ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

ENVIRONMENTAL COST RECOVERY CLAUSE

DOCKET NO. 040007-EI

PREPARED DIRECT TESTIMONY
OF
JAMES O. VICK

PROJECTION FILING
FOR THE PERIOD

JANUARY 2005 – DECEMBER 2005

SEPTEMBER 3, 2004

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GULF POWER

A SOUTHERN COMPANY

GULF POWER COMPANY

Before the Florida Public Service Commission

Prepared Direct Testimony of

James O. Vick

Docket No. 040007-EI

September 3, 2004

Q. Please state your name and business address.

A. My name is James O. Vick and my business address is One Energy Place, Pensacola, Florida, 32520.

Q. By whom are you employed and in what capacity?

A. I am employed by Gulf Power Company as the Director of Environmental Affairs.

Q. Mr. Vick, will you please describe your education and experience?

A. I graduated from Florida State University, Tallahassee, Florida, in 1975 with a Bachelor of Science Degree in Marine Biology. I also hold a Bachelor's Degree in Civil Engineering from the University of South Florida in Tampa, Florida. In addition, I have a Masters of Science Degree in Management from Troy State University, Pensacola, Florida. I joined Gulf Power Company in August 1978 as an Associate Engineer. I have since held various engineering positions such as Air Quality Engineer and Senior Environmental Licensing Engineer. In 2003, I assumed my present position as Director of Environmental Affairs.

Q. What are your responsibilities with Gulf Power Company?

A. As Director of Environmental Affairs, my primary responsibility is overseeing the activities of the Environmental Affairs section to ensure the Company is, and remains, in compliance with environmental laws and regulations, i.e., both existing laws and such laws and regulations that may be enacted or amended in the future. In performing this function, I have the responsibility for numerous environmental activities.

Q. Are you the same James O. Vick who has previously testified before this Commission on various environmental matters?

A. Yes.

Q. Mr. Vick, what is the purpose of your testimony?

A. The purpose of my testimony is to support Gulf Power Company's projection of environmental compliance costs recoverable through the Environmental Cost Recovery Clause (ECRC) for the period from January 2005 through December 2005.

Q. Have you prepared an exhibit that contains information to which you will refer in your testimony?

A. Yes, I have. My exhibit includes the following documents:

- Written concurrence from Florida Department of Environmental Protection (FDEP) that the NOx reduction activities Gulf proposes to implement for the Plant Crist Units 4, 5, and/or 6 are reasonable and necessary to achieve the emission limit specified in the terms of the August 28, 2002

agreement with FDEP.

- Plant Smith Consumptive Use Permit
- Northwest Florida Water Management District (NWFWMD) correspondence regarding the proposed Smith Water Conservation Plan.
- U.S. Fish and Wildlife Service correspondence regarding required changes to street lighting in the Panama City Beach area.
- Bay County Ordinance Number 02-07, establishing a sea turtle conservation zone and lighting ordinance.
- City of Destin, Florida ordinance relating to the regulation of outdoor lighting to protect marine turtles nesting in the Destin, Florida area.

Counsel: We ask that Mr. Vick's' Exhibit consisting Consisting of six documents be marked as Exhibit No. _____(JOV-1).

Q. Mr. Vick, please identify the capital projects included in Gulf's ECRC calculations.

A. A listing of the environmental capital projects which have been included in Gulf's ECRC calculations has been provided to Ms. Davis and are included in Schedules 3P and 4P of her testimony. Schedule 4P reflects the expenditures, clearings, retirements, salvage and cost of removal currently projected by month for each of these projects. These amounts were provided to Ms. Davis, who has compiled the schedules and calculated the associated revenue requirements for Gulf's requested recovery.

Q. Have all of the capital projects shown on Ms. Davis' schedules been previously approved by the Commission?

A. No. Gulf's 2005 ECRC capital projection includes both new projects and expansions of existing projects that have not been previously approved by the Commission. All of these projects are related to Gulf's existing Air and Water Quality programs, including Gulf's program for meeting the terms of its August 28, 2002 agreement (the "Agreement") with the FDEP. The purpose of the Agreement was to reduce NOx emissions at Gulf's Plant Crist to help ensure that Escambia and Santa Rosa counties are in compliance with the new eight hour ozone ambient air quality standard.

Q. Mr. Vick, please describe the new capital project associated with Gulf's NOx reduction agreement with FDEP that is part of Gulf's 2005 ECRC capital projection.

A. For the 2005 projection, we have included capital costs associated with the next phase of the Plant Crist FDEP Agreement for Ozone Attainment (PE 1287) which was developed to meet the terms of the August 28, 2002 agreement with FDEP. There are six activities described in the Agreement which the Commission has declared are environmental compliance costs under the requirements of Section 366.8255(1)(d)(7) of the Florida Statutes as amended in 2002. Gulf was granted approval for recovery of the costs prudently incurred in connection with these six activities in Docket No. 020943-EI through proposed agency action order PSC-02-1396-PAA-EI (the "Order") which was made final by consummating order PSC-02-1593-CO-EI issued November 18, 2002.

The sixth activity described in the Agreement as approved by the Order is the implementation of NOx emission reduction strategies on Crist Units 4, 5, and/or 6 by May 1, 2006. The Agreement called for completion of an engineering feasibility study addressing NOx reduction technologies on these units necessary to enable the entire plant to meet an overall plant-wide NOx emission limit of 0.2 lbs/mmbtu. As noted in the Order, the Agreement further called for Gulf to ". . . obtain written concurrence from FDEP that the activities Gulf proposes to implement [for these units] are reasonable and necessary to achieve the emission limit . . ." specified in the Agreement.

Gulf conducted a three step feasibility study to determine the best and most cost effective technology to meet the facility wide emission limit for Plant Crist as outlined in the Agreement. Gulf considered the proven history of technologies, commercial availability, costs and NOx removal efficiency in determining a selected strategy. Our initial step compared available NOx reduction technologies including Selective Catalytic Reduction (SCR) which would likely achieve NOx emissions well below the targeted levels but at a cost of approximately $142/kw. The SCR costs were at least three times higher than other available NOx reduction technologies that were evaluated. Technology evaluations conducted on Rich Reagent Injection (RRI), Rotating Overfire Air (ROA), Rotamix, Low Nox Burners and Overfired Air, and Selective Non-Catalytic Reduction (SNCR) revealed that the RRI, ROA, and the Rotamix did not meet the required NOx emission reduction levels. Based on the study, Gulf

concluded that a new low NOx burner system with an Overfired Air configuration and SNCR technology produced the most cost beneficial and reliable strategy for Crist Unit 6. Gulf further concluded that the next most cost effective step would be to retrofit Units 4 & 5 with SNCR technology if necessary, to assure compliance with the Agreement.

Gulf Power received written concurrence from FDEP on August 10, 2004 that the SNCR, low NOx burner/overfire air technologies for Plant Crist Unit 6, and Units 4 and 5 if necessary, meet the intent of the Agreement and are prudent for the purposes of ensuring that Plant Crist supports the Escambia/Santa Rosa area's compliance with the 8-hour ozone ambient air quality standard. A copy of the August 10 concurrence letter from FDEP is contained in my Exhibit, JOV-1. Gulf expects the Crist Unit 6 SNCR, low NOx burner/overfire air technologies totaling approximately $19 million to go in service in November 2005.

Q. Mr. Vick, please describe the next new capital project for 2005 that Gulf is asking be considered for cost recovery.

A. The next new project is shown on Ms. Davis' schedules under the title Precipitator Upgrades for Compliance Assurance Monitoring (CAM). CAM requirements are regulated under Title V of the 1990 Clean Air Act Amendments (CAAA) which require a method of continuously monitoring particulate emissions. Opacity can be used as a surrogate parameter if the precipitator demonstrates a correlation between opacity and particulate matter. Gulf demonstrated this correlation by stack

testing in 2003 and 2004, and submitted the results to the FDEP as part of the CAM plan included in Gulf's Title V Air Permit renewal applications in June 2004.

