI-SMM Input Data, for a copy of the actual SWMM 5 Hydraulic input data. Appendix D, Link-Node Map, and Appendix I, Drainage Area Map, also contain graphical data pertinent to the discussions below. Data source references are provided in Section 6.0.

3.4.1 Node Data

The nodes for the PI-SMM analyses are either junction type, storage type or outfall type. Common data for all nodes include information on initial water surface elevation and lowest invert elevation. The initial water surface elevation for all nodes in the PI-SMM is elevation 155 feet, NGVD. This current, normal operating elevation is controlled/maintained by PEF staff, and is within the range of the normal operating elevations established in the SCA and SSCA documents. The lowest invert for any particular node is equal to the lowest of the inverts of the links that are connected to that node.

Storage nodes or storage units are the most common type of node in the PI-SMM. This type of node allows the assignment of additional stormwater storage data that will not already be accounted for by SWMM 5. (Note that the SWMM 5 software automatically computes the storage in each link, such as a channel or pipe, and assigns one-half of the storage to the node at either end of the link.) The additional storage is either overbank storage, if associated with a channel link, or total storage if associated with a pond, non-channel link or headwaters area. The additional storage data are usually defined in terms of "surface area vs. elevation" relationships.

The overbank storage data for the nodes associated with the channel segments were measured from (or based on) the available construction drawings. In particular, the potential storage above the normal top-of-bank elevation of 162 feet, NGVD, and along the outside banks of the Northern, Southern, and Eastern Stormwater Channels (where grading is not expected to change significantly in the future), was determined from the mass grading plans. The potential storage along the inside banks of these channels (the sides that are adjacent to the developing areas) was generally assumed to have a 25-foot-width at elevation 163 feet, NGVD, and a 50-foot-width at elevation 164 feet, NGVD. Although the mass grading plans indicated larger storage widths currently exist in most

of these areas, the shorter widths will allow for more buildable area for future facilities. The overbank storage along the Central Stormwater Channel and Lateral Ditches also considered the shorter storage widths along both banks, except where existing construction plans indicated lesser widths were warranted.

Additional ground elevation data was received in the spring of 2006, in the form of one-foot contour maps generated from a LIDAR survey for the HEC property. This information confirmed the legitimacy of the assumptions described above for the PI-SMM overbank storage data.

The total storage data for the Detention Pond was directly and electronically determined from the LIDAR contour maps. The open surface areas were measured at one-foot intervals between elevation 155 feet, NGVD, and elevation 164 feet, NGVD. These area values also account for the higher ground that exists within the banks of the Detention Pond.

The total storage data for the remaining storage-type nodes was estimated from the available construction drawings. The typical ditch sections for the PI-SMS channels were used to estimate necessary data where it was appropriate to do so.

Junction-type nodes, of which there are only two in the PI-SMM, have no additional stormwater storage data assignments. The two junction nodes are located on the Detention Pond side of roadway crossings, and any potential additional stormwater storage for these nodes is accounted for in the Detention Pond numbers.

Outfall-type nodes define the "tailwater conditions" associated with the receiving waters at the outfall boundaries of the modeled system. An outfall boundary must be established for any location where flow can leave the modeled system. One outfall node is used in the PI-SMM to represent both the Cooling Pond (N-16) and SA-8 as the receiving waters. The Cooling Pond receives the outflows from the two main PI-SMS stormwater pumps, while a third pump is also available, when needed, to move stormwater from the Northern Stormwater Channel to SA-8. A constant water surface elevation of 160 feet, NGVD, the normal operating level of the Cooling Pond, is assumed for the tailwater condition at both boundaries. Although the normal water surface elevation for SA-8 is 169 feet, NGVD, the use of a lower than actual tailwater condition on the discharge end of the third pump will not affect the PI-SMM results.

3.4.2 Conduit Data

The conduit links in the PI-SMM are either channels or pipes/culverts. The required data is the same for all conduits, and include shape, number of parallel conduits, invert elevations, length, roughness characteristics and energy loss coefficients. Most of these data were obtained from the construction and as-built drawings, and from common water resources engineering data.

All of the modeled channels are trapezoidal in shape, and the dimensions and invert

elevations are defined by the Typical Ditch Sections identified in the PI-SMMP Drawings (Appendix I). The channel roughness, for all channels, is assumed to be best represented by a Manning n value of 0.07, which is applicable to channels with fairly regular sections and heavily vegetated sideslopes (refer to Appendix F, Hydraulic Data). The channel lengths were measured from the aerials, and other potential energy loss factors were ignored due to the expected low flow velocities for the channels.

Only the pipes and culverts that were located within the channels, or that connected significant stormwater storage areas to the channels, were included in the PI-SMM. Data on size, number of barrels, material, invert elevations and length were generally obtained from the construction drawings for seven of the eight pipe/culvert locations modeled. All of the above data for the other location, under the Future Use Area Access Road crossing of the Central Stormwater Channel, was obtained from PEF staff/subcontractors. It was reported that 120 feet of double 48-inch CHDPE pipe was installed at this location, with invert elevations of 151 feet, NGVD.

All modeled pipes are corrugated, and the roughness characteristics for such pipes are best represented by a Manning n value of 0.024. These pipes do not generally have headwalls, so entrance loss coefficients equal to 0.9 (corrugated pipe projecting from fill) were assumed, and exit loss coefficients of 1.0 (to account for the low channel velocities) were also assumed. For the lone concrete box culvert installation under the HEC Entrance Road within the Northern Stormwater Channel, a Manning n value of 0.012 is appropriate. An entrance loss coefficient of 0.5 (box culvert with headwall parallel to embankment), and an exit loss coefficient of 1.0 are also appropriate for the box culvert. Refer to Appendix F, Hydraulic Data, for tables of typical Manning n values and entrance loss coefficients for pipes and culverts.

3.4.3 Weir Data

Broad crested weirs have been used to model the potential road and subbasin boundary overtopping conveyances in the PI-SMM. These overland flow conveyances are needed to more realistically distribute flows for some subbasins in order to avoid unrealistically high water surface elevations. The required data for an individual weir consists of the crest elevation, shape, length and sideslope, as well as a discharge coefficient. The normal discharge coefficient for a broad crested weir is about 2.6. The remaining data was determined from available construction drawings and the LIDAR contour maps.
The temporary berm originally located along the Central Channel Lateral Ditch 1 would normally have been modeled as a broad crested weir to account for potential overtopping. This berm had been installed to prevent backflow from the Central Stormwater Channel, to temporarily allow for greater control of water surface elevations (by operating small temporary pumps) in the existing Power Block areas. However, the berm has been removed during the course of this study. Therefore, the currently existing short channel section, rather than the temporary berm, has been defined as the link between the Lateral and the main Channel.

3.4.4 Pump Data

Two Flygt Bibo drainage pumps (Model No. 2290.010) are operated to transfer stormwater from the PI-SMS to the Cooling Pond. A third Flygt Bibo pump is also available to transfer stormwater from the PI-SMS to SA-8. (For the purpose of this study, it is assumed that this third pump is operated at the same frequency as the two main pumps.) A maximum pumping rate of about 4,300 gpm (9.6 cfs) is achievable for each of the pumps. However, the pumps run most efficiently, and are operated at 3,500 gpm, per PEF staff. Therefore a constant pumping rate of 10,500 gpm or 23.4 cfs for the three pumps has been considered in the PI-SMM. It is also assumed that the pumps will begin operation when the water level in the Northern and Eastern Stormwater Channel reach elevation 156 feet, NGVD, and will cease operation when the water level returns to elevation 155 feet, NGVD.

4 Stormwater Model Results and Conclusions

4.1 Assessment of SWMM 5 Model Results

As mentioned previously, a copy of the PI-SMM Input Data can be found in Appendix G. The model was run for the 25-yr/24-hr, 50-yr/24-hr, 100-yr/24-hr, 500-yr/24-hr and PMP/6-hr storm events. The results of the model runs can be found in Appendix H. Table 1 of Appendix H shows the estimated minimum facility flood levels for the various subbasins, while Table 2 shows the projected water surface elevations (WSEL's) for all modeled storm events. The remainder of Appendix H contains the summary SWMM 5 output for the individual storm events.

The overall performance and integrity of the PI-SMS is represented by the model results associated with Node N8 – the Detention Pond. Although Table 2 shows other Nodes with higher WSEL's than those identified for Node N8, those elevations are temporary, internal peak elevations generally created by the more limited flow capacities of the system's pipes/culverts. These higher peak elevations are indicators of potential internal flooding, but the system's stormwater storage capacity and ability to contain extreme storm events is indicated by the Node N8 WSEL's. The higher peak elevations dampen quickly with time as stormwater is delivered to the "lower" Detention Pond, and the system quickly "levels-off" to the Node N8 WSEL's.

The Nodes that comprise the Plant Island site's "offsite" perimeter are N1, N2, N4 through N8, and N24. The low points along this perimeter are at about elevation 165 feet, NGVD (refer to Appendix I. PI-SMMP Drawings). As can be seen in Table 2 for the worst-case storm event, the PMP, the maximum projected WSEL for these perimeter Nodes is elevation 163.2 feet, NGVD, at Node N24. The peak WSEL for Node N24 is a little higher than that for Node N8 (elevation 162.5 feet, NGVD) due to the influence of the box culvert under the HEC Entrance Road. The model results show that at least one-foot of freeboard should be maintained along the Plant Island Containment Boundary, even for the most extreme of storm events.

The original Detention Pond top-of-bank was reported earlier to be at elevation 160 feet, NGVD, and the original tops-of-banks of the Channels were reported to be at elevation 162 feet, NGVD. In reality, the containment area of the Detention Pond exceeds elevation 162 feet, NGVD, so this elevation will be used to assess the "in-bank" performance of the PI-SMS. Table 2 shows that the system has the in-bank storage capacity for at least the 500-yr/24-hr storm, as indicated by the Node N8 projected WSEL of 158.6 feet, NGVD. However, the local peak WSEL at Node N19 (the upstream end of the Northern Stormwater Channel) exceeds the top-of-bank at a projected WSEL of at least 162.8 feet, NGVD, for all modeled storms. In fact, Nodes N19 through N21 are all projected to exceed the top-of-bank elevation of 162 feet, NGVD. These higher elevations are attributable to a shallower ditch section and the pipes under the Cooling Pond/S-8 access trail crossing in this portion of the Channel. Therefore, although the PI-SMS has ample

in-bank stormwater storage capacity for much larger storms, the overall system in-bank capacity is rated at less than a 25-yr/24-hr storm.

Out-of-bank flooding of the Plant Island area begins at about elevation 162 feet, NGVD, as indicated above. Table 2 indicates that facility flooding (i.e., the flooding of buildings or paved roads) is not expected during the 500-yr/24-hr and lesser storms. However, considering the footnote data contained in Table 1, the 100-yr/24-hr and greater storms are expected to flood the Cooling Pond/S-8 access trail across the Northern Stormwater Channel. There is alternative access to the Cooling Pond and S-8 berms, and no other significant access points are expected to be affected by the 500-yr/24-hr or lesser storms.

Some paved roadway flooding is expected during the PMP event, but no significant buildings/structures are expected to be affected. Tables 1 and 2 indicate that the Future Use Area Access Road is projected to be overtopped by about 0.1-foot of water, and the PB-3 Access Road across the Central Channel Lateral Ditch 1 is projected to be overtopped by about 0.2-foot of water. In addition, the pedestrian access trail across the Central Stormwater Channel and the construction access trail across the Central Channel Lateral Ditch 3 are expected to be overtopped during the PMP.

Also during the PMP, a number of subbasin boundaries are projected to be overtopped. The most significant of these, from the standpoint of system benefit, is the overflow of the boundary between Subbasins S10 and S6 (refer to Appendix B, Drainage Area Maps), along the Southern Channel Lateral Ditch. The construction access trail across the high point in this Lateral's flowline profile was assumed to be at elevation 163 feet, NGVD, based on the site's mass grading plans. The discharge of stormwater from the Central Stormwater Channel across this subbasin boundary, then, allowed for lower WSEL's than would otherwise have been projected in the flooded Central Stormwater Channel area.

Other subbasin boundary overflows, during the PMP event, were projected to occur along the fence berms on the northern and eastern sides of the PB-1 area, and across a small berm separating Subbasins S19 and S2 in the PB-1 area. The relocated northern portion of the Central Channel Lateral Ditch 2 in the PB-4 area is also expected to overflow into the northern portion of the Central Channel Lateral Ditch 3.

4.2 Conclusions

The results of the PI-SMM analyses have shown that the Plant Island site's Stormwater Detention Pond and associated Channel system should have in-bank storage capacity to hold the projected "future" runoff from at least a 500-yr/24-hr storm event; and the Plant Island area's "Containment Boundary" should have storage capacity to retain the "future" runoff from a Probable Maximum Precipitation event, with at least one-foot of freeboard to spare. Offsite discharge is not expected to be needed for a PMP/6-hr or lesser storm.

The Channel system designed and constructed within the Plant Island area should have an in-bank conveyance capacity for the runoff from the 500-yr/24-hr storm, except for the eastern half of the Northern Stormwater Channel where the conveyance capacity in the

most upstream portion is reduced to less than that needed for the 25-yr/24-hr storm. The pipes and box culvert installed within the Channels to provide conveyance under road/access crossings create restrictions and increase energy losses for larger flows. These pipes/culverts, then, generally control the conveyance capacity of the Channel system, although a shallower ditch section also contributes to the reduced capacity in the Northern Stormwater Channel. However, upgrades to the currently constructed conveyance system may not be warranted, unless PEF desires to have PMP-level protection for the internal HEC facilities.

The PI-SMS stormwater pumps have limited capacity for transferring stormwater to the Cooling Pond during a significant storm event. This is not an issue, though, due to the extensive stormwater storage capacity of the system. However, in order for the PI-SMS to be effective, the stormwater storage capacity must be recovered to the normal operating level of elevation 155 feet, NGVD, following a storm. The three existing stormwater pumps have a capacity to discharge about 46 ac-ft of water in a day. If the 25-yr/24-hr storm were to occur when the normal pool was at elevation 155 feet, NGVD, it would take about nine to ten days of continuous pumping (and no rainfall) to return the system to normal pool. This recovery rate is slower than the rate that would normally be required for a permitted retention system; however, the enormous storage capacity of the PI-SMS appears to adequately compensate for this slower recovery.

5 Recommendations

The Plant Island Stormwater Management System appears to have the capacity to convey and store the stormwater expected to be generated from a "future conditions" 6-hour Probable Maximum Precipitation event, without discharging any stormwater offsite. Therefore, the originally designed system appears to meet the standard for a "no offsite discharge site" set in the Power Block 1 Site Certification Application, even with system modifications that have occurred or are proposed. Although the PI-SMS appears to be adequate, a few recommendations are provided below to ensure the system functions properly in the future:

1. The Channels should be periodically inspected, and maintained/reestablished if the original cross sections have been significantly reduced with time.

2. The potential overflow of the Central Stormwater Channel into the Southern Channel Lateral Ditch should be enhanced, or at least the estimated overflow elevation of 163 feet, NGVD should be maintained, in order to best serve the Power Block 1, 2 and 3 areas.

3. All three of the existing PI pumps should be used to recover the depleted stormwater storage capacity of the PI-SMS following rainfall events.

4. The riser structures proposed to be constructed with the Power Block 4 "stormwater pond" (the relocated northern portion of the Central Channel Lateral Ditch 2) do not appear to be needed.

Also, with respect to the analysis described in this report, some of the data has been assumed. It is recommended that the PI-SMM be updated as more reliable data becomes available for a more accurate assessment.

6 References

(1) FPC Polk County Site – Site Certification Application for Power Block 1, dated 1992.

(2) Progress Energy Florida Inc. Polk County Site – Site Certification Application for Power Block 2, dated 2000

(3) Progress Energy Florida Inc. Polk County Site – Site Certification Application for Power Block 3, dated 2002.

(4) Progress Energy Florida Inc. Polk County Site – Site Certification Application for Power Block 4, dated 2004.

(5) "Grading and Drainage Plan - FPC Hines Energy Complex-Power Block 1" by Black & Veatch, dated 2002.

(6) "Final Site Grading and Drainage Sheet- -Progress Energy Florida - Hines Energy Complex - Power Block 2" by Parsons Energy & Chemicals Group Inc., dated 1996.

(7) "Grading Plan-Progress Energy Florida Hines Energy Complex-Power Block 3" by Bibb and Associates, dated 2004.

(8) "Grading Plan-Progress Energy Florida Hines Energy Complex-Power Block 4" by Bibb and Associates, dated 2005.

(9) "Earthwork for Plant Island Area & N-16 Initial Phase Cooling Pond" design plan by Dames & Moore, dated 1994, and as-built survey set by Pickett and Associates, dated 1994.

ATTACHMENT C: MITIGATION PLANS & CONSERVATION EASEMENTS

A. Mitigation Requirements

1. To offset unavoidable impacts that will occur from the dredging/filling of 2.71 acres of moderate quality, Freshwater non-Forested Wetland Marshes – Depression Marsh (G4/S4) authorized as part of Modification L to these Conditions, the Licensee shall purchase 0.9 of Herbaceous Wetland credits from the Tippen Bay Wetland Mitigation Bank. Prior to any construction or impacts associated with the lined brine evaporation ponds, the Licensee shall provide the Department with documentation that 0.9 of Herbaceous Wetland credits have been deducted from the credit ledger of the Tippen Bay Wetland Mitigation Bank (WMD permit number 43041757.003). Documentation of the mitigation credit purchase will be attached hereto as part of Attachment C.

[ERP Applicant's Handbook Volume I, Sections 10.3 and 10.3.1.3]

B. Mitigation Table

Project	**Date**	**Siting Tracking**	**SWD Tracking**	**Wetland Impacts**	**Mitigation Requirement**
Modification L	(Date of Final Order)	PA92-33L		Dredging/filling 2.71 acres of moderate quality, Freshwater non-Forested Wetland Marshes – Depression Marsh (G4/S4)	Purchase 0.9 of Herbaceous Wetland credits from the Tippen Bay Wetland Mitigation Bank, and provide documentation that 0.9 of Herbaceous Wetland credits have been deducted from the credit ledger of the Tippen Bay Wetland Mitigation Bank (WMD permit number 43041757.003).

ATTACHMENT C

This instrument prepared by:
J. Bradford Hines
Crawford, Owen & Hines, P.A.
144 First Avenue South
St. Petersburg, Florida 33701

CONSERVATION EASEMENT

This grant of Conservation Easement is made this 3 day of May, 2002, by FLORIDA POWER CORPORATION, a corporation organized and validly existing under and by virtue of the laws of the State of Florida ("Grantor"), and in favor of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida ("Grantee"), a state agency whose mailing address is c/o Florida Department of Environmental Protection, Division of State Lands, 3900 Commonwealth Boulevard, Mail Station 115, Tallahassee, FL 32399.

