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STATE OF FLORIDA SITING BOARD

BUREAU OF AIR REGULATION

AUG 1 2000

IN RE: GULF POWER COMPANY
(LANSING SMITH UNIT 3
POWER PLANT SITING)
APPLICATION NO. PA99-40

DOAH CASE NO. 99-2641EPP OGC CASE NO. 99-0972

FINAL ORDER APPROVING CERTIFICATION

On June 19, 2000, an Administrative Law Judge ("ALJ") with the Division of Administrative Hearings ("DOAH") submitted a Recommended Order to the Department of Environmental Protection ("DEP") in this proceeding. Copies of the Recommended Order were served upon the attorneys for DEP, Gulf Power Company ("Gulf"), and upon attorneys or representatives of other designated governmental entities. A copy of the Recommended Order is attached as Exhibit A. The Recommended Order also included the proposed Conditions of Certification, which are attached as Exhibit B. The matter is now before the Governor and Cabinet, sitting as the Siting Board, for final agency action under the Florida Electrical Power Plant Siting Act (hereafter "PPSA"), Sections 403.501 through 403.518, Florida Statutes (F.S.).

BACKGROUND

Gulf Power Company, a subsidiary of Southern Company, is an investor-owned electric utility that supplies electric service in northwest Florida. Gulf Power's Lansing Smith power plant is located in the central portion of Bay County, Florida, approximately 2.5 miles west of the unincorporated community of Southport. Within the approximate 1,384 acres which comprise the Smith Plant are two existing coal-fired electrical generating units along with their supporting facilities. The two existing units have been in operation since 1965 and 1967, respectively.

Gulf Power has proposed to construct and operate a 574 megawatt (MW) natural gasfired combined cycle electrical generating unit to be known as Smith Unit 3. It will be located at the existing Smith Plant and will more than double the generating capacity at the facility. Smith Unit 3 will employ two combustion turbine units which will each generate approximately 170 MW of electricity. The hot exhaust gases from the two combustion turbines will be captured in two heat recovery steam generators which will produce additional steam-generated electricity of 200 MW. Smith Unit 3 will utilize the existing cooling water discharge from Smith Units 1 and 2 within a new cooling tower.

Smith Unit 3 will use the existing Smith Plant access road, the existing electrical switch yard and the existing transmission lines. Three of these existing electrical transmission lines will be reconductored to replace the existing wires with higher capacity conductors; however, no new electrical transmission structures will be required. No other expansions or other alterations to the Gulf Power transmission system are required as part of this project.

A new 28-mile gas pipeline will be constructed to provide natural gas fuel for Smith Unit 3. This gas pipeline lateral will connect to an existing Florida Gas Transmission pipeline, and will be permitted, constructed, owned and operated solely by Florida Gas Transmission Company.

The Florida Public Service Commission issued an affirmative need determination for Smith Unit 3 on August 2, 1999. The Commission concluded that Smith Unit 3 was necessary to ensure the future reliability and integrity of Gulf Power's electrical system.

PPSA PROCEEDINGS

A PPSA land use hearing was conducted by the ALJ on November 1, 1999, as required by Section 403.508(1), F.S. On December 30, 1999, the ALJ entered a Recommended Order finding and concluding that the subject site is consistent and in compliance with the County's existing land use plans and zoning ordinances. On March 14, 2000, the Siting Board entered an Order adopting the ALJ's Recommended Order and determining that the proposed site is consistent and in compliance with the existing land use plans and zoning ordinances of Bay County.

DEP, the Florida Department of Community Affairs, the Florida Department of Transportation, the Florida Fish and Wildlife Conservation Commission, the Northwest Florida Water Management District, and the West Florida Regional Planning Council each prepared written reports on the project. Each of these agencies recommended approval of Smith Unit 3 or did not object to certification of the proposed power plant.

A PPSA site certification hearing was conducted in Lynn Haven, Florida, by the ALJ on April 3, 2000, as required by Section 403.508(3), F.S. Testimony and documentary evidence were presented at the site certification hearing by Gulf and DEP. This documentary evidence included various Joint Stipulations between the parties and Conditions of Certification as revised by DEP on March 30, 2000. A member of the Bay County Commission spoke in support of the Project. The record reflects that no other agencies or persons appeared at this hearing. On May 1, 2000, Gulf and DEP jointly filed with DOAH a Proposed Recommended Order.

The ALJ concluded in the Recommended Order that Gulf had demonstrated that Smith Unit 3 meets the criteria for certification under the PPSA. The ALJ further concluded that, if operated and maintained in accordance with the Conditions of Certification, Smith Unit 3 will comply with applicable nonprocedural requirements of all agencies, and will result in minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and aquatic wildlife. The ALJ thus recommended that the Siting Board grant certification of Smith Unit 3 pursuant to the PPSA, subject to DEP's Conditions of Certification.

CONCLUSIONS

No Exceptions have been filed with the Siting Board challenging any of the factual findings, legal conclusions, or recommendations set forth the in the ALJ's Recommended Order. Furthermore, no state, regional, or local agency has recommended denial of site certification for this project. Having reviewed the Recommended Order and other matters of record and being otherwise duly advised, it is ORDERED that:

- A. . . The Recommended Order of the Administrative Law Judge dated June 19, 2000, is approved and adopted by the Board.
- B. The Board approves certification for the location, construction, and operation of Smith Unit 3 as proposed in Gulf Power Company's site certification application and the Recommended Order, subject to the Conditions of Certification contained in Exhibit B.
- C. Authority to assure and enforce compliance by Gulf and their agents with all of the Conditions of Certification imposed by this Final Order is hereby delegated to DEP.
- D. Pursuant to Section 403.516(1), F.S., the Board hereby delegates the authority to the Secretary of DEP to modify any condition of this certification, except that any proposed modification to burn a fuel other than natural gas shall be reviewed by the Board.

Any party to this certification proceeding has the right to seek judicial review of this Final Order pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, Office of General Counsel, 3900 Commonwealth Boulevard, M.S. 35, Tallahassee, Florida, 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date this Final Order is filed with the Clerk of the Department.

DONE AND ORDERED this **28** day of July, 2000, in Tallahassee, Florida, pursuant to a vote of the Governor and Cabinet, sitting as the Siting Board, at a duly noticed and constituted Cabinet meeting held on July **26**, 2000.

THE GOVERNOR AND CABINET SITTING AS THE SITING BOARD

THE LONORABLE JEB BUSH

GOMERNOR

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

JLERK TURN

DATE

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing Final Order has been sent by United

States Postal Service or interoffice mail on this 28th day of July, 2000, to:

Douglas S. Roberts, Esquire William D. Preston, Esquire Hoping, Green, Sams & Smith Post Office Box 6526 Tallahassee, Florida 32314-6526

Andrew S. Grayson, Esquire Department of Community Affairs 2555 Shumard Oak Boulevard Tallahassee, Florida 32399-2100

Robert V. Elias, Esquire Florida Public Service Commission Gerald Gunter Building 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Douglas Barr, Executive Director Douglas L. Stowell, Esquire Northwest Florida Water Management District 81 Water Management Drive Havana, Florida 32333

ANN COLE, Clerk
P. MICHAEL RUFF
Administrative Law Judge
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, Florida 32399-3060

and by hand delivery to:

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620 Meridian Street
Tallahassee, Florida 32399-1600

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STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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STATE OF FLORIDA DIVISION OF ADMINISTRATIVE HEARINGS

IN RE: GULF POWER COMPANY (LANSING SMITH UNIT 3) POWER PLANT SITING APPLICATION NO. PA99-40

Petitioner,

vs.

Case No. 99-2641EPP

DEPARTMENT OF ENVIRONMENTAL PROTECTION:

Respondent.

RECOMMENDED ORDER

Pursuant to notice, the Division of Administrative Hearings, by its duly-designated Administrative Law Judge, P. Michael Ruff, conducted a formal certification hearing in this proceeding on April 3, 2000 in Lynn Haven, Florida.

APPEARANCES

For Gulf Power Company:

Douglas S. Roberts, Esquire William D. Preston, Esquire Angela R. Morrison, Esquire Hopping Green Sams & Smith Post Office Box 6526 Tallahassee, Florida 32314

For Florida Department of Environmental Protection:
Scott A. Goorland, Esquire
Department of Environmental
Protection
Douglas Building
Mail Station 35
3900 Commonwealth Boulevard.
Tallahassee, Florida 32399

STATEMENT OF THE ISSUE

The issue to be resolved in this proceeding concerns whether the Governor and Cabinet, sitting as the Siting Board, should issue certification to Gulf Power Company (Gulf or Gulf Power) to construct and operate a 574 megawatts (MW) combined cycle electrical generating unit to be located at Gulf's existing Lansing Smith Plant in Bay County, Florida, in accordance with the provisions of Section 403.501, et seq., Florida Statutes.

PRELIMINARY STATEMENT

This proceeding was conducted pursuant to the Florida

Electrical Power Plant Siting Act (PPSA), Chapter 403, Part II,

Florida Statutes, and Chapter 62-17, Florida Administrative Code,
to consider Gulf Power's Site Certification Application for the

proposed Lansing Smith Plant Unit 3 (Smith Unit 3 or Project).

On June 7, 1999, Gulf Power filed its application for site
certification for the Smith Unit 3. The application was filed

with the Florida Department of Environmental Protection

(Department or FDEP).

On August 2, 1999, the Florida Public Service Commission issued its order determining the need for Smith Unit 3, pursuant to Section 403.519, Florida Statutes.

As required by Sections 403.508(1) and (2), Florida

Statutes, a land use hearing was held near the Project site on

November 1, 1999. By Final Order, dated March 14, 2000, the

Siting Board adopted the Recommended Land Use Order, holding that
the site of the proposed Smith Unit 3 is consistent and in

compliance with the existing land use plans and zoning ordinances of Bay County, Florida.

On February 14, 2000, the Department issued its written analysis concerning the Project, as required by Section 403.507(4), Florida Statutes, which contained reports from other agencies, along with a compiled set of proposed conditions of certification for Smith Unit 3 proposed by FDEP and various agencies. On April 3, 2000, during the certification hearing, FDEP submitted its revised written analysis as an exhibit (FDEP Ex. 4), to update and correct various matters in the earlier version of its analysis. After proper notice by both the Applicant and by FDEP, a certification hearing was held in Lynn Haven, Florida, on April 3, 2000, as required by the PPSA. general purpose of this certification hearing was to receive oral, written, and documentary evidence concerning whether, through available and reasonable methods, the location and operation of the proposed Smith Unit 3 would produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of State waters and their aquatic life, in an effort to fully balance the increasing demands for an electrical power plant location and operation with the broad interests of the public. See Section 403.502, Florida Statutes.

At this hearing, Gulf Power presented the oral testimony of seven witnesses and had Gulf Power Exhibits numbered 1 to 24 and 26 to 46 admitted into evidence. These exhibits included the

prefiled written testimony of two additional witnesses. FDEP presented the testimony of Hamilton S. Oven, the administrator of FDEP's Siting Coordination Office, and had FDEP Exhibits 1 to 4 admitted into evidence. The Florida Department of Community Affairs, the Florida Fish and Wildlife Conservation Commission, the West Florida Regional Planning Council, the Northwest Florida Water Management District, and the Florida Department of Transportation, all of which were parties to this proceeding, did not enter appearances at the certification hearing. However, these agencies entered into settlement stipulations with Gulf Power prior to the hearing, resolving any outstanding issues. These stipulations were entered into evidence at the hearing. The other statutory agency party to this proceeding, Bay County, did not appear at the certification hearing. However, Bay County Commissioner Carol Atkinson, testified at the hearing, stating the County Commission supported the proposed Project. No other members of the general public testified at the certification hearing.

Subsequent to the certification hearing, Gulf Power, upon proper authorization granted at hearing, submitted its late-filed Exhibit 47, representing the Stipulation between Gulf Power and the Florida Fish and Wildlife Conservation Commission.

Following the conclusion of the April 3, 2000 hearing, a Transcript of the hearing was filed on April 21, 2000. The joint proposed recommended order of Gulf Power and FDEP was timely

submitted and has been adopted in the rendition of this Recommended Order.

FINDINGS OF FACT

- 1. Gulf Power is an investor-owned electric utility that supplies electric service in northwest Florida. Gulf currently serves approximately 350,000 customers in its service area, which extends westward from the Apalachicola River to the western border of Florida. Gulf Power has been supplying electricity within this area since 1926. Gulf is a subsidiary of the Southern Company. Gulf Power currently operates power plants at three locations in the Florida Panhandle, with a combined generating capacity of 2,284 MW.
- 2. Gulf Power's Lansing Smith power plant (Smith Plant) is located in the central portion of Bay County, Florida, approximately 2.5 miles west of the unincorporated community of Southport, Florida, and 2.5 miles northwest of the City of Lynn Haven, Florida. The City of Panama City lies due south, across the open waters of North Bay. The Smith Plant is in the unincorporated area of the County. Access is via County Road 2300 which connects to State Road 77.
- 3. Within the approximate 1,384 acres, which comprise, the Smith Plant, are two existing coal-fired electrical generating units along with their supporting facilities, including a coal unloading and storage facility, wastewater treatment and disposal facilities, intake and discharge canals which handle cooling water, and electrical substations and transmission lines. Smith

Unit 1 has a generating capacity of 162 MW and Smith Unit 2 has 192 MW of generating capacity. The two existing units have been in operation since 1965 and 1967 respectively. An existing 31.6 MW oil-fired simple cycle combustion turbine is also located at Smith Plant.

4. The balance of Smith Plant is largely undeveloped, and is comprised mainly of planted pines, forested areas and wetlands. Immediately adjacent off-site lands are used for silviculture (planted pines) or are otherwise undeveloped. The nearest residence is more than two miles away, located to the northeast of Smith Plant.

Project Description

- 5. The proposed Smith Unit 3 consists of a natural gasfired combined cycle plant capable of generating up to 574 MW of
 electricity. The new unit will more than double the generating
 capacity at Smith Plant. Smith Unit 3 will be located upon a
 50.1-acre site (Project site) within the existing boundaries of
 Smith Plant.
- 6. Smith Unit 3 will utilize state-of-the-art combined cycle design concepts and equipment to achieve a high level of efficiency in electrical power production. The Project will employ two General Electric combustion turbine units which have a proven operating record around the world. Each combustion turbine will generate approximately 170 NW of electricity. The hot exhaust gases from the two combustion turbines will be captured in two heat recovery steam generators (HRSGs) which will

produce additional steam-generated electricity of 200 MW. Hot exhaust gases from the combustion turbine/HRSGs will then be vented to the atmosphere by the main stack. In addition, the HRSGs will contain duct burners which will fire additional fuel in the boilers, adding additional generating capacity to the HRSG portion of the Project. Smith Unit 3 will also employ power augmentation in which a portion of the steam in the HRSGs is routed back to the combustion turbine to increase the mass flow through the combustion turbine, increasing its ability to generate electricity.

- 7. After the energy is removed from the steam in the steam turbine, the steam is condensed back into water in the condenser. Cooling for the Project will feature a creative and environmentally sound combination, utilizing the existing cooling water discharge from Smith Units 1 and 2 within a new cooling tower for Smith Unit 3. This means the Project will actually use hot water from the existing cooling system for Units 1 and 2 and then discharge cooler water from Unit 3 back into the existing discharge canal.
- 8. Smith Unit 3 will use the existing Smith Plant access road, also the existing electrical switch yard will provide the interconnection for Smith Unit 3, and electrical power from the Project will be transmitted via the existing transmission lines to existing off-site electrical substations.
- 9. Three of these existing electrical transmission lines, which run south and east into the Panama City area, will be

existing conductors or wires with higher capacity conductors.

This reconductoring is necessary to maintain the reliability of the Gulf Power transmission system. The reconductoring will involve removal of the existing wires, installation of new wires, and possible repair and maintenance of the existing structures. However, no new electrical transmission structures will be required as part of the reconductoring. No other expansions or other alterations to the Gulf Power transmission system are required as part of this project.

- 10. A new 28 mile gas pipeline will be constructed to provide natural gas fuel for Smith Unit 3. This gas pipeline lateral will connect to an existing Florida Gas Transmission pipeline running through Washington County. The new gas lateral to serve the Project will be permitted, constructed, owned and operated solely by Florida Gas Transmission Company. The new lateral will interconnect with the existing gas pipeline and then follow a southerly route paralleling State Road 77 and an existing Gulf Power transmission right-of-way before entering the Smith Plant. A new gas metering station will be constructed within the Project site.
- 11. Existing groundwater wells at the Smith Plant site will supply the groundwater needs for Smith Unit 3, as well as continue to supply the existing units.
- 12. New facilities to be constructed within the approximate 50-acre Project site will include the two combustion turbines,

the two HRSGs, steam turbines, three electrical generators, a cooling tower, an administration building, and other ancillary facilities. A new electrical switchyard will also be built within the Project site, which will then be interconnected to the existing main electrical switchyard at the Smith Plant.

Need for Smith Unit 3

- 13. The Florida Public Service Commission (Commission) issued an affirmative need determination for Smith Unit 3 on August 2, 1999. The Commission concluded that Smith Unit 3 was necessary to ensure the future reliability and integrity of Gulf Power's electrical system. The Commission found that there existed a generation/load imbalance in the Panama City area due to growth and electrical demand on Gulf Power's existing system. In finding that no cost-effective energy conservation measures existed that could offset the need for electricity from the Gulf Power Smith Unit 3, the Commission concluded that Smith Unit 3 is necessary to provide adequate electricity at a reasonable cost to Gulf Power's customers, as contemplated under Section 403.519, Florida Statutes. The Commission, therefore, found that the Project is the "most cost effective alternative available to Gulf to meet its needs for adequate electricity at a reasonable price."
- 14. Gulf Power needs to add new generating capacity by the year 2002 to maintain an appropriate level of generating reserves on its system. Gulf Power has been able to obtain short-term purchases of electricity that meet its capacity needs until 2002.

In evaluating its need for additional power, Gulf Power evaluated both a self-build option and conducted a request for proposal (RFP) process to consider outside offers to supply electricity. In the RFP process, Gulf Power evaluated nine different offers from outside interests, which were compared to the Gulf Power Smith Unit 3 option. After evaluating all of the options and their associated costs, Gulf Power concluded that Smith Unit 3 was clearly the most cost-effective choice.

Project Schedule and Construction

- 15. Construction of Smith Unit 3 is scheduled to begin in August 2000, or as soon as the final approvals are obtained. In addition to the site certification, Gulf Power is required to obtain a Prevention of Significant Deterioration (PSD) permit, a modified National Pollutant Discharge Elimination (NPDES) Permit issued by FDEP, and a dredge and fill permit from the U.S. Army Corps of Engineers.
- 16. The new unit is projected to be in service in June 2002. Construction will require approximately 250 employees, with a peak of 325 employees. Construction activities will involve clearing of a portion of the Project site, removal of muck and placement of backfill, setting of pilings and foundations, followed by assembly of equipment. Installation of boilers and metal buildings will then follow, with the gas turbines and steam turbines being put into place last. These construction activities will require approximately 32.7 acres of the approximate 50-acre Project site. This includes the power

block, construction laydown area, ancillary facilities, and stormwater ponds. The remainder of the Project site will remain principally as planted pine.

- 17. During construction, heavy equipment will be delivered by barge, while small and medium sized items will be delivered by truck over County Road 2300. Road wetting and project maintenance will be used to control dust during construction. The site is relatively flat and is not expected to create any significant runoff during Project construction. Erosion during construction will be managed with an erosion control plan. This will include planting of exposed areas, collection of runoff and use of detention ponds to collect sediments in runoff.
- 18. Project construction will have little impact on open waters. The only construction activity in open waters will be the placement of the cooling tower intake and discharge pipes within the existing Smith Plant cooling water discharge housing. This will cause minor turbidity during construction with approved construction techniques taken to minimize these impacts with no long term effect.

Surface Water Management System

- 19. The existing Project site is currently undeveloped although the upland areas have been modified by silviculture practices. The site currently drains to existing natural wetland systems.
- 20. During construction, a portion of the Project site will be filled and graded to provide a finished surface for various

Project components. Stormwater basins will also be installed during construction and grading will provide drainage for building and working areas through gravity flow. Runoff will be conveyed to two on-site wet detention stormwater ponds to be located within the east and west portions of the Project site. These stormwater ponds will ultimately discharge to adjacent wetland systems, following natural drainage patterns.