The precipitator upgrades that are included under this line item on Ms. Davis's schedules are necessary to meet the more stringent surrogate opacity standards under CAM. The first phase of this project, the Smith Unit 2 precipitator project is expected to be placed in service in May 2005. The second phase, the Smith Unit 1 precipitator upgrade, will be initiated in 2006 with an estimated completion date of April 2007. We also anticipate the need for similar precipitator upgrade projects related to the new CAM regulations at other Gulf coal fired generating units that will ultimately be included within this project title for future recovery periods.

Q. Mr. Vick, please describe the new Water Quality program that Gulf seeks to recover.

A. The next new project for 2005, the Smith Closed Loop Cooling Project (PE 1638), is an extension of Gulf's water conservation and consumptive use efficiency program at Plant Smith adopted pursuant to the Company's consumptive water use permit. As has been discussed in previous testimony, Plant Smith's consumptive use permit, issued by the NWFWMD, required Plant Smith to develop a plan for water conservation and efficiency measures by July 31, 2003. During plan development, Gulf Power reviewed several water conservation measures to determine the most cost effective compliance alternatives. The first such project was

the previously approved Shield Water Project. For the 2005 capital cost projection, we have renamed the line item category that contains the Shield Water Conservation Project to Smith Water Conservation and have expanded this category to include the new Closed Loop Cooling System at Plant Smith.

Currently, groundwater is used to cool steam cycle water samples. Plant Smith estimates that the proposed closed loop cooling system for the laboratory sampling system would reduce water consumption by approximately 80,000 gallons per day. The NWFWMD has agreed that this is a valid project to pursue for continued implementation of the water conservation effort. The projected capital expenditure for the project is $120,000. Correspondence from the NWFWMD regarding the Smith Closed Loop Cooling Project is included in my Exhibit, JOV-1.

Q. Mr. Vick, please identify any other expansions of previously approved capital projects for the projection period that are required for environmental compliance.

A. There are two other previously approved capital projects that will be expanded. These include the Plant Daniel Ash Management project and the Continuous Emission Monitoring (CEMs) replacements at Plant Crist, Plant Scholz and Plant Daniel.

On January 12, 1994 the FPSC granted ECRC approval for the recovery of the Daniel Ash Management Project in Order Number PSC-94-0044-

FOF-EI. The original project included the installation of a dry ash transport system, lining of the existing bottom of the ash pond, closure and capping of the existing fly ash pond, and the expansion of the landfill area.

Plant Daniel plans to construct a vertical expansion of the existing previously approved ash storage facility because the existing monofill is approaching the end of its storage capacity. In preparation for the completion and closure of the expansion area, Daniel must begin developing and permitting a new on-site ash storage facility. Expenditures for the existing monofill expansion and the engineering and design for the new storage facility are expected to be approximately $850,000.

During the 2005 recovery period the CEMs project includes the replacement of flow monitors at Plant Scholz (PE 1324 and PE 1325), the CEMs shelter for Units 4 and 5 at Plant Crist (PE 1217), and the installation of the Plant Daniel gas analyzers on Unit1 (PE 1570). The gas analyzer and flow monitors are necessary in order to provide the accuracy and reliability needed to measure SO2, NOx, CO2, opacity, and gas flow and further maintain compliance with the CAAA requirements. All of the existing analyzers and monitors are approaching the end of their useful life, and will be retired upon replacement.

Q. Please compare the Environmental Operation and Maintenance (O & M) activities listed on Schedule 2P of Ms. Davis' Exhibit to the O & M activities approved for cost recovery in past ECRC proceedings.

A. All of the O & M activities listed on Schedule 2P have been approved for recovery through the ECRC in past proceedings, except for the Cooling Water Intake Program that is included in the General Water Category and the Turtle Protective Lighting Program.

Q. Mr. Vick, please describe the regulation requiring the addition of the Cooling Water Intake Program that is included in the General Water Quality item (Line Item 1.6).

A. On July 9, 2004 the Environmental Protection Agency (EPA) published final regulations under the Clean Water Act Section 316(b) for cooling water intake structures at Phase II electric generating facilities. Phase II facilities include existing electric generating facilities with a cooling water intake structure that are designed to withdraw fifty million gallons per day (MGD) or more of water from waters of the United States for cooling purposes. The rule establishes national performance standards for reducing the impingement and entrainment of fish and shellfish and provides that EPA "shall require that the design, construction, and capacity of cooling water intake structures reflect the best technology available for minimizing adverse environmental impact" at existing Phase II facilities. Gulf's facilities that are subject to the rule include Plants Crist, Smith, and Scholz.

Gulf Power will be required to submit a Proposal for Information Collection (PIC) to the FDEP outlining Gulf's biological sampling and data collection plan. The biological and operational information collected will be summarized and reported to FDEP during the next National Pollution Discharge Elimination System (NPDES) permit cycle. An implementation strategy will also be developed during the next NPDES permit cycle. The projected expenses for the Cooling Water Intake Program during the 2005 recovery period total $234,602.

Q. Please describe the O & M activities included in the Air Quality category.

A. There are six O & M activities included in this category:

The first activity, Sulfur (Line Item 1.1) reflects operational expenses associated with the burning of low sulfur coal. This item refers to the flue gas sulfur injection system needed to improve the collection efficiency of the Plant Crist Unit 7 electrostatic precipitator for certain coals. Based on the expected coal supply for Plant Crist during 2005 there are no expenses projected for this activity during the 2005 recovery period.

The second activity listed on Schedule 2P, Air Emission Fees (Line Item 1.2), represents the expenses projected for the annual fees required by the CAAA that are payable to the FDEP. The expenses projected for the recovery period total $779,874.

The third activity included in the Air Quality category, Title V (Line Item 1.3), represents projected expenses associated with the implementation

of the Title V permits. The total estimated expense for the Title V Program during 2005 is $87,232.

The fourth activity listed on Schedule 2P, Asbestos Fees (Line Item 1.4), consists of the fees required to be paid to the FDEP for the purpose of funding the State's asbestos abatement program. The expenses projected for the recovery period total $2,000.

The fifth activity listed on Schedule 2P, Emission Monitoring (Line Item 1.5), reflects an ongoing O & M expense associated with the Continuous Emission Monitoring equipment (CEM) as required by the CAAA. These expenses are incurred in response to EPA's requirements that the Company perform Quality Assurance/Quality Control (QA/QC) testing for the CEMs, including Relative Accuracy Test Audits (RATAs) and Linearity Tests. Other activities within this category include the testing, development, and implementation of new periodic monitoring requirements associated with the Clean Air Act Amendment. The expenses expected to occur during the 2005 recovery period for these activities total $534,249.

Q. Please identify any Air Quality O & M categories that have not previously been included in ECRC projection filings?

A. The sixth Air Quality activity, FDEP NOx Reduction Agreement (Line Item 1.20), is being included in the ECRC projection for the first time. This line item currently includes the O & M cost associated with the SCR project

that was included as part of the August 28, 2002 agreement with FDEP discussed earlier in my testimony with regard to capital projects. This O&M line item includes the cost of anhydrous ammonia, air monitoring, and general operation and maintenance expenses related to the activities undertaken in connection with the Agreement. Gulf was granted approval for recovery of the costs incurred to complete these activities in Docket No. 020943-EI through proposed agency action order PSC-02-1396-PAA EI, issued October 9, 2002. The projected expenses for the 2005 recovery period total $757,241.

Q. What O & M activities are included in Water Quality?

A. The first activity, General Water Quality (Line Item 1.6), identified in Schedule 2P, includes Soil Contamination Studies, Dechlorination, Groundwater Monitoring Plan Revisions, Surface Water Studies, and the Cooling Water Intake Program. The expenses expected to be incurred during the projection period for this Line Item total $600,140. The projected increased activity in this line item is related to the addition of the previously discussed Cooling Water Intake Program ($234,602) and the new arsenic groundwater standard ($50,000).