WITNESSETH:

WHEREAS, Grantor is the owner of certain real property in Polk County, Florida, more particularly described as Parcel A and Parcel B in Exhibit "A" attached hereto (Parcel A and Parcel B are hereinafter collectively called the "Property"); and

WHEREAS, the Grantor and the Grantee mutually recognize the natural, scenic and special character of' the Property and have the common purpose of conserving certain natural values and character of the Property by conveyance to the Grantee of a perpetual conservation easement on, under, over, and across the Property, to conserve the value, character, ecological integrity and hydrological integrity of the Property, conserve and protect the animal and plant populations on the Property, and prohibit certain further development activity on the Property, hereinafter referred to as the "the conservation purposes", subject to provisions set forth herein;. and

WHEREAS, Grantor acknowledges that Parcel A is subject to a reclamation contract Program identification (IMC-N-021/IMC-N-023/IMC-N-024B), DEP Contract Number MR 8300 between the Florida Department of Environmental Protection, Division of Resource Management,

Bureau of Mine Reclamation, and Grantor with an effective date of September 21, 2000 (the "Reclamation Plan") and that all terms and conditions of the Reclamation Plan remain in full force and effect; and

WHEREAS, Grantor acknowledges that Parcel B was released from Mandatory Phosphate reclamation obligations in 1987, but continues to require certain enhancement and management as hereinafter described; and

WHEREAS, Grantor intends that the conservation values of the Property be preserved, subject to the permitted activities set forth in Section 4 below, and the parties acknowledge and agree that such activities do not significantly impair or interfere with those conservation values; and

WHEREAS, Grantor further intends, as owner of the Property, to convey to Grantee the right to preserve and protect the conservation values of the Property in perpetuity; and

WHEREAS, Grantee is an Agency of the State of Florida, and desires to preserve and protect in perpetuity the conservation values of the Property for the benefit of this generation and generations to come;

WHEREAS, by accepting this grant, Grantee agrees to honor the intentions of Grantor stated herein and to preserve and protect in perpetuity the conservation values of the Property for the benefit of this generation and the generations to come,

NOW, THEREFORE, in consideration of the above and the mutual covenants, terms, conditions and restrictions contained herein, and pursuant to the laws of the State of Florida, Grantor hereby voluntarily grants and conveys to Grantee a conservation easement in perpetuity over the Property of the nature and character and to the extent hereinafter set forth ("Easement").

1. Incorporation of Recitals. The foregoing recitals are true and correct and are incorporated herein by reference.

2. Purpose. It is the purpose and intent of this Easement to assure that the Property will be retained and maintained forever predominantly in its reclaimed vegetative and hydrologic

condition. Those areas included in this Easement that are to be enhanced or created pursuant to the provisions of Grantor's Non-Mandatory Phosphate (Parcel A) Reclamation Plan shall be retained and maintained by Grantor in the enhanced or created conditions required by the Reclamation Plan for a period of five years from the date of Certification of Reclamation Completion. Thereafter, Conservation Maintenance of Parcel A shall be the duty of the Bureau of Mine Reclamation of the Florida Department of Environmental Protection, or its successors. Conservation Maintenance of Parcel B shall be the mutual duty of the Grantor and Grantee from the effective date of the easement until 5 years from the date of Certification of Reclamation Completion for Parcel A. Thereafter Conservation Maintenance of Parcel B shall be the sole duty of Bureau of Mine Reclamation (BMR). Maintenance of the servient estate underlying the Easement shall remain the responsibility of Grantor, at its sole expense. Such maintenance shall include, but not necessarily be limited to, maintenance of all facilities associated with Grantor's use of the Property as allowed by the provisions of this Easement. "Conservation Maintenance" will consist of active and passive land management activities intended to conserve the environmental qualities as identified in the Baseline Documentation. Active conservation management activities may include boundary identification and marking, habitat enhancement, prescribed burning, and exotic and nuisance plant control. Passive conservation management activities may include inspection of the Property, reporting of inspections and Property status, coordination with other land management agencies, and coordination with and education of landowners, land managers and lessees regarding appropriate land management methodologies. The costs of the aforesaid active and/or passive conservation management activities for Parcel A shall be paid solely by the Grantor until 5 years from the date of Certification of Reclamation Completion. Thereafter, the costs of Conservation Maintenance of Parcel A shall be the sole responsibility of the Bureau of Mine Reclamation (BMR). The costs of the aforesaid active and/or passive conservation management activities for Parcel B shall be divided into equal shares to be paid by the Grantor and Grantee until 5 years from the date of Certification of

Reclamation Completion. Thereafter, the costs of Conservation Maintenance of Parcel B shall be the sole responsibility of the Bureau of Mine Reclamation (BMR). The specific conservation values of the Property will be documented in the "Baseline Documentation Report for the Florida Power Corporation Conservation Easement Tract in Polk County, Florida".

("Baseline Documentation Report"), which consists of reports, maps, photographs, and other documentation that the parties agree provide, collectively, an accurate representation of the Property at the time of this grant, and which is intended to serve as an objective information baseline for monitoring compliance with the terms of this grant. The Baseline Documentation Report is maintained in the offices of the Florida Department of Environmental Protection (DEP) and is incorporated by this reference. A copy of the Baseline Documentation Report is available from the Department on request. The Baseline Documentation Report for Parcels A and B shall be compiled and submitted to DEP/BMR at the completion of Grantor's reclamation plan of Parcel A. To the extent that baseline studies, reports and documentation have already been prepared and submitted by the Grantor in support of Hines Site Certification PA 92-33, and these documents are reflective of the current condition of the Property, these studies, reports and documentation may be incorporated into the Baseline Documentation.

3. Rights of Grantee. To accomplish the purpose of this Conservation Easement, the following rights are conveyed to Grantee by this Easement:

(a) The right but not the duty to preserve and protect the conservation values of the Property;

(b) The right to enter upon the Property at reasonable times in order to monitor Grantor's compliance with and otherwise enforce the terms of this Easement; provided that such entry shall be upon prior reasonable notice to Grantor, and Grantee shall not unreasonably interfere with Grantor's use and quiet enjoyment of the Property; and

(c) The right to prevent any activity on or use of the Property that is inconsistent with the purpose of this Conservation Easement and to require the restoration of such areas or features of the Property that may be damaged by any inconsistent activity or use.

(d) All future residential, commercial, industrial and incidental development rights that are now or hereafter allocated to, implied, reserved, or inherent in the Property except as may be specifically reserved to Grantor in this Easement. The parties agree that such rights are hereby terminated and extinguished and may not be used in or transferred to other property. Neither the Property, nor any portion thereof may be included as part of the gross area of other property not subject to this Conservation Easement for the purposes of determining density, lot coverage, or open space requirements, under otherwise applicable laws, regulations or ordinances controlling land use and building density. No development rights that have been encumbered or extinguished by this Conservation Easement shall be transferred to any other lands pursuant to a transferable development rights scheme or cluster development arrangement or otherwise. Nor shall any development rights or density credits be transferred onto the Property from other property.

(e) The right to be indemnified by Grantor for any and all liability, loss, damage, expense, judgment or claim (including a claim for attorney fees) to the extent directly arising out of any negligent or willful action or activity resulting from the Grantor's use and ownership of or activities on the Property or the use of or activities of Grantor's agents, guests, lessees or invitees on the Property.

4. Permitted Activities. Nothing in this Easement shall be construed as prohibiting the following activities and rights and Grantee expressly acknowledges that the permitted activities, and Grantor's exercise of its rights hereunder shall not be deemed to constitute a violation of any provisions of this conservation easement:

(a) Grantor's reclamation of Parcel A under the Reclamation Plan;

(b) Grantor's construction, operation and maintenance of rights-of-way for electric transmission and distribution lines, communication lines, pipelines, and appurtent facilities, located on or immediately adjacent to former clay settling area dams within Parcel A or along the boundary of Parcel A as the clay settling area dams are depicted in the Baseline Documentation Report and along the boundary of Parcel B as depicted in the Baseline Documentation Report; and

(c) Grantor's use of the Property to the extent Grantor reasonably determines necessary to operate and maintain any dams located on Grantor's property immediately adjacent to or located on the Property, including the right to patrol, inspect, improve, repair, rebuild or remove such dams subject to Grantor's site certification PA92-33 for Grantor's Hines Energy Complex (the "Hines Energy Complex") of which the Property is a portion, as said certification may be modified or amended from time to time to govern such activities, together with the right to use the Property as reasonably necessary to provide access to said dams; and expressly including, but not limited to, the right to drain seepage from the dam immediately north of Parcel B through the said drains which have been constructed on the south toe of said dam or which may be constructed in the future along said dam or any other dam adjacent to the Property, including the right to herbicide (for said drains

only) trim, cut and keep clear trees, limbs and undergrowth on such portion of the Property as necessary and convenient for the aforesaid. Grantee covenants and agrees that it shall not perform any alterations to the Property or perform any other act or actions that would or may affect, impact, alter or impair the integrity of any current or future dams on Hines Energy Complex adjacent to the Property or that would interfere with Grantor's rights herein reserved; and

(d) Grantor's right to use Parcel B, for the duration of the reclamation activities at the Hines Energy Complex, as a nursery area for the propagation of herbaceous wetland plant species and as a donor site to take therefrom aquatic plants for future wetland reclamation on the Hines Energy Complex in accordance with applicable state laws and regulations governing such activity, including access to Parcel B and such activities reasonably necessary in connection with the aforesaid; and

(e) Grantor's right, through December 31, 2001 across Parcel B to implement a program to eradicate and control nuisance plant species on Parcel B, including the right to (i) apply herbicide on Parcel B to reduce the existing coverage of cattails on Parcel B, and (ii) introduce desirable wetland species from both onsite and offsite sources to the wetlands on Parcel B to compete with cattails, for the purpose of reducing cattail coverage. Grantor shall complete this program on or before December 31, 2001, after which Grantor and Grantee shall mutually continue to control to the greatest extent practicable nuisance exotics and non-native plants on the Property for a period of five years from the date of Certification of Reclamation

Completion of Parcel A, in accordance with the provisions of Paragraph 2 above; and

(f) Grantor's right to discharge the runoff from the impervious surfaces of Hines Energy Complex onto, over, across, under and through the Property; and

(g) Grantor's right to use the Property as a perpetual zone of discharge for groundwater discharge from the Hines Energy Complex, including, but not limited to, from the cooling ponds at the Hines Energy Complex to Parcel B, in accordance with applicable state laws and regulations governing such activities. It is expressly agreed that the areal extent of the existing zone of discharge, as granted and described by Section XVIII of the Hines Energy Complex Site Certificate PA92-33, is not altered or otherwise reduced by the grant of this conservation easement; and

(h) Grantor's right to restrict public access to the Property by means of locked gates at locations on the Property deemed appropriate by Grantor. Under no circumstances shall Grantee permit access to or use of the Property by the general public.

5. Prohibited Activities: Subject to Grantor's permitted activities set forth in Section 4, the Property shall be maintained in its natural, scenic, rural and open condition and restricted from any development or use that would impair or interfere with the conservation purposes of this Easement. Without limiting the generality of the foregoing and subject to Grantor's permitted activities set forth in Section 4, the following activities and uses are expressly prohibited or restricted:

(a) No soil, trash, liquid or solid waste (including sludge), or unsightly, offensive, or hazardous materials, wastes or substances, toxic wastes or

substances, pollutants or contaminants, including, but not limited to, those as now or hereafter defined by federal or Florida law defining hazardous materials, wastes or substances, toxic wastes or substances, pollutants or contaminants shall be dumped or placed on the Property. This prohibition shall not be construed to include reasonable amounts of waste generated as a result of permitted activities.

(b) Subject solely to the reservation of oil and gas as set forth in (i) Deed from Florida National Bank of Jacksonville to International Minerals and Chemical Corporation recorded in Official Records Book 976 on page 714 of the Public Records of Polk County, Florida, and (ii) Deed dated December 21, 1964, from the Florida National Bank of Jacksonville to John L. Jerry recorded in Official Records Book 1949 on page 404 of the Public Records of Polk County, Florida, as to the North ¾ of the East ½ of Section 8, Township 31 South, Range 25 East, the exploration for and extraction of oil, gas, minerals, peat, muck, marl, limestone, limerock, kaolin, fuller's earth, phosphate, common clays, gravel, shell, sand and similar substances, under and by virtue of the authority of a grant or reservation or other form of ownership of or interest in or control over or right to such substances, by means of surface exploratory and extraction operations such as sifting of the sands, dragline, open pit mining, or other type of surface operation that would include movement of sands, dirt, rock, or by any other means other than through a well hole, that would result in a change in the topography of the land, except as reasonably necessary to combat erosion or flooding, or except as necessary and lawfully permitted for the conduct of permitted activities. Provided, however, nothing in this paragraph 5.B. shall be

construed to reimpose any rights previously eliminated by the Marketable Record Title Act, or to allow Grantor or any successor of Grantor to grant any right of entry to the holder of the reserved oil and gas rights described in 5.B.(i) and 5.B.(ii), above.

(c) Activities that will be detrimental to drainage, flood control, water conservation, erosion control, soil conservation, or fish and wildlife habitat preservation unless otherwise provided in this Easement. There shall be no dredging of new canals, construction of new dikes, manipulation of natural water courses, or disruption, alteration, pollution, depletion, or extraction on the Property of existing surface or subsurface water flow or natural water sources, fresh water lakes, ponds and pond shores, marshes, creeks or any other water bodies, nor any activities or uses conducted on the Property which would be detrimental to water purity or which could alter natural water level or flow in or over the Property.

(d) Acts or uses detrimental to the retention of land or water areas, natural or manmade, in their natural, scenic, wooded condition, or to the use of the Property as a water recharge area, spring recharge basin, habitat, or for passive recreation.

(e) Acts or uses detrimental to the preservation of the structural integrity or physical appearance of any portions of the Property having historical, archeological or cultural significance.

(f) The removal, destruction, cutting, trimming, mowing, alteration or spraying with biocides of trees, shrubs or other natural vegetation except as otherwise specifically provided in this Easement. There shall be no planting of nuisance exotic or non-native plants as listed by the Exotic Pest Plant

Council (EPPC).

(g) Commercial or industrial activity, or ingress, egress or other passage across or upon the Property in conjunction with any commercial or industrial activity including but not limited to swine, dairy and poultry operations and feed lot operations, except as may be incidental to the exercise of Grantor's reserved rights.

(h) New construction or placing of temporary or permanent buildings, mobile homes, signs, billboards or other advertising, or other structures in, on or above the ground of the Property except with prior notice to and approval of Grantee and as may be necessary by Grantor for maintenance or normal operations of the Property or during emergency situations or as may otherwise be specifically provided for hereinafter. For purposes of this paragraph the term "emergency" shall mean those situations that will have an immediate and irreparable adverse impact on the conservation purposes of the Property or the structural integrity of any adjacent dams on the Hines Energy Complex.

(i) The constructions or creation of new roads or jeep trails.

(j) The operation of dune buggies, motorcycles, all terrain vehicles or other loud, destructive or offensive recreational or motorized vehicles.

(k) There shall be no more intense agricultural use of the Property than currently exists on the Property, if any, and no conversion of non-agricultural areas to agricultural use. If the Property is in a spring recharge area, fertilizer use for agriculture activities shall be in accordance with agricultural best management practices recommended therefor by the Natural Resources Conservation Service or the Florida Department of Agriculture and

Consumer Services, whichever is more stringent, as those best management practices may be amended from time to time. No agricultural activities shall occur within a 100-foot buffer around sinkholes and other karst features that are connected to spring conduits.

(l) Actions or activities that adversely impact threatened or endangered species.

(m) Any subdivision of the land.

(n) Citrus production activity and the planting of truck crops or row crops.

(o) Grantor shall not lease or sell hunting and fishing rights on, or related to, the Property.

6. Remedies. If Grantee determines that Grantor is in violation of the terms of this Easement or that a violation is threatened, Grantee shall give written notice to Grantor of such violation and demand corrective action sufficient to cure the violation and, where the violation involves injury to the Property resulting from any use or activity inconsistent with the purpose of this Easement, to restore the portion of the Property so injured. If Grantor fails to cure the violation within thirty (30) days after receipt of notice thereof from Grantee, or under circumstances where the violation cannot reasonably be cured within a 30-day period, fails to begin curing such violation within the 30-day period, or fails to continue diligently to cure such violation until finally cured, Grantee may bring an action at law or in equity in a court of competent jurisdiction to enforce the terms of this Easement, to enjoin the violation, *ex parte* as appropriate, by temporary or permanent injunction, to recover any damages to which it may be entitled for violation of the terms of this Easement or injury to any conservation values protected by this Easement, including damages for the loss of scenic, aesthetic, or environmental values, and to require the restoration of the Property to the condition that existed prior to any such injury. Without limiting Grantor's liability therefore, Grantee, in its sole discretion, may apply any damages recovered to the cost of undertaking any corrective action on the Property.

Grantee's rights under this paragraph apply equally in the event of either actual or threatened violations of the terms of this Easement, and Grantor agrees that Grantee's remedies at law for any violation of the terms of this Easement are inadequate and that Grantee shall be entitled to the injunctive relief described in this paragraph, both prohibitive and mandatory, in addition to such other relief to which Grantee may be entitled, including specific performance of the terms of this Easement. Grantee's remedies described in this paragraph shall be cumulative and shall be in addition to all remedies now or hereafter existing at law or in equity. Grantor hereby waives any defense of estoppel, adverse possession or prescription.

7. Acts Beyond Grantor's Control. Nothing contained in this Conservation Easement shall be construed to entitle Grantee to bring any actions against Grantor for any injury to or change in the Property resulting from causes beyond Grantor's control, including, without limitation, fire, flood, storm, and earth movement, or from any prudent action taken by Grantor under emergency conditions to prevent, abate or mitigate significant injury to the Property, or to the adjacent dams on the Hines Energy Complex resulting from such causes.

8. Access. No right of access by the general public to any portion of the Property is conveyed by this Easement.

9. Costs and Liabilities. Grantor retains all responsibilities and shall bear all costs and liabilities of any kind related to the ownership, operation, upkeep and maintenance of the Property, including the maintenance of adequate comprehensive general liability insurance coverage. Provided, however, Grantor's obligation for upkeep and maintenance shall not require Grantor to physically maintain the Property beyond its natural state after completion of the Reclamation Plan and release of the Reclamation Plan. Grantor shall keep the Property free of any liens arising out of any work performed for, materials furnished to, or obligations incurred by Grantor.

10. Taxes. Grantor shall pay before delinquency of all taxes, assessments, fees and charges of whatever description levied on or assessed against the Property by competent authority

(collectively "taxes"), including any taxes imposed upon, or incurred as a result of, this Easement, and shall furnish Grantee with satisfactory evidence of payment upon request.

11. Condemnation. If the Easement is taken, in whole or in part, by exercise of the power of eminent domain, Grantee shall be entitled to compensation in accordance with applicable law.

12. Subsequent Transfers. Grantor agrees to incorporate the terms of this Easement in any deed or other legal instrument by which it divests itself of any interest in all or a portion of the Property, including, without limitation, a leasehold interest. The failure of Grantor to perform any act required by this paragraph shall not impair the validity of this Easement or limit its enforceability in any way.

13. Notices. Any notice, demand, request, consent, approval or communication that either party desires to or is required to give to the other shall be in writing and either served personally or sent by first class mail, postage prepaid, addressed as follows:

To Grantor: Florida Power Corporation
One Power Plaza
263 13th Avenue South
St. Petersburg, FL 33705
Attn:

To Grantee: Board of Trustees of the Internal Improvement Trust Fund of the State of Florida
C/o Florida Department of Environmental Protection

Division of State Lands
3900 Commonwealth Boulevard, Mail Station 115
Tallahassee, FL 32399-3000

With a copy to:Department of Environmental Protection

Bureau of Mine Reclamation
2051 East Dirac Drive
Tallahassee, FL 32310-3760

or to such other address as either party from time to time shall designate by written notice to the other.

14. Recordation. Grantee shall record this instrument in timely fashion in the official records of Polk County, Florida, and may re-record it at any time as may be required to preserve its rights in this Easement.

15. General Provisions.

(a) Controlling Law. The laws of the State of Florida shall govern the interpretation and performance of this Conservation Easement.

(b) Liberal Construction. Any general rule of construction to the contrary notwithstanding, this Easement shall be liberally construed in favor of the grant to effect the purpose of this Conservation Easement. If any provision of this instrument is found to be ambiguous, an interpretation consistent with the purpose of this Easement that would render the provision valid shall be favored over any interpretation that would render it invalid.

(c) Severability. If any provision of this Easement, or the application thereof to any person or circumstances, is found to be invalid, the remainder of the provisions of this Conservation Easement, or the application of such provision to persons or circumstances other than those as to which it is found to be invalid, as the case may be, shall not be affected thereby, provided the remaining provisions continue to provide Grantor and Grantee with the substantive benefit of the bargain herein contained.