- 21. The stormwater management system, including the stormwater ponds, will be constructed to comply with the requirements of local, state and federal regulations.
- Project Water Use
- 22. The major water uses during operation of Smith Unit 3 will involve cooling tower blowdown and cooling tower evaporation, representing approximately 7.4 million gallons per day (mgd). The cooling water system has the greatest water need of all of the systems for the Project. Other water uses will involve blowdown from the HRSGs to maintain water quality in that system, and water losses due to gas turbine evaporative cooling and wash water.
- 23. The Smith Unit 3 cooling system will utilize a closed-loop cooling circuit. This circulates cooled water from the mechanical draft cooling tower to the Unit 3 heat exchangers. Heated water resulting from the steam cycle of the plant is returned to the cooling tower where it is cooled by an evaporative cooling process. During this process, a certain amount of water is lost through evaporation and drift. In

addition, it is necessary to "blow down" or remove a portion of the water from the cooling tower periodically to control suspended and dissolved solids in the cooling water. Without this blowdown, sedimentation and deposits in the tower will reduce the heat transfer there and damage the cooling equipment.

The water loss in the cooling tower must be replaced with water from an outside source. The source of cooling water makeup for the Smith Unit 3 cooling tower will be from the existing thermal discharge flow from Smith Plant. The existing Units 1 and 2 use a once-through cooling system in which water withdrawn from North Bay passes directly through a condenser and discharges into the existing discharge canal. The makeup water from Smith Unit 3 will be taken from this hot water exiting Smith Plant Units 1 and 2.

- 24. The cooling tower blowdown from Smith Unit 3 will be discharged back into the discharge canal from the cool water side of its cooling tower. As a result, the Project will actually act to reduce the amount of heat currently discharged from Smith Plant into the cooling water discharge canal and then into West Bay.
- 25. The calculated quantity of water needed for cooling tower makeup is 7.4 mgd. This represents approximately 2.5 percent of the current daily water flow through Smith Plant Units 1 and 2. On a daily basis, approximately 3.7 mgd will be discharged back into the cooling water discharge canal as blowdown from the Unit 3 cooling tower. The other 3.7 mgd will

be lost through evaporation in the cooling tower.

- 26. Smith Unit 3 process water needs include water used to cool and wash the gas turbines and other facilities, to make up HRSG blowdown, and to satisfy other water uses. These process water needs will be supplied from groundwater taken from the existing Smith Plant well system. The raw water will be treated in both a filtered water production system and a demineralized water system. This water will then be used for the various processes identified.
- 27. During hot months of the year, evaporative coolers will be provided for the combustion turbines, providing denser intake air for combustion and improving the electrical output of the combustion turbines. In addition, the gas turbines must be washed periodically, both during plant operation and when the unit is offline. During operation, wash water is lost through evaporation in the combustion turbine exhaust. When Smith Unit 3 is offline, wastewater from this process is collected in an on-site tank and trucked off-site for appropriate disposal. During the power augmentation mode of operation, steam is introduced into the combustion turbine, again to increase mass flow through the combustion turbine. This steam is produced in the HRSG, using high quality demineralized water.
- 28. These water treatment and water uses in Smith Unit 3 will generate various process wastewaters. Wastewaters resulting from process water treatment will be routed to an existing Smith Plant on-site collection sump. HRSG blowdown will also be routed

to this on-site sump. The process wastewaters then will be routed to an existing Smith Plant on-site ash pond, which has adequate, permitted capacity to accommodate these additional wastewater flows. There will be no direct discharge of these project-related process waters to area surface waters of the State.

Impacts to Groundwater

- 29. In September 1998, a site investigation was undertaken to sample and characterize the subsurface system at Smith Plant. The groundwater regime and its subsurface system underlying Smith Plant consists of a surficial aquifer system, overlying an intermediate aquifer system that in turn overlays the Floridan aquifer which is found throughout this area. The existing Project site lies at an elevation of approximately 7 to 8 feet above mean sea level. Subsurface sediments in the area are primarily marine and estuarine and represent ancient coastal environments or marine terraces. After these marine terraces were deposited, they were mixed with underlying sediments, consisting of a permeable sand, clay, silt and shell mixture. The underlying intermediate aquifer system consists of sandy clay and is approximately 80 feet thick. The Floridan aquifer is found at a depth of approximately 100 feet below land surface, typically consists of limestone with macrofossils, and is approximately 300 feet thick in the area of the Project site.
- 30. Impacts to groundwater from the Project would occur principally from the withdrawal of groundwater for Smith Unit 3

use and from dewatering activities, if necessary, during construction. The existing Smith Plant is presently served by four groundwater wells that are permitted under a Consumptive Use Permit issued in September 1999 by the Northwest Florida Water Management District. That permit authorizes a maximum groundwater use of 1.2 million gallons per day (mgd) for the entire Smith Plant, which would include Units 1 and 2, as well as the proposed Smith Unit 3. These wells are sufficient to satisfy the groundwater withdrawal needs for Smith Unit 3, which amounts to an average of 209,000 gallons per day (gpd). By comparison, the existing Units 1 and 2 average a combined groundwater withdrawal rate of 647,000 gpd.

Permit, Gulf Power conducted groundwater modeling to determine if any significant impacts to water resources or water users would occur as a result of the projected water use increase due to Smith Unit 3 operations. That modeling indicated that no adverse or irreversible impacts will occur to the Floridan aquifer system, or to its users in the vicinity of the Smith Plant site. The use of groundwater for process water is a reasonable and beneficial use of that resource. In addition, Gulf Power evaluated other potential sources of water. The factors of reliability and distance to the source were the primary factors considered by Gulf Power in the selection of groundwater use for Smith Unit 3. The Northwest Florida Water Management District agreed with this conclusion and issued the renewed Consumptive

Use Permit for Smith Plant, including the proposed addition of Smith Unit 3. In fact, groundwater use for Smith Unit 3 represents less than 3 percent of the total 7.6 mgd Project water need.

- 32. Project construction may require dewatering during construction activities, including placement of pilings at the Project site. If dewatering occurs, any impact will be very localized, and limited to a small area immediately adjacent to the dewatering activities. Dewatering effluent would be routed to the drainage system and then to the new detention basins. This effluent will then be allowed to infiltrate back into the surficial aquifer, and thereby offset the dewatering volumes.
- ash pond at Smith Plant. That ash pond operates under an existing APDES permit and discharges infrequently, during extreme rainfall events, to a ditch which connects to the existing discharge canal only during extreme rainfall events. Any such pond discharge is sampled and reported to the Department. Any wastewaters that do not evaporate instead percolate into the underlying groundwater. The pond is subject to an FDEP-approved groundwater monitoring program, which has been in operation since the early 1980s. Seven compliance monitor wells are periodically sampled and analyzed for 21 separate parameters to ensure compliance with applicable state groundwater quality standards. This ash pond operates in compliance with the approved requirements of the groundwater

monitoring plan and monitoring data indicate that Smith Plant has been and continues to be in compliance with all applicable | Florida groundwater standards and criteria.

Impacts to Surface Water

- 34. Gulf's Smith Plant is located on the northern end of a peninsula between the North and West Bays of St. Andrews Bay in Panama City, Florida. Thus, surface water runoff at this location generally flows from the northeast to the southwest and discharges to the existing cooling water canal. Four adjacent surface waters could be potentially impacted by the Project. The existing Smith Plant Units 1 and 2 intake water from Alligator Bayou, which is connected to North Bay, and the discharge canal connects to Warren Bayou, which is part of the West Bay of St. Andrews Bay.
 - 35. Alligator Bayou is a Class III marine water, while North Bay, West Bay, and Warren Bayou are all Class II waterbodies. The Class III designation is primarily to protect recreation and maintain a healthy propagation in population of fish and wildlife. The Class II waterbody standards provide additional protections for shellfish propagation and harvesting areas, and contain more stringent bacterial limits.
 - 36. Operation of the cooling system for the existing generating units at Smith Plant may have impacts on area surface waters due to entrainment and impingement from cooling water intake structures and thermal stresses from cooling water discharge. Entrainment is an impact to organisms that are

entrapped in the cooling water and drawn through plant water processes. Impingement is the impact on organisms, such as crabs, which may be trapped on water intake screens. Thermal impacts are heat-related stresses that result if excess temperature levels occur in receiving waters, in this case, warren Bayou.

- These potential impacts have been studied extensively 37. at the Smith Plant for the past 25 years. Studies in 1977 concluded that impacts of the cooling water intake system were acceptable and that .Smith Plant was using the best available technology for that system. The thermal plume in West Bay from the existing units was also studied over the past 25 years. These studies delineated the extent of the thermal plume from Smith Plant in the open waters, and included specific sampling of biological communities to determine any adverse thermal plume impact. These studies were used to set the present thermal discharge limits for Smith Plant, and further demonstrated there would be no unacceptable impacts from its operation. ongoing studies, including findings and conclusions contained in a 1998 report, confirmed that there are minimal thermal impacts in West Bay from the existing Smith Plant's cooling water discharge.
- 38. As discussed above, cooling water for Smith Unit 3 will be taken from the warm water discharge from the existing two Smith Plant units; cooling water blowdown will be discharged from the cool side of the new cooling tower. Thus, the temperature of

the Smith Unit 3 discharge will actually be less than the temperature of the water withdrawn from the cooling canal. Further, since half the water withdrawn for Smith Unit 3 will be lost through evaporation in the cooling tower, approximately one-half of the heat that is removed from the existing canal will not be returned to the canal. Thus, there will be a slight reduction in the total heat contribution to area surface waters from Smith Plant as it presently exists. This will reduce the overall heat rejection from the Smith Plant by 1.4 percent. The existing thermal plume will therefore be reduced slightly and the water temperature in the discharge canal will not increase over existing conditions as a result of the addition of Smith Unit 3. This will not cause any exceedance in the existing permitted thermal limits for Smith Plant.

- 39. Since Smith Unit 3 will withdraw cooling water from the existing discharge canal, there will be no change in entrainment or impingement impacts from the once-through cooling system "because no additional water will be withdrawn from North Bay for this Project.
- 40. The Smith Unit 3 cooling tower will operate under two cycles, meaning that one-half the water withdrawn will be evaporated in the cooling tower. The remaining constituents within the water in the cooling tower will be concentrated two-fold prior to discharge as blowdown, due solely to water being evaporated. However, this blowdown of approximately 2,600 gallons per minute will be immediately mixed in the discharge

canal with the 185,000 gallons per minute of water discharged from Smith Plant Units 1 and 2. Therefore, the discharge from the Smith Unit 3 cooling tower will be diluted at a ratio of 71:1. Constituent concentrations within the discharge from Smith Plant will only increase approximately 1.4 percent over existing values. The existing discharge is in compliance with both Class II and Class III water quality standards, and it is not anticipated that the slight increase in concentrations due to the Project will cause any violations of applicable FDEP water quality standards.

- 41. Two constituents will be added to the cooling water to facilitate its use in the cooling tower. Biofouling or the growth of unwanted organisms, such as algae and bacteria, within the cooling tower will be treated with chlorination. However, the discharge valve will be closed during this process and the chlorine will be allowed to dissipate prior to any release. Chemicals will also be added to the cooling tower water to prevent scaling. These chemicals will be nontoxic in nature when discharged and will be approved for use by FDEP under the existing NPDES permit.
- 42. The Project also will have no measurable effect on adjacent aquatic communities from atmospheric deposition of air emissions from Smith Unit 3. The two primary emissions of concern are nitrogen oxides, which could reach the surrounding water as nitrogen and stimulate growth of algae, and sulfur dioxide, which could contribute to acid rain. With the addition

of Smith Unit 3, there will be no increase in nitrogen oxide emissions over existing conditions and, therefore, no additional impact from nitrogen deposition in area waters. Further, sulfur dioxide concentrations in natural gas are quite low and constitute 1/1000th of the current Smith Plant sulfur dioxide emission levels. Therefore, sulfur dioxide emissions from the Project will have no adverse effect in St. Andrews Bay or upon its aquatic community.

Wetlands, Impacts and Mitigation Plan

- 43. Of the 50.1-acre Project site, 26.5 acres constitute wetlands. These wetlands are composed of 15.4 acres of wet pine plantation, 10.2 acres of cypress-titi swamp, 0.5 acres of marsh, and 0.4 acres of ditch habitats. The remaining upland areas are mostly planted pines. Construction of Smith Unit 3 will impact 15.2 acres of these wetlands within the jurisdiction of the FDEP.
- 44. Gulf Power has prepared a Mitigation Plan (Plan) to provide compensation for the loss of these wetlands. This Plan provides for enhancement of 130 acres of wet pine plantation within a larger neighboring 232 acre parcel of land. This parcel is located approximately one mile north of the Project site. The mitigation site is contiguous to a large cypress swamp system. The Plan will involve removing the existing planted pines and replanting native hardwood and cypress trees. The trees will be planted at an average surviving tree density of at least 400 trees per acre. Tree species to be planted include Bald Cypress, Red Maple, Dahoon Holly, Elm and Laurel Oak, which already occur

naturally in hardwood and cypress swamps in the vicinity. The Plan is based upon a ratio of 12 wetland acres of enhancements for each acre impacted of the 6.4 acres of cypress-titi swamp and a 6:1 ratio of wetland enhancement to wetland loss for impacts to the wet pine plantation on the Project site. Thus, the overall mitigation ratio represents an average of 9:1 enhancement, which means for every acre of wetland impact at the Project site, there will be 9 acres of high quality wetlands produced in the mitigation/enhancement area. This Plan is more than adequate to compensate for the wetland impacts on the Project site.

- 45. The Plan also provides that after planting of the wetland tree species, there will be an ongoing monitoring and maintenance program to determine the overall success of the wetland mitigation efforts. Survival of planted trees and hydrological data will be collected for up to five years, or until the goals of the Plan are otherwise achieved. The mitigation parcel will also be placed under a Conservation Easement, which will preserve the property in perpetuity.
- 46. Plant and wildlife species surveys of the Project site identified the presence of four protected plant species. Two of these are relatively common ferns, which are protected from commercial exploitation. One threatened species, Chapman's Crownbeard, is found in a transmission corridor that will not be disturbed by Project construction. The fourth plant, the Panhandle Spiderlily, is a rare species in the region and is considered endangered. Gulf Power will relocate these plants out

of the construction area to nearby wetlands that will not be disturbed by construction. No listed animal wildlife species were found on the Project site, although the Bald Eagle and Brown Pelican were observed in the vicinity of Smith Plant. However, the Project will not impact either of these two species of birds. Air Quality

Analyses Required

- 47. The Prevention of Significant Deterioration (PSD) air construction permit program applies to new major facilities and major modifications to existing facilities in areas currently attaining the federal and state ambient air quality standards. When a new electrical generating unit is added at an existing major facility in an attainment area, PSD review is required if the addition of the unit results in a significant net emissions increase above recent past actual emission levels for certain regulated pollutants.
- 48. Neither Bay County nor any area in Florida is currently designated as "nonattainment" by the U.S. Environmental Protection Agency (EPA) or FDEP for any federal or Florida ambient air quality standard.
- 49. Gulf Power Company's Smith Plant is an existing major facility for PSD applicability purposes. Smith Unit 3 will add two new combustion turbines and two new duct burners, which will have the potential to emit the following PSD-regulated pollutants: carbon monoxide (CO), nitrogen oxides (NOX), particulate matter of ten microns or

- less (PM_{10}) , sulfur dioxide (SO_2) , sulfuric acid mist, and volatile organic compounds (VOCs), and will also add one new cooling tower, which will have the potential to emit PM/PM_{10} .
- 50. The recent actual NOX emissions from Smith Plant's existing Units 1 and 2 were 6,666 tons per year. As part of this Project, a facility-wide cap on NOX emissions will apply to existing Units 1 and 2, Smith Unit 3, and the existing gas turbine to ensure that the addition of Unit 3 will not result in an increase above these recent actual annual NOX emissions. PSD review was therefore not required for NOX emissions from the Project.
- 51. Because there were no creditable contemporaneous increases or decreases (within the last five years) in any pollutant emissions other than for NOX, the future potential emissions from Smith Unit 3 were compared to the PSD applicability thresholds for all emissions except NOX. Based on these thresholds and conservative estimates of the future potential emissions from the new Smith Unit 3 combustion turbines, duct burners, and cooling tower, PSD review was required for CO, PM/PM₁₀, SO₂, sulfuric acid mist, and VOCs. Operation in the steam power augmentation mode is limited to 1,000 hours per year of operation.
- 52. For those pollutants triggering PSD review, the PSD program requires a demonstration that the Project's emissions will not cause or contribute to any violation of state or federal ambient air quality standards or PSD increments. The program

further requires an analysis for these pollutants to demonstrate that Smith Unit 3 impacts on visibility, soils, and vegetation, as well as impacts induced by residential, commercial, and industrial growth, are acceptable. The PSD program also requires that Best Available Control Technology (BACT) be applied to control emissions triggering PSD review.

Emission Impacts

- 53. Air emissions from Smith Unit 3 must not cause or contribute to a violation of federal or state ambient air quality standards or PSD Class I or Class II increments. Bay County is classified as a Class II area for PSD. The nearest Class I area. to Smith Plant is the Bradwell Bay National Wilderness Area, located approximately 105 kilometers to the southeast.
- 54. An air quality analysis, undertaken in accordance with computer modeling procedures approved by FDEP, demonstrated that Smith Unit 3 would not cause or contribute to an exceedance of state and federal ambient air quality standards for CO, PM_{10} , or SO_2 , or PSD Class II increments for PM_{10} or SO_2 .
- 55. Smith Unit 3 is also not expected to cause an increase in ozone concentrations in the area because NOX emissions will not increase and VOC emissions will increase only negligibly. In addition, BACT was applied to projected VOC emissions from the new combustion turbines and duct burners.
- 56. The projected impacts of the sulfuric acid mist emissions from Smith Unit 3 combustion turbines and duct burners were compared to the draft Florida Ambient Reference

Concentrations (FARCs). The modeling analysis demonstrated that projected impacts of sulfuric acid mist from Smith Unit 3 will be well below the corresponding draft FARCs and will not impose a health risk.

- 57. Further, the Project's air emissions are not expected to cause any adverse impacts on visibility and vegetation in the Smith Plant vicinity or in the Bradwell Bay National Wilderness Area, the nearest PSD Class I area.
- 58. Only temporary and very small residential and no significant industrial or commercial growth is expected from the construction phase of Smith Unit 3. Any resulting air emissions will be very small, well-distributed, and have no measurable impact on ambient air quality.
- 59. The operation of Smith Unit 3 will not cause odor impacts and will have no significant effect on acid rain because NOX emissions are not being increased and sulfur dioxide emissions are being increased by only a small amount.
- 60. Consequently, taking into account all of the above factors and considerations, no significant air emission impacts are expected to result from the construction and operation of Smith Unit 3.

BACT and Emission Rates

61. A BACT analysis determines the most stringent, allowable emissions rule for each emissions unit and pollutant subject to PSD review on a case-by-case basis, considering available and technically feasible control technologies, methods,

systems, and technologies, as well as economic, energy, and environmental impacts and other costs.

- 62. A BACT review for the Smith Unit 3 combustion turbines and duct burners was required for CO, PM and PM_{10} , SO_2 , sulfuric acid mist, and VOCs. For the new cooling tower, BACT was required for PM and PM_{10} emissions.
- 63. For the Project's combustion turbines and duct burners, FDEP determined that BACT for PM and PM_{10} emissions is the fuel quality of natural gas, good combustion practices and a ten percent opacity limitation. For the new cooling tower, BACT was established by FDEP for PM and PM_{10} emissions to be the use of high-efficiency drift eliminators.
- burners, FDEP's BACT determination for CO and VOC emissions consists of good combustion practices. The cost per ton of controlling CO emissions through the use of an add-on emission control device known as an oxidation catalyst was found to be excessive. Further, in FDEP's BACT analysis, the use of an oxidation catalyst would provide no air quality benefits or serve an environmental purpose. BACT for CO and VOCs was, therefore, determined by FDEP to be good operating practices.
- 65. For the Project's combustion turbines and duct burners, BACT for SO₂ and sulfuric acid mist was determined by FDEP to be the use of low-sulfur natural gas.
- 66. For the Smith Unit 3 combustion turbines and duct burners, BACT for NOX emissions was not required since Gulf Power

will use dry low-NOX burners on Unit 3 to control NOX emissions, and short-term NOX emissions limits will apply on a 30-day rolling average basis. A separate NOX limit of 0.1 pounds per million British thermal units applies to the duct burners, which is more stringent than the applicable federal New Source Performance Standard (NSPS) limit.

67. Furthermore, Smith Unit 3 combustion turbines and duct burners will have emission limits well below the applicable NSPS requirements, and no NSPS requirements apply to cooling towers.

No National Emissions Standards for Hazardous Air Pollutants (NESHAPs) apply to Smith Unit 3, and a case-by-case determination of Maximum Achievable Control Technology (MACT) for hazardous air pollutants was not required.