The FDEP has published a new groundwater standard for arsenic, which lowers the standard from 0.05 mg/L to 0.01 mg/L, effective January 1, 2005. Historical groundwater monitoring data from Plants Crist and 2006. Scholz indicate that these facilities may not be able to comply with the lower standard. Gulf is proposing to conduct a groundwater study

during 2005 at Plant Scholz and Plant Crist due to projected groundwater impacts exceeding the new arsenic standard. The study is necessary to determine the nature of the potential impacts to groundwater and to identify solutions necessary to resolve this issue. Gulf expects to incur future capital and O&M costs to ensure continued compliance with the groundwater standards.

The second activity listed in the Water Quality Category, Groundwater Contamination Investigation (Line Item 1.7), was previously approved for environmental cost recovery in Docket No. 930613-EI. This activity is projected to incur incremental expenses totaling $927,218.

Line Item 1.8, State NPDES Administration, was previously approved for recovery in the ECRC and reflects expenses associated with annual fees for Gulf's three generating facilities in Florida. These expenses are expected to be $34,500 during the projected recovery period.

Finally, Line Item 1.9, Lead and Copper Rule, was also previously approved for ECRC recovery and reflects sampling, analytical and chemical costs related to lead and copper in drinking water. These expenses are expected to total $12,000 during the 2005 projection period.

Q. What activities are included in the Environmental Affairs Administration Category?

A. Only one O & M activity is included in this category on Schedule 2P (Line Item 1.10) of Ms. Davis's exhibit. This line item refers to the Company's Environmental Audit/Assessment function. This program is an on-going compliance activity previously approved for ECRC recovery and is expected to incur $8,800 of expenses during the 2005 recovery period.

Q. What O & M activities are included in the General Solid and Hazardous Waste category?

A. Only one program, General Solid and Hazardous Waste (Line Item 1.11) is included in the Solid and Hazardous Waste category on Schedule 2P. This activity involves the proper identification, handling, storage, transportation and disposal of solid and hazardous wastes as required by federal and state regulations. This program is a previously approved program that is projected to incur incremental expenses totaling $214,773.

Q. In addition to the four major O & M categories listed above, are there any other O & M activities which have been approved for recovery?

A. Yes. There are five other O & M categories which have been approved in past proceedings. They are Above Ground Storage Tanks, Low NOx, Ash Pond Diversion Curtains, Mercury Emissions, Sodium Injection System, and Gulf Coast Ozone Study (GCOS).

Q. What O & M activities are included in the Above Ground Storage Tanks category?

A. Only one program, Above Ground Storage Tanks (Line Item 1.12), is included in this category. This program is expected to incur $106,200 of expenses during 2005.

Q. Please identify the activities included in the Low NOx (Line Item 1.13) category.

A. This project included the purchase and installation of Low NOx burner tips at Plant Crist on Units 4 and 5 and at Plant Smith on Unit 1 to comply with Phase II requirements of the CAAA. There are no expenses projected for this project during the 2005 recovery period.

Q. Please identify the activities included in the Ash Pond Diversion Curtains category, (Line Item 1.14).

A. This project refers to the installation of additional flow diversion curtains in the Plant Crist ash pond to effectively increase ash pond water retention time. Increased retention time allows for the sedimention and treatment process to be more effective in reducing levels of suspended particulate matter. There are no expenses projected for this project during the 2005 recovery period.

Q. Please identify the activity included in the Mercury Emissions (Line Item 1.15) category.

A. This program, approved by the Commission for recovery in Docket No. 981973-EI, pertains to requirements for Gulf to periodically analyze coal shipments for mercury and chlorine content. The EPA mandated that shipments of coal would be analyzed for mercury and chlorine only during 1999. No further notices of continued sampling requirements of coal shipments beyond 1999 have been issued by EPA, therefore no expenses have been planned for this activity in 2005.

Q. What activity is included in the Sodium Injection (Line Item 1.16) category?

A. The Sodium Injection System, approved in Docket Number No. 990667-EI for inclusion in the ECRC, involves sodium injection to the coal supply at Plant Smith to enhance precipitator efficiencies when burning certain low sulfur coals at the plant. Based on coals expected to be used at Plant Smith during 2005, there are no projected expenses for the 2005 recovery period related to this activity.

Q. Please identify the activity included in the Gulf Coast Ozone Study (Line Item 1.17) category.

A. This program, approved for recovery in Docket No. 991834-EI for inclusion in the ECRC, involves a joint modeling analysis between Gulf Power and the State of Florida to provide an improved basis for assessment of eight-hour ozone air quality for Northwest Florida. The

project models past episodes of high ozone levels in Northwest Florida and will be used in developing potential control strategies for both stationary and mobile sources to provide a comprehensive evaluation of the area as required under Title I of the Clean Air Act. Gulf Power anticipates that the GCOS project will be completed by 2006. Expenses for this project during the 2005 recovery period are anticipated to be $20,000.

Q. Please identify the activity included in the SPCC Substation Project (Line Item 1.18).

A. The SPCC project included the expenses associated with installing additional containment and/or diversionary structures at substations to reduce the risk of a potential mineral oil discharge to navigable waters of the United States or adjoining shorelines. There are no projected expenses for this project during 2005.

Q. Please describe the activity included in the SO2 allowances (Line Item 1.21).

A. This program includes expenses for SO2 allowances for Gulf's plants. The expenses are offset by gains realized from the sale of SO2 allowances.

Q. Are there any additional O&M projects or programs that are included in the projection filing that have not been previously approved by the Commission?

A. Yes, Gulf has a new category for 2005 entitled Turtle Protective Lighting Program (Line Item 1.20). The Turtle Protective Lighting Program is necessary to meet the requirements of Title 50 Code of Federal Regulations Part 117, Endangered and Threatened Wildlife and Plants, and local County ordinances regulating artifical lighting in threatened and endangered sea turtle nesting areas. Gulf Power is requesting recovery of the cost to install protective sea turtle lighting in these nesting areas. The projected expenses for this project during the 2005 recovery period total $13,146. Gulf proposes these costs be allocated on a demand basis. A copy of the Destin and Bay County ordinances regulating artifical lighting along the coastal areas is included in my Exhibit, JOV-1. Correspondence from the U.S. Fish and Wildlife Service regarding required changes to street lighting in the Panama City Beach area is also included in my Exhibit, JOV-1.

Q. Are there any other project or program expenses resulting from either new or more stringent environmental regulations which may significantly increase O & M costs for the recovery period January 2005 through December 2005?

A. Gulf Power is not aware of any at this time.

Q. Mr. Vick, does this conclude your testimony?

A. Yes.

Exhibit to the Testimony of James O. Vick

Exhibit (JOV-1)_____

Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Colleen M. Castille
Secretary

August 10, 2004

James O. Vick
Director, Environmental Affairs
Gulf Power Company
One Energy Place
Pensacola, Florida 32520-0328

Re: Crist Electric Generating Plant
FDEP/Gulf Power Ozone Reduction Agreement

Dear Mr. Vick:

Thank you for your letter dated April 30, 2004, outlining Gulf Power Company's ("Gulf Power") plans and draft schedule for implementing air pollution controls on Unit 6 of the Crist facility pursuant to the Ozone Reduction Agreement ("Agreement") entered between the Florida Department of Environmental Protection and Gulf Power. Based upon your letter, as well as conversations in late May of this year during a site visit, it is my understanding that Gulf Power will be installing and operating selective non-catalytic reduction ("SNCR") technology, as well as a low NO_X burner/overfire air system, on Unit 6 by no later than May 1, 2006. In the event additional NO_X controls are required on Units 4 and/or 5 to achieve the NO_X emission limit of 0.2 lb/mmBtu as outlined in the Agreement, it is my understanding SNCR would be installed on Units 4 and 5 in the fall of 2005 and spring of 2006, respectively.

After reviewing the Agreement, FDEP concurs that the SNCR, low NO_X burner/overfire air technologies for Unit 6, and Units 4 and 5 if necessary, meet the intent of the Agreement and are prudent for purposes of (a) ensuring that the Crist facility supports the Escambia/Santa Rosa/Bay County area's compliance with the 8-hour ozone ambient air quality standard and (b) authorizing related cost recovery pursuant to Section 366.8255(1)(d), Florida Statutes, as amended by the Florida Legislature in its 2002 session and signed into law by the Governor of the State of Florida.