(d) Entire Agreement. This instrument sets forth the entire agreement of the parties with respect to the Conservation Easement and supersedes all prior discussions, negotiations, understandings or agreements relating to the Conservation Easement, all of which are merged herein.

(e) Easement Running with Land and Binding on Successors and Assigns. The covenants, terms, conditions and restrictions of this Conservation Easement shall be binding upon,

and inure to the benefit of, the parties hereto and their respective personal representatives, heirs, successors and assigns and shall continue as a servitude running in perpetuity with the Property.

(f) Captions. The captions in this instrument have been inserted solely for convenience of reference and are not a part of this instrument and shall have no effect upon construction or interpretation.

(g) Counterparts. The parties may execute this instrument in two or more counterparts, which shall, in the aggregate, be signed by both parties; each counterpart shall be deemed an original instrument as against any party who has signed it. In the event of any disparity between the counterparts produced, the recorded counterpart shall be controlling.

(h) Non-waiver. Any forbearance on behalf of the Grantee to exercise its rights in the event of the failure of Grantor to comply with the provisions of this Conservation Easement shall not be deemed or construed to be a waiver of the Grantee's rights hereunder in the event of any subsequent failure of the Grantor to comply.

TO HAVE AND TO HOLD unto Grantee, its successors and assigns forever.

IN WITNESS WHEREOF, Grantor and Grantee have executed this Conservation Easement as of the date and year set forth above.

FLORIDA POWER CORPORATION

Witnesses:

Sonja S. McCreary
Sonja S. McCreary

Donna L Darrow
Donna L. Darrow

By: Sarah S. Rogers

Name: Sarah S Rogers

Title: VP - Transmission

APPROVED
CRAWFORD, OWEN & HINES, P.A.
BY: JBH
DATE: 4/15/02

ATTACHMENT C

BOARD OF TRUSTEES OF THE
INTERNAL IMPROVEMENT FUND
OF THE STATE OF FLORIDA

Witnesses:

Judith A. Booth
Judithe A. Booth

Adrienne Bellflower
Adrienne Bellflower

By: Lynda I. Godfrey

Name: Lynda I. Godfrey

Title: Sr. Acquisition Review Agent
Bureau of Land Acquisition

APPROVED AS TO
FORM & LEGALITY

DEPARTMENT ATTORNEY
3-1-02

STATE OF FLORIDA

COUNTY OF SEMINOLE

The foregoing instrument was acknowledged before me this 19th day of April, 2002 by Sarah S. Rogers of Florida Power Corporation a Florida corporation, on behalf of the corporation. He(she) is personally known to me or has produced _____ as identification.

Sonja S. McCreary (Signature of Notary)

Sonja S. McCreary (Name of Acknowledger, typed, printed or stamped)

NOTARY'S SEAL

My Commission Expires: 3-5-02

Commission No.: CC 983564

SONJA S. MCCREARY
My Comm. Exp. 3/5/05
No. CC 983564
(✓) Personally Known ( ) Other I.D.

STATE OF FLORIDA

COUNTY OF _____

The foregoing instrument was acknowledged before me this ____ day of _____, 2002 by _____ of Board of Trustees of the Internal Improvement

STATE OF FLORIDA

COUNTY OF LEON

The foregoing instrument was acknowledged before me this 3 day of May, 2002 by Lynda I. Godfrey, Senior Acquisition Review Agent, Division of State Lands, Department of Environmental Protection, as agent for and on behalf of the Board of Trustees of the Internal Improvement Trust Fund of the State of Florida. She is personally known to me.

(NOTARY PUBLIC SEAL)

ADRIENNE BELLFLOWER
MY COMMISSION # DD 104135
EXPIRES: April 4, 2006
Bonded Thru Notary Public Underwriters

Adrienne Bellflower
Notary Public
Adrienne Bellflower
(Printed, Typed, or Stamped Name of Notary Public)

Commission No.: DD 104135
My Commission Expires: 4/4/2006

ATTACHMENT C

Exhibit "A"

A parcel of land lying in Sections 5,6,7,8,17 and 18, Township 31 South, Range 25 East, Sections 1,12 and 13, Township 31 South, Range 24 East, Section 6, Township 31 South, Range 25 East, Section 31, Township 30 South, Range 25 East and Section 36, Township 30 South, Range 24 East, Polk County, Florida, and being more particularly described as follows:

Commence at the Southwest corner of the North 1/2 of Section 18, Township 31 South, Range 25 East thence N 22°11'26" E, 8641.05 feet for the POINT OF BEGINNING; thence S 89°46'24" W, 694.41 feet; thence N 76°35'15" W, 397.61 feet; thence S 88°08'17" W, 715.08 feet; thence N 86°10'11" W, 734.31 feet; thence S 82°25'22" W, 770.57 feet; thence N 12°46'47" W, 155.02 feet; thence N 00°00'55" W, 1395.29 feet to a point on line; thence continue on said bearing a distance of 217.68 feet; thence N 44°45'38" W, 655.21 feet; thence N 13°21'58" W, 374.68 feet; thence N 08°13'20" E, 309.58 feet; thence N 01°08'51" W, 297.58 feet; thence N 42°43'09" W, 1002.42 feet; thence N 00°30'53" E, 1973.64 feet; thence N 02°51'11" E, 838.64 feet; thence N 00°33'03" W, 1074.04 feet; thence N 04°47'11" E, 425.85 feet; thence N 00°17'11" W, 466.97 feet; thence N 00°17'11" W, 88.21 feet to a point on the southerly right of way line of State Road 640; thence along said southerly right of way for the following 8 courses and distances: N 89°52'58" E, 1734.93 feet, to a point of curvature of a curve concave Southwesterly having a radius of 1105.92 feet, a central angle of 89°59'41", and a chord of 1563.94 feet that bears S 45°07'11" E; Southeasterly along the arc of said curve, 1737.07 feet to a point of tangency; S 00°07'22" E, 297.98 feet; S 89°52'26" W, 10.00 feet; S 00°07'21" E, 950.56 feet, to a point of curvature of a curve concave Northeasterly having a radius of 1195.92 feet, a central angle of 70°13'23", and a chord of 1375.71 feet that bears S 35°14'02" E; run Southeasterly along the arc of said curve, 1465.75 feet to a point of tangency; N 19°39'10" E, 10.00 feet; S 70°20'44" E, 157.86 feet; thence departing said right of way run S 00°00'00" E, 204.13 feet; thence S 48°03'10" E, 29.03 feet; thence S 27°21'04" E, 114.41 feet; thence S 52°04'00" E, 277.66 feet; thence S 27°09'36" E, 91.63 feet; thence S 69°59'33" E, 234.17 feet; thence S 87°21'03" E, 201.65 feet; thence S 38°41'33" E, 747.42 feet; thence S 25°09'52" E, 212.07 feet; thence S 08°19'45" E, 387.70 feet; thence S 11°40'20" E, 258.71 feet; thence S 07°33'07" E, 629.18 feet; thence S 74°24'24" E, 444.61 feet; thence S 05°12'41" W, 535.12 feet; thence S 05°12'40" W, 96.16 feet; thence S 18°08'29" W, 130.18 feet; thence S 00°03'29" W, 478.72 feet; thence S 02°15'46" E, 279.15 feet; thence S 03°36'10" W, 292.44 feet; thence S 00°33'03" E, 212.63 feet; thence S 04°58'57" E, 301.57 feet; thence S 21°35'48" E, 139.01 feet; thence S 63°26'29" E, 96.91 feet; thence S 85°55'42" E, 257.87 feet; thence S 89°43'25" E, 647.31 feet; thence S 87°11'01" E, 214.66 feet; thence S 85°03'03" E, 274.55 feet; thence S 87°11'01" E, 239.24 feet; thence N 86°00'45" E, 329.20 feet; thence N 89°02'57" E, 596.50 feet; thence S 78°44'42" E, 88.62 feet; thence S 75°41'22" E, 103.00 feet; thence S 71°41'58" E, 111.85 feet; thence S 64°56'45" E, 107.07 feet; thence S 56°15'05" E, 114.17 feet; thence S 63°44'08" E, 259.20 feet; thence

SK 2-19-02

N 90°00'00" E, 150.52 feet to a point on the west boundary of area N-9C, surveyed by Chastain-Skillman, Inc., For I.M.C. dated May 23, 1990; thence along said west boundary for the following 7 courses and distances: S 05°14'02" W, 468.09 feet; S 00°51'39" W, 406.09 feet; S 00°55'29" W, 586.86 feet; S 03°52'49" E, 464.73 feet; S 06°24'08" W, 361.52 feet; S 04°52'43" E, 522.79 feet; S 20°51'19" E, 472.74 feet to the most southerly corner of said west boundary; thence S 12°40'48" W, 429.41 feet to the Northeast corner of the South 100.00 feet of the West 200.00 feet of the North 1/2 of the Southeast 1/4 of Section 8, Township 31 South, Range 25 East, the following course being on the East boundary of the aforesaid description; thence S 00°17'18" E, 1416.32 feet to the Northeast corner of Tiger Bay, also being the Southeast corner of the West 200.00 feet of the Southwest 1/4 of said Section 8; thence S 45°03'49" W, 282.06 feet to a point on the East boundary of N.W. 1/4 of Section 17, Township 31 South, Range 25 East; thence along said East boundary S 00°05'42" E, 2433.10 feet to the S.E. corner of N.W. 1/4 of Section 17, Township 31 South, Range 25 East; thence along South boundary of the N.W. 1/4 of said Section 17 run N 89°53'56" W, 2640.76 feet to the S.W. corner of N.W. 1/4 of said Section 17; thence along the South boundary of North 1/2 of Section 18, Township 31 South, Range 25 East run N 89°23'39" W, 5250.31 feet to the S.W. corner of the North 1/2 of said Section 18; thence along the West boundary of North 1/2 of said Section 18 run N 00°07'58" W, 1323.65 feet to the S.E. corner of North 1/2 of N.E. 1/4 of Section 13, Township 31 South, Range 24 East; thence along the South boundary of North 1/2 of N.E. 1/4 of said Section 13 run S 89°55'06" W, 2457.25 feet; thence N 02°29'55" E, 173.97 feet; thence N 00°48'11" W, 1116.70 feet; thence N 86°46'32" E, 306.00 feet; thence S 87°27'36" E, 1072.36 feet; thence N 84°30'30" E, 720.71 feet; thence S 82°58'12" E, 812.36 feet; thence S 86°50'37" E, 767.89 feet; thence S 45°17'56" E, 310.18 feet; thence N 89°02'12" E, 1995.86 feet; thence N 87°34'55" E, 400.22 feet; thence N 89°46'10" E, 794.04 feet; thence S 89°05'16" E, 403.95 feet; thence N 89°30'22" E, 444.70 feet; thence N 79°52'39" E, 573.33 feet; thence N 83°32'02" E, 198.49 feet; thence N 78°39'05" E, 205.33 feet; thence N 89°52'58" E, 210.66 feet; thence N 00°38'13" W, 901.50 feet; thence N 00°31'29" W, 1816.88 feet; thence N 76°59'05" W, 153.14 feet; thence S 89°57'28" W, 1186.39 feet; thence N 89°45'49" W, 1240.71 feet; thence N 44°01'28" W, 139.63 feet; thence N 00°33'01" E, 1322.37 feet; thence N 03°47'51" E, 352.96 feet; thence N 01°00'13" W, 247.95 feet; thence N 03°55'43" E, 191.99 feet; thence N 07°40'46" W, 304.29 feet; thence N 35°35'41" W, 106.96 feet; thence N 68°28'29" W, 95.82 feet; thence N 87°23'44" W, 180.94 feet; thence N 85°11'15" W, 205.71 feet; thence N 60°26'49" W, 154.55 feet, to the Point of Beginning.

ATTACHMENT C

ALSO DESCRIBED AS:

PARCEL A

A parcel of land lying in Sections 5,6,7, and 8 Township 31 South, Range 25 East, Section 6, Township 31 South, Range 25 East, Section 1, Township 31 South, Range 24 East, Section 36, Township 30 South, Range 24 East and Section 31, Township 30 South, Range 25 East, Polk County, Florida, and being more particularly described as follows:

Commence at the Southwest corner of the North 1/2 of Section 18, Township 31 South, Range 25 East thence N 22°11'26" E, 8641.05 feet for the POINT OF BEGINNING; thence S 89°46'24" W, 694.41 feet; thence N 76°35'15" W, 397.61 feet; thence S 88°08'17" W, 715.08 feet; thence N 86°10'11" W, 734.31 feet; thence S 82°25'22" W, 770.57 feet; thence N 12°46'47" W, 155.02 feet; thence N 00°00'55" W, 1395.29 feet to a point on line; thence continue on said bearing a distance of 217.68 feet; thence N 44°45'38" W, 655.21 feet; thence N 13°21'58" W, 374.68 feet; thence N 08°13'20" E, 309.58 feet; thence N 01°08'51" W, 297.58 feet; thence N 42°43'09" W, 1002.42 feet; thence N 00°30'53" E, 1973.64 feet; thence N 02°51'11" E, 838.64 feet; thence N 00°33'03" W, 1074.04 feet; thence N 04°47'11" E, 425.85 feet; thence N 00°17'11" W, 466.97 feet; thence N 00°17'11" W, 88.21 feet to a point on the southerly right of way line of State Road 640; thence along said southerly right of way for the following 8 courses and distances: N 89°52'58" E, 1734.93 feet, to a point of curvature of a curve concave Southwesterly having a radius of 1105.92 feet, a central angle of 89°59'41", and a chord of 1563.94 feet that bears S 45°07'11" E; Southeasterly along the arc of said curve, 1737.07 feet to a point of tangency; S 00°07'22" E, 297.98 feet; S 89°52'26" W, 10.00 feet; S 00°07'21" E, 950.56 feet, to a point of curvature of a curve concave Northeasterly having a radius of 1195.92 feet, a central angle of 70°13'23", and a chord of 1375.71 feet that bears S 35°14'02" E; run Southeasterly along the arc of said curve, 1465.75 feet to a point of tangency; N 19°39'10" E, 10.00 feet; S 70°20'44" E, 157.86 feet; thence departing said right of way run S 00°00'00" E, 204.13 feet; thence S 48°03'10" E, 29.03 feet; thence S 27°21'04" E, 114.41 feet; thence S 52°04'00" E, 277.66 feet; thence S 27°09'36" E, 91.63 feet; thence S 69°59'33" E, 234.17 feet; thence S 87°21'03" E, 201.65 feet; thence S 38°41'33" E, 747.42 feet; thence S 25°09'52" E, 212.07 feet; thence S 08°19'45" E, 387.70 feet; thence S 11°40'20" E, 258.71 feet; thence S 07°33'07" E, 629.18 feet; thence S 74°24'24" E, 444.61 feet; thence S 05°12'41" W, 535.12 feet; thence S 05°12'40" W, 96.16 feet; thence S 18°08'29" W, 130.18 feet; thence S 00°03'29" W, 478.72 feet; thence S 02°15'46" E, 279.15 feet; thence S 03°36'10" W, 292.44 feet; thence S 00°33'03" E, 212.63 feet; thence S 04°58'57" E, 301.57 feet; thence S 21°35'48" E, 139.01 feet; thence S 63°26'29" E, 96.91 feet; thence S 85°55'42" E, 257.87 feet; thence S 89°43'25" E, 647.31 feet; thence S 87°11'01" E, 214.66 feet; thence S 85°03'03" E, 274.55 feet; thence S 87°11'01" E, 239.24 feet; thence N 86°00'45" E, 329.20 feet; thence N 89°02'57" E, 596.50 feet; thence S 78°44'42" E, 88.62 feet; thence S 75°41'22" E, 103.00 feet; thence S 71°41'58" E, 111.85 feet; thence S 64°56'45" E, 107.07 feet; thence S 56°15'05" E, 114.17 feet; thence S 63°44'08" E, 259.20 feet; thence N 90°00'00" E, 150.52 feet to a point on the west boundary of area N-9C, surveyed by

Chastain-Skillman, Inc., For I.M.C. dated May 23, 1990; thence along said west boundary for the following 7 courses and distances: S 05°14'02" W, 468.09 feet; S 00°51'39" W, 406.09 feet; S 00°55'29" W, 586.86 feet; S 03°52'49" E, 464.73 feet; S 06°24'08" W, 361.52 feet; S 04°52'43" E, 522.79 feet; S 20°51'19" E, 472.74 feet to the most southerly corner of said west boundary; thence departing said boundary run N 75°18'30" W, 97.97 feet; thence S 31°56'39" W, 354.90 feet; thence S 18°34'12" W, 255.83 feet; thence S 01°12'54" W, 1096.41 feet; thence S 56°35'48" W, 198.67 feet; thence S 86°42'58" W, 842.63 feet; thence N 39°57'55" W, 236.14 feet; thence N 00°38'13" W, 590.06 feet; thence N 00°31'29" W, 1816.88 feet; thence N 76°59'05" W, 153.14 feet; thence S 89°57'28" W, 1186.39 feet; thence N 89°45'49" W, 1240.71 feet; thence N 44°01'28" W, 139.63 feet; thence N 00°33'01" E, 1322.37 feet; thence N 03°47'51" E, 352.96 feet; thence N 01°00'13" W, 247.95 feet; thence N 03°55'43" E, 191.99 feet; thence N 07°40'46" W, 304.29 feet; thence N 35°35'41" W, 106.96 feet; thence N 68°28'29" W, 95.82 feet; thence N 87°23'44" W, 180.94 feet; thence N 85°11'15" W, 205.71 feet; thence N 60°26'49" W, 154.55 feet, to the Point of Beginning.

And

Commencing at the Southwest corner of the North 1/2 of Section 18, Township 31 south, Range 25 East thence N 61°39'55" E, 9286.10 feet to the POINT OF BEGINNING said point being the most southerly corner on the West boundary of Area N-9C, surveyed by Chastain-Skillman, Inc. for I.M.C. dated May 23, 1990; thence S 12°40'48" W, 429.41 feet to the Northeast corner of the South 100.00 feet of the West 200.00 feet of the North 1/2 of the Southeast 1/4 of Section 8, Township 31 South, Range 25 East, the following course being on the East boundary of the aforesaid description; thence S 00°17'18" E, 1416.32 feet to the Northeast corner of Tiger Bay, also being the Southeast corner of the West 200.00 feet of the Southwest 1/4 of said Section 8; thence S 86°23'57" W, 1066.92 feet; thence S 89°52'58" W, 390.63 feet; thence N 00°38'13" W, 311.44 feet; thence S 39°57'55" E, 236.14 feet; thence N 86°42'58" E, 842.63 feet; thence N 56°35'48" E, 198.67 feet; thence N 01°12'54" E, 1096.41 feet; thence N 18°34'12" E, 255.83 feet; thence N 31°56'39" E, 354.90 feet; thence S 75°18'30" E, 97.97 feet to the Point of Beginning.