· Compliance

- 68. The Smith Plant air emission units and activities, both new and existing, will comply with all applicable federal, state, and local air quality standards, including the conditions contained in the proposed PSD Permit and the recommended conditions of certification for Smith Unit 3.
- 69. Demonstrations of compliance with the facility-wide cap for NOX as well as the unit-specific emission limiting standards for Smith Plant are required under the recommended conditions of certification and the proposed PSD permit. Compliance with the facility-wide cap for NOX will be demonstrated through continuous emissions monitoring and fuel use data for existing Smith Plant Units 1 and 2 and Smith Unit 3, and through fuel use data and EPA

emission factors for the existing gas turbine.

Noise Impacts

- 70. The adjacent land use to Smith Plant is silvicultural. The Bay County Land Use Code defines the maximum noise level for silvicultural areas to be 75 A-weighted decibels (dBA). The Code sets maximum noise levels for residential areas at 60 dBA during daytime hours, and 55 dBA at night.
- of Smith Unit 3 will be 63 dBA at the plant boundary, which is lower than the applicable noise standard for the adjacent property. The nearest residence is more than two miles away, where noise levels from construction would not be excessive. Higher noise levels will be experienced during high-pressure steam and air blowing, which should occur infrequently during the construction phase, and will be of short duration. Gulf Power will notify the nearby residents prior to commencement of the steam blowing phase of construction.
- 72. During normal operation of Smith Plant following the construction of Smith Unit 3, the highest predicted continuous noise level will be approximately 42 dBA at the property boundary, which is below the noise standard applicable to the adjacent property. Thus, the operation of Smith Plant will comply with the noise limits of the Bay County Land Use Code. Socioeconomic Impacts and Benefits
- 73. Operation of Smith Unit 3 will result largely in beneficial economic and social effects. The main regional

benefit of the Project will be the provision of a new clean and reliable energy source. Also, during construction, employment will average 250 workers for the 21-month construction period, with a peak of 325 workers for approximately six months.

Construction payroll and indirect costs will total approximately \$23.7 million. It is expected that most of the construction wages will be generated for County residents. In addition, local subcontractors and vendors will be used to provide labor and goods during construction. Locally purchased materials will include concrete, lumber, and other construction materials.

Applying accepted economic multipliers for the County, construction costs will result in indirect benefits to the local economy of over approximately \$113.5 million.

- 74. The operation of Smith Unit 3 will result in employment of approximately 29 full-time employees over a 7-day week/24-hour day schedule. It is expected that these new employees will be hired locally. Annual operating payroll will be over \$1.5 "million. These new employees are expected to pay taxes and purchase housing locally, providing further positive benefits to the local economy. Using accepted economic multipliers, the indirect increase to household earnings in the community will be over \$1.8 million. Gulf Power also expects to make annual purchases totaling \$1.8 million for maintenance services and equipment related to Smith Unit 3 operations.
- 75. The principal impact from Project construction will be short term traffic impacts due to construction. These impacts

- will be monitored, and flag men will be employed to enhance traffic flow should conditions warrant. Residential areas are not expected to be impacted by the Project due to the distance from the site and screening by existing forested vegetation.

 Most on-site activities will not be visible to area residents.
- 76. Impacts from Smith Unit 3 operations are expected to be minimal and localized. The Project is not located near any recreational areas, parks or scenic viewsheds. Impacts upon the aesthetic quality of the vicinity will be negligible. Smith Unit 3 operation will not have a negative effect on essential public services or facilities. The Smith Plant is equipped with its own fire protection system and is secured and patrolled by security guards. The number of new employees are not expected to adversely affect provision of public services, schools, or local roadways.
- 77. From a land use perspective, the conversion of the Project site from agricultural to industrial uses is appropriate and logical. It represents a reasonable expansion of the present 600-acre portion of Smith Plant site used for electrical generation facilities. No residents will be displaced or caused an economic loss as a result of Smith Unit 3 construction.
- 78. Smith Unit 3 will also be consistent with the Bay County Comprehensive Plan, the State Comprehensive Plan, and the Strategic Regional Policy Plan for the West Florida Regional Planning Council.

Agency Positions and Stipulations

79. The FDEP, the Florida Department of Community Affairs, the Florida Department of Transportation, the Florida Fish and Wildlife Conservation Commission, the Northwest Florida Water Management District, and the West Florida Regional Planning Council each prepared written reports on the Project. Each of these agencies recommended approval of Smith Unit 3, or otherwise, did not object to certification of the proposed power plant. FDEP has proposed a series of Conditions of Certification for the Project, incorporating the recommendations of the various reviewing agencies. Gulf Power states it is prepared to accept and comply with these Conditions of Certification in the construction and operation of Smith Unit 3. In its report, the Florida Department of Community Affairs determined that, if certified, the Project would be consistent with the State Comprehensive Plan, as contained in Chapter 187, Florida Statutes. The West Florida Regional Planning Council stated in its agency report that the Project would not conflict with the strategic Regional Policy Plan for West Florida. No state, regional, or local agency has recommended denial of certification of the Project or has otherwise objected to certification of the Project.

CONCLUSIONS OF LAW

80. The Division of Administrative Hearings has jurisdiction over the parties to and the subject matter of this proceeding. This proceeding has been conducted in accordance

with the Florida Electrical Power Plant Siting Act, Chapter 403,

Part II, Florida Statutes, and Chapter 62-17, Part I, Florida

Administrative Code, which sets out the procedures for power plant siting reviews.

- 81. In accordance with Chapters 120 and 403, Florida
 Statutes, and Chapter 62-17, Florida Administrative Code, proper
 notice was accorded to all persons, entities, and parties
 entitled to such notice, and appropriate notice was provided to
 the general public by both the Department and Gulf Power. All
 necessary and required governmental agencies participated or
 otherwise had the opportunity to fully participate in the
 certification process. Reports and studies were issued by FDEP,
 the Department of Community Affairs, the Florida Department of
 Transportation, the Fish and Wildlife Conservation Commission,
 the Northwest Florida Water Management District and the West
 Florida Regional Planning Council, in accordance with their
 various statutory duties under the PPSA.
- 82. The Florida Public Service Commission has issued its affirmative determination that a need exists for the electrical generating facility and the electricity it will produce, in accord with Sections 403.519, Florida Statutes.
- 83. Competent, substantial evidence and testimony produced by Gulf Power at the certification hearing demonstrates that Gulf Power has met its burden of proof that Smith Unit 3 meets the criteria for certification under the PPSA. Unrebutted testimony produced at the hearing demonstrates that the safeguards for

construction and operation of Smith Unit 3 are technically sufficient to protect the public welfare of the citizens of Florida and are otherwise reasonable and available methods to achieve that protection of the public. Smith Unit 3 will result in minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life. In addition, the Project will not conflict with the goals established by the local comprehensive plan for Bay County, Florida. If operated and maintained in accordance with this Recommended Order and the FDEP's proposed Conditions of Certification, Smith Unit 3 will comply with the applicable nonprocedural requirements of all agencies. Further, certification of the Project will fully balance the demand for electrical power plant location and operation in this state with the broad interests of the public that are protected by the PPSA.

RECOMMENDATION

Based upon the foregoing Findings of Fact and Conclusions of Law, it is

RECOMMENDED that the Siting Board grant full and final certification to Gulf Power Company, under Section 403, Part II, Florida Statutes, for the location, construction, and operation of Smith Unit 3, representing a 575 MW combined cycle unit, as described in the Site Certification Application and the evidence presented at the certification hearing, and subject to the Conditions of Certification contained in FDEP Exhibit 4.

DONE AND ENTERED this 19 day of June, 2000, in

Tallahassee, Leon County, Florida.

P. MICHAEL RUFF
Administrative Law Judge
Division of Administrative Hearings
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Filed with the Clerk of the Division of Administrative Hearings this 19th day June, 2000.

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NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION GULF POWER COMPANY SMITH UNIT 3 PA 99-40

CONDITIONS OF CERTIFICATION

I. GENERAL

The following general and specific conditions shall apply to the construction and operation of the Lansing Smith Plant Unit 3.

A. Definitions

The meaning of the terms used herein shall be governed by the definitions contained in Chapters 403, 378, 373, 372, and 253, Florida Statutes (F.S.), and any regulation adopted pursuant thereto and the statutes and regulations of any agency. In the event of any dispute over the meaning of a term used in these conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning as determined by the Department. As used herein:

- 1. "Application" shall mean the Site Certification Application (SCA) for the Gulf Power Company Smith Unit 3, as supplemented.
- 2. "DEP" or Department shall mean the Florida Department of Environmental Protection.
- 3. "DHR" shall mean the Florida Department of State, Division of Historical Resources.
- 4. "Emergency conditions" shall mean urgent circumstances involving potential adverse consequences to human life or property as a result of weather conditions or other calamity, and necessitating new or replacement gas pipeline, transmission lines, or access facilities.
- 5. "Feasible" or "practicable" shall mean reasonably achievable considering a balance of land use impacts, environmental impacts, engineering constraints, and costs.
 - 6. "FFWCC" shall mean the Florida Fish and Wildlife Conservation Commission.
 - 7. "Permittee" shall mean the Gulf Power Company (Gulf).

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- 8. "Power plant" shall mean the electric power generating plant and appurtenances to be modified or constructed on the Smith Station site in Bay County, as generally depicted in the Application.
- 9. "Project" shall mean the Smith Unit 3 and all associated facilities, including but not limited to: the combined cycle unit, fuel and water storage tanks, natural gas delivery metering station and onsite appurtenances, air pollution control equipment, storm water control facilities, the cooling tower and related facilities.
 - 10. "NWFWMD" shall mean the Northwest Florida Water Management District.

B. Applicable Rules

The construction and operation of the Smith Unit 3 shall be in accordance with all applicable provisions of at least the following regulations of DEP: Chapters 62-4, 62-17, 62-814, 62-256, 62-296, 62-297, 62-301, 62-302, 62-531, 62-532, 62-550, 62-555, 62-560, 62-600, 62-601, 62-604, 62-610, 62-620, 62-621, 62-650, 62-699, 62-660, 62-701, 62-762, 62-767, 62-769, 62-770, and 62-25, Florida Administrative Code (F.A.C.), or their successors as they are renumbered.

II. CHANGE IN DISCHARGE

All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any regulated pollutant not identified in the application, or more frequent than, or at a level in excess of that authorized herein, shall constitute a violation of the certification. Any anticipated facility expansions beyond the certified initial generating capacities of the existing units or Unit 3, production increases, or process modifications which may result in new, different, or increased discharges of pollutants, or expansion in steam generation capacity shall be reported by submission of an application for modification pursuant to Chapter 403, F.S.

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III. GENERAL CONDITIONS

A. Facilities Operation

- 1. Gulf shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed and used by Gulf to achieve compliance with the conditions of this certification, and are required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the approval and when required by Department rules.
- 2. In the event of a prolonged [thirty (30) days or more] equipment malfunction or shutdown of air pollution control equipment, operation may be allowed to resume and continue to take place under an appropriate Department order, provided that the Permittee demonstrates that such operation will be in compliance with all applicable ambient air quality standards and PSD increments, solid waste rules, domestic wastewater rules and industrial wastewater rules. During such malfunction or shutdown, the operation of the Smith Station shall comply with all other requirements of this certification and all applicable state and federal emission and effluent standards not affected by the malfunction or shutdown which is the subject of the Department's order.
- 3. Gulf shall comply with the terms and conditions contained in Industrial Wastewater Facility Permit FL0002267 and Permit No. PSD-FL- 269 and any revisions, modifications or reissuances thereof.

B. Non-Compliance Notification

If, for any reason, the permittee (defined as the applicant or its successors and or assigns) does not comply with or will be unable to comply with any limitation specified in this certification, the permittee shall notify the Northwest District office of the DEP by telephone at (850)444-8300 or the Northwest District Branch Office at (850) 872-4375. After normal business hours, report any condition that poses a public health threat to the State Warning Point under telephone number (850)413-9911 or (850)413-9912. Gulf shall confirm this non-compliance in writing at 160 Government Center, Suite 308, Pensacola, Florida 32501-5794 within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

- 1. A description of the discharge and cause of noncompliance; and,
- 2. The period of non-compliance, including exact dates and times; or if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying event.

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3. Spill Notification

Gulf shall report all critical (having potential to significantly pollute surface or ground waters) spills of liquid or liquid-solid materials, not confined to a building or similar containment structure, to the Department by telephone immediately after discovery and submit a written report within forty-eight hours, excluding weekends, from the original notification. The telephonic report shall be submitted by calling the Northwest District Industrial Wastewater Compliance/Enforcement Section under telephone number (850)444-8300. After normal business hours, contact the State Warning Point by calling (850)413-9911 or (850)413-9912. The written report shall include, but not be limited to, a detailed description of how the spill occurred, the name and chemical make-up (include any MSDS sheets) of the substance, the amount spilled, the time and date of the spill, the name and title of the person who first reported the spill, the areal size of the spill and surface types (impervious, ground, water bodies, etc.) it impacted, the cleanup procedures used and status of completion, and include a map or aerial photograph showing the extent and paths of the material flow. Any deviation from this requirement must receive prior approval from the Department.

C. Safety

- 1. The overall design, layout, and operation of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction. The Safety Standards specified under Section 442.20, F.S., by the Division of Safety of the Florida Department of Labor and Employment Security shall also be complied with.
- 2. The Permittee shall not discharge to surface waters wastes which are acutely toxic, or present in concentrations which are carcinogenic, mutagenic, or teratogenic to human beings or to significant locally occurring wildlife or aquatic species. The Permittee shall not discharge to ground waters wastes in concentrations which, alone or in combination with other substances, or components of discharges (whether thermal or non-thermal) are carcinogenic, mutagenic, teratogenic, or toxic to human beings (unless specific criteria are established for such components in Section 62-520.420, F.A.C.) or are acutely toxic to indigenous species of significance to the aquatic community within surface waters affected by the ground water at the point of contact with surface waters.

D. Enforcement

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

E. Design and Performance Criteria

The power plant may be operated at up to the maximum electrical output projected from design information without the need for modifying these conditions. Treatment or control facilities or systems installed or used to achieve compliance with the terms and conditions of this certification are not to be bypassed without prior DEP approval. Moreover, the Permittee shall take all reasonable steps to minimize any adverse impacts resulting from noncompliance with any limitation specified in this certification, including, but not limited to, such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying event.

F. Certification - General Conditions

- 1. The terms, conditions, requirements, limitations and restrictions set forth in these conditions of certification are the same as "Permit Conditions" and are binding and enforceable pursuant to Sections 403.141, 403.161, 403.514, 403.727, and 403.859 through 403.861, F.S. Any noncompliance with a condition of certification or condition of a federally delegated or approved permit constitutes a violation of chapter 403, F.S., and is rounds for enforcement action, permit termination, permit revocation and reissuance, or permit revision. Gulf is placed on notice that the Department will review this approval periodically and may initiate enforcement action for any violation of these conditions.
- 2. This approval is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this approval may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6), 403.511, and 403.722(5), F.S., the issuance of this approval does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state, or local laws or regulations. This approval is not a waiver of or approval of any other Department approval that may be required for other aspects of the total project under federally delegated programs which are not addressed in this certification.
- 4. This certification does not relieve Gulf Power from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this approved source, or from penalties therefore; nor does it allow Gulf to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department. The permittee shall take all reasonable steps to minimize or prevent any discharge, reuse of reclaimed water, or residuals use or disposal in violation of these Conditions which has a reasonable likelihood of adversely affecting human health or the environment. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with these Conditions.

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- 5. In accepting this certification, Gulf Power Company understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this approved source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the approved source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.111 and 403.73, F.S. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 6. This certification is transferable only upon Department approval in accordance with Section 403.516, F.S., Rules 62-4.120 and 62-730.300, F.A.C., as applicable. Gulf shall be liable for any noncompliance of the approved activity until the transfer is approved by the Department.
- 7. These conditions of certification or a copy thereof shall be kept at the work site of the approved activity.
 - 8. Gulf shall comply with the following:
 - a) Upon request, Gulf shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b) Gulf shall hold at the facility or other location designated by this approval records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the approval, copies of all reports required by this approval, and records of all data used to complete the application for this approval. These materials shall be retained at least three (3) years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule. Data utilized to prepare the application may be maintained at the following locations:

Gulf Power

Smith Facility:4300 CR 2300 Southport, Florida 32409

Pensacola:

One Energy Place* Pensacola, Florida 32520-0328

- c) Records of monitoring information shall include:
 - 1. the date, exact place, and time of sampling or measurements;
 - 2. the person responsible for performing the sampling or measurements;
 - 3. the dates analyses were performed;
 - 4. the person responsible for performing the analyses;
 - 5. the analytical techniques or methods used;
 - 6. the results of such analyses.
- 9. These Conditions may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit revision, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.
- 10. The permittee, by accepting these Conditions, specifically agrees to allow authorized Department personnel, including an authorized representative of the Department and authorized EPA personnel, when applicable, upon presentation of credentials or other documents as may be required by law, and at reasonable times, depending upon the nature of the concern being investigated, to
 - (a) Enter upon the permittee's premises where a regulated facility, system, or activity is located or conducted, or where records shall be kept under these Conditions;
 - (b) Have access to and copy any records that shall be kept under the conditions of these Conditions;
 - (c) Inspect the facilities, equipment, practices, or operations regulated or required under these Conditions; and
 - (d) Sample or monitor any substances or parameters at any location necessary to assure compliance with these Conditions or Department rules.
- 11. In accepting these Conditions, the permittee understands and agrees that all records, notes, monitoring data, and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except as such use is proscribed by section 403.111, Florida Statutes, or Rule 62-620.302, Florida Administrative Code. Such evidence shall only be used to

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the extent that it is consistent with the Florida Rules of Civil Procedure and applicable evidentiary rules.

- 12. When requested by the Department, the permittee shall within a reasonable time provide any information required by law which is needed to determine whether there is cause for revising, revoking and reissuing, or terminating these Conditions, or to determine compliance with the permit. The permittee shall also provide to the Department upon request copies of records required by these Conditions to be kept. If the permittee becomes aware of relevant facts that were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be promptly submitted or corrections promptly reported to the Department.
- 13. Unless specifically stated otherwise in Department rules, the permittee, in accepting these Conditions, agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance; provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules. A reasonable time for compliance with a new or amended surface water quality standard, other than those standards addressed in Rule 62-302.500, F.A.C., shall include a reasonable time to obtain or be denied a mixing zone for the new or amended standard.
- 14. The permittee, in accepting these Conditions, agrees to pay the applicable regulatory program and surveillance fee in accordance with Rule 62-4.052, F.A.C.
- 15. The permittee shall give the Department written notice at least 60 days before inactivation or abandonment of a wastewater facility and shall specify what steps will be taken to safeguard public health and safety during and following inactivation or abandonment.
- 16. The permittee shall apply for a revision to any Department issued PSD, Title V, or Industrial Wastewater permit in accordance with Department Rules in Chapter 62, Florida Administrative Code, at least 90 days before construction of any planned substantial modifications to the permitted facility is to commence or with applicable rules for minor modifications to the permitted facility. A revised permit shall be obtained before construction begins except as provided in the applicable portions of Chapter 62, F.A.C.
- 17. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements. The permittee shall be responsible for any and all damages which may result from the changes and may be subject to enforcement action by the Department for penalties or revocation of these Conditions. The notice shall include the following information:
 - (a) A description of the anticipated noncompliance;
 - (b) The period of the anticipated noncompliance, including dates and times; and
 - (c) Steps being taken to prevent future occurrence of the noncompliance.

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- 18. Water quality sampling and monitoring data shall be collected and analyzed in accordance with Rule 62-4.246, chapters 62-160 and 62-601, F.A.C., and 40 CFR 136, as appropriate.
 - (a) Monitoring results shall be reported at the intervals specified clsewhere in these Conditions and shall be reported on a Discharge Monitoring Report (DMR), DEP Form 62-620.910(10).
 - (b) If the permittee monitors any contaminant more frequently than required by the permit, using Department approved test procedures, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
 - (c) Calculations for all limitations which require averaging of measurements shall use an arithmetic mean unless otherwise specified in these Conditions.
 - (d) Under chapter 62-160, F.A.C., sample collection shall be performed by following the protocols outlined in "DER Standard Operating Procedures for Laboratory Operations and Sample Collection Activities" (DEP-QA-001/92). Alternatively, sample collection may be performed by an organization who has an approved Comprehensive Quality Assurance Plan (CompQAP) on file with the Department. This CompQAP shall be approved for collection of samples from the required matrices and for the required tests.
- 19. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule detailed elsewhere in these Conditions shall be submitted no later than 14 days following each schedule date.