We expect these upgrades to contribute significantly to improved air quality in the Pensacola region. Because of Gulf Power's commitment to ozone reduction, Pensacola is on a fast track for important air quality improvements, which is tremendous news for the environment, economy, and community of Northwest Florida. Please contact me at (850) 488-0114 if you have any questions regarding this matter.

Sincerely,

Michael G. Cooke, Director
Division of Air Resource Management

MGC/bja

Northwest Florida Water Management District

81 Water Management Drive, Havana, Florida 32333-4712
(U.S. Highway 90, 10 miles west of Tallahassee)

(850) 539-5999 • (Suncom) 771-2080 • (Fax) 539-4380

Douglas E. Barr
Executive Director

April 1, 2002

Gulf Power, Inc.
Lansing Smith Electric Generating Plant
One Energy Place
Pensacola, FL 32520-0328

NOTICE OF AGENCY ACTION
Individual Water Use Permit No. 19850073
Consumptive Use Permit Application No. I 06108

Dear Permitee:

Your Individual Water Use Permit was approved by the Governing Board of the Northwest Florida Water Management District at a public hearing on March 28, 2002. The permit issued is subject to the terms and conditions set forth in the enclosed permit document. As you are legally responsible for compliance with the conditions of the permit please read the document thoroughly. Pay close attention to any condition(s) of the permit which require the one-time or periodic submittal of information to the District.

If the property where the withdrawal facility is located changes ownership, the permit must be transferred. A permit transfer request must be made on NWFWMD Form A2-F and approved by the Executive Director. If the permit is not transferred you may remain responsible for compliance with the conditions of the permit.

If you have any questions concerning the permit document or if the District can be of any other service, please let us know.

Sincerely,

F. E. Recio, Division Director
Division of Resource Regulation

FER/tp
Enclosure
cc: Richard M. Markey

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NORTHWEST FLORIDA WATER MANAGEMENT DISTRICT
INDIVIDUAL WATER USE PERMIT
(NWFWMD Form No. A2-E)

Permit granted to:

Gulf Power Company
Lansing Smith
Electric Generating Plant
One Energy Place
Pensacola, Florida 32520-0328
(Legal Name and Address)

Permit No.: 19850073 Modification

Date Permit Granted: March 28, 2002

Permit Expires On: March 29, 2007

Source Classification: Floridan Aquifer, North Bay, Recycled Water

Use Classification: Power Generation Public Supply

County: Bay Area: B

Location: Section ____ 1/4 Section ____

Application No.: I06108

Township 2 South Range 15 West

Terms and standard conditions of this Permit are as follows:

1. That all statements in the application and in supporting data are true and accurate and based upon the best information available, and that all conditions set forth herein will be complied with. If any of the statements in the application and in the supporting data are found to be untrue and inaccurate, or if the Permittee fails to comply with all of the conditions set forth herein, then this Permit shall be revoked as provided by Chapter 373.243, Florida Statutes.

2. This Permit is predicated upon the assertion by the Permittee that the use of water applied for and granted is and continues to be a reasonable and beneficial use as defined in Section 373.019(4), Florida Statutes, is and continues to be consistent with the public interest, and will not interfere with any legal use of water existing on the date this Permit is granted.

3. This Permit is conditioned on the Permittee having obtained or obtaining all other necessary permit(s) to construct, operate and certify withdrawal facilities and the operation of water system.

4. This Permit is issued to the Permittee contingent upon continued ownership, lease or other present control of property rights in underlying, overlying, or adjacent lands. This Permit may be assigned to a subsequent owner as provided by Chapter 40A-2.351, Florida Administrative Code, and the acceptance by the transferee of all terms and conditions of the Permit.

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5. This Permit authorizes the Permittee to make a combined average annual withdrawal of **275,200,000*** gallons of water per day, a maximum combined withdrawal of **276,880,000**** gallons during a single day, and a combined monthly withdrawal of **8,531,200,000***** gallons. Withdrawals for the individual facilities are authorized as shown in the table below in paragraph six. However, the total combined amount of water withdrawn by all facilities listed in paragraph six shall not exceed the amounts identified above.

6. Individual Withdrawal Facility Authorization

WITHDRAWAL POINT ID NO.	LOCATION SEC,TWN,RNG	GALLONS/DAY AVERAGE	GALLONS/DAY MAXIMUM
LSGP #1 (AAA6592)	Sec. 36, T2S, R15W		720,000
LSGP #2 (AAA6591)	Sec. 36, T2S, R15W		720,000
LSGP #3 (AAA6590)	Sec. 36, T2S, R15W		720,000
LSGP #4 (AAD3491)	Sec. 25, T2S, R15W		720,000
LSGP #5 (To Be Assigned)	Sec. 19, T2S, R15W		720,000
LGSP 1A/NB	Sec. 36, T2S, R15W		68,256,000
LGSP 1B/NB	Sec. 36, T2S, R15W		68,256,000
LGSP 2A/NB	Sec. 36, T2S, R15W		68,256,000
LGSP 2B/NB	Sec. 36, T2S, R15W		68,256,000

* 1,200,000 Ground Water – 274,000,000 Surface Water
** 2,880,000 Ground Water – 274,000,000 Surface Water
*** 37,200,000 Ground Water – 8,494,000,000 Surface Water

7. The use of the permitted water withdrawal is restricted to the use classification set forth by the Permit. Any change in the use of said water shall require a modification of this Permit.

8. 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.

9. 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.

10. The District reserves the right, at a future date, to require the Permittee to submit pumpage records for any or all withdrawal point(s) covered by this Permit.

05

11. Permittee 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 permit application. The District reserves the right to curtail permitted withdrawal rates if the withdrawal causes significant adverse impact on the resource and legal uses of water, or adjacent land use, which existed at the time of permit application.

12. Permittee 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.

13. The District, pursuant to Section 373.042, Florida Statutes, 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 Permittee to limit withdrawal from these water sources at times when water levels are below established levels.

14. Nothing in this Permit should 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, Florida Statutes, or to formulate and implement a plan during periods of water shortage pursuant to Section 373.246, Florida Statutes, or to declare Water Resource Caution Areas pursuant to Chapters 40A-2.801, and 62-40.41, Florida Administrative Code

(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 permit.

15. The Permittee 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, Florida Administrative Code.

16. Any Specific Permit Condition(s) enumerated in Attachment A are herein made a part of this Permit.

Authorized Signature
Northwest Florida Water Management District

06

ATTACHMENT
Gulf Power Company
Lansing Smith Electric Generating Plant

Individual Water Use Permit No. 19850073
Individual Water Use Application No. I06108

1. The Permittee shall record the data required on the Water Use Summary Reporting Form, NWFWMD A2-I, and submit copies to the District by January 31 of each year. The withdrawals shall be reported separately by source (ground water, surface, and recycled). The ground and surface water withdrawals shall also be provided as an aggregate. The first report is due by January 31, 2003.

2. 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 of 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 District for assistance in designing the method and specifics of data collection. The water level data shall be referenced to mean sea level.

   The next water use, water quality and water level reports are due by January 31, 2003.

3. The Permittee shall continue to return approximately 95% or more of the surface water withdrawn.

4. The Permittee, at the time of construction, shall install an in-line totaling flow meter at the well head of proposed well LSGP #5. The Permittee shall install and maintain in working order in-line totaling flow meters on all other ground water wells.

5. The Permittee shall not exceed a withdrawal rate of 2,000 gallons per minute from the Floridan aquifer. The Permittee, at the time that LGSP #5 is operational, shall implement the pumping scenario identified in the ground water modeling analysis whereby LGSP #4 and #5 are operated as primary wells and LGSP #1 and #2 are operated as backup and emergency supply wells.

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6. The Permittee shall, at the time LGSP #5 becomes operational, abandon and properly plug LGSP #3 with cement grout from bottom of well to land surface in accordance with Chapter 40A-3.531, F.A.C., Abandoned Well Plugging.