And

PARCEL B

A parcel of land lying in Sections 17 and 18, Township 31 South, Range 25 East, and Section 13, Township 31 South, Range 24 East, Polk County, Florida, and being more particularly described as follows:

Commence at the N.W. corner of the N.E. 1/4 of Section 13, Township 31 South, Range 24 East and run along the West boundary of North 1/2 of N.E. 1/4 of said Section 13 S 00°12'10" W, 1321.42 feet to the S.W. corner of North 1/2 of N.E. 1/4 of said Section 13; thence along the South boundary of North 1/2 of N.E. 1/4 of said Section 13 run N

ATTACHMENT C

89°55'06" E, 205.23 feet for the POINT OF BEGINNING; thence N 02°29'55" E, 173.97 feet; thence N 00°48'11" W, 1116.70 feet; thence N 86°46'32" E, 306.00 feet; thence S 87°27'36" E, 1072.36 feet; thence N 84°30'30" E, 720.71 feet; thence S 82°58'12" E, 812.36 feet; thence S 86°50'37" E, 767.89 feet; thence S 45°17'56" E, 310.18 feet; thence N 89°02'12" E, 1995.86 feet; thence N 87°34'55" E, 400.22 feet; thence N 89°46'10" E, 794.04 feet; thence S 89°05'16" E, 403.95 feet; thence N 89°30'22" E, 444.70 feet; thence N 79°52'39" E, 573.33 feet; thence N 83°32'02" E, 198.49 feet; thence N 78°39'05" E, 205.33 feet; thence N 89°52'58" E, 601.29 feet; thence N 86°23'57" E, 1066.92 feet to the S.E. corner of West 200' of S.W. 1/4 of S.E. 1/4 of Section 8, Township 31 South, Range 25 East; thence S 45°03'49" W, 282.06 feet to a point on the East boundary of N.W. 1/4 of Section 17, Township 31 South, Range 25 East; thence along said East boundary S 00°05'42" E, 2433.10 feet to the S.E. corner of N.W. 1/4 of Section 17, Township 31 South, Range 25 East; thence along South boundary of the N.W. 1/4 of said Section 17 run N 89°53'56" W, 2640.76 feet to the S.W. corner of N.W. 1/4 of said Section 17; thence along the South boundary of North 1/2 of Section 18, Township 31 South, Range 25 East run N 89°23'39" W, 5250.31 feet to the S.W. corner of the North 1/2 of said Section 18; thence along the West boundary of North 1/2 of said Section 18 run N 00°07'58" W, 1323.65 feet to the S.E. corner of North 1/2 of N.E. 1/4 of Section 13, Township 31 South, Range 24 East; thence along the South boundary of North 1/2 of N.E. 1/4 of said Section 13 run S 89°55'06" W, 2457.25 feet, to the Point of Beginning.

ATTACHMENT C

Exhibit "A"

A parcel of land lying in Sections 5,6,7,8,17 and 18, Township 31 South, Range 25 East, Sections 1,12 and 13, Township 31 South, Range 24 East, Section 6, Township 31 South, Range 25 East, Section 31, Township 30 South, Range 25 East and Section 36, Township 30 South, Range 24 East, Polk County, Florida, and being more particularly described as follows:

Commence at the Southwest corner of the North 1/2 of Section 18, Township 31 South, Range 25 East thence N 22°11'26" E, 8641.05 feet for the POINT OF BEGINNING; thence S 89°46'24" W, 694.41 feet; thence N 76°35'15" W, 397.61 feet; thence S 88°08'17" W, 715.08 feet; thence N 86°10'11" W, 734.31 feet; thence S 82°25'22" W, 770.57 feet; thence N 12°46'47" W, 155.02 feet; thence N 00°00'55" W, 1395.29 feet to a point on line; thence continue on said bearing a distance of 217.68 feet; thence N 44°45'38" W, 655.21 feet; thence N 13°21'58" W, 374.68 feet; thence N 08°13'20" E, 309.58 feet; thence N 01°08'51" W, 297.58 feet; thence N 42°43'09" W, 1002.42 feet; thence N 00°30'53" E, 1973.64 feet; thence N 02°51'11" E, 838.64 feet; thence N 00°33'03" W, 1074.04 feet; thence N 04°47'11" E, 425.85 feet; thence N 00°17'11" W, 466.97 feet; thence N 00°17'11" W, 88.21 feet to a point on the southerly right of way line of State Road 640; thence along said southerly right of way for the following 8 courses and distances: N 89°52'58" E, 1734.93 feet, to a point of curvature of a curve concave Southwesterly having a radius of 1105.92 feet, a central angle of 89°59'41", and a chord of 1563.94 feet that bears S 45°07'11" E; Southeasterly along the arc of said curve, 1737.07 feet to a point of tangency; S 00°07'22" E, 297.98 feet; S 89°52'26" W, 10.00 feet; S 00°07'21" E, 950.56 feet, to a point of curvature of a curve concave Northeasterly having a radius of 1195.92 feet, a central angle of 70°13'23", and a chord of 1375.71 feet that bears S 35°14'02" E; run Southeasterly along the arc of said curve, 1465.75 feet to a point of tangency; N 19°39'10" E, 10.00 feet; S 70°20'44" E, 157.86 feet; thence departing said right of way run S 00°00'00" E, 204.13 feet; thence S 48°03'10" E, 29.03 feet; thence S 27°21'04" E, 114.41 feet; thence S 52°04'00" E, 277.66 feet; thence S 27°09'36" E, 91.63 feet; thence S 69°59'33" E, 234.17 feet; thence S 87°21'03" E, 201.65 feet; thence S 38°41'33" E, 747.42 feet; thence S 25°09'52" E, 212.07 feet; thence S 08°19'45" E, 387.70 feet; thence S 11°40'20" E, 258.71 feet; thence S 07°33'07" E, 629.18 feet; thence S 74°24'24" E, 444.61 feet; thence S 05°12'41" W, 535.12 feet; thence S 05°12'40" W, 96.16 feet; thence S 18°08'29" W, 130.18 feet; thence S 00°03'29" W, 478.72 feet; thence S 02°15'46" E, 279.15 feet; thence S 03°36'10" W, 292.44 feet; thence S 00°33'03" E, 212.63 feet; thence S 04°58'57" E, 301.57 feet; thence S 21°35'48" E, 139.01 feet; thence S 63°26'29" E, 96.91 feet; thence S 85°55'42" E, 257.87 feet; thence S 89°43'25" E, 647.31 feet; thence S 87°11'01" E, 214.66 feet; thence S 85°03'03" E, 274.55 feet; thence S 87°11'01" E, 239.24 feet; thence N 86°00'45" E, 329.20 feet; thence N 89°02'57" E, 596.50 feet; thence S 78°44'42" E, 88.62 feet; thence S 75°41'22" E, 103.00 feet; thence S 71°41'58" E, 111.85 feet; thence S 64°56'45" E, 107.07 feet; thence S 56°15'05" E, 114.17 feet; thence S 63°44'08" E, 259.20 feet; thence

SK 2-19-02

N 90°00'00" E, 150.52 feet to a point on the west boundary of area N-9C, surveyed by Chastain-Skillman, Inc., For I.M.C. dated May 23, 1990; thence along said west boundary for the following 7 courses and distances: S 05°14'02" W, 468.09 feet; S 00°51'39" W, 406.09 feet; S 00°55'29" W, 586.86 feet; S 03°52'49" E, 464.73 feet; S 06°24'08" W, 361.52 feet; S 04°52'43" E, 522.79 feet; S 20°51'19" E, 472.74 feet to the most southerly corner of said west boundary; thence S 12°40'48" W, 429.41 feet to the Northeast corner of the South 100.00 feet of the West 200.00 feet of the North 1/2 of the Southeast 1/4 of Section 8, Township 31 South, Range 25 East, the following course being on the East boundary of the aforesaid description; thence S 00°17'18" E, 1416.32 feet to the Northeast corner of Tiger Bay, also being the Southeast corner of the West 200.00 feet of the Southwest 1/4 of said Section 8; thence S 45°03'49" W, 282.06 feet to a point on the East boundary of N.W. 1/4 of Section 17, Township 31 South, Range 25 East; thence along said East boundary S 00°05'42" E, 2433.10 feet to the S.E. corner of N.W. 1/4 of Section 17, Township 31 South, Range 25 East; thence along South boundary of the N.W. 1/4 of said Section 17 run N 89°53'56" W, 2640.76 feet to the S.W. corner of N.W. 1/4 of said Section 17; thence along the South boundary of North 1/2 of Section 18, Township 31 South, Range 25 East run N 89°23'39" W, 5250.31 feet to the S.W. corner of the North 1/2 of said Section 18; thence along the West boundary of North 1/2 of said Section 18 run N 00°07'58" W, 1323.65 feet to the S.E. corner of North 1/2 of N.E. 1/4 of Section 13, Township 31 South, Range 24 East; thence along the South boundary of North 1/2 of N.E. 1/4 of said Section 13 run S 89°55'06" W, 2457.25 feet; thence N 02°29'55" E, 173.97 feet; thence N 00°48'11" W, 1116.70 feet; thence N 86°46'32" E, 306.00 feet; thence S 87°27'36" E, 1072.36 feet; thence N 84°30'30" E, 720.71 feet; thence S 82°58'12" E, 812.36 feet; thence S 86°50'37" E, 767.89 feet; thence S 45°17'56" E, 310.18 feet; thence N 89°02'12" E, 1995.86 feet; thence N 87°34'55" E, 400.22 feet; thence N 89°46'10" E, 794.04 feet; thence S 89°05'16" E, 403.95 feet; thence N 89°30'22" E, 444.70 feet; thence N 79°52'39" E, 573.33 feet; thence N 83°32'02" E, 198.49 feet; thence N 78°39'05" E, 205.33 feet; thence N 89°52'58" E, 210.66 feet; thence N 00°38'13" W, 901.50 feet; thence N 00°31'29" W, 1816.88 feet; thence N 76°59'05" W, 153.14 feet; thence S 89°57'28" W, 1186.39 feet; thence N 89°45'49" W, 1240.71 feet; thence N 44°01'28" W, 139.63 feet; thence N 00°33'01" E, 1322.37 feet; thence N 03°47'51" E, 352.96 feet; thence N 01°00'13" W, 247.95 feet; thence N 03°55'43" E, 191.99 feet; thence N 07°40'46" W, 304.29 feet; thence N 35°35'41" W, 106.96 feet; thence N 68°28'29" W, 95.82 feet; thence N 87°23'44" W, 180.94 feet; thence N 85°11'15" W, 205.71 feet; thence N 60°26'49" W, 154.55 feet, to the Point of Beginning.

ATTACHMENT C

ALSO DESCRIBED AS:

PARCEL A

A parcel of land lying in Sections 5,6,7, and 8 Township 31 South, Range 25 East, Section 6, Township 31 South, Range 25 East, Section 1, Township 31 South, Range 24 East, Section 36, Township 30 South, Range 24 East and Section 31, Township 30 South, Range 25 East, Polk County, Florida, and being more particularly described as follows:

Commence at the Southwest corner of the North 1/2 of Section 18, Township 31 South, Range 25 East thence N 22°11'26" E, 8641.05 feet for the POINT OF BEGINNING; thence S 89°46'24" W, 694.41 feet; thence N 76°35'15" W, 397.61 feet; thence S 88°08'17" W, 715.08 feet; thence N 86°10'11" W, 734.31 feet; thence S 82°25'22" W, 770.57 feet; thence N 12°46'47" W, 155.02 feet; thence N 00°00'55" W, 1395.29 feet to a point on line; thence continue on said bearing a distance of 217.68 feet; thence N 44°45'38" W, 655.21 feet; thence N 13°21'58" W, 374.68 feet; thence N 08°13'20" E, 309.58 feet; thence N 01°08'51" W, 297.58 feet; thence N 42°43'09" W, 1002.42 feet; thence N 00°30'53" E, 1973.64 feet; thence N 02°51'11" E, 838.64 feet; thence N 00°33'03" W, 1074.04 feet; thence N 04°47'11" E, 425.85 feet; thence N 00°17'11" W, 466.97 feet; thence N 00°17'11" W, 88.21 feet to a point on the southerly right of way line of State Road 640; thence along said southerly right of way for the following 8 courses and distances: N 89°52'58" E, 1734.93 feet, to a point of curvature of a curve concave Southwesterly having a radius of 1105.92 feet, a central angle of 89°59'41", and a chord of 1563.94 feet that bears S 45°07'11" E; Southeasterly along the arc of said curve, 1737.07 feet to a point of tangency; S 00°07'22" E, 297.98 feet; S 89°52'26" W, 10.00 feet; S 00°07'21" E, 950.56 feet, to a point of curvature of a curve concave Northeasterly having a radius of 1195.92 feet, a central angle of 70°13'23", and a chord of 1375.71 feet that bears S 35°14'02" E; run Southeasterly along the arc of said curve, 1465.75 feet to a point of tangency; N 19°39'10" E, 10.00 feet; S 70°20'44" E, 157.86 feet; thence departing said right of way run S 00°00'00" E, 204.13 feet; thence S 48°03'10" E, 29.03 feet; thence S 27°21'04" E, 114.41 feet; thence S 52°04'00" E, 277.66 feet; thence S 27°09'36" E, 91.63 feet; thence S 69°59'33" E, 234.17 feet; thence S 87°21'03" E, 201.65 feet; thence S 38°41'33" E, 747.42 feet; thence S 25°09'52" E, 212.07 feet; thence S 08°19'45" E, 387.70 feet; thence S 11°40'20" E, 258.71 feet; thence S 07°33'07" E, 629.18 feet; thence S 74°24'24" E, 444.61 feet; thence S 05°12'41" W, 535.12 feet; thence S 05°12'40" W, 96.16 feet; thence S 18°08'29" W, 130.18 feet; thence S 00°03'29" W, 478.72 feet; thence S 02°15'46" E, 279.15 feet; thence S 03°36'10" W, 292.44 feet; thence S 00°33'03" E, 212.63 feet; thence S 04°58'57" E, 301.57 feet; thence S 21°35'48" E, 139.01 feet; thence S 63°26'29" E, 96.91 feet; thence S 85°55'42" E, 257.87 feet; thence S 89°43'25" E, 647.31 feet; thence S 87°11'01" E, 214.66 feet; thence S 85°03'03" E, 274.55 feet; thence S 87°11'01" E, 239.24 feet; thence N 86°00'45" E, 329.20 feet; thence N 89°02'57" E, 596.50 feet; thence S 78°44'42" E, 88.62 feet; thence S 75°41'22" E, 103.00 feet; thence S 71°41'58" E, 111.85 feet; thence S 64°56'45" E, 107.07 feet; thence S 56°15'05" E, 114.17 feet; thence S 63°44'08" E, 259.20 feet; thence N 90°00'00" E, 150.52 feet to a point on the west boundary of area N-9C, surveyed by

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And

Commencing at the Southwest corner of the North 1/2 of Section 18, Township 31 south, Range 25 East thence N 61°39'55" E, 9286.10 feet to the POINT OF BEGINNING said point being the most southerly corner on the West boundary of Area N-9C, surveyed by Chastain-Skillman, Inc. for I.M.C. dated May 23, 1990; thence S 12°40'48" W, 429.41 feet to the Northeast corner of the South 100.00 feet of the West 200.00 feet of the North 1/2 of the Southeast 1/4 of Section 8, Township 31 South, Range 25 East, the following course being on the East boundary of the aforesaid description; thence S 00°17'18" E, 1416.32 feet to the Northeast corner of Tiger Bay, also being the Southeast corner of the West 200.00 feet of the Southwest 1/4 of said Section 8; thence S 86°23'57" W, 1066.92 feet; thence S 89°52'58" W, 390.63 feet; thence N 00°38'13" W, 311.44 feet; thence S 39°57'55" E, 236.14 feet; thence N 86°42'58" E, 842.63 feet; thence N 56°35'48" E, 198.67 feet; thence N 01°12'54" E, 1096.41 feet; thence N 18°34'12" E, 255.83 feet; thence N 31°56'39" E, 354.90 feet; thence S 75°18'30" E, 97.97 feet to the Point of Beginning.

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ATTACHMENT C

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Progress Energy Service Company, LLC
on behalf of Progress Energy, Inc. subsidiaries
P.O. Box 1551
Raleigh, NC 27602

ATTACHMENT C

Check Date	Check Number	Vendor name	Vendor #
10-APR-02	98789	COMMONWEALTH LAND TITLE INSUR CO	160643

Invoice#	Invoice Date	Invoice Description	Adjustments	Paid Amt
040102	01-APR-02		0.00	2,905.00
			0	2905
				2905

THE FACE OF THIS DOCUMENT HAS A COLORED BACKGROUND NOT A WHITE BACKGROUND

Progress Energy Service Company, LLC
on behalf of Progress Energy, Inc. subsidiaries
P.O. Box 1551
Raleigh, NC 27602

Progress Energy

64-1327
611

098789

Vendor Number 160643

VOID AFTER 6 MONTHS FROM DATE

Check Date
10-APR-02 98789

******2,905.00

Pay Exactly **Two Thousand Nine Hundred Five Dollars And 00 Cents**

TO THE ORDER OF
COMMONWEALTH LAND TITLE INSUR CO
205 1/2 S BROADWAY AVE
BARTOW, FL 33830

Wachovia Bank, N.A.
Augusta, GA

Signature

⑈098789⑈ ⑆061113279⑆ 07 529 207 ⑈

ATTACHMENT C

GRANTOR'S AFFIDAVIT AND INDEMNITY AGREEMENT

State of Florida

County of Seminole

SARAH ROGERS, deposes and says:

1. That she is Vice President of Florida Power Corporation ("Seller"), a corporation which is the owner of the property situate in Polk County, Florida, described as:

SEE EXHIBIT "A" ATTACHED HERETO AND MADE A PART HEREOF

2. That she has knowledge of the facts stated herein and full power and authority to execute this Affidavit and Indemnity Agreement on behalf of said corporation.

3. That Seller's title to said property is good and marketable to the best of her knowledge and belief, that all improvements located on said property have been completed for more than 90 days and all who performed labor or furnished materials for construction or remodeling have been paid in full, and that there are no encumbrances on the title other than those shown on the commitment or commitments to insure the said land, except:

4. That there are no parties other than the undersigned in possession of or claiming possession to said property.

5. That there are no facts by reason of which the title to, or boundaries, or possession of said property might be disputed or questioned.

6. That there are no facts which might be asserted that could give rise to a lien interest in said property prior to the deed or mortgage being recorded, and that the undersigned will not execute any instrument that would adversely affect the title or interest to be conveyed.

7. That this Affidavit is made fro the purpose of inducing the buying and/or the making of a loan on said property and COMMONWEALTH LAND TITLE INSURANCE COMPANY issuing a Commitment or Commitments, and/or Policy or Policies insuring the title to said property, and Seller does hereby agree to indemnify and hold COMMONWEALTH LAND TITLE INSURANCE COMPANY harmless from any and all loss, costs or damages, including attorneys' fees, which COMMONWEALTH LAND TITLE INSURANCE COMPANY may incur or become liable for under its Insured Closing Service Letter, Commitment or Commitments, and/or Policy or Policies, either directly or indirectly, as a result of any mechanic' or materialmen's liens filed against the

ATTACHMENT C

subject property or parties in possession or other unrecorded claims or encumbrances of any kind or any misstatement contained herein.

Sarah Rogers

THE FOREGOING instrument was sworn to and subscribed before me this 19th day of April, 2002 by Sarah Rogers, as Vice President of Florida Power Corporation, a Florida corporation, on behalf of the corporation. She [✓] is personally known to me or [ ] produced _____ for identification.