When requested by the Department, Gulf shall within a reasonable time furnish any information required by law which is needed to determine compliance with the certification. If Gulf becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

G. Laboratories and Quality Assurance

- 1. The Permittee shall ensure that all laboratory analytical data submitted to the Department, as required by this certification, must be from a laboratory which has a currently valid and Department approved Comprehensive Quality Assurance Plan (CompQAP) [or a CompQAP pending approval] for all parameters being reported, as required by Chapter 62-160, F.A.C.
- 2. When a contract laboratory is used to analyze samples required pursuant to this certification, the Permittee is required to have the samples taken by qualified personnel

following EPA and Department approved sampling procedures and chain-of-custody requirements in accordance with Rule 62-160, F.A.C.

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

H. Procedures for Post-Certification Submittals

- 1. Purpose of Submittals Conditions of certification which provide for the post-certification submittal of information to DEP by Gulf are for the purpose of facilitating DEP's monitoring of the effects arising from plant construction, the mitigation of wetlands lost or impacted due to project construction, or changes in plant design after site certification. This monitoring is for DEP to assure, in consultation with other agencies with applicable regulatory jurisdiction, continued compliance with the conditions of certification, without any further agency action.
- 2. Filings All post-certification submittals of information by Gulf are to be filed with DEP. Copies of each submittal shall be simultaneously submitted to any other agency indicated in the specific conditions requiring the post-certification submittals.

3. Completeness

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

4. Interagency Meetings

Within sixty (60) days of the filing of a complete post-certification submittal, DEP may conduct an interagency meeting with other agencies which received copies of the submittal. The purpose of such an interagency meeting shall be for the agencies with regulatory jurisdiction over the matters addressed in the post-certification submittal to discuss whether reasonable assurance of compliance with the conditions of certification has been provided. Failure of any agency to attend an interagency meeting shall not be grounds for DEP to withhold a determination of compliance with these conditions nor to delay the time frames for review established by these conditions.

5. Reasonable Assurance of Compliance

Within ninety (90) days of the filing of a complete post-certification submittal, or 45 days after a submittal is made by the applicant, or unless another date is specified herein, DEP shall give written notification to Gulf and the agencies to which the post-certification information was submitted of its determination whether there is reasonable assurance of compliance with the conditions of certification. If it is determined that reasonable assurance has not been provided, Gulf shall be notified with particularity and possible corrective measures suggested. Failure to notify Gulf in writing within ninety (90) days of receipt of a complete post-certification submittal shall constitute a compliance determination.

6. Commencement of Construction

If DEP does not object within the time period specified in Condition III.H.5. above, Gulf may begin construction pursuant to the terms of the conditions of certification and the subsequently submitted construction details.

IV. ADVERSE IMPACT

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

V. RIGHT OF ENTRY

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

- 1. To enter upon the Permittee's premises where an emission or effluent source is located or in which records are required to be kept under the terms and conditions of this certification;
- 2. To have access during normal business hours (Monday-Friday, 7:00 a.m. to 3:30 p.m.) to any records required to be kept under the conditions of this certification for examination and copying;
- 3. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants, or monitor any substances or parameters at any location reasonably necessary to assure compliance with this certification or Department rules; and,
 - 4. To assess any damage to the environment or violation of ambient standards.

VI. REVOCATION OR SUSPENSION

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

VII. CIVIL AND CRIMINAL LIABILITY

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

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

VIII. PROPERTY RIGHTS

The issuance of this certification does not convey any property rights in either real or personal property, nor any exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights nor any infringement of federal, state or local laws or regulations. This certification conveys no title to land or water, does not constitute state recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the state. Only the Trustees of the Internal Improvement Trust Fund may express state opinion as to title.

IX. SEVERABILITY

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

X. REVIEW OF SITE CERTIFICATION

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

XI. MODIFICATION OF CONDITIONS

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

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B. Subject to the notice requirements of 403.516(1), F.S., the certification shall be automatically modified to conform to subsequent DEP-issued amendments, modifications or renewals of any separately-issued Prevention of Significant Deterioration (PSD) permit, Title V Air Operation permit, or Industrial Wastewater permit issued pursuant to the National Pollutant Discharge Elimination System (NPDES) permit program for the project and the conditions of such permits shall be controlling over these Conditions of Certification.

XII. CONSTRUCTION

A. Standards and Review of Plans

- 1. The facility shall be constructed pursuant to the design standards presented in the application and the standards or plans and drawings submitted and signed by an engineer registered in the state of Florida. Specific Northwest District office acceptance of plans will be required based upon a determination of consistency with approved design concepts, regulations and these conditions prior to initiation of construction of any: industrial waste treatment facilities; domestic waste treatment facilities; potable water treatment and supply systems; ground water monitoring systems and storm water runoff systems; solid waste disposal areas; and hazardous or toxic handling facilities or areas. The Applicant shall present specific facility plans for these facilities for review by the Northwest District office at least ninety (90) days prior to construction of those portions of the facility for which the plans are then being submitted, unless other time limits are specified in the following conditions herein. Review and approval or disapproval shall be accomplished in accordance with Chapter 120, F.S., or these conditions of certification as applicable.
- 2. The Department must be notified in writing and prior written approval obtained for any changes, modification, or revision to be made to the project during construction which is in conflict with these conditions of certification. If there are any changes, modification, or revision made to a project approved by the Department without this prior written approval, the project will be considered to have been constructed without departmental approval, the construction will not be cleared for service, and the construction will be considered a violation of the conditions of certification.
- 3. Ninety (90) days prior to the anticipated date of first operation, Gulf shall provide the Department with an itemized list of any changes made to the facility design and operation plans that would affect a change in discharge as referenced in Condition II. since the time of the approval of these conditions. This pre-operational review of the final design and operation shall demonstrate continued compliance with Department rules and standards.

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B. Control Measures

1. Storm Water Runoff

To control runoff during construction which may reach and thereby pollute waters of the state, necessary measures shall be utilized to settle, filter, treat or absorb silt-containing or pollutant-laden storm water to ensure against spillage or discharge of excavated material that may cause turbidity in excess of 29 Nephelometric Turbidity Units above background in waters of the state. Control measures may consist of sediment traps, barriers, berms, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment-laden runoff. The pH of the runoff shall be kept within the range of 6.0 to 8.5. The Permittee shall comply with Chapter 62-25, F.A.C.

2. Open Burning

Any open burning in connection with initial land clearing shall be in accordance with Chapter 62-256, F.A.C., Chapter 5I-2, F.A.C., Uniform Fire Code Section 33.101 Addendum, and any other applicable county regulation. Any burning of construction-generated material, after initial land clearing that is allowed to be burned in accordance with Chapter 62-256, F.A.C., shall be approved by the Northwest District office in conjunction with the Division of Forestry and any other county regulations that may apply. Burning shall not occur unless approved by the appropriate agency or if the Department or the Division of Forestry has issued a ban on burning due to fire safety conditions or due to air pollution conditions.

3. Sanitary Wastes

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

4. Solid Wastes

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

5. Noise

Construction noise shall not exceed noise requirements of the Bay County Land Development Code where applicable.

6. Dust and Odors

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

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7. Transmission Lines

The directly associated transmission lines from the Smith Station electric switchyard to the existing Gulf Power Company transmission lines shall be maintained in accordance with the application and the appropriate state and federal regulations concerning use of herbicides. Gulf shall notify the Department of the type of herbicides to be used at least 60 days prior to its first use.

8. Protection of Vegetation

The Permittee shall develop the site so as protect by buffering or transplanting any rare, endangered or threatened species of vegetation as identified in the wetlands mitigation plan.

9. Dewatering Operations

The dewatering operations during construction shall be carried out in accordance with Rule 62-621.300(2), F.A.C.

10. Historical or Archaeological Finds

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

C. Environmental Control Program

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

D. Reporting

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

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XIII. AIR

A. Unit 3 General Operation Requirements

- 1. Applicable Regulations: Unless otherwise indicated in this permit, the construction and operation of the subject emission unit(s) shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-103, 62-204, 62-210, 62-212, 62-213, 62-214, 62-296, 62-297; and the applicable requirements of the Code of Federal Regulations Section 40, Part 60 including Subpart A and GG (1997 version), adopted by reference in the Florida Administrative Code regulation [Rule 62-204.800 F.A.C.]. Issuance of this certification does not relieve the facility owner or operator from compliance with any applicable federal permitting requirements or regulations. [Rule 62-210.300, F.A.C.]
- 2. The maximum heat input rates, based on the lower heating value (LHV) of the fuel to Smith Unit 3 at ambient conditions of 65° F temperature, 100% load, and 14.7 psi pressure shall not exceed 1,751 mmBtu/hr when firing natural gas. The maximum heat input rates will vary depending upon ambient conditions and the combustion turbine characteristics. Manufacturer's curves corrected for site conditions or equations for correction to other ambient conditions shall be provided to the Department of Environmental Protection (DEP) within 45 days of completing the initial compliance testing. {Permitting note: The heat input limitations have been placed in the PSD permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability} [Design, Rule 62-210.200, F.A.C.]
- 3. Construction and operation of Smith Unit 3 shall be in accordance with the General and Administrative Requirements of Permit PSD-FL-269.
 - 4. Only pipeline natural gas shall be fired in the unit.
- 5. Maximum allowable hours of operation for Smith Unit 3 are 8760 hours per year while firing natural gas. [Rule 62-210.200, F.A.C.]
- 6. The maximum heat input rate of each natural gas fired duct burner shall not exceed 275 mmBTU/hour (LHV). {Permitting note: The heat input limitations have been placed in the permit to identify the capacity of each emissions unit for purposes of confirming that emissions testing is conducted within 90-100 percent of the emissions unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate limits and to aid in determining future rule applicability}[Design, Rule 62-210.200, F.A.C.]
 - 7. During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary.

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- 8. Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the Northwest District Office of DEP as soon as possible, but at least within (1) working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]
- 9. Operating Procedures: Operating procedures shall include good operating practices and proper training of all operators and supervisors. The good operating practices shall meet the guidelines and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained in plant specific equipment. [Rule 62-4.070(3), F.A.C.]
- 10. Circumvention: The owner or operator shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rules 62-210.650, F.A.C.]
- 11. Dry Low NO_x (DLN) burners shall be installed on the stationary combustion turbine and Low NO_x burners shall be installed in the duct burner arrangement to comply with NO_x emission limits specified in Conditions XIII.B.1. and B.2. [Rules 62-4.070 and 62-204.800(7), F.A.C. to avoid PSD review]
- 12. The permittee shall design these units to accommodate adequate testing and sampling locations for compliance with the applicable emission limits (per each unit) listed in Specific conditions XIII.B.1. through B.9. [Rule 62-4.070, Rule 62-204.800, F.A.C.]
- 13. DLN systems shall be installed as per the manufacturer's recommendation. [Rule 62-4.070 and 62-204.800,(7), F.A.C., to avoid PSD review]
- 14. Drift eliminators shall be installed on the cooling tower to reduce PM/PM₁₀ emissions.

B. Unit 3 - Emission Limits and Standards

Note: The following emission limits and standards shall apply upon completion of the initial compliance tests, certification tests and performance specification tests as applicable, for each unit.

1. ARMS Emissions Units 004 and 005. Power Generation, each consisting of a nominal 170 megawatt combustion turbine-electrical generator and a supplementally fired (275 MMBtu/hr) heat recovery steam generator equipped with a natural gas fired duct burner. The CT's will include provisions for the optional use of evaporative coolers

and steam power augmentation. The emissions units shall comply with all applicable provisions of 40 CFR 60, Subpart Da, Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978, adopted by reference in Rule 62-204.800(7), F.A.C.; and 40 CFR 60, Subpart GG, Standards of Performance for Stationary Gas Turbines, adopted by reference in Rule 62-204.800(7)(b), F.A.C. except as noted herein. The Subpart GG requirement to correct NSPS test data to ISO conditions applies.

- 2. <u>ARMS Emission Unit 006.</u> Cooling Tower is a regulated emission unit. The Cooling Tower is not subject to a NESHAP because Chromium-based chemical treatment is not used.
- 3. <u>BACT Limits</u> The following table is a summary of the BACT determination and is followed by the applicable specific conditions. Values for are corrected to $15 \% O_2$ on a dry basis. These limits or their equivalent in terms of lb/hr or NSPS units, as well as the applicable averaging times, are followed by the applicable specific conditions. Each Unit shall be initially tested to comply with the applicable NSPS and with the BACT limits as indicated below: [Rules 62-212.400, 62-204.800(7)(b) (Subpart GG and Da), 62-210.200 (Definitions-Potential Emissions) F.A.C.]

Emission Unit	NO _x (t)	CO BACT	SO ₂ /SAM BACT	VOC BACT	PM/Visibility (% Opacity)	Technology and Comments
C.T.'s: With Duct Burners	82.9 lb/hr	16 ppm @15% O ₂	2 gr/100 scf natural gas (3)	4 ppm @15% O ₇	10 - gas	Dry Low NO, Combustors Natural Gas, Good Combustion
Steam power Augmentation	113.2 lb/hr	23 ppm @15% O ₂	2 gr/100 scf natural gas (3)	6 ppm @15% O ₂	10 - gas	Unit limited to 1000 hours per year of operation
Cooling Tower					18.2 lb/hr (2)	Drift Eliminators

⁽¹⁾ NO_x limits not determined by BACT. (2) Listed for informational purposes only. (3) See Fuel Mon. Sch. in Specific Condition F.6. below.

4. Nitrogen Oxides (NO_x) Emissions:

a. Emissions of NO_X in the stack exhaust gas, with the combustion turbine operating and the duct burner on shall not exceed 82.9 lb/hr (30 day rolling average). Emissions of NO_X in the stack exhaust gas, with the combustion turbine operating with steam augmentation and the duct burner on shall not exceed 113.3 lb/hr (30 day rolling average). Compliance will be determined by the continuous emission monitor system (CEMS) and prorated daily as necessary based upon hours of operation per operating mode. Emissions of NO_X in the stack exhaust gas with the combustion turbine operating with the duct burner on shall not exceed 82.9 lb/hr and 113.3 lb/hr with steam augmentation to be demonstrated by initial stack test. [Rule 62-4.070 and 62-204.800(7), F.A.C. to avoid PSD Review]

- b. Emissions of NO_X from the duct burner shall not exceed 0.1 lb/MMBtu, which is more stringent than the NSPS (see Specific Condition 46). [Rule 62-4.070 and 62-204.800(7), F.A.C. to avoid PSD Review]
- c. When NO_X monitoring data is not available, substitution for missing CEMS data shall be handled as required by Title IV (40 CFR 75) to calculate any specified average time. Heat input for these periods shall be determined by fuel sampling and measurement.
- 5. Facility-wide NO_X emissions cap: In addition to individual (point source) emission limits and NO_X averaging plan requirements, the Lansing Smith facility shall be required to comply with a facility-wide NO_X emissions cap of 6666 TPY. CEMS shall be the method of compliance.
- 6. Carbon Monoxide (CO) Emissions: Emissions of CO in the stack exhaust gas with the combustion turbine operating and duct burner on shall exceed neither 16 ppm nor 23 ppm (@15% O₂) with steam augmentation to be demonstrated annually by stack test using EPA Method 10. {For informational purposes, this equates to 78.7 lb/hr and 116.6 lb/hr respectively} [Rule 62-212.400, F.A.C.]
- 7. Volatile Organic Compounds (VOC) Emissions: Emissions of VOC in the stack exhaust gas with the combustion turbine operating and duct burner on shall exceed neither 4 ppm nor 6 ppm (@15% O₂) with steam augmentation to be demonstrated by initial stack test using EPA Method 18, 25 or 25A. {For informational purposes, this equates to 10.2 lb/hr and 16.8 lb/hr respectively} [Rule 62-212.400, F.A.C.]
- 8. <u>Sulfur Dioxide (SO₂) emissions</u>: SO₂ emissions shall be limited by firing pipeline natural gas (sulfur content less than 20 grains per 100 standard cubic foot). Compliance with this requirement in conjunction with implementation of the Custom Fuel Monitoring Schedule in Specific Condition 44 will demonstrate compliance with the applicable NSPS SO₂ emissions limitations from the duct burner or the combustion turbine. {For informational purposes, annual SO₂ emissions will be up to 105 TPY}[40CFR60 Subpart GG and Rules 62-4.070, 62-212.400, and 62-204.800(7), F.A.C.]
- 9. <u>Visible emissions (VE)</u>: VE emissions shall serve as a surrogate for PM/PM₁₀ emissions from the combustion turbine operating with or without steam augmentation and/or the duct burner and shall not exceed 10 percent opacity from the stack in use. PM/PM₁₀ emissions (for information only) are up to 43 lb/hr. [Rules 62-4.070, 62-212.400, and 62-204.800(7), F.A.C.]

C. Unit 3 Excess Emissions

1. Excess emissions entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited pursuant to Rule 62-210.700, F.A.C. These emissions shall be

included in the 30 day rolling average for NOx.

2. Excess Emissions Report: If excess emissions occur due to malfunction, the owner or operator shall notify DEP's Northwest District office within (1) working day of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the Department may request a written summary report of the incident. Pursuant to the New Source Performance Standards, excess emissions shall also be reported in accordance with 40 CFR 60.7, Subpart A. Following this format, 40 CFR 60.7, periods of startup, shutdown, malfunction, shall be monitored, recorded, and reported as excess emissions when emission levels (in terms of applicable averaging periods) exceed the permitted standards listed in Specific Condition No. 19 through 24. [Rules 62-4.130, 62-204.800, 62-210.700(6), F.A.C., and 40 CFR 60.7 (1998 version)].

D. Unit 3 Compliance Determination

- 1. Compliance with the allowable emission limiting standards shall be determined within 60 days after achieving the maximum production rate, for each fuel, at which this unit will be operated, but not later than 180 days of initial operation of the unit for that fuel, and annually thereafter as indicated in this permit, by using the following reference methods as described in 40 CFR 60, Appendix A (1998 version), and adopted by reference in Chapter 62-204.800, F.A.C.
- 2. Initial (I) performance tests shall be performed by the deadlines in Specific Condition 28. Initial tests shall also be conducted after any substantial modifications (and shake down period not to exceed 100 days after re-starting the CT) of air pollution control equipment such as installation of SCR or change of combustors. Annual (A) compliance tests shall be performed during every federal fiscal year (October 1 September 30) pursuant to Rule 62-297.310(7), F.A.C., on these units as indicated. The following reference methods shall be used. No other test methods may be used for compliance testing unless prior DEP approval is received in writing.
 - a.. EPA Reference Method 9, "Visual Determination of the Opacity of Emissions from Stationary Sources" (I, A).
 - b. Method 10, Determination of Carbon Monoxide Emissions from Stationary Sources (I, A).
 - c. EPA Reference Method 20, "Determination of Oxides of Nitrogen Oxide, Sulfur Dioxide and Diluent Emissions from Stationary Gas Turbines." Initial test only for compliance with 40CFR60 Subpart GG, Da. Initial (only) NO_x compliance test for the duct burners (Specific Condition 20) shall be accomplished via testing with duct burners "on" as compared to "off" and computing the difference.
 - d. EPA Reference Method 18, 25 and/or 25A, "Determination of Volatile Organic Concentrations." Initial test only.