7. The Permittee shall develop a plan for the implementation of water conservation and efficiency measures at the plant. The findings of the plan, along with a timetable for implementation, shall be submitted to the District no later than July 31, 2003.

8. The Permittee shall mitigate impacts attributable to the authorized withdrawal that interfere with users of water in the vicinity of Gulf Power's wells. The Permittee shall report the occurrence of any such impacts to the District and shall identify the mitigation action undertaken to address the impacts.

9. The Permittee, when corresponding with the District (e.g., pumping reports), shall reference its wells by the Florida Unique Identification Number.

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2.12.4

Northwest Florida Water Management District

Division of Resource Regulation
152 Water Management Drive, Havana, Florida 32333-4711
(U.S. Highway 90, 10 miles west of Tallahassee)
(850) 539-5999 • (Suncom) 793-5999 • (Fax) 539-2777

Douglas E. Barr
Executive Director

August 18, 2004

Mr. Mike Markey
Gulf Power Company
One Energy Place
Pensacola, Florida 32520-0328

RE: Individual Water Use Permit No. 19850073
Specific Condition No. 7

Dear Mr. Markey:

The District understands that Gulf Power has implemented a water conservation plan in accordance with Specific Condition No. 7 of their consumptive use permit. In a 2004 submittal to the District, Gulf Power proposed the replacement of the laboratory sample cooling system with a closed loop chiller. The plant estimates that installation of the new system could reduce water use by approximately 80,000 gallons per day. This being the case, the District agrees that this would be a valid project to pursue for continued implementation of the required water conservation effort.

Sincerely,

Angela Chelette, Chief
Bureau of Ground Water Regulation

09

IN REPLY REFER TO:

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Field Office
1601 Balboa Avenue
Panama City, FL 32405-3721

Tel: (850) 769-0552
Fax: (850) 763-2177

August 25, 2004

Ms. Sondra Perry
Gulf Power (faxed)
Panama City, Florida

Dear Ms. Perry:

Per our conversation this morning I have listed below the Gulf Power leased lighting that needs shielding along Panama City Beach in Bay County, Florida. The shielding will help keep the beaches dark for sea turtle nesting and hatching. I have also indicated what streetlights need to be shielded immediately and those that can be done in the next 60 days.

Streetlight Location
Needs shielding ASAP
14th Street and Front Beach Road (near 20107 FBR)
Can be shielded in the next 60 days
Nautilus Street and Front Beach Road (between 13623 and 14401 FRB, Bid-a-Wee Beach)
Anemone Street and Front Beach Road (between 13623 and 14401 FRB, Bid-a-Wee Beach)
Dolphin Street and Front Beach Road (between 13623 and 14401 FRB, Bid-a-Wee Beach)
Tarpon Street and Front Beach Road (between 13623 and 14401 FRB, Bid-a-Wee Beach)
Argonaut Street and Front Beach Road (between 13623 and 14401 FRB, Bid-a-Wee Beach)
Petrel Street and Front Beach Road (between 13623 and 14401 FRB, Bid-a-Wee Beach)
Albatross Street and Front Beach Road (between 13623 and 14401 FRB, Bid-a-Wee Beach)
Crane Street and Front Beach Road (between 13623 and 14401 FRB, Bid-a-Wee Beach)
Streetlight between 20011 and 20015 Front Beach Road
Streetlight at 22025 Front Beach Road
Streetlight at 5025 Surf Drive
Streetlights between 10716 and 10519 Front Beach Road

Please call me at ext. 229 if you have any questions regarding the list.

Sincerely yours,

Lorna Patrick
Fish and Wildlife Biologist

ORDINANCE NO. 03-40-LC

AN ORDINANCE OF THE CITY OF DESTIN, FLORIDA, RELATING TO THE REGULATION OF OUTDOOR LIGHTING TO PROTECT MARINE TURTLES NESTING IN DESTIN, FLORIDA; PROVIDING FOR AUTHORITY; PROVIDING FOR FINDINGS OF FACT; PROVIDING FOR AMENDMENTS TO ARTICLE 3, SECTION 3.00.00 DEFINITIONS; PROVIDING FOR AMENDMENTS TO THE LAND DEVELOPMENT CODE, ARTICLE 7, BY CREATING SECTION 7.17.00. OUTDOOR LIGHTING STANDARDS; PROVIDING FOR THE CREATION OF ARTICLE 7, SECTION 7.17.01. OUTDOOR LIGHTING STANDARDS FOR THE MARINE TURTLE CONSERVATION ZONE; PROVIDING FOR THE CREATION OF ARTICLE 7, SECTION 7.17.01.A. PURPOSE AND INTENT; PROVIDING FOR THE CREATION OF ARTICLE 7, SECTION 7.17.01.B. STANDARDS FOR NEW CONSTRUCTION ACTIVITIES; PROVIDING FOR THE CREATION OF ARTICLE 7, SECTION 7.17.01.C. STANDARDS FOR EXISTING LIGHTING; PROVIDING FOR THE CREATION OF ARTICLE 7, SECTION 7.17.01.D. PUBLIC AWARENESS; PROVIDING FOR THE CREATION OF ARTICLE 7, SECTION 7.17.02 ENFORCEMENT AND PENALTIES; PROVIDING FOR INCORPORATION INTO THE LAND DEVELOPMENT CODE; PROVIDING FOR INTERPRETATION; PROVIDING FOR CONFLICTING PROVISIONS; PROVIDING FOR SEVERABILITY; AND PROVIDING FOR AN EFFECTIVE DATE.

NOW, THEREFORE, BE IT ORDAINED BY THE CITY OF DESTIN, FLORIDA AS FOLLOWS:

SECTION 1. AUTHORITY. The authority for the enactment of this Ordinance is Section 1.01(h) of the City Charter and Section 166.021, Florida Statutes.

SECTION 2: FINDINGS OF FACT.

WHEREAS, Destin, Florida is a coastal community with an extensive shoreline on the Gulf of Mexico; and

WHEREAS, Destin's beaches are a marine turtle nesting location; and

WHEREAS, Destin's shoreline is developed or will be developed with numerous structures on the shoreline in close proximity to marine turtle nests; and

WHEREAS, it is the City of Destin's intent to protect marine turtles to the fullest possible extent; and

WHEREAS, artificial lighting has been proven to adversely affect marine turtles; and

WHEREAS, it is Destin City Council's intention to ensure protection of marine turtles by regulating lighting in the Marine Turtle Conservation Zone and incorporating these regulations into the Destin Land Development Code; and

WHEREAS, a public hearing has been conducted after due public notice by the Destin Local Planning Agency and its recommendations reported to the City Council; and

WHEREAS, a public hearing has been conducted by the City Council after due public notice; and

WHEREAS, the City Council has determined that this ordinance is consistent with the adopted comprehensive plan and is in the best interests of the City and its citizens.

NOTE: *Language in sections 3 and 4 of this ordinance that is ~~struck through~~ is language proposed to be deleted, underlined language is language proposed to be added, language that is not ~~struck through~~ or underlined is not to be changed, and * * * represents sections of the Land Development Code that have been skipped and remain unchanged.*

SECTION 3: DEFINITIONS AMENDMENTS.

Article 3, Section 3.00.00, *Definitions*, of the City of Destin's Land Development Code is hereby amended to add the following:

3.00.00. Definitions.

The purpose of this article is to provide definitions applicable to the land development code. The following terms supplement those contained in the glossary of the foundation document:

* * *

Artificial light or *artificial lighting*: Means the light emanating from any human made device.

* * *

Beach: Means the area of white, sandy beach between the vegetation line and the waters of the Gulf of Mexico.

* * *

Bug: Type light means any yellow colored like bulb that is marketed as being specifically treated so as to reduce the attraction of bugs to the light.

* * *

Coastal construction activities: Means any work or development in the conservation zone

* * *

Coastal construction control line (CCCL): ~~The most landward line for jurisdiction established by the department of natural resources (DNR)~~ Means the portion of the coastal construction line established pursuant to the provisions of section 161.053 Florida Statues that lies with the City of Destin.