My Commission Expires: 3-5-05

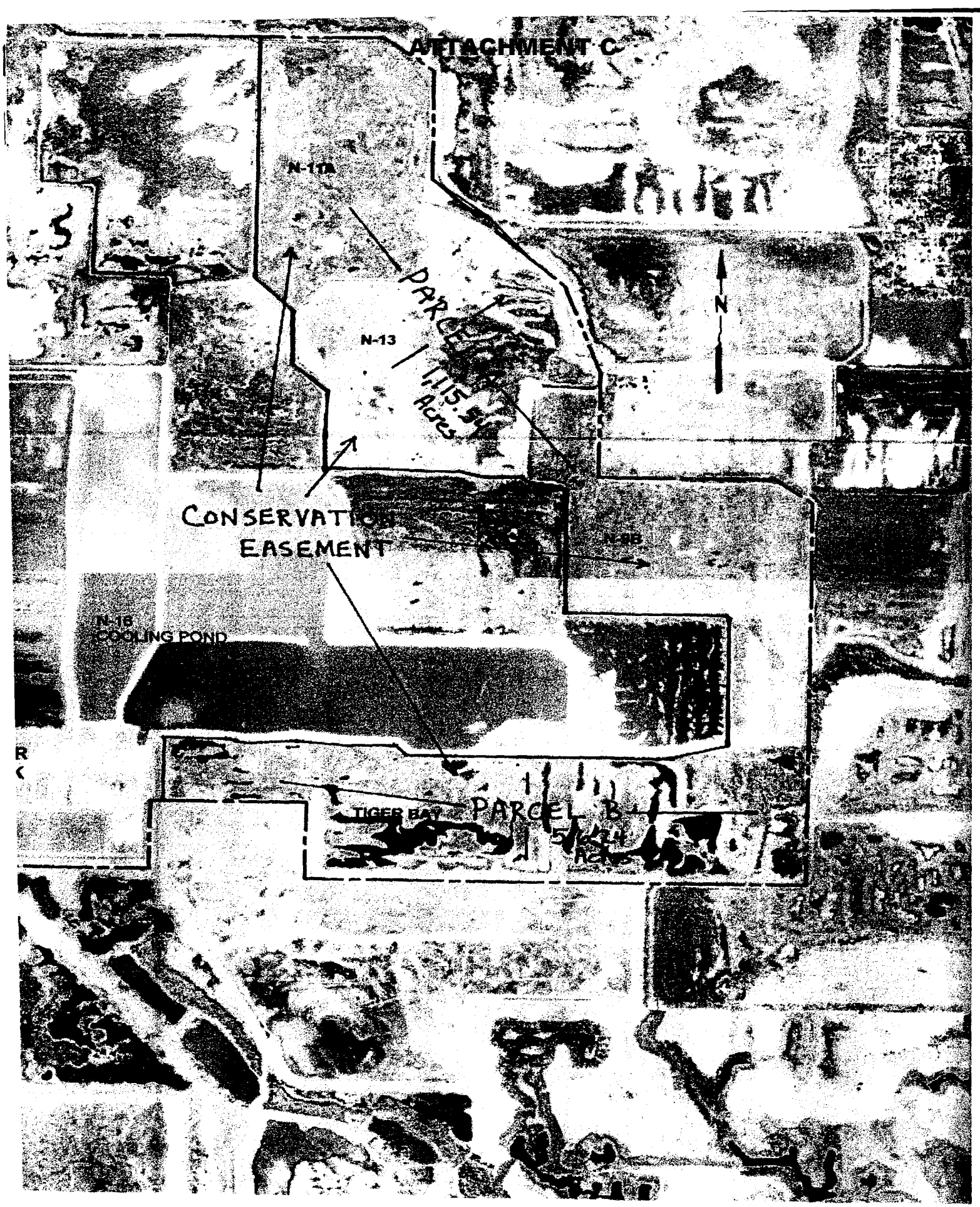
Notary Signature (IMPRESS SEAL)

Sonja S. McCreary

Printed Notary Signature

SONJA S. MCCREARY
My Comm. Exp. 3/5/05
No. CC 983564
(✓) Personally Known ( ) Other I.D.

APPROVED
CRAWFORD, OWEN & HINES, P.A.
BY: JBH
DATE: 4/15/02



FLORIDA POWER CORPORATION - CONSERVATION EASEMEN

ATTACHMENT D: GROUNDWATER MONITORING REQUIREMENTS

ATTACHMENT D

GROUNDWATER CONSTRUCTION, OPERATION AND MONITORING REQUIREMENTS

WAFR ID: FLA187348

Duke Energy Florida, LLC.
Hines Energy Complex: Power Blocks 1, 2, 3, and 4
7700 County Road 555
Bartow, FL 33830
Polk County

Latitude: 27° 47' 21.12" N Longitude: 81° 58' 11.57" W

These Groundwater Construction, Operation and Monitoring Requirements (GWCOMR) are developed by the Licensee, Duke Energy Florida, LLC., in conjunction with the Florida Department of Environmental Protection (Department) Southwest District's Industrial Wastewater (IWW) Section for the monitoring of the following sites (as defined in Rule 62-520.600, F.A.C.): the Cooling Pond (N-16), Wetlands Treatment System (SA-8), the Brine Pond (SA-9) Triangle Lakes Water Cropping Area (WCA) and Lake Phosphoria WCA.

The Department's Southwest District IWW Section is responsible for reviewing and approving all revisions to this document in accordance with Section A, General Condition XXI. [Procedures for Post-Certification Submittals] and Section B, DEP Specific Condition I.A. [Groundwater Monitoring] of the Conditions of Certification, unless the Department determines that a modification or an amendment to the Conditions is necessary.

New sources or deletion of existing sources of wastewater with changes to water quality standards; improvements made at a treatment facility to provide for a new or expanded land application system with increase in the permitted capacity; projects that cause or may cause changes to the quantity and/or quality of discharges to groundwater as a result of solid waste disposal or industrial wastewater treatment; pollutants not addressed in this Attachment; and, applications for a new Water Quality Criteria exemption pursuant to Rule 62-520.500, F.A.C., shall be submitted by the Licensee and reviewed by the Department for determination of modification or amendment to the existing license. If a determination is made that a modification to the Conditions is warranted, the licensee shall submit a petition for modification to the Conditions of Certification to the Department for review and approval in accordance with Section 403.516, F.S. and Rule 62-17.211, F.A.C.

ATTACHMENT D

I. FACILITY DESCRIPTION

Wastewater Treatment:

Wastewater discharges are directed to either the Cooling Pond or the Brine Pond. The cooling pond receives wastewater from cooling systems; treated domestic wastewater; non-hazardous chemical cleaning and biocide wastes; and other non-hazardous. low volume waste streams, pursuant to the federal definition found in 40 CFR Part 423.11, which include, but are not limited to, water pretreatment filter backwash, water treatment system cleaning wastes, boiler blowdown, laboratory and sampling streams, floor drains, treated water (service water), incidental leaks and spills from the power blocks and associated ancillary structures, discharges from power block sumps, and discharge from oil/water separators. In addition, cooling pond water may be directed to SA-8 Water Crop/Wetlands Treatment System; Contact stormwater (stormwater associated with industrial activity) is collected via the Plant Island Ditch (PID) stormwater system and directed to the zero-discharge Cooling Pond. The Brine Pond receives only reverse osmosis (R.O.) reject. In addition, inlet chiller cooling tower blowdown may flow to the Brine Pond as an emergency back-up. All other wastewater streams discharge to the Cooling Pond.

The additional alternative water supplies consist of reclaimed/IWW used to augment the cooling pond, including those supplies associated with receipt of City of Bartow reclaimed water and IWW from the Duke Energy Florida Tiger Bay Cogen. facility, Mosaic Fertilizer, LLC, and Estech, Inc. Water will be transferred from Mosaic's systems upstream from their final NPDES Outfalls, via pumping stations, to existing water crop areas P-3 and/or Lake Phosphoria located on Duke Energy property. From this point, water will follow the existing flow paths from and or through P-3 and Lake Phosphoria to the Triangle Lakes area, all of which may be used to store excess water. From the existing Triangle Lakes pump station, water can be pumped directly to the Hines Cooling Pond or other water crop storage areas. Water from the Estech, Inc. Agricola site will be pumped directly to the Tiger Bay Cogen. IWW transfer line, which discharges directly into the Cooling Pond.

Figure 1 shows location of the monitoring wells.

II. MONITORING AND REPORTING REQUIREMENTS

1. The sample collection, analytical test methods, and method detection limits (MDLs) applicable to this attachment shall be conducted using a sufficiently sensitive method to ensure compliance with applicable water quality standards and effluent limitations and shall be in accordance with Rule 62-4.246, Chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate. The list of Department established analytical methods, and corresponding MDLs (method detection limits) and PQLs (practical quantitation limits), which is titled "FAC 62-4 MDL/PQL Table (November 10, 2020)" is available at http://www.dep.state.fl.us/labs/library/index.htm. The MDLs and PQLs as described in this list shall constitute the minimum acceptable MDL/PQL values and the Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those described above unless alternate MDLs and/or PQLs have been specifically approved by the Department for this attachment. Any method included in the list may be used for reporting as long as it meets the following requirements:
    a. The laboratory's reported MDL and PQL values for the particular method must be equal or less than the corresponding method values specified in the Department's approved MDL and PQL list;

b. The laboratory reported MDL for the specific parameter is less than or equal to the compliance limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Parameters that are listed as "report only" in the attachment shall use methods that provide an MDL, which is equal to or less than the applicable water quality criteria stated in 62-302, F.A.C.; and

If the MDLs for all methods available in the approved list are above the stated compliance limit or applicable water quality criteria for that parameter, then the method with the lowest stated MDL shall be used. When the analytical results are below method detection or practical quantitation limits, the licensee shall report the actual laboratory MDL and/or PQL values for the analyses that were performed following the instructions on the applicable discharge monitoring report.

Where necessary, the licensee may request approval of alternate methods or for alternative MDLs or PQLs for any approved analytical method. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the compliance limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C. Approval of an analytical method not included in the above-referenced list is not necessary if the analytical method is approved in accordance with 40 CFR 136 or deemed acceptable by the Department. *[62-4.246, 62-160]*

2. The licensee shall provide safe access points for obtaining representative influent and effluent samples which are required by this attachment. *[62-620.320(6)]*

3. The licensee shall complete and submit to the Department Discharge Monitoring Reports (DMRs) in accordance with the frequencies specified by the REPORT type (i.e. monthly, quarterly, semiannual, annual, etc.) indicated on the DMR forms attached to this attachment. Unless specified otherwise in this attachment, monitoring results for each monitoring period shall be submitted in accordance with the associated DMR quarterly dates below. DMRs shall be submitted for each required monitoring period.

   The licensee may submit either paper or electronic DMR forms. If submitting paper DMR forms, the licensee shall make copies of the attached DMR forms, without altering the original format or content unless approved by the Department and shall mail the completed DMR forms to the Department's Southwest District Office at the address specified in Condition I.B.4.by the twenty-eighth (28th) of the month following the month of operation.

   If submitting electronic DMR forms, the licensee shall use the electronic DMR system(s) approved in writing by the Department and shall electronically submit the completed DMR forms to the Department by the twenty-eighth (28th) of the month following the month of operation. Data submitted in electronic format is equivalent to data submitted on signed and certified paper DMR forms. *[62-620.610(18)]*

4. Unless specified otherwise in this attachment, all reports and other information required by this attachment, including 24-hour notifications, shall be submitted to or reported to, as appropriate, the Department's Southwest District Office at the address specified below:

   Florida Department of Environmental Protection, Southwest
   District Compliance Assurance Program, Attention: Industrial
   Wastewater 13051 N. Telecom Pkwy, Suite 101

Temple Terrace, Florida 33637-0926

Phone Number - (813) 470-5700
FAX Number - (813) 470-5995
email: swd_iw@floridadep.gov

[62-620.305]

5. All reports and other information shall be signed in accordance with the requirements of Rule 62-620.305, F.A.C. *[62-620.305]*

6. If there is no discharge from the facility on a day when the facility would normally sample, the sample shall be collected on the day of the next discharge. *[62-620.320(6)]*

A. EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

REUSE OR DISPOSAL:

1. Discharge to G-001, HEC Cooling Pond and Brine Pond, shall be limited and monitored by the licensee as specified below and reported in accordance with Requirement I.A.3.:

Table 1.

			Effluent Limitations		Monitoring Requirements			
Parameter	Units	Max/Min	Limit	Statistical Basis	Frequency of Analysis	Sample Type	Monitoring Site Number	Notes
Specific Conductance	UMHOS/CM	Max	Report	Daily Maximum	Quarterly	In-situ	EFF-1, EFF-2	
pH	s.u.	Min Max	Report	Daily Minimum Daily Maximum	Quarterly	In-situ	EFF-1, EFF-2	
Temperature Water	Deg. C	Max	Report	Daily Maximum	Quarterly	In-situ	EFF-1, EFF-2	
Oxygen, Dissolved	mg/L	Max	Report	Daily Minimum	Quarterly	In-situ	EFF-1, EFF-2	
Arsenic, Total	ug/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Carbon, Total Organic (TOC)	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Sodium, Total	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Fecal Coliform	cts/100mL	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Dissolved Solids, Total (TDS)	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Aluminum, Total	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Iron, Total	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Manganese, Total	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Sulfate, Total	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Color	CU	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Nitrogen, Nitrate, Total (as N)	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Gross Alpha	pCi/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	
Fluoride, Total	mg/L	Max	Report	Daily Maximum	Quarterly	Grab	EFF-1, EFF-2	

2. Effluent samples shall be taken at the monitoring site locations listed in Requirement I.A.1. and as described below:

Table 2.

Monitoring Site Number	Description of Monitoring Site
EFF-1	Representative location from G-001 in the vicinity of the HEC Cooling Pond discharge structure.
EFF-2	Representative location from G-001 in the vicinity of the Brine Pond discharge structure.

III. SITE GROUNDWATER MONITORING

1. The permittee shall give at least 72-hours notice to the Department's Southwest District Office, prior to the installation of any monitoring wells. *[62-520.600(6)(h)]*
2. Before construction of new groundwater monitoring wells, a soil boring shall be made at each new monitoring well location to properly determine monitoring well specifications such as well depth, screen interval, screen slot, and filter pack. *[62- 520.600(6)(g)]*
3. Within 30 days after installation of a monitoring well, the permittee shall submit to the Department's Southwest District Office well completion reports and soil boring/lithologic logs on the attached DEP Form(s) 62-520.900(3), Monitoring Well Completion Report. *[62-520.600(6)(j) and .900(3)]*
4. Within sixty (60) days of completion of construction of new ground water monitoring wells and every 5 years thereafter, the licensee shall sample **MWB-6**, **MWC-5** and **MWC-1F** ground water monitor wells for the Primary and Secondary Drinking Water parameters included in Chapter 62-550, F.A.C., "Drinking Water Standards, Monitoring, and Reporting", Fecal Coliform and EPA Methods 601 and 602 (for parameters not otherwise included in the Primary and Secondary Drinking Water parameters). The results from the initial sampling of a new well shall be used to determine the background concentrations of the parameters tested and shall be sent to the DEP's Industrial Wastewater Section, Southwest District Office. *[62- 520.600(5)(a) and (b)]*
5. Within 60 days after installation of any monitoring well, a properly scaled figure depicting all active monitoring well locations with identification numbers shall be submitted to the appropriate permitting program at the Department's District office that issued the permit. The figure also shall include the monitoring well, top of casing, and ground surface elevations referenced to the National Geodetic Vertical Datum (NGVD) of 1929 or to the North American Vertical Datum (NAVD 1988) and measured to the nearest 0.01 foot, along with monitoring well location latitude and longitude to the nearest 0.1 seconds. [62-520.600(6) (i)]
6. All piezometers and monitoring wells not part of this GWCOMR are to be plugged and abandoned in accordance with Rule 62-532.500(4), F.A.C., unless future use is intended. *[62-532.500(4)]*
7. During the period of operation authorized by this Certification the Licensee shall continue to sample ground water at the monitoring wells identified in Section II.8 below, in accordance with the COC and GWCOMR prepared in accordance with Rule 62- 520.600,

F.A.C.

8. The following monitoring wells shall be sampled for Groundwater Monitoring requirements:

Table 3.

Monitoring Well ID	Alternate Well Name and/or Description of Monitoring Location	Aquifer Monitored	New or Existing
MWC-1F	Compliance well	Lower Intermediate	Existing
MW-1	Water Level well (Formerly MWC-1)	Intermediate	Existing
MWC-2	Compliance well	Intermediate	Existing
MWC-3	Compliance well	Intermediate	Existing
MWC-4	Compliance well	Intermediate	Existing
MWC-5	Compliance well	Intermediate	Existing
MWB-6	Background well	Intermediate	Existing
MWC-7	Compliance well	Intermediate	Existing
MWC-8	Compliance	Intermediate	New
MWB-WCA	Background well	Surficial	Existing
MWC-TL	Compliance well	Surficial	Existing

MWB = Background; MWI = Intermediate; MWC = Compliance; MWP = Piezometer
[62-520.600]

9. The monitor wells specified in Condition II.8 above shall be sampled for the parameters listed below:

Table 4.

Parameter Name	Compliance Well Limit	Units	Sample Type	Monitoring Frequency
Water Level Relative to NGVD*	Report	FEET	In-situ	Quarterly
Specific Conductance	Report	UMHOS/CM	In-situ	Quarterly
pH	6.5-8.5	SU	In-situ	Quarterly
Temperature Water	NA	DEG.C	In-situ	Quarterly
Oxygen, Dissolved	Report	MG/L	In-situ	Quarterly
Arsenic, Total	10	ug/L	Grab	Quarterly
Carbon, Total Organic (TOC)	Report	mg/L	Grab	Quarterly
Sodium, Total	160	mg/L	Grab	Quarterly
Fecal Coliform	Report	cts/100mL	Grab	Quarterly
Dissolved Solids, Total (TDS)	840	mg/L	Grab	Quarterly

Aluminum, Total	0.2	mg/L	Grab	Quarterly
Iron, Total	3.16	mg/L	Grab	Quarterly
Manganese, Total	0.72	mg/L	Grab	Quarterly
Sulfate, Total	250	mg/L	Grab	Quarterly
Color	Report	CU	Grab	Quarterly
Nitrogen, Nitrate, Total (as N)	10.0	mg/L	Grab	Quarterly
Gross Alpha	Report	pCi/L	Grab	Quarterly
Fluoride, Total	2.0	mg/L	Grab	Quarterly

[62-520.600(11)(b)]

10. Water levels shall be recorded prior to evacuating the well for sample collection. Elevation references shall include the top of the well casing and land surface at each well site (NGVD allowable) at a precision of plus or minus 0.01 feet. *[62- 520.600(11)(c)]*

11. Ground water monitoring wells shall be purged prior to sampling to obtain a representative sample. *[62-160.210]*

12. Analyses shall be conducted on un-filtered samples, unless filtered samples have been approved by the Department as being more representative of ground water conditions. *[62-520.310(5)]*

13. Ground water monitoring test results shall be submitted as required under Condition I.B.3 of this attachment. *[62-520.600(11)(b)]*

14. In the event of the addition of a new wastewater or water makeup source(s) to the cooling pond, a characterization will be required prior to discharge to the cooling pond.

    Within six (6) months of startup for any new facilities, the licensee shall provide separate waste stream characterizations for the cooling pond and brine pond. The cooling pond samples will be collected in the plant discharge side and will beconsidered as representative of the combined waste streams discharged to this impoundment. The brine pond samples will be collected in SA-9 and shall be considered as representative of the reverse osmosis, demineralizer, and any other waste (if applicable) discharges to this impoundment. Thereafter, a waste streams characterization shall be performed from a surface water sample collected from the cooling pond discharge side within six months of the completion of coal gasification units but in no event with less frequency than every 5 years.