- 3. Continuous compliance with the NO_x emission limits: Continuous compliance with the NO_x emission limits shall be demonstrated with the CEM system based on the applicable averaging time of 30 day rolling average (DLN): Based on CEMS data, a separate compliance determination is conducted at the end of each operating day and a new average emission rate is calculated from the arithmetic average of all valid hourly emission rates from the previous operating day. A valid hourly emission rate shall be calculated for each hour in which at least two NO_x concentrations are obtained at least 15 minutes apart. A valid operating day shall consist of at least one valid operating hour. These excess emissions periods shall be reported as required in Condition 41. Continuous compliance with the 0.1 lb/MMBtu limit for the duct burners will be demonstrated through continuous compliance with the combined duct burner and CT emission limits (see Specific Condition 46). [Rule 62-4.070 and 62-204.800(7), F.A.C. to avoid PSD Review]
- 4. Compliance with the SO₂ and PM/PM₁₀ emission limits: Not withstanding the requirements of Rule 62-297.340, F.A.C., the use of pipeline natural gas, is the method for determining compliance for SO₂ and PM₁₀. For the purposes of demonstrating compliance with the 40 CFR 60.333 SO₂ standard, ASTM methods D4084-82 or D3246-81 (or equivalent) for sulfur content of gaseous fuel shall be utilized in accordance with the EPA-approved custom fuel monitoring schedule or natural gas supplier data may be submitted or the natural gas sulfur content referenced in 40 CFR 75 Appendix D may be utilized. However, the applicant is responsible for ensuring that the procedures in 40 CFR 60.335 or 40 CFR 75 are used when determination of fuel sulfur content is made. Analysis may be performed by the owner or operator, a service contractor retained by the owner or operator, the fuel vendor, or any other qualified agency pursuant to 40 CFR 60.335(e) (1998 version). A certification following installation (and prior to startup) shall be submitted that the drift eliminators were installed and that the installation is capable of meeting 0.001 gallons/100 gallons recirculation water flowrate.
- 5. Compliance with CO emission limit: An initial test for CO, concurrent with the initial NO_X test, is required. The initial NO_X and CO test results shall be the average of three valid one-hour runs. Annual compliance testing for CO may be conducted at less than capacity when compliance testing is conducted concurrent with the annual RATA testing for the NO_X CEMS required pursuant to 40 CFR 75. Alternatively to annual testing in a given year, periodic tuning data may be provided to demonstrate compliance in the year the tuning is conducted.
- 6. Compliance with the VOC emission limit: An initial test is required to demonstrate compliance with the VOC emission limit. Thereafter, the CO emission limit and periodic tuning data will be employed as surrogate and no annual testing is required.
- 7. Testing procedures: Testing of emissions shall be conducted with the combustion turbine operating at permitted capacity. Permitted capacity is defined as 95-100 percent of the maximum heat input rate allowed by the permit, corrected for the average ambient air

temperature during the test (with 100 percent represented by a curve depicting heat input vs. ambient temperature). If it is impracticable to test at permitted capacity, the source may be tested at less than permitted capacity. In this case, subsequent operation is limited by adjusting the entire heat input vs. ambient temperature curve downward by an increment equal to the difference between the maximum permitted heat input (corrected for ambient temperature) and 105 percent of the value reached during the test until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity. Procedures for these tests shall meet all applicable requirements (i.e., testing time frequency, minimum compliance duration, etc.) of Chapters 62-204 and 62-297, F.A.C.

- 8. <u>Test Notification</u>: The DEP's Northwest District office shall be notified, in writing, at least 30 days prior to the initial performance tests and at least 15 days before annual compliance test(s).
- 9. Special Compliance Tests: The DEP may request a special compliance test pursuant to Rule 62-297.310(7), F.A.C., when, after investigation (such as complaints, increased visible emissions, or questionable maintenance of control equipment), there is reason to believe that any applicable emission standard is being violated.
- 10. <u>Test Results</u>: Compliance test results shall be submitted to the DEP's Northwest District office no later than 45 days after completion of the last test run. [Rule 62-297.310(8), F.A.C.].

E. Unit 3 Notification, Reporting and Recordkeeping

- 1. All measurements, records, and other data required to be maintained by the Gulf Power shall be retained for at least five (5) years following the date on which such measurements, records, or data are recorded. These records shall be made available to DEP representatives upon request.
- 2. <u>Compliance Test Reports</u>: The test report shall provide sufficient detail on the tested emission unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.

F. Unit 3 Monitoring Requirements

1. Continuous Monitoring System: The permittee shall install, calibrate, maintain, and operate a continuous emission monitor in the stack to measure and record the nitrogen oxides emissions from these units. Periods when NO_X emissions are above the standards, listed in ific Conditions XIII.B.3. and B.4, shall be reported to the DEP Northwest District Office within one

working day (verbally) followed up by a written explanation postmarked not later than three (3) working days (alternatively by facsimile within one working day). [Rules 62-204.800, 62-210.700, 62-4.130, 62-4.160(8), F.A.C and 40 CFR 60.7 (1998 version)].

- 2. <u>CEMS for reporting excess emissions</u>: Subject to EPA approval, the NO_x CEMS shall be used in lieu of the requirement for reporting excess emissions in accordance with 40 CFR 60.334(c)(1), Subpart GG (1998 version). Upon request from DEP, the CEMS emission rates for NO_x on the CT's shall be corrected to ISO conditions to demonstrate compliance with the NO_x standard established in 40 CFR 60.332.
- 3. Continuous Monitoring System Reports: The monitoring devices shall comply with the certification and quality assurance, and any other applicable requirements of Rule 62-297.520, F.A.C., 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5) or 40 CFR Part 75. Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F or 40 CFR 75. The monitoring plan, consisting of data on CEM equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location shall be provided to the DEP Emissions Monitoring Section Administrator and EPA for review no later than 45 days prior to the first scheduled certification test pursuant to 40 CFR 75.62.
- 4. CEMS for reporting facility-wide NO_x emissions: The NO_x CEMS shall be used for ensuring compliance with the facility-wide cap. For the oil-fired peaking turbine (Emissions Unit EU-003) emissions shall be determined using fuel sampling and AP-42 emission factors. Monthly records shall be maintained of the facility-wide NO_X emissions and the owner/operator shall calculate the facility-wide cap on a monthly basis for each prior consecutive 12-month period. These records shall be made available to inspectors as necessary. Additionally, a summary shall be filed with each quarterly report as a means of demonstrating compliance with the facility-wide cap for each consecutive 12-month period. The monthly calculations for the coal-fired units shall consist of use of the monthly NO_X emission rate per MMBtu (as determined by CEMS using the appropriate fuel F factor) multiplied by the monthly fuel (MMBtu) usage as specified in the Lansing Smith Title V permit and converted as appropriate to tons of NOx for each unit. The sum of the monthly NO_X emissions from the coal units and the oil-fired peaking turbine shall then be added to the monthly NO_X emissions from the combined cycle unit, which will be calculated based upon the monthly average NO_X emission rate (lb/hr) multiplied by the number of valid operating hours for the same period. This annual emissions cap shall become effective on the first day of the month following completion of the initial performance testing of Unit 3, and compliance shall begin based upon the first twelve months of operation thereafter. [Rule 62-4.070 and 62-204.800(7), F.A.C. to avoid PSD Review]
- 5. Natural Gas Monitoring Schedule: A custom fuel monitoring schedule pursuant to 40 CFR 75 Appendix D for natural gas may be used in lieu of the daily sampling requirements of 40 CFR 60.334 (b)(2) provided the following requirements are met (monitoring of nitrogen content is not required):
 - a. The permittee shall apply for an Acid Rain permit within the deadlines specified in

- b. The permittee shall submit a monitoring plan, certified by signature of the Designated Representative, that commits to using a primary fuel of pipeline supplied natural gas pursuant to 40 CFR 75.11(d)(2).
- c. Each unit shall be monitored for SO₂ emissions using methods consistent with the requirements of 40 CFR 75 and certified by the USEPA.
- d. This custom fuel monitoring schedule will only be valid when pipeline natural gas is used as a primary fuel. If the primary fuel for these units is changed to a higher sulfur fuel, SO₂ emissions must be accounted for as required pursuant to 40 CFR 75.11(d).
- e. Gulf shall notify DEP of any change in natural gas supply for reexamination of this monitoring schedule. A substantial change in natural gas quality (i.e., sulfur content variation of greater than 1 grain per 100 cubic foot of natural gas) shall be considered as a change in the natural gas supply. Sulfur content of the natural gas will be monitored weekly by the natural gas supplier during the interim period when this monitoring schedule is being reexamined.

6. Determination of Process Variables:

- a. The permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as process weight input or heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value. [Rule 62-297.310(5), F.A.C.]
- 7. Subpart Da Monitoring and Record Keeping Requirements: The permittee shall comply with all applicable requirements of this Subpart [40CFR60, Subpart Da]. The requirements under 40 CFR 60.46a, 60.47a, 60.48a, and 60.49a regarding continuous monitoring systems for emissions of nitrogen oxides and for electrical output are inapplicable (due to impracticability) and therefore waived.

G. Smith Station Conditions

For Smith Station air operating conditions see the Title V Air Operation Permit, to be attached as Appendix I (Reserved).

XIV. Stormwater Discharge

New construction on the Smith site must meet the requirements of Chapter 62-25 of the Florida Administrative Code, as well as the design requirements presented in the Site Certification Application (SCA). The new stormwater facilities associated with Smith Unit 3 will

Section 471.003(2)(d) Florida Statutes, and with the appropriate experience in surface water design, certifies that these facilities have been constructed in accordance with the design as approved by the Florida Department of Environmental Protection (FDEP). Gulf Power is required to continue to update the Smith Station's Storm Water Pollution Prevention Plan (SWPPP) annually, as required and to implement the annual revisions to the SWPPP.

- B. This certification is predicated on the Gulf Power's submitted information to FDEP which reasonably demonstrates that adverse off-site water resource related impacts will not be caused by the authorized activities.
- C. FDEP representatives shall be allowed reasonable escorted access to the power plant site to inspect and observe any activities associated with the Smith Unit 3 Project construction and/or the operation and/or maintenance of the surface water management system in order to determine compliance with the conditions of this certification. The Gulf Power shall not refuse immediate entry or access, upon reasonable notice, to any FDEP representative who requests entry for the above noted inspection and presents appropriate credentials.
- D. The Gulf Power shall hold and save FDEP harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance and/or use of any facility authorized by this certification, to the extent allowed under Florida law.

XV. Domestic Wastewater

Gulf is authorized to dispose of domestic wastewater from Unit 3 in the existing Lansing Smith sewage treatment system. Any future request for expansion in onsite treatment capacity may require approval to construct and operate any such new facility and would be subject to the non-procedural provisions of Chapter 403, F.S., and F.A.C. Chapter 62-4, and pertinent chapters within the 62-300, 62-500 and 62-600 Series.

XVI. Drinking Water Facilities

A. Use of Existing Facilities

The approval to operate and expand the distribution system for the existing potable water distribution system is subject to the non-procedural provisions of Chapter 403, F.S., and pertinent Chapters within the F.A.C. Rules in Chapter 62-500 Series and Chapter 62-699. Gulf is approved to continue to operate the existing, permitted potable water system as shown on any previously-submitted and approved drawings, plans, and other documents attached thereto or on file with the DEP or Department of Health and made a part thereof. Gulf will submit a copy of any revisions to current plans to the DEP NW District Office.

Pursuant to Rule 62-555.540, F.A.C., any proposed extension of the potable water system to serve the expanded plant facilities may be undertaken following the filing with the DEP a completed copy of DEP Form 62-555.910(1), F.A.C. Such form shall be submitted no later than 90 days prior to beginning work on the extension of the distribution system to serve the new connections. This activity shall be subject to the requirements of Rule 62-555.540, F.A.C.

The conditions set forth on conditions XV.B. and C. below shall apply to any future construction or expansion of any potable water system on the site.

B. Prior Approval

- 1. No portion of a new potable water supply system or any portion of a water supply system that will be or is intended to be converted to potable water use at a later date may be constructed without prior written approval from the Department. Construction of any portion of a new potable water supply system without the prior written approval of the Department will be considered a violation of the conditions of certification.
- 2. In order to obtain approval to construct a new onsite water supply system where the potable water is to be supplied by an off-site water supply system, the following information must be submitted to the Department no earlier than eighteen (18) months prior to nor later than six months prior to the date that the water supply system is proposed for construction:
- a. A completed and fully executed application form which complies with the nonprocedural requirements of the rules and regulations of the Department in effect as of the date that the request for approval to construct the system is made to the Department; however, the Department will not accept "An Intent to Use a General Permit" for such a project. Reference: F.A.C. Rules 62-4.050, 62-555.500, .520, and .530.
- b .Complete specifications for the material and workmanship covering the entire new potable water supply system for which the request for approval to construct is being made. The specification must be signed and sealed by an engineer registered in the state of Florida and must provide documentation that the material and workmanship will comply with all applicable nonprocedural rules of the Department in effect as of the date that the request for approval to construct is made to the Department. Reference: F.A.C. Rules 62-4.050, Rules 62-2.555.520, 62-555.530, an 21H-23.
- c. Complete engineering drawings of the entire proposed potable water supply system for which approval to construct is being made. The drawings must demonstrate full compliance with all applicable nonprocedural rules and regulations of the Department in effect as of date that the request for approval to construct is made to the Department. The drawing must be signed and sealed by an engineer registered in the state of Florida. Reference: F.A.C. Rules 62 and 4.050, 62-555.520, 62-555.530, and 21H-23.
- d. Signed and sealed comprehensive engineering report on the new potable water supply system which fully describes that project and basis of design. The report must include design data and such pertinent data to give an accurate understanding of the work to be undertaken and must provide supporting documentation that the new potable water system as proposed will comply with all applicable nonprocedural rules and regulations of the Department

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in effect as of the date that the request for approval to construct the water supply system is made to the Department. Reference: F.A.C. Rules 62-4.050, 62-555.520, 62-555.530, and 21H-23.

- e. Documentation that the public water supply system supplying the water has the capacity in its water treatment system to serve the project and that the existing water transmission line from that system's water treatment plant to the point of connection with water supply system Gulf is proposing to construct has been designed and sized to provide sufficient water to meet the demand of Gulf project. Reference: F.A.C. Rules 62-4.050, 62-555.350, 62-555.520, and 62-555.530.
- 3. Should Gulf request approval to construct a potable water treatment system which produces a waste stream (e.g., softening, electrodialysis, reverse osmosis, etc.) other than as described in the original SCA, Gulf must submit as part of its request for approval to construct that water supply system documentation that the disposal of that waste stream has been approved by the appropriate agency or section of the Department.

C. Construction

- 1. Gulf must retain the services of a project engineer registered in the state of Florida to observe that the construction of any changes in the water supply system is in accordance with the plans and specifications approved by the Department. The project engineer will be responsible for certifying to the Department that he/she observed the construction and that the construction conformed to the plans and specifications approved by the Department.
- 2. The approval to construct a new or modify the existing potable water supply system will be in effect for two (2) years from the date of issuance. All construction of the potable water supply system must be completed within this two (2) year period unless a written request for an extension of this date is made to the Department at least sixty (60) days prior to the expiration of the construction approval, and written approval for an extension of the expiration date is issued by the Department. The expiration date of the construction approval may be extended on a year-by-year basis. The maximum length of time that the approval or each subsequent approval for the construction of the potable water system may be in effect is five (5) years from the date of the original approval or for subsequent approvals from the date of issuance of each approval. Should the construction of the water supply system not be completed within that five (5) year period, should Gulf have failed to request a timely extension of the approval expiration date, or should any water quality analysis submitted with the request for an extension of the expiration date demonstrate the presence of a contaminant for which the water treatment plant was not originally designed to handle, or as additional wells are installed on-site and proposed for connection to the potable water system, Gulf will have to make a new request to the Department for approval to construct the potable water system. That request must meet the submittal and approval requirements of the rules of the Department in effect as of the date that the request for approval is submitted and will be subject to the same review schedule as the original request.

- 3. No future, modified portion of the potable water supply system may be placed into service without the prior written approval of the Department except as authorized herein for extension of the potable water distribution system. Placing any portion of a modified potable water supply system into service prior to receipt of this written approval will be considered as a violation of the conditions of certification.
- 4. The Department will not issue approval to place the modified or new potable water supply system or any portion of that system into service unless the construction of the system or portion thereof had been approved for construction by the Department prior to the commencement of that construction.
- 5. In order to obtain approval to place a new portion of the potable water supply system into service, Gulf must make a written request for clearance to the Department. The request must be in the form and/or manner stipulated in the letter authorizing construction of the potable water supply system and must include all information stipulated in that letter as being required to be submitted with the request for clearance, as well as any information required for clearance of a potable water supply system contained in applicable rules and regulations of the Department in effect as of the date that the request for clearance is made.
- 6. The Department will issue a letter of clearance to place the new or modified potable water supply system into service within thirty (30) days of receipt of a written request for clearance, provided that the request is accompanied by all necessary supporting documentation and meets the criteria for clearance contained in the applicable rules and regulations of the Department in effect as of the date that the request for clearance was made.

XVII. INDUSTRIAL WASTES (NPDES)

This Condition of Certification is issued under the provisions of Chapter 403, Florida Statutes, and applicable rules of the Florida Administrative Code and constitutes authorization to discharge to waters of the state under the National Pollutant Discharge Elimination System. Gulf Power is hereby authorized to operate the facilities shown in the Smith Unit 3 Site Certification Application and other documents on file with the Department and made a part hereof and as specifically described in Industrial Wastewater Facility Permit No. FL 0002267 Rev A or as subsequently revised. In addition to the provisions of Permit No. FL 0002267, Unit 3 shall operate in accordance with the limitations, monitoring requirements, and other conditions set forth below.

A. Surface Water Discharges

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1. During the period beginning on the issuance date of Permit No. FL 0002267 and lasting through its expiration date, the permittee is authorized to discharge cooling tower blowdown (I017) from Unit 3 during periods of normal plant operation through the discharge canal to Warren Bayou.

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a. Such discharges shall be limited and monitored by the permittee as specified

	DISCHARGE	LIMITATIONS	MONITORING REQUIREMENTS		
EFFLUENT CHARACTERISTIC	Maximum	Maximum Monthly Average	Measurement Frequency	Sample Type	Sample Point
Flow, MGD Temperature Rise, °F¹ (Units 1 & 2 only)	Report	Report	l/hour	Pump Logs	INT-2

18

20

NA

NA

NA

ΝA

NA

NA

4/day¹

4/day1

1/week

1/week

1/month

1/year

1/year

1/year

Calculated

Calculated

Grab

Grab

Grab

Composite³

Composite

INT-1

EFF-1

EFF-2

EFF-2

EFF-2

EFF-2

EFF-2

EFF-2

Composite³ b. Total Residual Oxidant (TRO) means the value obtained using the amperometric titration method for total residual chlorine. Testing for TRO by titration shall be conducted according to the amperometric method, as specified in Section 4500-Cl D, Standard Methods for the Examination of Water and Wastewater, 19th Edition (or most current edition).

Report

Report

6.5 (minimum)

8.5 (maximum)

0.01

5.0

 2.9^{2}

5.6²

8.3²

- c. Continuous chlorination of the cooling water intake is authorized by this permit.
- d. The location of samping points as specified above are as follows:

INT-1 - OTCW condenser inlets.

below:

April - September

Oil & Grease, mg/l

Copper, ug/l

Lead, ug/l

Nickel, ug/l

PH Range, stand. units

Total Residual Oxidants, mg/l

Winter

¹ The cooling water intake and discharge shall be monitored simultaneously four times per day spread out evenly over a 24-hour time period. The temperature rise shall be calculated for each temperature intake and discharge measurement and the daily temperature rise for any one day shall be average of all temperature rise values for that day.

² The actual limit shall be the water quality standard set forth in FAC 62-302.530 for Class II waters as specified here or the concentration of the intake cooling water, whichever is greater. If the Outfall 001 composite sample exceeds the intake concentration (and the intake concentration exceeds the water quality standard), the concentration of a minimum of five (5) additional subsamples shall be measured from the original intake and outfall composites and a "student's ttest" shall be run on these additional subsamples comparing discharge concentrations with the intake concentrations; unless the discharge concentration exceeds the intake concentration at the 95% confidence level, the facility shall be in compliance with the limitation.

³ Either 8-hour manual composite composed of 16 aliquots or 24-hour automatic composite.

EFF-1 - OTCW discharge structure.

INT-2 - OTCW circulator pump logs.

EFF-2 - Immediately downstream of the center of the second roadway embankment across the discharge canal downstream of the discharge structure.

- 2. During the period beginning on the issuance date of this permit and lasting through the expiration date, the permittee is authorized to discharge from INTERNAL OUTFALL D017 COOLING TOWER BLOWDOWN, during periods of normal plant operation to the discharge canal to Warren Bayou.
- a. Such discharges shall be limited and monitored by the permittee as specified below:

	DISCHARGE I	LIMITATIONS	MONITORING REQUIREMENTS			
EFFLUENT CHARACTERISTIC	Maximum	Maximum Monthly Average	Measurement Frequency	Sample Type	Sample Point	
Flow, MGD	Report	Report	1/hour	Pump Logs	EFF-7	
Free Available Oxidants (FAO), mg/l	Report	NA	1/week	Grab	EFF-7	

- b. The location of samping points as specified above are as follows:
 - EFF-7 The end of the discharge structure leading from the cooling tower exit and prior to being discharged to the discharge canal.
- c. The time of sampling shall be immediately after the opening of the blowdown valve and prior to being discharged into the discharge canal at point EFF-7.
- d. Cooling tower blowdown shall be minimized to the degree allowed by best engineering practices.
- e. The permittee shall, within 30 days of permit issuance and yearly thereafter, provide certification that the 126 priority pollutants (as listed in 40 CFR Part 423, Appendix A) are not detectable by the analytical methods in 40 CFR Part 136 in the cooling tower blowdown as a result of the addition of any maintenance chemicals. Compliance shall be demonstrated by one of the three methods:

Method 1 - sampling at a frequency of not less than once per year for all priority pollutants referenced above with submission of analysis results with each certification.