* * *

Cumulative illuminated: Means illuminated by numerous artificial light sources that as a group illuminate any portion of the beach.

* * *

Directly illuminated (Beach Lighting): Means illuminated as a result of glowing element(s), lamp(s), globe(s), or reflector(s), of any artificial light source, which is visible to an observer on the beach.

* * *

Dune: Means a mound or ridge of loose sediments, usually sand-sized, lying landward of the beach and deposited by any natural or artificial mechanism.

* * *

Frontal dune: Means the first natural or man-made mound or bluff of sand which is located landward of the beach and which has sufficient vegetation, height, continuity, and configuration to offer protective value.

* * *

Ground-level barrier: Means any vegetation, natural feature or artificial structure arising from the ground, which prevents beachfront lighting from shining directly onto the beach-dune system.

* * *

Hatchling: Means any species of marine turtle, within or outside of a nest, and that has recently hatched from an egg.

* * *

Indirectly illuminated (Beach Lighting): Means illuminated as a result of the glowing element(s), lamp(s), globe(s), or reflector(s), of an artificial light source that is not visible to an observer on the beach.

* * *

Low-pressure sodium luminaire (LPS): Means an electric discharge lamp containing sodium, neon, and argon, that when illuminated appears amber-yellow.

* * *

Marine turtle: Means any marine-dwelling reptile of the families Cheloniidae or Dermochelyidae found in Florida waters or using the beach as nesting habitat, including the species: Caretta caretta (loggerhead); Chelonia mydas (green); Dermachelys coriacea (leatherback); Eretmochelys imbricata (hawksbill); and Lepidochelys Kempi (Kemp's ridley). For purposes of this Code, marine turtles are synonymous with sea turtles.

* * *

Marine turtle conservation zone: Includes all land abutting the "beach" within 300 feet of the Mean High Water Line starting at the tip of the south side of the entrance of the Destin Harbor south and then eastward to the Walton County line.

* * *

Nest: Means an area where marine turtle eggs have been naturally deposited or subsequently relocated.

* * *

Nesting season: Means the period from May 1 through October 31 of each year as defined by F.A.C. 62b-55.002(17) for all counties.

* * *

Nighttime: Means the locally effective time period between sunset and sunrise.

* * *

Pole lighting: Means a light fixture set on a base or pole, which raises the source of light higher than twenty four (24) inches off the ground.

* * *

Shield (Beach Lighting): Means a non-reflective covering, canopy or other such device fitted over and extended below a light source preventing light from illuminating the beach.

* * *

Tinted glass: Means any glass treated to achieve an industry-approved, inside-to-outside light transmittance value of 45% or less. Such transmittance is limited to the visible spectrum (400 to 700 nanometers) and is measured as the percentage of light that is transmitted through the glass.

SECTION 4: AMENDING LAND DEVELOPMENT CODE ARTICLE 7, BY CREATING SECTION 7.17.00 OUTDOOR LIGHTING STANDARDS.

Article 7, *Land Use, Type, Density, Intensity, Zoning and Regulatory Controls*, of the City of Destin's Land Development Code is hereby amended by creating Section 7.17.00., *Outdoor Lighting Standards*, as follows:

7.17.00. Outdoor lighting standards.

7.17.01. *Outdoor lighting standards for the marine turtle conservation zone.*

A. *Purpose and Intent.* This ordinance is intended to protect marine turtle hatchlings from the adverse effects of artificial lighting to provide overall improvement in nesting habitat degraded by light pollution, and to increase successful nesting activities and production of hatchlings on the beaches located within the Marine Turtle Conservation Zone within the City Limits of the City of Destin. The provisions of section 7.17.00 apply during the nesting season as defined in Article 3, Section 3.00.00.

B. *Standards for new construction activities.* In order to provide the highest level of protection for nesting marine turtles and their hatchlings, the following standards for artificial light sources on all new coastal construction seaward of the Coastal Construction Control Line (CCCL) in the Marine Turtle Conservation Zone are adopted:

1. Exterior artificial lighting fixtures shall be designed for and positioned so that:

   a. The point source of light or any reflective surface of the light fixture is not directly visible from the beach;
   b. Areas seaward of the frontal dune are not directly or indirectly illuminated; and
   c. Areas seaward of the frontal dune are not cumulatively illuminated.

2. Exterior artificial light fixtures within direct line-of-sight of the beach will be permitted only if designed and installed completely shielded down light only fixtures or recessed fixtures having low wattage (i.e., 50 watts or less), "bug" type bulbs and non-reflective interior surface. Other fixtures that have appropriate shields, louvers, or cutoff features may also be used if they are in compliance with subsection (1) (a), (b), and (c) above.

3. Floodlights, up lights or spotlights that are directly visible from the beach, or which indirectly or cumulatively illuminate the beach are prohibited.

4. No lighting other than approved turtle friendly lights installed appropriately shall be allowed on dune walkovers.

5. Exterior lights used expressly for safety or security purposes must comply with subsections (1) (a) and (b) above and shall be limited to the minimum number of configurations required to achieve their functional role(s). The use of motion detector switches that keep lights off except when approached and that switch lights on for the minimum duration possible are required.

6. Only low intensity lighting shall be used in parking areas within line-of-sight of the beach. Such lighting shall be:

   a. Set on a base which raises source of light no higher than 48 inches off the ground; and

   b. Positioned or shielded so that the light is cast downward and the source of light or any reflective surface of light feature is not visible from the beach and does not directly or indirectly illuminate the beach.

7. Parking area lighting shall be shielded from the beach through the use of ground-level barriers. Ground-level barriers must not interfere with marine turtle nesting or hatchling emergence, or cause short or long-term damage to the beach/dune system.

8. Tinted glass shall be installed on all windows and glass doors on single or multi-story structures within line-of-sight of the beach.

9. Use of appropriately shielded low-pressure sodium vapor lamps and fixtures shall be required for high-intensity lighting applications such as lighting parking areas and roadways providing security, and similar applications.

10. Temporary lighting of construction sites during the marine turtle nesting season shall be restricted to the minimal amount necessary and shall incorporate all of the standards of this section.

11. Before granting any building permit, the Community Development Department shall determine that all proposed development complies in all respects with the standards imposed in this section.

12. Utility lease lighting shall comply to all respects with the standards imposed in this ordinance, with the exception that appropriated shielded, full-cut off-feature high-pressure sodium lights may be installed for utility lease lighting until the utility provider offers functional low pressure sodium lighting.

C. *Standards for existing lighting.* In order to provide the highest level of protection for nesting marine turtles and their hatchlings, the following

standards for existing artificial light sources, including utility leased lighting, within the Marine Turtle Conservation Zone shall be brought into compliance by May 1, 2005:

1. Existing artificial light fixtures shall be repositioned, modified, disconnected, or removed so that:

   a. The point source of light or any reflected surface of the light fixture is not directly visible from the beach,

   b. Areas seaward of the frontal dune are not directly or indirectly illuminated; and

   c. Areas seaward of the frontal dune are not cumulatively illuminated.

2. Existing artificial light fixtures that are replaced for any reason shall comply with Sub-section B, Standards for New Construction Activities and the following measures shall be taken:

   a. Reposition fixtures so that the point source of light or any reflected surface of the light fixture is no longer visible from the beach;

   b. Replace fixtures having an exposed light source with fixtures containing recessed light sources or shields;

   c. Replace traditional light bulbs with yellow "bug" type bulbs not exceeding 50 watts;

   d. Replace non-directional fixtures with directional fixtures that point down and away from the beach;

   e. Replace fixtures having transparent or translucent coverings with fixtures having opaque shields covering an arc of at least 180 degrees and extending an appropriate distance below the bottom edge of the fixture on the seaward sides so that the light source of any reflective surface of the light fixture is not visible from the beach;

   f. Replace pole lamps with low profile, low-level luminaries so that the light source of any reflective surface of the light fixture is not visible from the beach;

   g. Replace incandescent, fluorescent, and high-intensity lighting with the lowest wattage low-pressure sodium-vapor lighting possible for the specific application;

   h. Plant or improve vegetation buffers between the light source and beach to screen light from the beach;

c. Permanently remove or permanently disable any fixture that cannot be brought into compliance with the provisions of these standards.