    The samples for characterization shall be analyzed for the Primary and Secondary Drinking Water Standards (Chapter 62-550, F.A.C), Fecal Coliform and the EPA Priority Pollutants. The components identified in the waste stream characterizations, and the leachate characterization pursuant to Section B, DEP Specific Condition I.E. [Solid Waste Storage and Disposal] of the Conditions of Certification as well as ground water indicator parameters may be used to modify the Ground Water Monitoring Plan. The results shall be sent to-the Groundwater Regulatory Section, Southwest District office.
    [62-4.070 (3)]

15. Should the licensee wish to resample water quality analyses, taken pursuant to the GWCOMR, the licensee will do so within 15 days of the receipt of the first sampled water quality analyses. The Department will then consider the resample analyses to be acceptable; in any other event the original samples will be considered representative of formation waters by the Department and by the licensee.
    [62- 4.070 (3)]

16. If any monitor well becomes damaged or inoperable, the licensee shall notify the Department's SWD office the next business day from discovery, and a detailed written report shall follow within seven (7) days. The written report shall detail what problem has occurred and remedial measures that have been taken to prevent the recurrence. All monitoring well design and replacement shall be approved by the Department prior to installation. *[62-520.600][62-620.320(6)]*

ATTACHMENT D

DEPARTMENT OF ENVIRONMENTAL PROTECTION DISCHARGE MONITORING REPORT - PART A

When Completed mail this report to: Department of Environmental Protection, Southwest District Office, Compliance Assurance Program, Industrial Wastewater, 13051 N. Telecom Parkway, Suite 101, Temple Terrace, Florida 33637-0926, Email: swd_iw@dep.state.fl.us

PERMITTEE NAME: Duke Energy Florida, LLC.
MAILING ADDRESS: 7700 County Road 555
Bartow, FL 33830

FACILITY NUMBER: PA 92-33 (FLA187348)

LIMIT: Final
CLASS SIZE: N/A
REPORT: Quarterly
GROUP: Industrial

FACILITY: Hines Energy Complex: Power Blocks 1, 2, 3, and 4

LOCATION: 7700 County Road 555
Bartow, FL 33830

COUNTY: Polk

MONITORING GROUP NUMBER: G-001

MONITORING GROUP DESC: HEC Cooling Pond and Brine Pond

NO DISCHARGE TO G-001: ☐

MONITORING PERIOD From: _____ To _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Specific Conductance	Sample Measurement										
PARM Code 00095 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	umhos/cm		Quarterly	In-Situ
pH	Sample Measurement										
PARM Code 00400 1 Mon. Site No. EFF-1	Permit Requirement				Report (Day.Min.)		Report (Day.Max.)	s.u.		Quarterly	In-Situ
Temperature (C), Water	Sample Measurement										
PARM Code 00010 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	Deg C		Quarterly	In Situ
Oxygen, Dissolved (DO)	Sample Measurement										
PARM Code 00300 1 Mon. Site No. EFF-1	Permit Requirement				Report (Day.Min.)			mg/L		Quarterly	In Situ
Arsenic, Total Recoverable	Sample Measurement										
PARM Code 00978 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	ug/L		Quarterly	Grab

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (YY/MM/DD)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

ATTACHMENT D

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Hines Energy Complex: Power Blocks 1, 2, 3, and 4 MONITORING GROUP NUMBER: G-001 FACILITY NUMBER: PA 92-33 (FLA187348)

Polk County MONITORING PERIOD From: _____ To _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Carbon, Total Organic (TOC)	Sample Measurement										
PARM Code 00680 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Sodium, Total Recoverable	Sample Measurement										
PARM Code 00923 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Coliform, Fecal	Sample Measurement										
PARM Code 74055 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	#/100mL		Quarterly	Grab
Dissolved Solids, Total (TDS)	Sample Measurement										
PARM Code 70295 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Aluminum, Total Recoverable	Sample Measurement										
PARM Code 01104 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Iron, Total Recoverable	Sample Measurement										
PARM Code 00980 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Manganese, Total Recoverable	Sample Measurement										
PARM Code 11123 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Sulfate, Total	Sample Measurement										
PARM Code 00945 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Color	Sample Measurement										
PARM Code 00080 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	PCU		Quarterly	Grab
Nitrogen, Nitrate Total (as N)	Sample Measurement										
PARM Code 11123 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab

DISCHARGE MONITORING REPORT - PART A (Continued)

ATTACHMENT D

FACILITY: Hines Energy Complex: Power Blocks 1, 2, 3, and 4 MONITORING GROUP NUMBER: G-001 FACILITY NUMBER: PA 92-33 (FLA187348)

Polk County MONITORING PERIOD From: _____ To _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Gross Alpha	Sample Measurement										
PARM Code 80045 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	pCi/L		Quarterly	Grab
Fluoride, Total	Sample Measurement										
PARM Code 00951 1 Mon. Site No. EFF-1	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab

ATTACHMENT D

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Hines Energy Complex: Power Blocks 1, 2, 3, and 4 MONITORING GROUP NUMBER: G-001 FACILITY NUMBER: PA 92-33 (FLA187348)

Polk County MONITORING PERIOD From: _____ To _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Specific Conductance	Sample Measurement										
PARM Code 00095 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	umhos/cm		Quarterly	In-Situ
pH	Sample Measurement										
PARM Code 00400 1 Mon. Site No. EFF-2	Permit Requirement				Report (Day.Min.)		Report (Day.Max.)	s.u.		Quarterly	In-Situ
Temperature (C), Water	Sample Measurement										
PARM Code 00010 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	Deg C		Quarterly	In Situ
Oxygen, Dissolved (DO)	Sample Measurement										
PARM Code 00300 1 Mon. Site No. EFF-2	Permit Requirement				Report (Day.Min.)			mg/L		Quarterly	In Situ
Arsenic, Total Recoverable	Sample Measurement										
PARM Code 00978 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	ug/L		Quarterly	Grab

ATTACHMENT D

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Hines Energy Complex: Power Blocks 1, 2, 3, and 4 MONITORING GROUP NUMBER: G-001 FACILITY NUMBER: PA 92-33 (FLA187348)

Polk County MONITORING PERIOD From: _____ To _____

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Carbon, Total Organic (TOC)	Sample Measurement										
PARM Code 00680 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Sodium, Total Recoverable	Sample Measurement										
PARM Code 00923 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Coliform, Fecal	Sample Measurement										
PARM Code 74055 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	#/100mL		Quarterly	Grab
Dissolved Solids, Total (TDS)	Sample Measurement										
PARM Code 70295 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Aluminum, Total Recoverable	Sample Measurement										
PARM Code 01104 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Iron, Total Recoverable	Sample Measurement										
PARM Code 00980 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Manganese, Total Recoverable	Sample Measurement										
PARM Code 11123 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Sulfate, Total	Sample Measurement										
PARM Code 00945 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab
Color	Sample Measurement										
PARM Code 00080 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	PCU		Quarterly	Grab
Nitrogen, Nitrate Total (as N)	Sample Measurement										
PARM Code 11123 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab

ATTACHMENT D

DISCHARGE MONITORING REPORT - PART A (Continued)

FACILITY: Hines Energy Complex: Power Blocks 1, 2, 3, and 4

Polk County

MONITORING GROUP NUMBER: G-001

MONITORING PERIOD From: _____ To _____

FACILITY NUMBER: PA 92-33 (FLA187348)

Parameter		Quantity or Loading		Units	Quality or Concentration			Units	No. Ex.	Frequency of Analysis	Sample Type
Gross Alpha	Sample Measurement										
PARM Code 80045 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	pCi/L		Quarterly	Grab
Fluoride, Total	Sample Measurement										
PARM Code 00951 1 Mon. Site No. EFF-2	Permit Requirement						Report (Day.Max.)	mg/L		Quarterly	Grab

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (YY/MM/DD)

COMMENT AND EXPLANATION OF ANY VIOLATIONS (Reference all attachments here):

GROUNDWATER MONITORING REPORT

Facility Name: Duke Energy - Hines Energy Complex
Permit Number: FLA187348
County: Polk
Office: Southwest District

Monitoring Well ID: MWB-6
Well Type: Background
Description: HEC Cooling Pond
Re-submitted DMR: ☐

Report Frequency: Quarterly
Program: Industrial

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes____No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In situ	Quarterly				
Specific Conductance	00095		Report	umho/cm	In situ	Quarterly				
Oxygen, Dissolved (DO)	00300		Report	Mg/L	In situ	Quarterly				
Coliform, Fecal	74055		Report	#100 mL	Calculation	Quarterly				
Sulfate, Total	00945		Report	Mg/L	Grab	Quarterly				
Arsenic, Total Recoverable	00978		Report	ug/L	Grab	Quarterly				
Sodium, Total Recoverable	00923		Report	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		Report	mg/L	Grab	Quarterly				
Color	00080		Report	PCU	Grab	Quarterly				
Iron, Total Recoverable	00980		Report	mg/L	Grab	Quarterly				
Aluminum, Total Recoverable	01104		Report	mg/L	Grab	Quarterly				
Manganese, Total Recoverable	11123		Report	mg/L	Grab	Quarterly				
Temperature (C), Water	00010		Report	Deg C	In situ	Quarterly				
Carbon, Total Organic (TOC)	00680		Report	mg/L	Grab	Quarterly				
Nitrogen, Nitrate Total (as N)	00620		Report	mg/L	Grab	Quarterly				
Alpha, Gross Particle Activity	80045		Report	pCi/L	Grab	Quarterly				
pH	00400		Report	s.u.	In Situ	Quarterly				
Fluoride, Total (as F)	00951		Report	mg/L	Grab	Quarterly				

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COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT

Facility Name: Duke Energy - Hines Energy Complex
Permit Number: FLA187348
County: Polk
Office: Southwest District

Monitoring Well ID: MWB-WCA
Well Type: Background
Description: HEC WCA
Re-submitted DMR: ☐

Report Frequency: Quarterly
Program: Industrial

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes____No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In situ	Quarterly				
Specific Conductance	00095		Report	umho/cm	In situ	Quarterly				
Oxygen, Dissolved (DO)	00300		Report	Mg/L	In situ	Quarterly				
Coliform, Fecal	74055		Report	#100 mL	Calculation	Quarterly				
Sulfate, Total	00945		Report	Mg/L	Grab	Quarterly				
Arsenic, Total Recoverable	00978		Report	ug/L	Grab	Quarterly				
Sodium, Total Recoverable	00923		Report	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		Report	mg/L	Grab	Quarterly				
Color	00080		Report	PCU	Grab	Quarterly				
Iron, Total Recoverable	00980		Report	mg/L	Grab	Quarterly				
Aluminum, Total Recoverable	01104		Report	mg/L	Grab	Quarterly				
Manganese, Total Recoverable	11123		Report	mg/L	Grab	Quarterly				
Temperature (C), Water	00010		Report	Deg C	In situ	Quarterly				
Carbon, Total Organic (TOC)	00680		Report	mg/L	Grab	Quarterly				
Nitrogen, Nitrate Total (as N)	00620		Report	mg/L	Grab	Quarterly				
Alpha, Gross Particle Activity	80045		Report	pCi/L	Grab	Quarterly				
pH	00400		Report	s.u.	In Situ	Quarterly				
Fluoride, Total (as F)	00951		Report	mg/L	Grab	Quarterly				

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COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT

Facility Name: Duke Energy - Hines Energy Complex
Permit Number: FLA187348
County: Polk
Office: Southwest District

Monitoring Well ID: MW-1
Well Type:
Description: HEC Cooling Pond
Re-submitted DMR: ☐

Report Frequency: Quarterly
Program: Industrial

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes____No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In situ	Quarterly				

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COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT

Facility Name: Duke Energy - Hines Energy Complex
Permit Number: FLA187348
County: Polk
Office: Southwest District

Monitoring Well ID: MWC-1F
Well Type: Compliance
Description: HEC Cooling Pond
Re-submitted DMR: ☐

Report Frequency: Quarterly
Program: Industrial

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes____No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In situ	Quarterly				
Specific Conductance	00095		Report	umho/cm	In situ	Quarterly				
Oxygen, Dissolved (DO)	00300		Report	Mg/L	In situ	Quarterly				
Coliform, Fecal	74055		Report	#100 mL	Calculation	Quarterly				
Sulfate, Total	00945		250	Mg/L	Grab	Quarterly				
Arsenic, Total Recoverable	00978		10	ug/L	Grab	Quarterly				
Sodium, Total Recoverable	00923		160	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		840	mg/L	Grab	Quarterly				
Color	00080		Report	PCU	Grab	Quarterly				
Iron, Total Recoverable	00980		3.16	mg/L	Grab	Quarterly				
Aluminum, Total Recoverable	01104		0.2	mg/L	Grab	Quarterly				
Manganese, Total Recoverable	11123		0.72	mg/L	Grab	Quarterly				
Temperature (C), Water	00010		Report	Deg C	In situ	Quarterly				
Carbon, Total Organic (TOC)	00680		Report	mg/L	Grab	Quarterly				
Nitrogen, Nitrate Total (as N)	00620		10	mg/L	Grab	Quarterly				
Alpha, Gross Particle Activity	80045		Report	pCi/L	Grab	Quarterly				
pH	00400		6.5 – 8.5	s.u.	In Situ	Quarterly				
Fluoride, Total (as F)	00951		2.0	mg/L	Grab	Quarterly				

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COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT

Facility Name: Duke Energy - Hines Energy Complex
Permit Number: FLA187348
County: Polk
Office: Southwest District

Monitoring Well ID: MWC-2
Well Type: Compliance
Description: HEC Cooling Pond
Re-submitted DMR: ☐

Report Frequency: Quarterly
Program: Industrial

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes____No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In situ	Quarterly				
Specific Conductance	00095		Report	umho/cm	In situ	Quarterly				
Oxygen, Dissolved (DO)	00300		Report	Mg/L	In situ	Quarterly				
Coliform, Fecal	74055		Report	#100 mL	Calculation	Quarterly				
Sulfate, Total	00945		250	Mg/L	Grab	Quarterly				
Arsenic, Total Recoverable	00978		10	ug/L	Grab	Quarterly				
Sodium, Total Recoverable	00923		160	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		840	mg/L	Grab	Quarterly				
Color	00080		Report	PCU	Grab	Quarterly				
Iron, Total Recoverable	00980		3.16	mg/L	Grab	Quarterly				
Aluminum, Total Recoverable	01104		0.2	mg/L	Grab	Quarterly				
Manganese, Total Recoverable	11123		0.72	mg/L	Grab	Quarterly				
Temperature (C), Water	00010		Report	Deg C	In situ	Quarterly				
Carbon, Total Organic (TOC)	00680		Report	mg/L	Grab	Quarterly				
Nitrogen, Nitrate Total (as N)	00620		10	mg/L	Grab	Quarterly				
Alpha, Gross Particle Activity	80045		Report	pCi/L	Grab	Quarterly				
pH	00400		6.5 – 8.5	s.u.	In Situ	Quarterly				
Fluoride, Total (as F)	00951		2.0	mg/L	Grab	Quarterly				

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COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT

Facility Name: Duke Energy - Hines Energy Complex
Permit Number: FLA187348
County: Polk
Office: Southwest District

Monitoring Well ID: MWC-3
Well Type: Compliance
Description: HEC Cooling Pond
Re-submitted DMR: ☐

Report Frequency: Quarterly
Program: Industrial

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes____No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In situ	Quarterly				
Specific Conductance	00095		Report	umho/cm	In situ	Quarterly				
Oxygen, Dissolved (DO)	00300		Report	Mg/L	In situ	Quarterly				
Coliform, Fecal	74055		Report	#100 mL	Calculation	Quarterly				
Sulfate, Total	00945		250	Mg/L	Grab	Quarterly				
Arsenic, Total Recoverable	00978		10	ug/L	Grab	Quarterly				
Sodium, Total Recoverable	00923		160	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		840	mg/L	Grab	Quarterly				
Color	00080		Report	PCU	Grab	Quarterly				
Iron, Total Recoverable	00980		3.16	mg/L	Grab	Quarterly				
Aluminum, Total Recoverable	01104		0.2	mg/L	Grab	Quarterly				
Manganese, Total Recoverable	11123		0.72	mg/L	Grab	Quarterly				
Temperature (C), Water	00010		Report	Deg C	In situ	Quarterly				
Carbon, Total Organic (TOC)	00680		Report	mg/L	Grab	Quarterly				
Nitrogen, Nitrate Total (as N)	00620		10	mg/L	Grab	Quarterly				
Alpha, Gross Particle Activity	80045		Report	pCi/L	Grab	Quarterly				
pH	00400		6.5 – 8.5	s.u.	In Situ	Quarterly				
Fluoride, Total (as F)	00951		2.0	mg/L	Grab	Quarterly				

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COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Duke Energy - Hines Energy Complex
Permit Number: FLA187348
County: Polk
Office: Southwest District

Monitoring Well ID: MWC-4
Well Type: Compliance
Description: HEC Cooling Pond
Re-submitted DMR: ☐

Report Frequency: Quarterly
Program: Industrial

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes____No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In situ	Quarterly				
Specific Conductance	00095		Report	umho/cm	In situ	Quarterly				
Oxygen, Dissolved (DO)	00300		Report	Mg/L	In situ	Quarterly				
Coliform, Fecal	74055		Report	#100 mL	Calculation	Quarterly				
Sulfate, Total	00945		250	Mg/L	Grab	Quarterly				
Arsenic, Total Recoverable	00978		10	ug/L	Grab	Quarterly				
Sodium, Total Recoverable	00923		160	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		840	mg/L	Grab	Quarterly				
Color	00080		Report	PCU	Grab	Quarterly				
Iron, Total Recoverable	00980		3.16	mg/L	Grab	Quarterly				
Aluminum, Total Recoverable	01104		0.2	mg/L	Grab	Quarterly				
Manganese, Total Recoverable	11123		0.72	mg/L	Grab	Quarterly				
Temperature (C), Water	00010		Report	Deg C	In situ	Quarterly				
Carbon, Total Organic (TOC)	00680		Report	mg/L	Grab	Quarterly				
Nitrogen, Nitrate Total (as N)	00620		10	mg/L	Grab	Quarterly				
Alpha, Gross Particle Activity	80045		Report	pCi/L	Grab	Quarterly				
pH	00400		6.5 – 8.5	s.u.	In Situ	Quarterly				
Fluoride, Total (as F)	00951		2.0	mg/L	Grab	Quarterly				

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COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Duke Energy - Hines Energy Complex
Permit Number: FLA187348
County: Polk
Office: Southwest District

Monitoring Well ID: MWC-5
Well Type: Compliance
Description: HEC Cooling Pond
Re-submitted DMR: ☐

Report Frequency: Quarterly
Program: Industrial

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes____No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In situ	Quarterly				
Specific Conductance	00095		Report	umho/cm	In situ	Quarterly				
Oxygen, Dissolved (DO)	00300		Report	Mg/L	In situ	Quarterly				
Coliform, Fecal	74055		Report	#100 mL	Calculation	Quarterly				
Sulfate, Total	00945		250	Mg/L	Grab	Quarterly				
Arsenic, Total Recoverable	00978		10	ug/L	Grab	Quarterly				
Sodium, Total Recoverable	00923		160	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		840	mg/L	Grab	Quarterly				
Color	00080		Report	PCU	Grab	Quarterly				
Iron, Total Recoverable	00980		3.16	mg/L	Grab	Quarterly				
Aluminum, Total Recoverable	01104		0.2	mg/L	Grab	Quarterly				
Manganese, Total Recoverable	11123		0.72	mg/L	Grab	Quarterly				
Temperature (C), Water	00010		Report	Deg C	In situ	Quarterly				
Carbon, Total Organic (TOC)	00680		Report	mg/L	Grab	Quarterly				
Nitrogen, Nitrate Total (as N)	00620		10	mg/L	Grab	Quarterly				
Alpha, Gross Particle Activity	80045		Report	pCi/L	Grab	Quarterly				
pH	00400		6.5 – 8.5	s.u.	In Situ	Quarterly				
Fluoride, Total (as F)	00951		2.0	mg/L	Grab	Quarterly				

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COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Duke Energy - Hines Energy Complex
Permit Number: FLA187348
County: Polk
Office: Southwest District

Monitoring Well ID: MWC-7
Well Type: Compliance
Description: HEC Cooling Pond
Re-submitted DMR: ☐