Method 2 - submission of certification(s) from the manufacturer that each product used contains no priority pollutants. Such submission is required only once for each product used, unless subsequent changes in the product formulation occur or the product is obtained from a different source. Certifications for all products in use shall be maintained on site.

Method 3 - calculations to assure that if priority pollutants are contained in any product(s), no discharge of any individual priority pollutant can occur at concentrations greater than detectable levels using analytical methods in 40 CFR Part 136 due to dilution within the cooling water system.

The certification shall be in the following form: "I certify that no priority pollutants at concentrations greater than detectable levels using analytical methods in 40 CFR Part 136 are being discharged from any maintenance chemicals added to the cooling towers. Compliance is demonstrated by Method ____."

- f. Neither Free Available Oxidant (FAO) nor Total Residual Oxidant (TRO) shall be discharged from any one unit for more than two hours in any one day at concentrations limits specified above (as required in 40 CFR 423.15(j)(1) and (2)).
 - g. The permittee shall sample internal Outfall I017 for the parameters required by DEP Form 2-CS (62-620.910(5)) within six months from the commencement of discharge from internal Outfall I017. The sampling information shall be reported to the Department on Form 2-CS (62-620.910(5)) Item VII, pursuant to the schedule in section VI of Permit No. FL 0002267. This data is subject to the Reopener Clause of section VII-C of Permit No. FL 0002267.

B. Other Limitations and Monitoring and Reporting Requirements

- 1. The sample collection, analytical test methods and method detection limits (MDLs) applicable to this permit 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 quantification limits), which is titled "Florida Department of Environmental Protection Table as Required By Rule 62-4.246(4) Testing Methods for Discharges to Surface Water" dated June 21, 1996, is available from the Department on request. 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 permit. 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 PQL for the specific parameter is less than or equal to the permit 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 permit shall use methods that provide a PQL, which is equal to or less than the applicable water quality criteria stated in 62-302 FAC; and
- c. If the PQLs for all methods available in the approved list are above the stated permit limit or applicable water quality criteria for that parameter, then the method with the lowest stated PQL shall be used.

Where the analytical results are below method detection or practical quantification limits, the permittee 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. Approval of alternate laboratory MDLs or PQLs are not necessary if the laboratory reported MDLs and PQLs are less than or equal to the permit limit or the applicable water quality criteria, if any, stated in Chapter 62-302, F.A.C.The approved alternate methods and MDLs and PQLs are listed for the following parameters:

Parameter	EPA Method	MDL (ug/l)	PQL (ug/l)
Arsenic	206.3/206.2/200.7	1.0/2.0/50.0	5.0/10.0/100.0
Chromium VI	7196	10.0	50.0
Nickel	200.7	3.3	40.0
Total Residual Chlorine	330.1	30.0	30.0
Total Radium 226 and Radium 228	903.0	0.70 pCi/l	2.0 pCi/l

The MDLs and PQLs listed above shall constitute the minimum reporting levels for the life of the permit. The Department shall not accept results for which the laboratory's MDLs or PQLs are greater than those listed above.

2. Monitoring requirements specified in condition XVII.A.2. shall begin upon initiation of discharge from Outfall D017 cooling tower blowdown.

3. Monitoring results obtained for each calendar month shall be summarized for that month and reported on a Discharge Monitoring Report (DMR), Form 62-620.910(10), postmarked no later than the 28th day of the month following the completed calendar month. For example, data for January shall be submitted by February 28. Signed copies of the DMR shall be submitted to the address specified below:

Florida Department of Environmental Protection Wastewater Facilities Regulation Section, Mail Station 3551 Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400

If no discharge occurs during the reporting period, sampling requirements of this permit do not apply. The statement "No discharge" shall be written on the DMR form. If, during the term period of this permit, the facility ceases to discharge, the Department shall be notified immediately upon cessation of discharge. Such notification shall be in writing.

4. Unless specified otherwise in this permit, all other reports and notifications required by this permit, including twenty-four hour notifications, shall be submitted to or reported to, as appropriate, the Department's Northwest District Office at the address specified below:

Florida Department of Environmental Protection Northwest Florida District 160 Government Center Pensacola, Florida 32501-5794 Phone Number (850) 595-8300

5. In order to determine compliance with the discharge limitations specified in Section XVII.A. of this permit sampling results shall be calculated and reported as follows:

Daily Average Value - the average of all sampling results for a parameter over a single day.

Monthly Average Value - the average of all sample results for a parameter over a monthly period.

Maximum - the maximum limitation for a single sampling result or, for report only, the maximum value of all sampling results during the reporting period.

6. After two years of data collection the permittee may request by permit revision a reduction in parameter monitoring frequencies in accordance with EPA Document 833-R-96-001 entitled <u>Interim Guidance for Performance Based Reduction of NPDES permit Monitoring Frequencies</u> (April 19, 1996).

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- 7. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
- 8. Discharge of uncontaminated storm water, intake screen backwash water, turbine oil cooler water, and hydrogen generator cooler water is permitted without limitations or monitoring requirements, except that there shall be no discharge of floating oil.
- 9. There shall be no discharge of floating solids or visible foam in other than trace amounts and no discharge of a visible oil sheen at any time. Any such discharges shall be reported to the Department when submitting DMR's.
- 10. Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which ultimately may be released to waters of the State is prohibited unless specifically authorized elsewhere in this permit. This requirement is not applicable to products used for lawn and agricultural purposes or to the use of herbicides if used in accordance with labeled instructions and any applicable State permit.

A permit revision from the Department shall be required prior to the use of any biocide or chemical additive used in the cooling system (except chlorine as authorized elsewhere in this permit) or any other portion of the treatment system which may be toxic to aquatic life. The permit revision request shall include:

- a. Name and general composition of biocide or chemical
- b. Frequencies of use
- c. Quantities to be used
- d. Proposed effluent concentrations
- e. Acute and/or chronic toxicity data (laboratory reports shall be prepared according to Section 12 of EPA document no. EPA/600/4-90/027 entitled, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters for Freshwater and Marine Organisms, or most current addition.)
 - f. Product data sheet
 - g. Product label

The Department shall review the above information to determine if a major or minor permit revision is necessary. Discharge associated with the use of such biocide or chemical is not authorized without a permit revision by the Department. Permit revisions shall be processed in accordance with the requirements of Chapter 62-620, F.A.C.

- 11. All permit effluent limitations, standards, or prohibitions for a metal shall be reported and expressed as "Total Recoverable Metal" in accordance with Rule 62-620.620(2)(c)(1) F.A.C., unless expressed otherwise in Rule 62-302.530 for Class II(Shellfish Propagation or Harvesting) waters.
- 12. The submission of DEP Form 2-CS (62-620.910(5)) will be required at six months for Outfall D017 from the commencement of discharge from Outfall D017 to determine

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compliance with the permit effluent limitations and to ensure water quality standards are being met.

C. General Conditions

- 1. Drawings, plans, documents or specifications submitted by the Gulf Power, not attached hereto, but retained on file with the Department, are made a part hereof.
- 2. If significant historical or archaeological artifacts are discovered at any time within the project site, Gulf Power shall immediately notify the Department at the address shown in I B 3 above and the Bureau of Historic Preservation, Division of Historical Resources, R.A. Gray Building, 500 South Bronough, Tallahassee, Florida, 32399-0250.
- 3. Where required by Chapter 471 (P.E.) or Chapter 492 (P.G.) Florida Statutes, applicable portions of reports to be submitted under this certification shall be signed and scaled by the professional(s) who prepared them.
- 4. This certification satisfies industrial wastewater program permitting requirements only and does not authorize operation of this facility prior to obtaining any other permits required by federal agencies.

D. Specific Conditions Related to Best Management Practices

Gulf Power shall comply with the Best Management Practices portion of the Smith Station Storm Water Pollution Prevention Plan (SWPPP).

E. Specific Conditions Relating to Existing Manufacturing, Commercial, Mining, and Silviculture Wastewater Facilities or Activities

- 1. Existing manufacturing, commercial, mining, and silvicultural wastewater facilities or activities that discharge into surface waters shall notify the Department as soon as they know or have reason to believe: [62-620.624(1)]
 - (a) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the certification, if that discharge will exceed the highest of the following levels:
 - (1) One hundred micrograms per liter
 - (2) Two hundred micrograms per liter for acrolein and acrylonitrile; five hundred micrograms per liter for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter for antimony, or
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application.

- (b) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following levels:
 - (1) Five hundred micrograms per liter;
 - (2) One milligram per liter for antimony; or
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

XVIII. Groundwater

When required by Florida Administrative Code Chapter 62-701, Gulf shall file or amend the Ground Water Monitoring plan within 180 days of being advised by the Department for review and approval by the Northwest District of the DEP.

XIX. Toxic, Deleterious or Hazardous Materials

A. Spills

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

B. Handling and Testing of Potentially Hazardous Material

Gulf shall continue to implement its current plan for handling and disposing of hazardous wastes.

XX. By-product and Solid Waste Storage

A. Solid Waste General

1. Any solid waste produced by the operation of the facility shall be disposed of in an approved disposal facility. By-products that are to be sold for reuse are not considered solid waste.

B. By-Product & Solid Waste Site Specific Standards

1. Any future by-product storage areas shall be designed, constructed, operated, maintained, closed and monitored in accordance with acceptable waste disposal practices providing environmental protection equivalent to those described in F.A.C. Chapter 62-701, or Chapter 62-673, as appropriate, and these conditions of Certification. The prohibitions of F.A.C. Chapter 62-701 shall not be violated.

2. All engineering plans, reports, and related information shall be provided by the engineer of record with professional certification and shall be approved by the NWSSWD of the DEP 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 to the NWSSWD of the DEP prior to operation of each by-product or solid waste storage and disposal area.

XXI. Federal Operating Permits and Fees

A. DEP Responsibilities

The Department of Environmental Protection shall implement the provisions of Title V of the 1990 Clean Air Act and the NPDES program for the Smith Generating Station developing conditions of certification requiring submission of annual operating permit information and annual pollutant emission fees in accordance with federal law and federal regulations and sections 403.0885, 403.0872, 403.5055, 403.509, and 403.511, F.S.

B. Gulf Power Responsibilities

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

XXII. Wetlands Mitigation

A. General

- 1. Wetland Avoidance. The Permittee shall avoid impacting wetlands within the power plant site wherever practicable. Where necessary and feasible the location of plant facilities shall be varied to eliminate or reduce wetland impacts.
- 2. Fill Materials. Except as authorized by this Certification and other permits issued for this project, no fill materials may be obtained from excavated wetlands within the project site, unless in accordance with a mitigation plan submitted in compliance with the conditions of this Certification.
- 3. Additional Wetlands Mitigation. The Permittee may be required to provide additional mitigation and/or other measures if wetland monitoring and/or other information demonstrates that, adverse impacts to protected, restored and/or mitigated wetlands have occurred as a result of project-related activities.

B. Additional Information Requirements

- 1. Expansion Area Wetlands Protection. Prior to the commencement of construction of any facilities located adjacent to the wetlands identified for preservation Gulf shall stake and rope off the protected wetland areas to prevent encroachment during construction. Staking shall remain in place until all adjacent construction activities are completed. Verification by DEP staff shall be required prior to commencement and upon completion of any construction activities.
- 2. The Permittee shall provide mitigation/ compensation (M/C) for any of the 15.2 acres of wetland or open water habitat within the jurisdiction of the DEP which is degraded or destroyed as a result of the construction of any portion of the power plant facilities. M/C may include the creation of new wetland or open water habitat, the restoration of degraded habitat, the enhancement of functions and values provided by existing wetland or open water habitats, removal of exotics, or other activities found by the relevant agencies and appropriate local government to be in compliance with their applicable regulations. Any elimination or degradation of any such wetland or open water habitat shall be in accordance with an approved mitigation plan to be attached to and incorporated into this document as Appendix A. The Mitigation Plan and any subsequent amendments to the plan shall be submitted for approval to the DEP's Northwest District Office. Gulf Power Shall submit the final Mitigation Plan within 90 days of certification. Submission of such plans shall be for the purpose of determining compliance with the Conditions of Certification. The mitigation plan or subsequent amendments shall, at a minimum, include the following:
- a. Specific acreage figures and locations of all wetlands which would be impacted by the construction activities and other aspects of the project.
- b. Modifications to the project which would reduce or eliminate the adverse environmental impacts of the project, including an explanation of why such alternatives were not undertaken or are not feasible.
- c. Documentation that none of the proposed construction activities will adversely affect off site wetlands.
- d. The specific acreages and locations of waters of the state to be created, enhanced, preserved, or protected as a result of the mitigation activity. The mitigation plan shall include the type and nature of these waters, species present or to be planted, plant density, anticipated source of plants, soils, proposed hydrologic regime, proposed elevations of the site, methods of construction or enhancement of the mitigation site, and a set of plan and cross sectional view drawings of the proposed mitigation site and activities.
 - e. A timetable of accomplishing the proposed mitigation activities.
 - f. A proposed conservation easement for the mitigation wetlands, if applicable.

- g. A detailed maintenance and monitoring program designed to ensure the success of the mitigation plan proposed by the Permittee. Maintenance of the mitigation site shall include replanting of wetland vegetation; removal of exotic, invasive, or nuisance vegetation; additional construction to achieve the necessary hydrology; or any other activity necessary to secure success of the mitigation plan. Monitoring of the mitigation site shall be for the purpose of making a measured assessment of the mitigation plan's progress toward achieving a functioning wetland with a stable hydrologic regime; development or improvement of hydric soils; and natural, beneficial changes in vegetation composition, health, diversity, growth rates, and canopy characteristics. For any restored or enhanced wetland, the measure of success shall be survival of at least 80% of the appropriate wetland vegetation or coverage of at least 80% of the mitigation area by such vegetation. Monitoring of the mitigation site shall be conducted for not less than 5 years, with reports submitted annually to the DEP Northwest District Office. All monitoring stations shall be identified on a plan view of the mitigation site. This monitoring may be continued past the 5 year deadline on a year to year basis, depending on the extent to which the program has successfully achieved its objectives. However, DEP may at any time determine that such monitoring may be discontinued upon success of the program being demonstrated by the Permittee.
- 3. Prior to clearing activities within any of the on-site wetlands, an ecological survey shall be conducted to identify the presence of threatened or endangered species (plants and animals) as defined in the Application, likely to occur on the site 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 DEP and the Florida Fish and Wildlife Conservation Commission (FFWCC) and the United States Fish and Wildlife Service (USFWS). If it is determined that any of those species will be affected by the construction of any of the linear facilities, the Permittee shall consult with DEP and FFWCC to determine the appropriate steps to be taken to avoid, minimize, mitigate or otherwise appropriately deal with, any adverse impacts to resources within each agency's respective jurisdiction.
- 4. M/C plans must be found to fully compensate for the functions and values provided by wetlands that will be degraded or eliminated. DEP will work with the Permittee in the development of acceptable mitigation plans. The mitigation plans proposed by the Permittee shall be submitted for review and compliance monitoring to DEP and such review shall be subject to the time constraints set forth in specific Conditions XXII.11. or 15. below and IV.A.2 above, as appropriate.
- 5. DEP shall promptly review the submittal for completeness and sufficiency and process the information in accordance with Condition III.H..
- 6. If DEP does not object within the time period specified, Permittee may begin construction pursuant to the terms of the conditions of certification and the subsequently submitted construction details and DEP shall provide to the Corps of Engineers a letter indicating that the full requirements of this condition have been met and the water quality certification for the purposes of 33 USC Section 1341 is thereby conveyed.

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7. Permittee, at its option, may submit information for different wetlands modification activities at different time intervals. Each submittal shall be processed by DEP separately.

C. Specific Conditions

- 1. If historical or archaeological artifacts, such as Indian canoes, are discovered at any time within the project site the applicant shall immediately notify the district office and the Bureau of Historic Preservation, Division of Historical Resources, R.A. Gray Building, 500 S. Bronough Street, Tallahassee, Florida 32399-0250.
- 2. At least 48 hours prior to commencement of work in wetlands approved by this certification authorization, Gulf Power Company shall notify the Department of Environmental Protection, Submerged Lands & Environmental Resources Program, Compliance and Enforcement Section, Suite 202, Northwest District Office, 160 Governmental Center, Pensacola, Florida 32501-5794, in writing. The Department telephone number for reporting problems, malfunctions or exceedances under this authorization is (850) 595-8300 during normal working hours.
- 3. If the approved authorization drawings conflict with the specific conditions, then the specific conditions shall prevail.
- 4. Grass seed or mulch or sod shall be installed and maintained on all exposed slopes and disturbed soil areas 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 and/or adjacent wetlands. A vegetative cover that stabilizes and prevents erosion of the fill material shall be established within 60 days of sodding or seeding. Upon establishment of a substantial vegetative cover, all turbidity barriers/erosion control devices shall be removed.
- 5. Best management practices for erosion control shall be implemented and maintained all times during construction to prevent siltation and turbid discharges in excess of state water quality standards pursuant to Rule 62-302, F.A.C. Methods shall include, but are not limited to use of staked hay bales, staked filter cloth, sodding, seeding, and mulching; staged construction; and the installation of turbidity screens around the immediate project site.

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

The following measures shall be taken immediately by the applicant whenever turbidity levels within waters of the state surrounding the project site exceed 29 NTUs above background:

a. Immediately cease all work contributing to the water quality violation.

- b. Stabilize all exposed soils contributing to the violation. Modify the work procedures that were responsible for the violation and install more turbidity containment devices and repair any non-functioning turbidity containment devices.
 - c. Notify the District Office within 24 hours of the time the violation is first detected.
- 6. There shall be no stockpiling or storage of tools, materials (i.e., lumber, pilings, debris) within wetlands areas not authorized by this authorization. All cleared vegetation, excess lumber, scrap wood, trash, garbage and any other type of debris shall be removed from wetlands/waters of the state within 7 days of completion of the work authorized for impacts.
- 7. Prior to construction, the limits of the proposed fill areas shall be clearly flagged and staked by the agent and/or contractor. All construction personnel shall be shown the location(s) of all wetland areas outside of the construction area to prevent encroachment from heavy equipment into these areas.
- 8. Mitigation shall commence within the first growing season (spring/summer) after initiation of project construction in wetlands.
- 9. Trees planted as part of the mitigation shall be staggered, rather than planted in a straight row, to result in a more natural spatial distribution. The specific location for planting should be determined in the field by a qualified mitigation planting professional, based on an assessment of the variation in topography and hydrology.
- 10. Planted mitigation shall be successful when all of the following criteria have been continuously met for a period of at least one growing season, without intervention in the form of irrigation, dewatering, removal of undesirable vegetation, or replanting of desirable vegetation.
- a. All of the mitigation area is determined by the Department to be jurisdictional pursuant to Section 373.421, F.S.;
- b. The desirable vegetation species cover exceeds 80% of the mitigation area, and the plants are reproducing naturally;
 - c. Nuisance species shall not exceed 5% of the total cover;
- d. Planted trees have achieved a minimum 80% long term survival rate, as compared to the initial number planted, by the end of the first two years after planting;
- e. The hydrology of the site is sufficient to maintain the site as proposed in the mitigation plan.
- 11. The mitigation shall be determined to be successful when the requirements of Specific Condition #10 have been met. The procedures for requesting a success determination and guidelines for the Department's response are provided herein.

- a. The applicant may notify the Department whenever the applicant believes the mitigation is successful, but in no event earlier than two years after the mitigation is implemented. This notice shall be sent by certified mail addressed to the District Office.
- b. The notice shall include a copy of the most recent Progress Report and a narrative describing how the reported data support the contention that each of the mitigation criteria have been met. The applicant shall afford Department personnel the opportunity to schedule and conduct enough on-site inspections of the mitigation site to determine whether the criteria are met.
- c. Within one hundred twenty (120) days of receipt of this notice, the Department shall notify the Applicant by certified mail that the Department determined one of the following:
 - (1) That the mitigation has been successfully completed; or
 - (2) That the mitigation is not successful, identifying specifically those elements of the mitigation that do not meet the success criteria; or
 - (3) That the mitigation cannot be determined to be successful at this time, identifying specifically those elements of the mitigation that prevent it from determining whether the mitigation is successful.
- d. When the Department notifies the Applicant that the mitigation is successful, or if the Department fails to notify the Applicant within the time period prescribed by this condition, then the Applicant's mitigation obligation under the terms of the authorization shall be deemed satisfied for that particular authorization area.
- 12. In the event that the applicant becomes aware that the mitigation is not meeting the success criteria and probably will not meet them (based on site observation or review of monitoring reports), then the applicant, no later than six months before the end of the fifth year of monitoring shall:
 - a. Submit an alternative mitigation plan to the Department for review and approval;
 - (1) Contents of the alternative mitigation plan The plan shall analyze why a particular mitigation site is not clearly trending towards success and propose actions which will ensure success. The Applicant is on notice that the failure to meet a single criterion will prevent the mitigation site from meeting the success criteria of this authorization.
 - (2) Implementation schedule As part of the alternative mitigation plan, the Applicant shall propose a schedule for implementation and completion of all of the provisions of the alternative mitigation plan. Upon approval, the Applicant shall implement the contingency plan pursuant to the approved schedule.