3. The following measures shall be taken as applicable to reduce or eliminate the negative effects of interior light emanating from doors and windows within line-of-sight of the beach:

a. Apply window tint or film that meets the standards tinted glass;

b. Rearrange lamps and other movable fixtures away from windows;

c. Use window treatment (i.e., blind, curtains) to shield interior light from the beach; and

d. Turn off unnecessary lights.

D. *Public awareness.* Any person submitting an application for coastal construction activities within a Marine Turtle Conservation Zone shall be informed of the existence of and the requirements concerning artificial lighting and marine turtle protection by the City of Destin's Community Development Department.

7.17.07 *Enforcement and penalties.* Any alleged violation of section 7.17.00 or any of its sub-sections shall be processed in accordance with the procedures set forth in the City's Code of Ordinances, Chapter 14, Article III Code Enforcement Board.

SECTION 5: INCORPORATION INTO LAND DEVELOPMENT CODE.

This ordinance shall be incorporated into the City of Destin's Land Development Code and any section or paragraph number or letter and any heading may be changed or modified as necessary to effectuate the foregoing.

SECTION 6. INTERPRETATION

The provisions of this ordinance shall be liberally construed in order to effectively carry out its purpose. Where any provision of this ordinance refers to or incorporates another provision, ordinance, statute, rule, regulation, policy, official publication, or other party, it refers to the most current version, incorporating any amendments thereto or rescinded station thereof.

SECTION 7: CONFLICTING PROVISIONS

Special Acts of the Florida Legislature applicable to the incorporated area of the City of Destin, City Ordinances and City Resolutions, or parts, thereof, in conflict with the provisions of this ordinance are hereby superceded by this ordinance to the extent of such conflict.

SECTION 8: SEVERABILITY.

Each separate provision of this ordinance is deemed independent of all other provisions herein so that if any portion or provision of this ordinance is declared invalid, all other provisions thereof shall remain valid and enforceable.

SECTION 9: EFFECTIVE DATE.

This ordinance shall become effective upon its adoption by the City Council and signature by the Mayor.

ADOPTED THIS 17th DAY OF FEBRUARY 2004

By: _____
Craig H. Barker, Mayor

ATTEST:

SEAL

_____
Dana B. S. Williams, City Clerk

The form and legal sufficiency of the foregoing has been reviewed and approved by the Land Use Attorney.

_____
Scott Shirley, City Land Use Attorney

First Reading: 2/2/04
Second Reading: 2/17/04

ORDINANCE NO. 02-07

AN ORDINANCE OF BAY COUNTY, FLORIDA, ESTABLISHING A SEA TURTLE CONSERVATION ZONE AND LIGHTING ORDINANCE IN THE WESTERN BEACHES AREA OF UNINCORPORATED BAY COUNTY; PROVIDING FOR A PURPOSE AND APPLICABILITY; PROVIDING FOR DEFINITIONS; PROVIDING STANDARDS FOR NEW CONSTRUCTION ACTIVITIES; PROVIDING STANDARDS FOR EXISTING LIGHTING; PROVIDING FOR ENFORCEMENT AND PENALTIES; PROVIDING FOR INTERPRETATION; PROVIDING FOR SEVERABILITY AND PROVIDING FOR AN EFFECTIVE DATE.

WHEREAS, Bay County, Florida, is a coastal community with an extensive shoreline on the Gulf of Mexico; and,

WHEREAS, Bay County's extensive shoreline is good habitat for sea turtle nesting and many sea turtles make their nests on Bay County's beaches; and,

WHEREAS, Bay County's shoreline is developed or will be developed with numerous structures on the shoreline in close proximity to sea turtle nests; and,

WHEREAS, structures which are built on or near the shoreline usually include some source of artificial lighting; and,

WHEREAS, scientific studies have determined that certain types of artificial lighting have a detrimental effect on nesting sea turtles and their hatchlings due to the disorientation that occurs when the sea turtle mistakes the artificial lighting as the reflection of the moon light from the waters of the Gulf of Mexico; and,

WHEREAS, the Bay County Board of County Commissioners (the "Board") is desirous of implementing this lighting ordinance with the intention that the detrimental effects of artificial lighting on sea turtles will be relieved; and,

WHEREAS, the Board desires to test the effects of this ordinance first in the limited area of the

westernmost beaches area of unincorporated Bay County with the intention to expand it to other areas of Bay County; provided that, the expected positive effects of the ordinance are realized;

NOW THEREFORE, BE IT ORDAINED by the Board of County Commissioners of Bay County, Florida:

Section 1. PURPOSE AND APPLICABILITY

(1) This purpose and intent of this ordinance is to protect threatened and endangered sea turtles along the Gulf of Mexico beaches in the western unincorporated area of Bay County from the westernmost municipal boundary of the City of Panama City Beach west to the Bay/Walton County boundary. This ordinance is intended to protect nesting sea turtles and sea turtle hatchlings from the adverse effects of artificial lighting, provide overall improvement in nesting habitat degraded by light, and to increase successful nesting activity and production of hatchlings on the beaches.

(2) The provisions of this ordinance apply during the nesting season. Note that "nesting season" is defined in Section 2.

Section 2. DEFINITIONS

(1) *Artificial light* or *artificial lighting* means the light emanating from a manmade point source (see *Point source of light*, below).

(2) *Beach* means the zone of unconsolidated material that extends landward from the mean low-water line to the place where there is a marked change in material or physiographic form, or to the line of permanent vegetation, usually the effective limit of storm waves.

(3) *Bug type light* means any yellow colored incandescent light bulb that is specifically treated in such a way so as to reduce the attraction of bugs to the light, but does not include bug killing devices.

(4) *Construction* means the carrying out of any building, clearing, filling, excavating or substantial improvement in the size or use of any structure or the appearance of any land. When appropriate to the context, the term "construction" refers to the act of constructing or the result of construction, and includes remodeling or reconstruction of existing buildings or structures.

(5) *Cumulatively illuminated* means illuminated by numerous artificial light sources that as a group illuminate any portion of the beach.

(6) *Directly illuminated* means illuminated by one or more point sources of light directly visible to an observer on the beach.

(7) *Dune* means a mound or ridge of loose sediments, usually sand-sized, lying landward of the beach and deposited by any natural or artificial mechanism.

(8) *Frontal dune* means the first natural or human-made mound or bluff of sand which is located landward of the beach and which has sufficient vegetation, height, continuity, and configuration to offer protective value.

(9) *Ground-level barrier* means any vegetation, natural feature or artificial structure rising from the ground which prevents beachfront lighting from shining directly onto the beach-dune system.

(10) *Hatchling* means any individual of a species of sea turtle, within or outside of a nest, that has recently hatched from an egg.

(11) *Indirectly illuminated* means illuminated by one or more point sources of light not directly visible to an observer on the beach.

(12) *Low-pressure sodium light* means an electric discharge lamp containing sodium, neon, and argon, that when illuminated appears amber-yellow.

(13) *Nest* means an area where sea turtle eggs have been naturally deposited or subsequently relocated by an authorized permittee of the Florida Department of Environmental Protection.

(14) *Nesting season* means the period from sunset until sunrise during May 1 through October 31 of each year.

(15) *Person* means individuals, firms, associations, joint ventures, partnerships, estates, trusts, syndicates, fiduciaries, corporations, and all other groups or combinations.

(16) *Point source of light* means a manmade source emanating light, including, but not limited to: incandescent, tungsten-iodine (quartz), mercury vapor, fluorescent, metal halide, neon, halogen, high-pressure sodium, low-pressure sodium light sources, as well as torches, camp and bonfires.

(17) *Pole lighting* means a light fixture set on a base or pole which raises the source of light higher than twenty four (24) inches off the ground.