Report Frequency: Quarterly
Program: Industrial

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes____No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In situ	Quarterly				
Specific Conductance	00095		Report	umho/cm	In situ	Quarterly				
Oxygen, Dissolved (DO)	00300		Report	Mg/L	In situ	Quarterly				
Coliform, Fecal	74055		Report	#100 mL	Calculation	Quarterly				
Sulfate, Total	00945		250	Mg/L	Grab	Quarterly				
Arsenic, Total Recoverable	00978		10	ug/L	Grab	Quarterly				
Sodium, Total Recoverable	00923		160	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		840	mg/L	Grab	Quarterly				
Color	00080		Report	PCU	Grab	Quarterly				
Iron, Total Recoverable	00980		3.16	mg/L	Grab	Quarterly				
Aluminum, Total Recoverable	01104		0.2	mg/L	Grab	Quarterly				
Manganese, Total Recoverable	11123		0.72	mg/L	Grab	Quarterly				
Temperature (C), Water	00010		Report	Deg C	In situ	Quarterly				
Carbon, Total Organic (TOC)	00680		Report	mg/L	Grab	Quarterly				
Nitrogen, Nitrate Total (as N)	00620		10	mg/L	Grab	Quarterly				
Alpha, Gross Particle Activity	80045		Report	pCi/L	Grab	Quarterly				
pH	00400		6.5 – 8.5	s.u.	In Situ	Quarterly				
Fluoride, Total (as F)	00951		2.0	mg/L	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Duke Energy - Hines Energy Complex
Permit Number: FLA187348
County: Polk
Office: Southwest District

Monitoring Well ID: MWC-8
Well Type: Compliance
Description: HEC Cooling Pond
Re-submitted DMR: ☐

Report Frequency: Quarterly
Program: Industrial

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes____No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In situ	Quarterly				
Specific Conductance	00095		Report	umho/cm	In situ	Quarterly				
Oxygen, Dissolved (DO)	00300		Report	Mg/L	In situ	Quarterly				
Coliform, Fecal	74055		Report	#100 mL	Calculation	Quarterly				
Sulfate, Total	00945		250	Mg/L	Grab	Quarterly				
Arsenic, Total Recoverable	00978		10	ug/L	Grab	Quarterly				
Sodium, Total Recoverable	00923		160	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		840	mg/L	Grab	Quarterly				
Color	00080		Report	PCU	Grab	Quarterly				
Iron, Total Recoverable	00980		3.16	mg/L	Grab	Quarterly				
Aluminum, Total Recoverable	01104		0.2	mg/L	Grab	Quarterly				
Manganese, Total Recoverable	11123		0.72	mg/L	Grab	Quarterly				
Temperature (C), Water	00010		Report	Deg C	In situ	Quarterly				
Carbon, Total Organic (TOC)	00680		Report	mg/L	Grab	Quarterly				
Nitrogen, Nitrate Total (as N)	00620		10	mg/L	Grab	Quarterly				
Alpha, Gross Particle Activity	80045		Report	pCi/L	Grab	Quarterly				
pH	00400		6.5 – 8.5	s.u.	In Situ	Quarterly				
Fluoride, Total (as F)	00951		2.0	mg/L	Grab	Quarterly				

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

GROUNDWATER MONITORING REPORT - PART D

Facility Name: Duke Energy - Hines Energy Complex
Permit Number: FLA187348
County: Polk
Office: Southwest District

Monitoring Well ID: MWC-TL
Well Type: Compliance
Description: Triangle Lakes WCA
Re-submitted DMR: ☐

Report Frequency: Quarterly
Program: Industrial

Monitoring Period From: _____ To: _____

Date Sample Obtained: _____

Time Sample Obtained: _____

Was the well purged before sampling? ___Yes____No

Parameter	PARM Code	Sample Measurement	Permit Requirement	Units	Sample Type	Frequency of Analysis	Detection Limits	Analysis Method	Sampling Equipment Used	Samples Filtered (L/F/N)
Water Level Relative to NGVD	82545		Report	ft	In situ	Quarterly				
Specific Conductance	00095		Report	umho/cm	In situ	Quarterly				
Oxygen, Dissolved (DO)	00300		Report	Mg/L	In situ	Quarterly				
Coliform, Fecal	74055		Report	#100 mL	Calculation	Quarterly				
Sulfate, Total	00945		250	Mg/L	Grab	Quarterly				
Arsenic, Total Recoverable	00978		10	ug/L	Grab	Quarterly				
Sodium, Total Recoverable	00923		160	mg/L	Grab	Quarterly				
Solids, Total Dissolved (TDS)	70295		840	mg/L	Grab	Quarterly				
Color	00080		Report	PCU	Grab	Quarterly				
Iron, Total Recoverable	00980		3.16	mg/L	Grab	Quarterly				
Aluminum, Total Recoverable	01104		0.2	mg/L	Grab	Quarterly				
Manganese, Total Recoverable	11123		0.05	mg/L	Grab	Quarterly				
Temperature (C), Water	00010		Report	Deg C	In situ	Quarterly				
Carbon, Total Organic (TOC)	00680		Report	mg/L	Grab	Quarterly				
Nitrogen, Nitrate Total (as N)	00620		10	mg/L	Grab	Quarterly				
Alpha, Gross Particle Activity	80045		Report	pCi/L	Grab	Quarterly				
pH	00400		6.5 – 8.5	s.u.	In Situ	Quarterly				
Fluoride, Total (as F)	00951		2.0	mg/L	Grab	Quarterly				

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NAME/TITLE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT	TELEPHONE NO	DATE (mm/dd/yyyy)

COMMENTS AND EXPLANATION (Reference all attachments here):

INSTRUCTIONS FOR COMPLETING THE WASTEWATER DISCHARGE MONITORING REPORT

Read these instructions before completing the DMR. Hard copies and/or electronic copies of the required parts of the DMR were provided with the permit. All required information shall be completed in full and typed or printed in ink. A signed, original DMR shall be mailed to the address printed on the DMR by the 28th of the month following the monitoring period. Facilities who submit their DMR(s) electronically through eDMR do not need to submit a hardcopy DMR. The DMR shall not be submitted before the end of the monitoring period.

The DMR consists of three parts--A, B, and D--all of which may or may not be applicable to every facility. Facilities may have one or more Part A's for reporting effluent or reclaimed water data. All domestic wastewater facilities will have a Part B for reporting daily sample results. Part D is used for reporting ground water monitoring well data.

When results are not available, the following codes should be used on parts A and D of the DMR and an explanation provided where appropriate. Note: Codes used on Part B for raw data are different.

CODE	DESCRIPTION/INSTRUCTIONS
ANC	Analysis not conducted.
DRY	Dry Well
FLD	Flood disaster.
IFS	Insufficient flow for sampling.
LS	Lost sample.
MNR	Monitoring not required this period.

CODE	DESCRIPTION/INSTRUCTIONS
NOD	No discharge from/to site.
OPS	Operations were shutdown so no sample could be taken.
OTH	Other. Please enter an explanation of why monitoring data were not available.
SEF	Sampling equipment failure.

When reporting analytical results that fall below a laboratory's reported method detection limits or practical quantification limits, the following instructions should be used, unless indicated otherwise in the permit or on the DMR:

1. Results greater than or equal to the PQL shall be reported as the measured quantity.
2. Results less than the PQL and greater than or equal to the MDL shall be reported as the laboratory's MDL value. These values shall be deemed equal to the MDL when necessary to calculate an average for that parameter and when determining compliance with permit limits.
3. Results less than the MDL shall be reported by entering a less than sign ("<") followed by the laboratory's MDL value, e.g. < 0.001. A value of one-half the MDL or one-half the effluent limit, whichever is lower, shall be used for that sample when necessary to calculate an average for that parameter. Values less than the MDL are considered to demonstrate compliance with an effluent limitation.

PART A -DISCHARGE MONITORING REPORT (DMR)

Part A of the DMR is comprised of one or more sections, each having its own header information. Facility information is preprinted in the header as well as the monitoring group number, whether the limits and monitoring requirements are interim or final, and the required submittal frequency (e.g. monthly, annually, quarterly, etc.). Submit Part A based on the required reporting frequency in the header and the instructions shown in the permit. The following should be completed by the permittee or authorized representative:

Resubmitted DMR: Check this box if this DMR is being re-submitted because there was information missing from or information that needed correction on a previously submitted DMR. The information that is being revised should be clearly noted on the re-submitted DMR (e.g. highlight, circle, etc.)
No Discharge From Site: Check this box if no discharge occurs and, as a result, there are no data or codes to be entered for all of the parameters on the DMR for the entire monitoring group number; however, if the monitoring group includes other monitoring locations (e.g., influent sampling), the "NOD" code should be used to individually denote those parameters for which there was no discharge.
Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.
Sample Measurement: Before filling in sample measurements in the table, check to see that the data collected correspond to the limit indicated on the DMR (i.e. interim or final) and that the data correspond to the monitoring group number in the header. Enter the data or calculated results for each parameter on this row in the non-shaded area above the limit. Be sure the result being entered corresponds to the appropriate statistical base code (e.g. annual average, monthly average, single sample maximum, etc.) and units. Data qualifier codes are not to be reported on Part A.
No. Ex.: Enter the number of sample measurements during the monitoring period that exceeded the permit limit for each parameter in the non-shaded area. If none, enter zero.
Frequency of Analysis: The shaded areas in this column contain the minimum number of times the measurement is required to be made according to the permit. Enter the actual number of times the measurement was made in the space above the shaded area.
Sample Type: The shaded areas in this column contain the type of sample (e.g. grab, composite, continuous) required by the permit. Enter the actual sample type that was taken in the space above the shaded area.
Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.
Comment and Explanation of Any Violations: Use this area to explain any exceedances, any upset or by-pass events, or other items which require explanation. If more space is needed, reference all attachments in this area.

PART B - DAILY SAMPLE RESULTS

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.
Daily Monitoring Results: Transfer all analytical data from your facility's laboratory or a contract laboratory's data sheets for all day(s) that samples were collected. Record the data in the units indicated. Table 1 in Chapter 62-160, F.A.C., contains a complete list of all the data qualifier codes that your laboratory may use when reporting analytical results. However, when transferring numerical results onto Part B of the DMR, only the following data qualifier codes should be used and an explanation provided where appropriate.

CODE	DESCRIPTION/INSTRUCTIONS
<	The compound was analyzed for but not detected.
A	Value reported is the mean (average) of two or more determinations.
J	Estimated value, value not accurate.
Q	Sample held beyond the actual holding time.
Y	Laboratory analysis was from an unpreserved or improperly preserved sample.

To calculate the monthly average, add each reported value to get a total. For flow, divide this total by the number of days in the month. For all other parameters, divide the total by the number of observations.
Plant Staffing: List the name, certificate number, and class of all state certified operators operating the facility during the monitoring period. Use additional sheets as necessary.

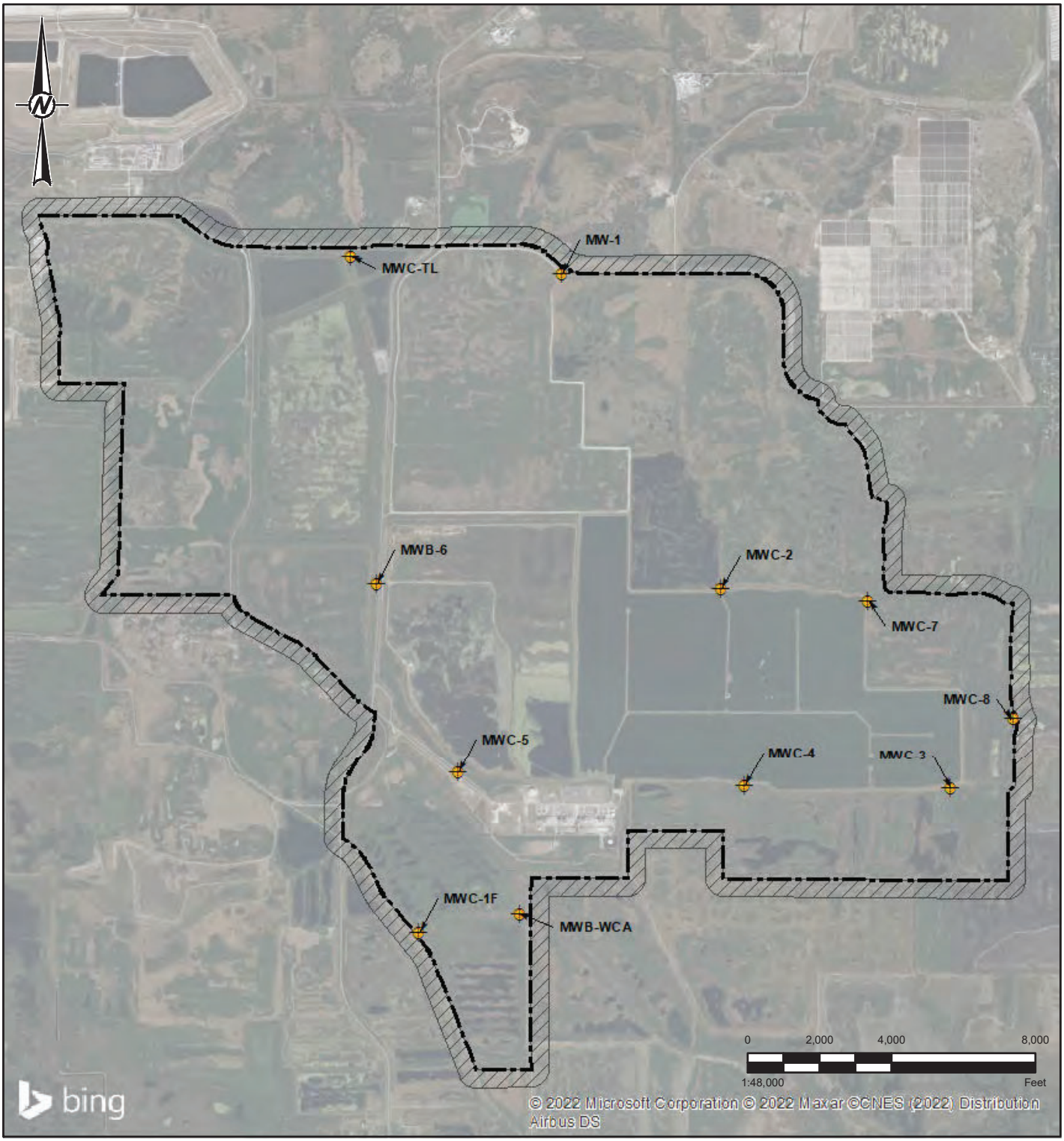
PART D - GROUND WATER MONITORING REPORT

Monitoring Period: Enter the month, day, and year for the first and last day of the monitoring period (i.e. the month, the quarter, the year, etc.) during which the data on this report were collected and analyzed.
Date Sample Obtained: Enter the date the sample was taken. Also, check whether or not the well was purged before sampling.
Time Sample Obtained: Enter the time the sample was taken.
Sample Measurement: Record the results of the analysis. If the result was below the minimum detection limit, indicate that. Data qualifier codes are not to be reported on Part D.
Detection Limits: Record the detection limits of the analytical methods used.
Analysis Method: Indicate the analytical method used. Record the method number from Chapter 62-160 or Chapter 62-601, F.A.C., or from other sources.
Sampling Equipment Used: Indicate the procedure used to collect the sample (e.g. airlift, bucket/bailer, centrifugal pump, etc.)
Samples Filtered: Indicate whether the sample obtained was filtered by laboratory (L), filtered in field (F), or unfiltered (N).
Signature: This report must be signed in accordance with Rule 62-620.305, F.A.C. Type or print the name and title of the signing official. Include the telephone number where the official may be reached in the event there are questions concerning this report. Enter the date when the report is signed.
Comments and Explanation: Use this space to make any comments on or explanations of results that are unexpected. If more space is needed, reference all attachments in this area.

SPECIAL INSTRUCTIONS FOR LIMITED WET WEATHER DISCHARGES

Flow (Limited Wet Weather Discharge): Enter the measured average flow rate during the period of discharge or divide gallons discharged by duration of discharge (converted into days). Record in million gallons per day (MGD).
Flow (Upstream): Enter the average flow rate in the receiving stream upstream from the point of discharge for the period of discharge. The average flow rate can be calculated based on two measurements; one made at the start and one made at the end of the discharge period. Measurements are to be made at the upstream gauging station described in the permit.
Actual Stream Dilution Ratio: To calculate the Actual Stream Dilution Ratio, divide the average upstream flow rate by the average discharge flow rate. Enter the Actual Stream Dilution Ratio accurate to the nearest 0.1.
No. of Days the SDF > Stream Dilution Ratio: For each day of discharge, compare the minimum Stream Dilution Factor (SDF) from the permit to the calculated Stream Dilution Ratio. On Part B of the DMR, enter an asterisk (*) if the SDF is greater than the Stream Dilution Ratio on any day of discharge. On Part A of the DMR, add up the days with an "*" and record the total number of days the Stream Dilution Factor was greater than the Stream Dilution Ratio.
$CBOD_5$: Enter the average $CBOD_5$ of the reclaimed water discharged during the period shown in duration of discharge.
TKN: Enter the average TKN of the reclaimed water discharged during the period shown in duration of discharge.
Actual Rainfall: Enter the actual rainfall for each day on Part B. Enter the actual cumulative rainfall to date for this calendar year and the actual total monthly rainfall on Part A. The cumulative rainfall to date for this calendar year is the total amount of rain, in inches, that has been recorded since January 1 of the current year through the month for which this DMR contains data.
Rainfall During Average Rainfall Year: On Part A, enter the total monthly rainfall during the average rainfall year and the cumulative rainfall for the average rainfall year. The cumulative rainfall for the average rainfall year is the amount of rain, in inches, which fell during the average rainfall year from January through the month for which this DMR contains data.
No. of Days LWWD Activated During Calendar Year: Enter the cumulative number of days that the limited wet weather discharge was activated since January 1 of the current year.
Reason for Discharge: Attach to the DMR a brief explanation of the factors contributing to the need to activate the limited wet weather discharge.

Figure 1: Well Location Map



LEGEND

- Duke Energy Hines Energy Complex
- Property Boundary 500ft Buffer
- Groundwater Monitoring Well

REFERENCE(S)

1. PROJECT BOUNDARY, GOLDER ASSOCIATES INC., POLK COUNTY PROPERTY APPRAISER, 2012
2. WELL LOCATIONS, GOLDER ASSOCIATES INC., 2012-2020

COORDINATE SYSTEM: NAD 1983 STATEPLANE FLORIDA WEST FIPS 0902 FEET
PROJECTION: TRANSVERSE MERCATOR
DATUM: NORTH AMERICAN 1983

CLIENT
DUKE ENERGY
HINES ENERGY COMPLEX

PROJECT
GROUNDWATER MONITORING PLAN - REVISION

TITLE
MONITORING WELL NETWORK

CONSULTANT
WSP GOLDER

YYYY-MM-DD	2022-05-13
DESIGNED	GJM
PREPARED	JGW
REVIEWED	GJM
APPROVED	MM

PROJECT NO.	CONTROL	REV.	FIGURE
20139865	A004	0	1

PATH: G:\Projects\Duke Energy\Hines_Station\99_PROJECTS\15-44179 Duke Hines Energy Complex\2021 GW Monitoring Plan Revision\20139865_A004_MonitoringWellNetwork_101.mxd

IF THIS MEASUREMENT DOES NOT MATCH WHAT IS SHOWN, THE SHEET SIZE HAS BEEN MODIFIED FROM: ANSI A

1 in
0

ATTACHMENT E: VEGETATION PLANTING PLAN & EXOTIC SPECIES LIST

ATTACHMENT E

VEGETATION PLANTING PLAN FOR N-9B, N-13 AND SA-10 WITH CANDIDATE SPECIES AND PLANTING DENSITIES

MINE AREA N-9B

1. UPLAND FOREST - ACRES OF HABITAT TO BE ESTABLISHED: 41

Trees - Total average density of 300/acre
- Slash Pine (Pinus elliottii)
- Laurel Oak (Quercus laurifolia)
- Southern Red Ceder (Juniperus silicicola)
- Live Oak (Quercus virginiana)
- Sweetgum (Liquidamber styraciflua)
- American Holly (Ilex opaca)
- Pignut Hickory (Carya glabra)
- Redbud (Cercis canadensis) - Delayed until overstory shading
- Dogwood (Cornus florida) - Delayed until overstory shading
- Black Cherry (Prunus serotina) - Natural recruitment
- Cabbage Palm (Sabel palmetto)

Shrubs - Total average density of 240/acre
- Saw Palmetto (Serenoa repens)
- Wax Myrtle (Myrica cerifera)
- Beautyberry (Callicarpa americana)
- Yaupon Holly (Ilex vomitoria)
- Wild Olive (Osmanthus americanus)
- Shining Sumac (Rhus copallina)
- Hawthorne (Crataegus spp.)
- Blueberry (Vaccinium spp.)
- Groundsel Tree (Baccharis halimifolia) - Natural recruitment

Grasses, Forbs and Vines - 80 percent of ground cover
- Eastern Gamagrass (Tripsacum dactyloides)
- Panicum (Panicum spp.)
- Blackberry (Rubus spp.) - Natural recruitment
- Virginia Creeper (Parthenocissus quinquefolia) - Natural recruitment
- Greenbriar (Smilax spp.) - Natural recruitment
- Wild Grape (Vitis munsoniana) - Natural recruitment
- Wood Fern (Thelypterus spp.) - Natural recruitment

2. SHRUB/BRUSHLAND - ACRES OF HABITAT TO BE ESTABLISHED: 23

Shrubs - Total average density of 240/acre
- Saw Palmetto (Serenoa repens)
- Wax Myrtle (Myrica cerifera)

ATTACHMENT E

Beautyberry (Callicarpa americana)
Yaupon Holly (Ilex vomitoria)
Wild Olive (Osmanthus americanus)
Shining Sumac (Rhus copallina)
Groundsel Tree (Baccharis halimifolia) - Natural recruitment

Grasses, Forbs and Vines - 80 percent of ground cover
Eastern Gamagrass (Tripsacum dactyloides)
Panicum (Panicum spp.)
Blackberry (Rubus spp.) - Natural recruitment
Virginia Creeper (Parthenocissus quinquefolia) - Natural recruitment
Greenbriar (Smilax spp.) - Natural recruitment
Wild Grape (Vitis munsoniana) - Natural recruitment
Wood Fern (Thelypterus spp.) - Natural recruitment

3. RANGELAND - ACRES OF HABITAT TO BE ESTABLISHED: 6

Grasses, Forbs and Vines - 100 percent of ground cover
Eastern Gamagrass (Tripsacum dactyloides)
Panicum (Panicum spp.)
Bluestems (Andropogon spp.)
Lopsided Indiangrass (Sorgastrum secundum)
Blackberry (Rubus spp.) - Natural recruitment
Partridge Pea (Cassia chamaecrista)
Wild Grape (Vitis munsoniania) - Natural recruitment
Hairy Indigo (Indigofera hirsuta) - Natural recruitment
Aster (Aster spp.) - Natural recruitment

4. PINE FLATWOODS - ACRES OF HABITAT TO BE ESTABLISHED: 27

Trees - Total average density of 200/acre
Slash Pine (Pinus elliottii)
Longleaf Pine (Pinus palustris)
Persimmon (Diospyros virginiana)

Shrubs - Total average density of 200/acre
Saw Palmetto (Serenoa repens)
Wax Myrtle (Myrica cerifera)
Beautyberry (Callicarpa americana)
Yaupon Holly (Ilex vomitoria)
Gallberry (Ilex glabra)
Fetterbush (Lyonia lucida)
Blueberry (Vaccinium spp.)

Grasses, Forbs and Vines - 80 percent of ground surface
Eastern Gamagrass (Tripsacum dactyloides)

Panicum (Panicum spp.)
Bluestems (Andropogon spp.)
Lopsided Indiangrass (Sorgastrum secundum)
Blackberry (Rubus spp.) - Natural recruitment
Greenbriar (Smilax spp.) - Natural recruitment
Partridge Pea (Cassia fasiculata)
Wild Grape (Vitis munsoniania) - Natural recruitment
Aeschyomene (Aeschyomene spp.)

5. SHRUB WETLAND - ACRES OF HABITAT TO BE ESTABLISHED: 25

Shrubs - Total average density of 300/acre
Buttonbush (Cephalanthus occidentalis)
Dahoon Holly (Ilex cassine)
Elderberry (Sambucus simpsonii)
Swamp Dogwood (Cornus foemina)
Swamp Hibiscus (Hibiscus grandiflorus)
Groundsel Tree (Baccharis halimifolia) - Natural recruitment
Carolina Willow (Salix caroliniana) - Natural recruitment
Wax Myrtle (Myrica cerifera) - Natural recruitment

Grasses, Forbs and Vines - 100 percent of ground surface
Panicum (Panicum spp.)
Lizard's Tail (Saururus cernuus)
Sedge (Carex spp. and Cyperus spp.)
Royal Fern (Osmunda regalis)
Cinnamon Fern (Osmunda cinnamomea)
Sawgrass (Cladium jamaicense)
Duck Potato (Sagittaria spp.)
Golden Ragwort (Senecio glabellus) - Natural recruitment
Wood Fern (Thelypterus spp.) - Natural recruitment
Wild Grape (Vitis munsoniania) - Natural recruitment
Camphorweed (Pluchea spp.) - Natural recruitment
Cow Pea (Vigna luteola) - Natural recruitment

6. FRESHWATER MARSH (HERBACEOUS WETLAND) - ACRES OF HABITAT TO BE ESTABLISHED: 79

Groundcover - 50 percent of remaining available ground surface
Panicum (Panicum spp.)
Sedge (Carex spp. and Cyperus spp.)
Sawgrass (Cladium jamaicense)
St. John's Wort (Hypericum fasiculatum)
Spike Rush (Eleocharis spp.)
Soft Rush (Juncus effusus)
Black Rush (Juncus repens)

Bullrush (Scirpus spp.)
Swamp Lily (Crinum americanum)
Spider Lily (Hymenocallis spp.)
Pickerelweed (Pontederia cordata)
Arrowroot (Thalia geniculata)
Canna Lily (Canna spp.)
Duck Potato (Sagittaria spp.)
Spatterdock (Nuphar lutea)
Water Lily (Nymphaea spp.)

7. ISLANDS AND OVERBURDEN MOUNDS - ACRES OF HABITAT TO BE ESTABLISHED: 6

Vegetation in these areas will require minimal to no plantings. They will either be overburden mounds left intact or constructed mounds tapered into the slough.

MINE AREA N-13

1. WETLAND MIXED FOREST - ACRES OF HABITAT TO BE ESTABLISHED: 13

Trees - Total Average Density
Red Maple (Acer rubrum)
Sugerberry (Celtis laevigata)
Pop Ash (Fraxinus caroliniana)
Bald Cypress (Taxodium distichum)
Red Mulberry (Morus rubra)
Water oak (Quercus nigra)

Shrubs - Total average density of 300/acre
Buttonbush (Cephelanthus occidentalis)
Dahoon Holly (Ilex cassine)
Elderberry (Sambucus simpsonii)
Swamp Dogwood (Cornus foemina)
Swamp Hibiscus (Hibiscus grandiflorus)
Wild Olive (Osmanthus americanus)
Groundsel Tree (Baccharis halimifolia) - Natural recruitment

Grasses, Forbes and Vines - 100 percent of ground cover
Panicum (Panicum spp.)
Lizard's Tail (Saururus cernuus)
Sedge (Carex spp. and Cyperus spp.)
Royal Fern (Osmunda regalis)
Cinnamon Fern (Osmunda cinnamomea)
Wood Fern (Thelypterus spp.) - Natural recruitment
Wild Grape (Vitis munsoniania) Natural recruitment

ATTACHMENT E

2. SHRUB WETLAND - ACRES OF HABITAT TO BE ESTABLISHED: 14

Shrubs - Total average density of 300/acre
- Buttonbush (Cephalanthus occidentalis)
- Dahoon Holly (Ilex cassine)
- Elderberry (Sambucus simpsonii)
- Swamp Dogwood (Cornus foemina)
- Swamp Hibiscus (Hibiscus grandiflorus)
- Groundsel Tree (Baccharis halimifolia) - Natural recruitment
- Carolina Willow (Salix caroliniana) - Natural recruitment
- Wax Myrtle (Myrica cerifera) - Natural recruitment

Grasses, Forbs and Vines - 50 percent of remaining available ground surface
- Panicum (Panicum spp.)
- Lizard's Tail (Saururus cernuus)
- Sedge (Carex spp. and Cyperus spp.)
- Royal Fern (Osmunda regalis)
- Cinnamon Fern (Osmunda cinnamomea)
- Sawgrass (Cladium jamaicense)
- Duck Potato (Sagittaria spp.)
- Golden Ragwort (Senecio glabellus) - Natural recruitment
- Wood Fern (Thelypterus spp.) - Natural recruitment
- Wild Grape (Vitis munsoniania) - Natural recruitment
- Camphorweed (Pluchea spp.) - Natural recruitment
- Cow Pea (Vigna luteola) - Natural recruitment
- Water Lily (Nymphaea spp.)

3. PALMETTO PRAIRIE - ACRES OF HABITAT TO BE ESTABLISHED: 268

Shrubs - Total average density of 50/acre
- Saw Palmetto (Serenoa repens)
- Wax Myrtle (Myrica cerifera)
- Gallberry (Ilex cassine)
- Fetterbush (Lyonia lucida)
- Blueberry (Vaccinium spp.)

Grasses, Forbs and Vines - 100 percent of remaining ground cover
- Eastern Gamagrass (Tripsacum dactyloides)
- Panicum (Panicum spp.)
- Bluestems (Andropogon spp.)
- Lopsided Indiangrass (Sorgastrum secundum)
- Blackberry (Rubus spp.) - Natural recruitment
- Greenbriar (Smilax spp.) - Natural recruitment
- Partridge Pea (Cassia chamaecrista)
- Aeschynomene (Aeschynomene spp.) - Natural recruitment

ATTACHMENT E

MINE AREA SA-10

1. RANGELAND -ACRES OF HABITAT TO BE ESTABLISHED: 83.6

Grasses, Forbs and Vines - 100 percent of ground cover
- Eastern Gamagrass (Tripsacum dactyloides)
- Panicum (Panicum spp.)
- Bluestems (Andropogon spp.)
- Lopsided Indiangrass (Sorgastrum secundum)
- Blackberry (Rubus spp.) - Natural recruitment
- Partridge Pea (Cassia chamaecrista)
- Wild Grape (Vitis munsoniania) - Natural recruitment
- Hairy Indigo (Indigofera hirsuta) - Natural recruitment
- Aster (Aster spp.) - Natural recruitment

2. FRESHWATER MARSH (herbaceous wetland) - ACRES OF HABITAT TO BE ESTABLISHED: 90

Groundcover - 50 percent of remaining available ground surface
- Panicum (Panicum spp.)
- Sedge (Carex spp. and Cyperus spp.)
- Sawgrass (Cladium jamaicense)
- St. John's Wort (Hypericum fasiculatum)
- Spike Rush (Eleocharis spp.)
- Soft Rush (Juncus effusus)
- Black Rush (Juncus repens)
- Bullrush (Scirpus spp.)
- Swamp Lily (Crinum americanum)
- Spider Lily (Hymenocallis spp.)
- Pickerelweed (Pontederia cordata)
- Arrowroot (Thalia geniculata)
- Canna Lily (Canna spp.)
- Duck Potato (Sagittaria spp.)
- Spatterdock (Nuphar lutea)
- Water Lily (Nymphaea spp.)

3. SHRUB/BRUSHLAND - ACRES OF HABITAT TO BE ESTABLISHED: 21.6

Shrubs - Total average density of 240/acre
- Saw Palmetto (Serenoa repens)
- Wax Myrtle (Myrica cerifera)
- Beautyberry (Callicarpa americana)
- Yaupon Holly (Ilex vomitoria)
- Wild Olive (Osmanthus americanus)
- Shining Sumac (Rhus copallina)
- Groundsel Tree (Baccharis halimifolia) - Natural recruitment

ATTACHMENT E

Grasses, Forbs and Vines - 80 percent of ground cover
Eastern Gamagrass (Tripsacum dactyloides)
Panicum (Panicum spp.)
Blackberry (Rubus spp.) - Natural recruitment
Virginia Creeper (Parthenocissus quinquefolia) - Natural recruitment
Greenbriar (Smilax spp.) - Natural recruitment
Wild Grape (Vitis munsoniana) - Natural recruitment
Wood Fern (Thelypterus spp.) - Natural recruitment

4. UPLAND FOREST - ACRES OF HABITAT TO BE ESTABLISHED: 65.8

Trees - Total average density of 300/acre
Slash Pine (Pinus elliottii)
Laurel Oak (Quercus laurifolia)
Southern Red Ceder (Juniperus silicicola)
Live Oak (Quercus virginiana)
Sweetgum (Liquidamber styraciflua)
American Holly (Ilex opaca)
Pignut Hickory (Carya glabra)
Redbud (Cercis canadensis) - Delayed until overstory shading
Dogwood (Cornus florida) - Delayed until overstory shading
Black Cherry (Prunus serotina) - Natural recruitment
Cabbage Palm (Sabel palmetto)

Shrubs - Total average density of 240/acre
Saw Palmetto (Serenoa repens)
Wax Myrtle (Myrica cerifera)
Beautyberry (Callicarpa americana)
Yaupon Holly (Ilex vomitoria)
Wild Olive (Osmanthus americanus)
Shining Sumac (Rhus copallina)
Hawthorne (Crataegus spp.)
Blueberry (Vaccinium spp.)
Groundsel Tree (Baccharis halimifolia) - Natural recruitment

Grasses, Forbs and Vines - 80 percent of ground cover
Eastern Gamagrass (Tripsacum dactyloides)
Panicum (Panicum spp.)
Blackberry (Rubus spp.) - Natural recruitment
Virginia Creeper (Parthenocissus quinquefolia) - Natural recruitment
Greenbriar (Smilax spp.) - Natural recruitment
Wild Grape (Vitis munsoniana) - Natural recruitment
Wood Fern (Thelypterus spp.) - Natural recruitment

ATTACHMENT E

EXOTIC AND NUISANCE PLANT LISTS

Exotic Plant List

Brazilian Pepper (Schinus terebinthifolius)
Water Lettuce (Pistia stratiotes)
Cogan Grass (Imperata brasiliensis & cylindrica)
Caeser's Weed (Urena lobata)
Kudzu (Pueraria montana)
Lantana (Lantana camara)
Japanese Climbing Fern (Lygodium japonicum)
Melaleuca (Melaleuca quinquenervia)
Australian Pine (Casuarina equisetifulia)

Nuisance Plant List

Cattail (Typha spp.)
Primrose Willow (Ludwigia peruviana)
Climbing Hempvine (Mikania scandens)
Water Hyacinth (Eichornia crassipes)

ATTACHMENT F: HC CHECKLIST OF SUBMITTAL REQUIREMENTS FOR LIMITED USE

ATTACHMENT F

OR REC: 6973PG1308

CHECKLIST OF SUBMITTAL REQUIREMENTS
FOR LIMITED USE

Petitioner's Initials	Technician's Initials		
_____	_____	1)	RECORDED DEED
_____	_____	2)	LEGAL DESCRIPTION
_____	_____	3)	DETAILED STATEMENT
_____	_____	4)	GENERAL LOCATION MAP
_____	_____	5)	SITE PLAN (3 copies, if larger than 8½" x 14")
_____	_____	6)	REDUCED COPY OF SITE PLAN where applicable
_____	_____	7)	AREA TABULATIONS
_____	_____	8)	PARKING TABULATIONS
_____	_____	9)	STATEMENTS FOR PROVISION OF COMMON AREAS, if any
_____	_____	10)	STORMWATER/WASTEWATER INFORMATION
_____	_____	11)	ARCHITECTURAL DESCRIPTION
_____	_____	12)	LANDSCAPING PLAN
_____	_____	13)	AERIAL PHOTOGRAPH
_____	_____	14)	FILING FEE
_____	_____	15)	COMPLETED APPLICATION

NOTE: If any of the required documents or fees are not included with your Application, the application will not be accepted for processing. (See Section II of this Packet.)

ATTACHMENT G: HCEPC APPROVAL & MITIGATION AGREEMENT FORM

ATTACHMENT G

RE: 6073:1309

ATTACHMENT B-2

APPROVAL AND MITIGATION AGREEMENT

This agreement is made and entered into by the Executive Director of the Environmental Protection Commission of Hillsborough County pursuant to Chapter 84-446, Laws of Florida, and _____, owner of the following described property (location of mitigation area(s) and/or Conservation Easement; include description, address, folio, section, township, range):

And in consideration of the Executive Director's authorization to develop or impact the wetland(s) located on (location of area(s) to be developed or impacted; include description, address, folio, section, township, range):

as described in _____, owner agrees:
(project name)

(a) to perform or construct the mitigation on property identified first above according to the specifications of the approved plan (Plan), identified as _____ (plan name) and kept on file with the Commission;

(b) to perform the monitoring as required and any corrections or modifications to the mitigation in order to achieve the success specifications agreed upon in the Plan;

(c) to notify in writing the Director of the Ecosystems Management Department of the exact start and completion dates for approved disturbances and for the construction of mitigation areas;

(d) to give actual notice of this Mitigation Agreement and any Conservation Easement to any purchaser of the mitigation area and/or area of the Conservation Easement;

(e) to specifically retain the right to complete the terms of this Mitigation Agreement in the event of sale of the mitigation area, or to otherwise provide for the satisfactory completion of the terms of the Plan pursuant to this Mitigation Agreement, by written agreement acceptable to the Executive Director;

(f) to provide public notice of the Commission's interest in the mitigation area at its own expense, by (i) executing and recording a Conservation Easement over the mitigation area to the Commission, (ii) recording this Mitigation Agreement, or by (iii) appropriate notation on the plat; and (please indicate which methods of public notice will be used by crossing out those not applicable)

(g) owner agrees to provide prior to commencing the proposed impact of this project, a Irrevocable Standby Letter of Credit or equivalent financial security for the implementation term of the Plan, in the amount of $_____, to ensure compliance with this agreement and the Plan.

ATTACHMENT G

property, and in consideration of the agreement to complete the mitigation according to the specifications of the Plan and as agreed above, the Executive Director has determined that the proposed Plan would provide adequate protection of the environmental benefits and hereby gives authorization to the owner to impact the wetland as proposed, conditioned upon the specifications of that proposal and this agreement.

It is agreed that THIS AUTHORIZATION WILL EXPIRE ON _____; however, if any impact to the wetland identified above has occurred prior to that time pursuant to this authorization, the Plan shall be implemented in its entirety. Failure to comply with the terms of this agreement or to implement the Plan according to its specifications shall be a violation of Chapter 84-446, Laws of Florida and enforceable accordingly, as well as by action on the contract.

OFF. REC. 6973PG1310

_____
Date

_____
Owner/Agent Signature & Title
(If by agent, Power of Attorney required)

_____
Mailing Address

(Corporate Seal)

State of _____
County of _____

The signature on the foregoing instrument was acknowledged before me this _____(date) by _____(name of officer or agent, title of officer or agent), of _____(name of corporation), a _____(state or place of incorporation) corporation, on behalf of the corporation. He/she is personally known to me or produced _____(type of ID) as identification, and who did _____ take an oath.

_____(Notary's Signature)
_____(Notary's Name - typed, printed or stamped)
Notary Public _____(Title or rank)
_____(Serial number, if any)
_____(Date Commission Expires)

(Notary Seal)

_____
Date

_____
Roger P. Stewart, Executive Director
Environmental Protection Commission
of Hillsborough County
1900 Ninth Avenue
Tampa, Florida 33605

Prepared by: Sara M. Fotopulos, Chief Counsel
Return to: Environmental Protection Commission
1900 9th Avenue
Tampa, Florida 33605

(corporation)

(6/92)

CLERK - BOCC
Room 214-F - Courthouse
P.O. Box 1110
Tampa, Florida 33601