- b. Submit a long term obligation agreement; and
- c. Submit a \$500 mitigation fee, pursuant to FAC Rule 62-312.320(3).

The Applicant shall implement the approved plan within 60 days of Department approval of the alternative mitigation plan, unless otherwise specified in the approved plan. The approved plan shall be made a part of this certification.

- 13. As part of an ongoing mitigation management plan, the Applicant shall do the following:
- a. Remove nuisance species from the mitigation site at least quarterly for the first year and semi-annually thereafter.
- b. Replant wetland vegetation if the percent coverage does not meet success criteria or if plants are not biologically viable.
- 14. Narrative progress reports shall be submitted every 6 months to the Bureau of Submerged Lands, Compliance and Enforcement Section, 160 Governmental Center, Pensacola, Florida 32501, indicating the status of the project. The cover page shall indicate the authorization number, project name, and the applicant name. The first report shall be submitted six months from the date of authorization issuance, and reports shall continue to be submitted until all work authorized by the authorization, including mitigation, has been completed. The report shall include the following information:
- a. Date authorized activity was begun; if work has not begun on-site, please so indicate.
- b. Brief description of extent of work (i.e., dredging, filling, monitoring, mitigation, management, maintenance) completed since the previous report or since the authorization was issued. Show on copies of the authorization drawings those areas where work has been completed.
- c. A map of the mitigation site depicting the proposed sampling stations, fixed photographic stations and the locations of the plants planted.
- d. The progress of authorized mitigation, including photographs taken from permanent stations, a description of problems encountered and solutions undertaken, and anticipated work for the next six months.
- e. The report shall include on the first page, just below the title, the certification of the following statement by the individual who supervised preparation of the report: "This report represents a true and accurate description of the activities conducted during the six month period covered by this report."

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- f. Wildlife observations, especially for fauna that depend on the target community type.
- 15. Prior to the start of construction, the mitigation area shall be preserved through a perpetual conservation easement to the Department. No later than 120 days prior to start of construction a proposed conservation easement shall be submitted to the Department for approval. The approved conservation easement shall be attached to these conditions and included herein as Attachment B. The language in the conservation easement shall not be changed. Within 30 days of issuance of the final order of certification, the conservation easement shall be signed by the appropriate party, notarized and returned to the District Office, along with a legal description and sketch of the preservation area, which have been certified by a registered land surveyor. The Department will then review the document to ensure it complies with the authorization requirements. Within 30 days of receiving DEP approval of the conservation easement and legal description and sketch, the applicant shall have the easement, legal description and sketch recorded with Bay County and a clerk-of-court certified copy of the recorded document shall be submitted to the District office.
- 16. The conservation easement submitted to the Department for review and approval prior to recording shall include the following information:

a. Title Information

- (1) Proof of ownership as a deed or updated title certificate.
- (2) Affidavit of lien status.
- (3) If liens on the property exist, subordination/release/joinder agreement.

b. Boundary Information

- (1) Legal description of the proposed conservation easement.
- (2) A survey sketch of the proposed conservation easement. (NOTE: Both documents need to be certified by a registered land surveyor and should reference each other if on separate pages).
- 17. The boundaries of the conservation easement with existing access shall be posted on 150 foot intervals with signs identifying it as conservation area for the Department of Environmental Protection, and referencing the Department's authorization number.

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XXIII. NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT

- 1. The Permittee, by January 31, April 30, July 31, and October 31, of each year, shall report the following information as specified below:
- a. Water quality results from tests conducted on each production well of the system during the first two weeks of the months January, April, July, and October as appropriate to the reporting period. The water quality analysis shall test for the following chemical concentrations: chloride, sodium, sulfate, bicarbonate, carbonate, calcium, magnesium, potassium, and total dissolved solids. Prior to sampling, the Permittee shall purge approximately three to five well volumes from each well, and shall report with each set of test results, the duration of purging, purge volume, and purge rates used.
- b. Static water level data for each production well as recorded during the first two weeks of January, April, July, and October as appropriate to the reporting period. The Permittee shall contact the NWFWMD for assistance in designing the method and specifics of data collection. The water level data shall be referenced to mean sea level.
- 2. The NWFWMD retains the discretion to decide whether to require monthly water quality in the future based on resource concerns.
- 3. The use of the permitted water withdrawal is restricted to the use described in the Site Certification Application. Any change in the use of said water shall require a modification of the Site Certification.
- 4. The District's staff, upon proper identification, will have permission to enter, inspect and observe permitted and related facilities in order to determine compliance with the approved plans, specifications, and conditions of this permit.
- 5. The District's staff, upon providing prior notice and proper identification, may request permission to collect water samples for analysis, measure static and/or pumping water levels and collect any other information deemed necessary to protect the water resources of the area.
- 6. Gulf Power shall mitigate any significant adverse impact caused by withdrawals permitted herein on the resource and legal water withdrawals and uses, and on adjacent land use, which existed at the time of filing of the SCA. The District reserves the right to curtail permitted withdrawal rates if withdrawals cause significant adverse impacts on the resource and legal water withdrawals and uses, and on adjacent land use, which existed at the time of Site Certification.
- 7. Gulf Power shall not cause significant saline water intrusion or increased chloride levels. The District reserves the right to curtail permitted withdrawal rates if withdrawals cause significant saline water intrusion or increased chloride levels.

- 8. The District, pursuant to Section 373.042, F.S., at a future date, may establish minimum and/or management water levels in the aquifer, aquifers, or surface water hydrologically associated with the permitted withdrawals; these water levels may require the Gulf Power to limit withdrawal from these water sources to comply with the established levels.
- 9. Nothing in this Site Certification shall be construed to limit the authority of the Northwest Florida Water Management District to declare water shortages and issue orders pursuant to Section 373.175, F.S., or to formulate and implement a plan during periods of water shortage pursuant to Section 373.222246, F.S., or to declare Water Resource Caution Areas pursuant to Chapters 40A-2.801, and 62-40.41 F.A.C.
 - (a) In the event of a declared water shortage, water withdrawal reductions shall be made as ordered by the District.
 - (b) In the event of a declared water shortage or an area as a Water Resource Caution Area, the District may alter, modify or inactivate all or parts of this section of the Conditions of Certification.
- 10. Gulf Power shall, by January 31 of each year, submit for ground water withdrawals, a completed Water Use Summary Reporting Form (NWFWMD A2-I) for each month of the previous year. Water use amounts for each well may be calculated using flow meter readings at the plant divided by the pump rate of each well. The calculations must be provided with each submittal. The first report is due by January 31, 2003, and a final report shall be submitted when the wells are removed from service.
- 11. The District reserves the right, at a future date, to require the Gulf Power to submit actual pumpage records for withdrawals not otherwise required by this Certification.
- 12. Gulf Power shall reference the power plant's wells by their Florida Unique Identification Number when corresponding with the District (pumping reports, etc.).
- 13. Gulf Power shall properly plug and abandon any well determined unsuitable for its intended use, not properly operated and maintained, or removed from service. The well(s) shall be plugged and abandoned to District Standards in accordance with Section 40A-3.531, F.A.C. Gulf shall also notify the District within 30 days of removing any well associated with the facility from service.
- 14. Gulf Power shall provide for the efficient and non-wasteful use of water, and shall implement water conservation measures designed to enhance water use efficiency and reduce water demand and losses.

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XXIV. DEPARTMENT OF COMMUNITY AFFAIRS

A. Wind Loading

Prior to the commencement of construction of Smith Unit 3, Gulf Power Company (Gulf) shall provide the Department of Community Affairs certification by a licensed engineer that the Smith Unit 3 structures and any associated liquid storage tanks will comply with the wind loading provisions of ASCE 7-95, "Minimum Design Loads for Buildings and other Structures."

B. Hurricane Preparation, Evacuation and Recovery Plan

Gulf shall develop a comprehensive hurricane preparation, evacuation and recovery plan (the "Plan") for the Lansing Smith Generating Station Umit 3 ("Smith Unit 3"). The Plan shall include the following elements:

- 1. Annual pre-season hurricane preparation activities.
- 2. Process for hurricane preparation to be undertaken prior to expected arrival at Smith Unit 3 of tropical storm-force winds (sustained winds greater than 39 mph), including (as appropriate to the expected force of storm):
 - a. Securing and/or removing any hazardous materials at Smith Unit 3
 - b. Minimum levels necessary for stability of any liquid storage tanks
 - c. Processes and criteria for staffing, securing and evacuation of Smith Unit 3 including:
 - (1) Determination of essential staffing
 - (2) Criteria for release of non-essential staff
 - (3) Process for preparing Smith Unit 3 for essential staff to remain on site
 - (4) Criteria for determining whether evacuation of essential staff is required
 - (5) Process for preparing Smith Unit 3 and conducting an evacuation of all staff, including provisions for securing fuel supplies
 - 3. Communications plan for:
- a. Notification of storm-specific decisions by and between Gulf and the Bay County Emergency Management Office
- b. Coordination of post-storm Smith Unit 3 recovery efforts with Gulf and the Bay County Emergency Management Office
- c. Coordination of changes in the Plan with the Bay County Emergency Management Office
 - 4. General recovery estimates:
 - a. Types of damage which could be sustained at Smith Unit 3 from flooding at the following elevations:
 - (1) 14.2 feet above National Geodetic Vertical Datum at mean high tide
 - (2) 14.2 feet to 17.7 feet above National Geodetic Vertical Datum at mean high tide

- b. For each elevation category identified above:
 - (1) Procedures for re-entry to Smith Unit 3 for recovery purposes
 - (2) Processes for achieving recovery
 - (3) Ranges of estimated time periods required for recovery

5. Gulf shall submit the Plan to the Department of Community Affairs (two copies), Florida Department of Environmental Protection, and the Bay County Emergency Management Office no later than the commencement of construction of Smith Unit 3. All receiving agencies shall provide their comments on the Plan to the Department of Community Affairs and Gulf within 30 days of receipt. The Department of Community Affairs and Gulf shall confer about the comments within the next 30 days. Within 30 days after such conferral, the Department of Community Affairs shall consolidate and provide to Gulf such comments as it deems appropriate. Gulf shall finalize the Plan within 60 days thereafter and provide copies to the Department of Environmental Protection, the Department of Community Affairs, and Bay County Emergency Management Office. The Plan shall be formally updated, using the same process, no less frequently than every 5 years following commercial operation of Smith Unit 3.

If the Department of Community Affairs deems the Plan or any of its periodic updates not to be in compliance with the requirements of this Condition, it may petition for enforcement of this condition pursuant to the Florida Electrical Power Plant Siting Act (ss. 403-501-403.518, Florida Statutes)

C. Noise Condition

Gulf shall notify area residents in advance of the onset of the steam cleaning noise phase of construction.

XXV. DEPARTMENT OF TRANSPORTATION

A. Access Management to the State Highway System:

No new access to the State Highway System is proposed in the site certification application. If new access or modification of current access to the State Highway System is proposed at a later date, such as related to the borrow pit sites when they are identified, access will be subject to the requirements of Rule Chapters 14-96, State Highway System Connection Permits, Administrative Process, and 14-97, State Highway System Access Management Classification System and Standards, Florida Administrative Code, will be required.

B. Overweight or Overdimensional Loads:

Operation of overweight or overdimensional vehicles by the applicant on the State transportation facilities will be subject to the safety and permitting requirements of Chapter 3 16, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight

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and Overdimensional Vehicles, Florida Administrative Code.

C. Use of State of Florida Right of Way or Transportation Facilities:

If any use of State of Florida right of way or transportation facilities is later proposed, such usage will be subject to the requirements of the Department of Transportation's Utility Accommodation Manual and Rule Chapter 14-46, Railroads/Utilities Installation or Adjustment, Florida Administrative Code. Depending upon the corridor or route used, any new or additional interconnections between the power plant and off site facilities may require the applicant to meet the requirements of the Utility Accommodation Manual if the construction or installation of these interconnections fall within State of Florida right of way or a State transportation facility.

D. Traffic Control:

Traffic control will be maintained on the State Highway System during plant construction and maintenance, particularly as related to the borrow pits when they are identified, in compliance with the standards contained in the Manual of Uniform Traffic Control Devices; Statewide Minimum Level of Service Standards, Rule Chapter 14-94, Florida Administrative Code; Florida Department of Transportation's Roadway and Traffic Design Standards and the Florida Department of Transportation's Standard Specifications for Road and Bridge Construction, whichever is more stringent.

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MITIGATION PLAN SPECIFICATIONS LANSING SMITH UNIT 3 BAY COUNTY, FLORIDA

INTRODUCTION

The construction of Smith Unit 3 in Bay County, Florida will result in the unavoidable loss of 15.2 acres of Florida Department of Environmental Protection (FDEP) wetlands and 15.3 acres of U.S. Army Corps of Engineers (USACE) wetlands (i.e., 6.4 acres of cypress-titi swamp, 0.2 acre of ditch, and 8.7 acres of wet pine plantation). To provide compensation for the loss of the 15.3 acres of FDEP/USACE wetlands, Gulf Power will enhance 130 acres of wet pine plantation within a 232-acre parcel of land located along the southeastern corner of Jackson's Titi Swamp about 1-mile north of Smith Unit 3 by removing the existing pines and planting native hardwood and cypress trees (Figure 1). The 130 acres of mitigation is based upon a 12:1 ratio of wetland enhancement to wetland loss for impacts to cypress-titi swamp (i.e., 6.4 acres \times 12 = 77 acres) and a 6:1 ratio of wetland enhancement to wetland loss for impacts to wet pine plantation and the ditch (i.e., 8.9 acres $\times 6 = 53$ acres). The 232-acre parcel of land borders existing cypress-titi swamp on the north and west, an existing transmission line to the east, and County Road 2300 on the south (Figure 2). The existing transmission line corridor along the eastern boundary of the parcel of land provides access to the mitigation site. After success, the 130-acre parcel of land will be preserved in perpetuity either through a conservation easement or, if preferred, transferred in fee title to FDEP, another resource agency or a third party. More specific details concerning the property transfer will be provided after further discussion with USACE and FDEP.

TREE SPECIES AND DENSITY

Bottomland hardwood and cypress tree plantings will result in an average density of surviving trees of at least 400 trees per acre after each growing season for five years following initial planting, as determined by annual monitoring. The overall tree species composition of bottomland hardwood and cypress seedlings will be:

- Twenty percent bald cypress (*Taxodium distichum*);
- Twenty percent red maple (Acer rubrum);

EXHIBIT
GULF POWER
EX. 23

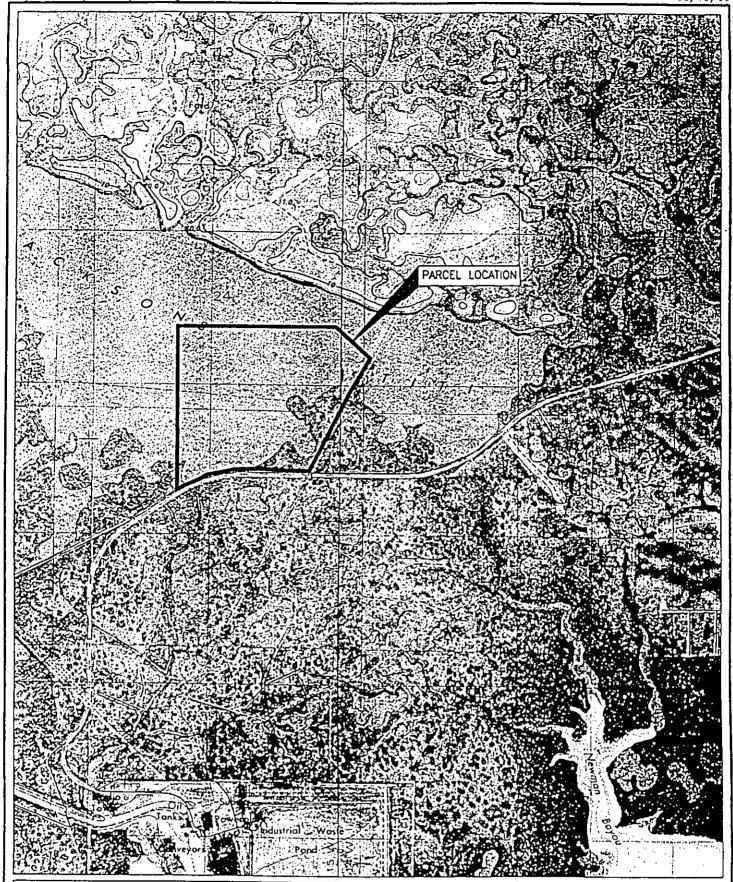


FIGURE 1.
TOPOGRAPHIC MAP OF PARCEL CONTAINING THE PROPOSED MITIGATION SITE:
GULF POWER
SMITH UNIT 3
Sources: USGS Quad Map of Southport, FL.; ECT, 2000. 2

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- Twenty percent dahoon holly(Ilex cassine);
- Twenty percent elm (Ulmus americana); and
- Twenty percent laurel oak (Quercus laurifolia).

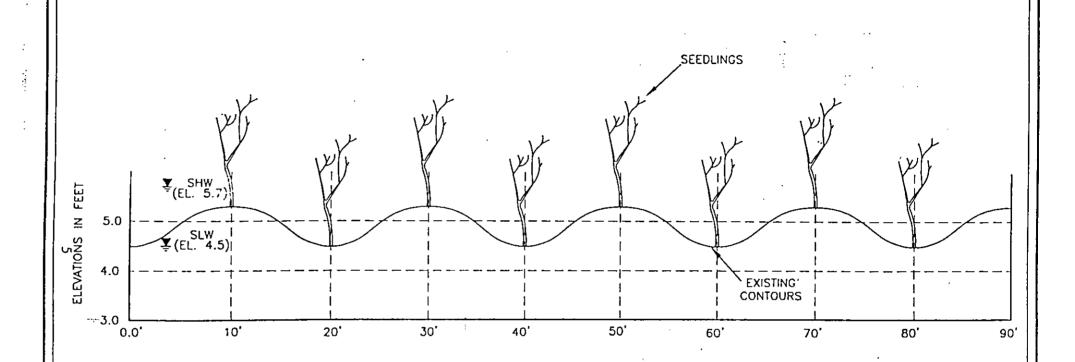
The above species occur naturally in hardwood/cypress swamps in the immediate vicinity.

Substitutions of species based on commercial availability will be at the approval of the project biologist. Species substitutions will only include those species that occur naturally in swampland in the region. Examples of possible species substitutions could include, but not be limited to, sweet bay (Magnolia virginiana), myrtle holly (Ilex cassine var. myrtifolia), swamp red bay (Persea palustris), popash (Fraxinus caroliniana), and swamp tupelo (Nyssa sylvatica subsp. biflora). The placement and species composition within each grouping of tree seedlings at the parcel of land will be finalized by the onsite project biologist prior to planting. A cross section view of the planting scheme is provided in Figure 3.

TREE MATERIAL

The tree material will be first-class grade, true to name and consist of 3-gallon or larger container size seedlings. All plants will be nursery grown and originate within a 200-mile distance from the parcel of land. Trees having any of the following defects will be rejected:

- 1. Undue abrasions of the bark;
- 2. Dried root systems;
- 3. Dried top wood of deciduous plants or dried foliage of evergreens;
- 4. Prematurely opened buds or with buds stripped off;
- 5. Diseased or insect-infected trees; and
- 6. Trees in containers that are overgrown or rootbound.



NOTES:

SEEDLINGS WILL BE PLANTED AT ROUGHLY 10-FOOT INTERVALS ALONG THE TOP AND BOTTOM OF THE EXISTING FURROWS.

SEEDLINGS WILL BE PLANTED ALONG STAGGERED ROWS.

THE DISTANCES BETWEEN THE TOPS AND BOTTOMS OF FURROWS VARIES. THE 10-FOOT SPACING INDICATED ON THIS DRAWING IS FOR ILLUSTRATIVE PURPOSES ONLY.

FIGURE 3.

TYPICAL CROSS-SECTION OF MITIGATION GULF POWER

SMITH UNIT 3

Source: ECT, 2000.

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TREE DELIVERY

No shipment of plant material will be accepted or planted by the contractor until such material has been inspected and accepted by the project biologist onsite. Plants will not be delivered to the project until ordered in writing by the owner and when so ordered, the owner/engineer and project biologist shall be notified of a proposed delivery of plant material at least 24 hours prior to its arrival at the project. Each shipment will be accompanied by an invoice showing the number, size, and name of each of the several kinds of plant material included, with each kind of plant adequately identified by tags.

The entire plant will be properly protected from sun and air damage from the time of purchase from the supplier until planting on the project. Plants will be kept moist until planted.

Upon arrival, the project biologist will make an immediate inspection and will accept for planting all plants complying with these specifications and any plants rejected under the same will be immediately removed from the project.

The contractor should provide a warranty on work for a resultant average survival density of 400 trees per acre following each growing season for five years, as determined by the annual monitoring program. The warranty should commence on the date of final completion. If the average survival rates are not achieved after each growing season, additional trees will be installed according to these specifications to meet the minimum survival rate on a yearly basis.

Warranty should include coverage of plants from death or unhealthy conditions.

SITE PREPARATION

Prior to planting, all of the existing pines within a 130-acre area of the referenced parcel will be removed by a timber contractor by cutting. After the removal of pines and before planting, fallow or weedy/grassy areas of the planting areas may be mowed and/or disked to reduce competition for the tree seedlings.

TREE PLANTING

Planting holes may be dug by hand or by mechanical means. Trimming of the sides or bottoms of the hole to uniform shape will not be required. Planting holes will have a minimum horizontal dimension of two times the specified diameter of the root ball.

Bottomland hardwoods and cypress will be planted in the 130-acre treeless area of the mitigation parcel. Trees will be planted on approximate 10-ft centers at a maximum. An approximate even mix of target species will be accomplished over the planting area, but species selection for any given zone will be based on hydrology (i.e., obligate species in wetter areas). Specific boundaries of the planting area and the location of tree species will be identified by the project biologist prior to the planting activity.

When planting commences within the identified planting areas, plants initially will be placed for review and orientation under the supervision of the onsite project biologist.

At the time of planting, all non-biodegradable root containers will be removed. Container plants will be installed in a vertical position. Backfill soil will be placed in 6-inch layers. Plant materials will be maintained in a vertical position during backfilling. If needed, the soil will be saturated with water when the pit or bed is half full of topsoil and again when full.

PLANTING SCHEDULE

The planting of the parcel of land will be initiated during the first winter/early spring season following the start of power plant construction based upon the availability of planting stock. Replanting will occur as necessary during the first five years to achieve the required stocking rate.

FERTILIZER

A slow-release granular fertilizer with a 12-6-6 NPK ratio will be applied to each planting hole according to label directions at initial planting.

INITIAL PLANT WATERING

All plants will be watered with 5-gallons per tree if soils are not wet enough at the time of planting.

MAINTENANCE PROGRAM

No exotic/invasive plant species were observed during prior inspections of the parcel of land. However, prior to the planting effort, a survey will be conducted across the entire parcel of land for exotic/invasive plant species. Any exotic/invasive plant species found during the survey will be removed from the site. Surveys will be conducted for exotic/invasive plant species on an annual basis to repeat the maintenance effort as necessary.

If weedy herbs, shrubs, and/or vines threaten the growth and/or vigor of planted hardwood seedlings, these plants will be removed within a suitable radius from affected seedlings by hand or more effective methods such as mowing, weed whacking, machete, etc. If deemed necessary, watering of tree seedlings will also be conducted after the initial planting effort should drought conditions prevail.

PLANTING DOCUMENTATION

The planting process will be documented and records will be retained at the Smith Unit 3 facility. A written report of the planting effort, including onsite photographs and as-built drawings of the planting areas will be provided to Gulf Power by the project biologist within 30 days of completion of the plantings. Gulf Power will forward copies of the report to the FDEP and USACE within 30 days of receipt of the report from the project biologist.

FOLLOW-UP MONITORING PROGRAM

Annual monitoring will be conducted at the parcel of land over a five-year period. Annual monitoring will include quantitative sampling across the planted area to determine numbers of healthy, dead, and reduced-vigor trees and the percent cover of

herbaceous and shrubby (non-canopy woody species) vegetation. Planted trees will be sampled using the quadrat sampling technique (Oosting, 1956; Mueller-Dombois and Ellenberg, 1974) along permanently marked transects. Trees will be sampled within quadrats spaced at 25-ft intervals along the transects. The beginning and end points and two equidistant points of each transect will be permanently marked with 10-ft lengths of aluminum pipe. In addition, a 10-ft length of one-half inch polyvinyl chloride (PVC) pipe will be located at the corner of each quadrat along the transects. Both the aluminum and PVC pipes will be partially painted at the top with a biodegradable fluorescent orange or red paint for easy identification in the field. The starting and end points of each transect will be so identified on the pipes together with transect number/codes.

The tree quadrats will consist of 5-meter by 10-meter rectangle plots oriented with the 10-meter dimension perpendicular to the transect. The sides of the tree plots will be measured and then flagged with surveyor's flagging to mark the boundaries in the field for easy identification during the sampling effort. Proceeding from the starting point to the end, the tree plots will be situated on the left side of each transect.

All planted, live trees located within the quadrats will be identified to species and measured for height and crown covers. Each tree will be identified in the field with aluminum tags labeled with a distinct code. The code uses the first two letters of the genus and species followed by a consecutive number. The numbers identify the individual trees measured consecutively from the beginning to the end of each transect (e.g. AR-1, TD-2, TD-3, and AR-4 indicate that <u>Acer rubrum, Taxodium distichum, Taxodium distichum, and Acer rubrum</u> were the first four trees sampled in the transect). The percent cover of recruited and/or existing shrub species (i.e., non-canopy woody species) will also be recorded within the 5 x 10 square meter (m²) tree quadrats along all of the vegetation transects.

The herbaceous plant cover within the ground layer will also be visually estimated for all of the vegetation transects. Herbaceous cover will be estimated within 1 m² quadrats situated at approximately 25-ft intervals along each transect (i.e., each 1-m² quadrat will be nested at the corner of each tree/shrub plot). Aerial cover of each species will be

recorded as a percent of the quadrat area. In addition, the percent cover of unvegetated surface area will also be recorded for each quadrat (e.g., open water, bare ground, litter, detritus, etc.).

Hydrological data will be collected from staff gauges located near each transect. Relative water level depths will also be recorded at each 25-ft interval along the transects during the collection of vegetation data. The number of quadrats/transects will be adequate to achieve a statistically valid sample of tree survival and vegetation cover.

In addition to the quantitative sampling, the parcel of land will be qualitatively inspected during the annual monitoring efforts to develop a complete listing of all plant species. Also, qualitative monitoring utilizing random pedestrian transects will be conducted across the parcel of land to compare the analysis of data obtained during the quantitative sampling and to evaluate overall planting and maintenance success. Qualitative information will include the following:

- Visual estimates of percent coverages by wetland planted/recruited trees as well
 as desirable herbaceous and shrubby species, nuisance/exotic species, upland
 species, and bare ground/open water;
- 2. Visual determination of overall hydrological conditions;
- 3. Assessment of jurisdictional status pursuant to FDEP and USACE criteria; and
- 4. Incidental wildlife sightings or indications of wildlife usage.

Color panoramic photographs will be taken at permanent photo documentation stations located at the ends of each transect. The transect, photo station, and staff gauge locations will be depicted on the as-built drawings of the planting areas.

DATA ANALYSIS

Aerial coverage values will be summed for all transects and quadrats for each species. Individual tress crown covers will be calculated for the parcel of land using the following formula:

$$\left[\frac{D_1 + D_2}{4}\right]^2 \pi = Area of Crown Cover$$

 D_i = Diameter of crown on the longest axis.

 D_2 = Diameter of crown on the shortest axis.

The percent cover/dominance for each planted tree species will be calculated by dividing the sum of the crown covers over the area sampled. The sum of the covers for each species of shrub and herb will be divided by the total number of quadrats of each respective layer to obtain the percent cover/dominance for a species. The relative dominance will be estimated by summing the dominance for a species and dividing by the total dominance for all species.

Frequency will be calculated by dividing the numbers of quadrats in which a species occurs by the total number of quadrats sampled. The relative frequency will be estimated by summing the frequency for a species and dividing by the total frequency for all species.

The number of trees per acre will also be calculated for all tree species measured. The average tree heights will be calculated for the planted species of trees. Tree density will be calculated by determining the number of individuals of a species over the area sampled. The relative density will be calculated as the density for a species divided by the total density for all species.

Importance values will be calculated as either the sum of the relative frequency, relative density, and relative dominance (trees) or the sum of the relative frequency and relative dominance (shrub and herb layers). Combining these relative values into a single importance value reflects the different measures of the importance of each species in a community.

The formulas for the values identified above are provided as follows:

Percent Cover/Dominance = Crown covers or cover values of each species

Total area sampled or total number of plots sampled

Density =Individuals of a species

Area sampled

Frequency = Number of plots in which a species occurs

Total number of plots sampled

Dominance for a species Relative Dominance = x 100

Total dominance for all species

Relative Density = Density for a species x 100 Total density for all species

Frequency for a species

Relative Frequency = x 100 Total frequency for all species

Importance Value = Relative dominance + relative density + relative frequency

The jurisdictional status of the parcel of land will be determined by a separate estimate of the percent cover of wetland species. Wetland species are those plants listed in Chapter 62-340.450, Florida Administrative Code (F.A.C.)., as aquatic (AQUA), facultative (FAC), facultative wet (FACW), or obligate (OBL) (Florida Wetlands Delineation Manual, 1995). Any plants not listed in the referenced vegetative index are considered to be upland plants (UP). Plants listed as vines (VINE) in the vegetative index will also not be considered to be wetlands vegetation. Finally, in estimates of desirable/jurisdictional wetland vegetation cover, the covers for exotic or undesirable (nuisance) species will be calculated separately. The identification of exotic and nuisance species will be made using the 1999 List of Florida's Most Invasive Species (Florida Exotic Pest Plant Council, 2000) provided in Attachment A, but also include climbing hemp vine (Mikania scandens), cattail (Typha sp.), and primrose willow (Ludwigia peruviana). Finally, hydrological data will be tabulated and shown in graphical form in order to depict overall hydrological conditions.

MONITORING INTERVAL

Upon completion of the initial planting phase of the project, the parcel of land will be monitored for a period of five years to determine if replanting is required. Vegetation monitoring will be conducted during the summer season (June to August) by a qualified biologist (i.e., the project biologist).

REPORTING

Written compliance update reports with photographs will be submitted to Gulf Power by the project biologist following each annual monitoring session. The written reports will outline compliance with the FDEP and USACE wetland permits and this mitigation plan. Copies of the reports will be forwarded to FDEP/USACE no later than 60 days after completion of each annual monitoring session.

PROJECT BIOLOGIST

Gulf Power will contract the services of a qualified project biologist to conduct all of the above-referenced tasks associated with the mitigation effort.

ATTACHMENT A

Piorica Rootic Pest Plant Council's

1999

List of Florida's Most Invasive Species

Purpose: To focus attention on:

The impacts exotic pest plants have on native bio-diversity in Florida ecosystems.

The impact of exotic pest plants on the integrity of native plant community functions.

3. Habitat losses due to exotic plant infestations.

- 4. The impacts of exotic plants on endangered species via habitat loss and alteration (e.g., Cape Sable seaside sparrow).
- The need to prevent such losses by comprehensive management for exotic pest plants.
- The socioeconomic impacts of exotic pest plants (e.g., increased wildfires in Melaleuca).

5. The need to prevent such losses by completions
6. The socioeconomic impacts of exotic pest plants (e.g., increased will 7. Changes in the seriousness of different exotic pest plants over time. 8. The need to provide information that will help managers set priorities for management.

Definitions: Exotic-a non-indigenous species, or one introduced to this state, either purposefully or accidentally. A naturalized exotic, such as those listed here, has escaped into the wild where it reproduces on its own either sexually or asexually. Native-a species already occurring in Florida at the time of European contact (1500). Invasive- a variable condition defined by the category to which the species is assigned.

Abbreviations used: for "Government listed": P=Prohibited by Fla. Dept. of Environmental Protection, N=Noxious weed as listed by Fla. Dept. of Agriculture & Consumer Services and/or U.S. Department of Agriculture.

For information on distributions within Florida, see: http://www.usf.edu/~isb/projects/atlas/mapindex.html

For other information:

Langeland, K. A. and K. Craddock Burks (editors). 1999. <u>Identification & Biology of Non-native Plants in Florida's Natural Areas.</u> Production is supported by 14 federal and private agencies, including Florida EPPC.

Category I-Species that are invading and disrupting native plant communities in Florida. This definition does not rely on the economic severity or geographic range of the problem, but on the documented ecological damage caused.

Scientific Name	Common Name	FLEPPC Rank	Government Listed
Abrus precatorius	rosary pea	I	
Acacia auriculiformis	earleaf acacia	1	
Albizia julibrissin	mimosa, silk tree	I	
Albizia lebbeck	woman's tongue	1	
Ardisia crenata (= A. crenulata)	coral ardisia	1.	
Ardisia elliptica (=A. humilis)	shoebutton ardisia	1	
Asparagus densiflorus	asparagus-fern	1	ļ
Bauhinia variegata	orchid tree		

Bischofia javanica	bischofia	1 1	
Calophyllum antillanum		1-1	
(=C. calaba; C.	wood," "Alexandrian		į
inophyllum, often	laurel" used in cultivation)	İ	
misapplied in cultivation)	}	}	1
Casuarina equisetifolia	Australian pine		P
Casuarina glauca	suckering Australian pine	1	P
Cestrum diurnum	day jessamine	1	
Cinnamomum camphora	1	 - 	
Colocasia esculenta	wild taro		·
Colubrina asiatica	lather leaf	$\frac{1}{1}$	·
Cupaniopsis	carrotwood	1	N
anacardioides	ounotwood	1	1 1
Dioscorea alata	winged yam	I -	N
Dioscorea bulbifera	air-potato	1	N
Eichhornia crassipes	water-hyacinth	1	P
Eugenia uniflora	Surinam cherry	1	1
Ficus microcarpa (F.	laurel fig	1	
nitida and F. retusa var.			
nitida misapplied) Hydrilla verticillata			
	<u>hydrilla</u>	I .	P, N
Hygrophila polysperma Hymenachne	green hygro	<u></u>	P, N
amplexicaulis	West Indian marsh grass	i	
Imperata cylindrica	cogon grass	<u> </u>	N
(Imperata brasiliensis		•	1
misapplied)			
lpomoea aquatica	waterspinach	1	P, N
Jasminum dichotomum	Gold Coast jasmine	Ι.	
Jasminum fluminense	Brazilian jasmine	I	
Lantana camara	lantana, shrub verbena	1	
Ligustrum sinense	Chinese privet, hedge privet	1	
Lonicera japonica	Japanese honeysuckle	I	
Lygodium japonicum	Japanese climbing fern	I	N
Lygodium microphyllum	Old World climbing fern	I	N
Macfadyena unguis-cati	cat's claw vine	1	
Melaleuca	melaleuca, paper bark	1	P, N
quinquenervia			
Melia azedarach	Chinaberry	I	
Mimosa pigra	catclaw mimosa	1	P,N
Nandina domestica	nandina, heavenly bamboo	1	
Nephrolepis cordifolia	sword fern	1	
Vephrolepis multiflora	Asian sword fern	1	
Ne <u>vraudia reynaudiana</u>	Burma reed; cane grass	1	N
Paederia cruddasiana	sewer vine, onion vine	T	N

Paederia foetida	skunk vine	I	N
Panicum repens	torpedo grass	T	
Pennisetum purpureum	Napier grass	1	
Pistia stratiotes	water lettuce	I	P
Psidium cattleianum (=P. littorale)	strawberry guava	1	
Psidium guajava	guava	1	
Pueraria montana (=P. lobata)	kudzu	ì	N
Rhodomyrtus tomentosa	downy rose-myrtle	I	. N
Rhoeo spathacea (=R. discolor; Tradescantia spathacea)	- oyster plant	l	
Sapium sebiferum	popcorn tree, Chinese tallow tree	1	N
Scaevola sericea (=Scaevola taccada var sericea, S. frutescens)	scaevola, half-flower, beach naupaka	1	
Schefflera actinophylla (=Brassaia actinophylla)	schefflera, Queensland umbrella tree	1	
Schinus terebinthifolius	Brazilian pepper	1	P, N
Senna pendula (=Cassia coluteoides)	climbing cassia, Christmas cassia, Christmas senna	I	
Solanum tampicense (=S. houstonii)	wetland night shade, aquatic soda apple	1	N
Solanum torvum	susumber, turkey berry	1	.N
Solanum viarum	tropical soda apple	1	N
Syzygium cumini	jambolan, Java plum	1	
lectaria incisa	incised halberd fern	1	1
Thespesia populnea	seaside mahoe	1	
l'radescantia Iuminensis	white-flowered wandering jew	I	
Urochloa mutica (= Brachiaria mutica)	Pará grass	I	à T

Category II—Species that have shown a potential to disrupt native plant communities. These species may become ranked as Category I, but have not yet demonstrated disruption of natural Florida communities.

Scientific Name	Common Name	FLEPPC	Government
		Rank	Listed
Adenanthera pavonina	red sandalwood	11	
Agave sisalana	sisal hemp	Υl	
Aleurites fordii	tung oil tree	11	

Alstonia macrophylla	devil-tree	11	
Alternanthera	alligator weed	II	P
philoxeroides			
Anredera leptostachya	Madeira vine	II	
Antigonon leptopus	coral vine	II	
Aristolochia littoralis	calico flower	II	
Asystasia gangetica	Ganges primrose	11	
Begonia cucullata	begonia	11	
Broussonetia papyrifera	paper mulberry	ll II	
Callisia fragrans	inch plant, spironema	11	
Casuarina	Australian pine	Il	P
cunninghamiana	•		
Cereus undatus (=Hylocereus undatus)	night-blooming cereus	11	
Clerodendrum bungei	strong-scented glorybower	ll	
Cryptostegia madagascariensis	rubber vine	11	
Cyperus alternifolius (=C. involucratus)	umbrella plant	11	
Cyperus prolifer	dwarf papyrus	II	
Dalbergia sissoo	Indian rosewood, sissoo	11	
Eleagnus pungens	thorny eleagnus	Il	
Enterolobium	ear-pod tree	11	
contortisilquum	•		•
<i>Epipremnum pinnatum</i> cv. Aureum	pothos	11	
Ficus altissima	false banyan		•
Flacourtia indica	governor's plum	11	
Flueggea virosa	Chinese waterberry	TI -	
Hibiscus tiliaceus	mahoe, sea hibiscus	II	
Hiptage benghalensis	hiptage	11	
Jasminum sambac	Arabian jasmine	11	
Koelreuteria elegans	golden rain tree	II	
Leucaena leucocephala	lead tree	l li	
Ligustrum lucidum	glossy privet	II	
Livistona chinensis	Chinese fan palm	11	
Melinis minutiflora	molasses grass	11	
Merremia tuberosa	wood-rose	11	
Murraya paniculata	orange-jessamine	11	
Myriophyllum spicatum	Eurasian water-milfoil	11	}
Ochrosia parviflora (=0. elliptica)	kopsia	11	<u> </u>
Oeceoclades maculata	ground orchid		
		ii **	<u> </u>
Passiflora biflora	twin-flowered passion vine	i II	

Phoenix reclinata	Senegal date palm	11	
Phyllostachys aurea	golden bamboo	ll li	
Pteris vittata	Chinese brake	II	
Ptychosperma elegans	solitary palm	Il	
Rhynchelytrum repens	Natal grass	11	
Ricinus communis	castor bean	II	
Ruellia brittoniana (=R. tweediana)	Mexican petunia	ll	
Sansevieria hyacinthoides (=S. trifasciata)	bowstring hemp	II	
Sesbania punicea	purple sesban, rattlebox	II	1
Solanum diphyllum	twinleaf nightshade	II	
Solanum jamaicense	Jamiaca nightshade	ll	
Syngonium podophyllum	arrowhead vine	11 .	
Syzygium jambos	rose-apple	II	
Terminalia catappa	tropical almond	11	
Tribulus cistoides	puncture vine, burnut	11	
Triphasia trifoliata	lime berry	II	
Urena lobata	Caesar's weed	11	
Wedelia trilobata	wedelia	II	
Wisteria sinensis	Chinese wisteria	II	
Xanthosoma sagittifolium	malanga, elephant ear	11	

Citation example:

Florida Exotic Pest Plant Council. FLEPPC 1999 List of Florida's Most Invasive Species. Internet: http://www.fleppc.org/99list.htm

The 1999 list was prepared by the FLEPPC, Exotic Pest Plant List Committee:

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