(18) *Sea turtle* means any marine-dwelling reptile of the families Cheloniidae or Dermochelyidae found in Florida waters or using the beach as nesting habitat, including the species: *Caretta caretta* (loggerhead), *Chelonia mydas* (green), *Dermochelys coriacea* (leatherback), *Eretmochelys imbricata* (hawksbill), and *Lepidochelys kempi* (Kemp's ridley). For purposes of this rule, sea turtle is synonymous with marine turtle.

(19) *Sea Turtle Conservation Zone* means the beach area seaward of the Coastal Construction Control Line in the unincorporated area of Bay County from the westernmost municipal boundary of the City of Panama City Beach west to the Bay/Walton County boundary.

(20) *Shield* means a non-reflective covering, canopy or other such device fitted over and extended below a light source preventing light from illuminating the beach.

(21) *Turtle glass* means any tinted glass treated to achieve an industry-approved, inside-to-outside light transmittance value of 45% or less. Such transmittance is limited to the visible spectrum (400 to 700 nanometers) and is measured as the percentage of light that is transmitted through the glass.

Section 3. STANDARDS FOR NEW CONSTRUCTION ACTIVITIES

In order to provide the highest level of protection for nesting sea turtles and their hatchlings, the following standards for artificial light sources on all new coastal construction in the Sea Turtle Conservation Zone are adopted:

(1) Exterior artificial light fixtures shall be designed and positioned so that:

(a) The point source of light or any reflective surfaces of the light fixture is not directly visible from the beach;

(b) Areas seaward of the frontal dune are not directly or indirectly illuminated; and

(c) Areas seaward of the frontal dune are not cumulatively illuminated.

(2) Exterior artificial light fixtures within direct line-of-sight of the beach will be permitted only

if designed and installed as follows:

(a) Completely shielded downlight only fixtures or recessed fixtures having bug lights not exceeding 50 watts and non-reflective interior surfaces are used. Other fixtures that have appropriate shields, louvers, or cutoff features may also be used if they are in compliance with subsection (1)(a), (b) and (c) above; and

(b) All fixtures are mounted as low in elevation as possible through the use of low-mounted wall fixtures, low bollards, and ground-level fixtures.

(3) Floodlights, uplights or spotlights that are directly visible from the beach, or which indirectly or cumulatively illuminate the beach, are prohibited.

(4) Exterior lights used expressly for safety or security purposes must comply with subsection 2(a) and shall be limited to the minimum number and configuration required to achieve their functional role(s). The use of motion detector switches that keep lights off except when approached and that switch lights on for the minimum duration possible are required.

(5) Only low intensity lighting shall be used in parking areas within line-of-sight of the beach. Such lighting shall be:

(a) Set on a base which raises the source of light no higher than 48 inches off the ground; and

(b) Positioned or shielded so that the light is cast downward and the source of light or any reflective surface of the light fixture is not visible from the beach and does not directly or indirectly illuminate the beach.

(6) Parking area lighting, and roadway lighting shall be shielded from the beach through the use of ground-level barriers. Ground-level barriers must not interfere with sea turtle nesting or hatchling emergence, or cause short or long term damage to the beach/dune system.

(7) Turtle glass shall be installed on all windows and glass doors of single or multi-story structures within line-of-sight of the beach.

(8) Use of appropriately shielded low-pressure sodium lights and fixtures will be encouraged for high-intensity lighting applications such as lighting parking areas and roadways, providing security, and similar applications.

(9) Temporary lighting of construction sites during the sea turtle nesting season shall be restricted to the minimal amount necessary and shall incorporate all of the standards of this section.

(10) Before granting any building permit, the Bay County Builders Services shall determine that all proposed construction complies in all respects with the standards imposed in this section.

(11) Utility leased lighting shall comply in all respects with the standards imposed in this

ordinance.

(12) No lighting shall be allowed on dune walkovers.

Section 4. STANDARDS FOR EXISTING LIGHTING

In order to provide the highest level of protection for nesting sea turtles and their hatchlings, the following standards for existing artificial light sources, including utility leased lighting, within the Sea Turtle Conservation Zone shall be brought into compliance by May 1, 2003:

(1) Existing artificial light fixtures shall be repositioned, modified, disconnected, or removed so that:

(a) The point source of light or any reflective surface of the light fixture is not directly visible from the beach;

(b) Areas seaward of the frontal dune are not directly or indirectly illuminated; and

(c) Areas seaward of the frontal dune are not cumulatively illuminated.

(2) Existing artificial light fixtures that are replaced for any reason shall comply with Section 3, Standards for New Construction Activities and the following measures shall be taken:

(a) Reposition fixtures so that the point source of light or any reflective surface of the light fixture is no longer visible from the beach;

(b) Replace fixtures having an exposed light source with fixtures containing recessed light sources or shields;

(c) Replace traditional light bulbs with bug lights not exceeding 50 watts;

(d) Replace non-directional fixtures with directional fixtures that point down and away from the beach;

(e) Replace fixtures having transparent or translucent coverings with fixtures having opaque shields covering an arc of at least 180 degrees and extending an appropriate distance below the bottom edge of the fixture on the seaward side so that the light source or any reflective surface of the light fixture is not visible from the beach;

(f) Replace pole lamps with low-profile, low-level luminaries so that the light source or any reflective surface of the light fixture is not visible from the beach;

(g) Replace incandescent, fluorescent, and high intensity lighting with the lowest wattage low-pressure sodium lighting possible for the specific application;

(h) Plant or improve vegetation buffers between the light source and the beach to screen light from the beach.

(i) Permaneatly remove or permanently disable any fixture which cannot be brought into compliance with the provisions of these standards:

(3) One or more of these voluntary measures as applicable, shall be encouraged to reduce or eliminate the negative effects of interior light emanating from doors and windows within line-of-sight of the beach:

(a) Apply window tint or film that meets the standards of turtle glass;

(b) Rearrange lamps and other moveable fixtures away from windows;

(c) Use window treatments (i.e., blinds, curtains) to shield interior lights from the beach; and

(d) Turn off unnecessary lights.

Section 5. ENFORCEMENT AND PENALTIES

The enforcement and penalties of this ordinance, shall be the same manner as provided in Section 125.69 Florida Statutes, as may be amended from time to time. Each day of any such violation shall constitute a separate and distinct offense. In addition to the Bay County Code Enforcement Office, the Department of Environmental Protection and the Florida Fish and Wildlife Conservation Commission (Marine Patrol) shall have authority to enforce the ordinance.

The Board, by Resolution, will require property owners that remit Tourist Development Council Bed Taxes within the Sea Turtle Conservation Zone to post a sign on their property informing renters of this ordinance and the provisions within it.

Section 6. INTERPRETATION

The provisions of this ordinance shall be construed in order to effectively carry out its purpose. Where any provision of this ordinance refers to or incorporates another provision, ordinance, statute, rule, regulation, policy, official publication, or other authority, it refers to the most current version, incorporating any amendments thereto or redesignation thereof.

Section 7. SEVERABILITY

If any section, subsection, sentence, clause or provision of this ordinance is held invalid by a court of competent jurisdiction, the remainder of the ordinance shall not be affected.

Section 8. EFFECTIVE DATE

This ordinance shall take effect as provided by law.

DONE AND ADOPTED this 21st day of May, 2002.

BOARD OF COUNTY COMMISSIONERS
OF BAY COUNTY, FLORIDA

CHAIRMAN

SEAL

ATTEST:

CLERK OF THE COURT
by: Tammy Deputy Clerk

Approved as to correctness of form:

Burke & Blue, P.A.
Attorneys for Bay County

AFFIDAVIT

STATE OF FLORIDA)
)
COUNTY OF ESCAMBIA)

Docket No. 040007-EI

Before me the undersigned authority, personally appeared James O. Vick, who being first duly sworn, deposes, and says that he is the Director of Environmental Affairs of Gulf Power Company, a Maine corporation, and that the foregoing is true and correct to the best of his knowledge, information, and belief. He is personally known to me.

James O. Vick
Director of Environmental Affairs

Sworn to and subscribed before me this 2nd day of September, 2004.

Notary Public, State of Florida at Large

Commission Number:

Commission Expires: