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COMMISSION
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May 6, 2011

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Mr. Phillip Ellis
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399

Dear Mr. Ellis:

Enclosed is a hard copy of Gulf Power Company's response to Staff's Second Supplemental Data Request dated March 3, 2011 for the 2011 Ten Year Site Plan. Also enclosed is a CD containing the electronic versions of the tables and appendices as requested.

Sincerely,

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

nbm

Enclosures

cc: Beggs & Lane
Jeffrey A. Stone, Esq.
Florida Public Service Commission
Charles Murphy, Office of General Counsel
Ann Cole, Office of the Commission Clerk

[CLK Note: No CD
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1. Please provide a description of the costs associated with each existing and planned utility-owned renewable generation resource. Please also include each renewable resource which provides fuel to conventional facilities (co-firing), if applicable, with estimates of its capacity and energy contributions. As part of this response, please include a description of the unit's generator type, fuel type, installed cost (nominal \$), fixed operations & maintenance (O&M) cost, variable O&M cost, fuel cost (if applicable), and the annual levelized cost of electricity. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

ANSWER:

Gulf owns one renewable facility, the Perdido Landfill Gas-to-Energy Facility, and incurs all related capital, O&M and fuel costs. Also, Gulf has no renewable resources that provide fuel to conventional facilities.

Utility-Owned Renewable Resources

Facility Name	Unit Type	Fuel Type	Installed Cost	Fixed O&M Cost	Variable O&M Cost	Fuel Cost	Levelized Cost of Electricity ⁽¹⁾
-	-	-	\$/kW	\$/kW-yr	\$/Mwh	\$/Mwh	\$/Mwh
Perdido	IC	LFG	1808	86.46	28.03	34.29	100.26

(1) Includes capital revenue requirements, fixed and variable O&M, and fuel.

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2. Please provide a description of the costs associated with each existing and planned renewable purchased power agreement. Please also include each renewable resource which provides fuel to conventional facilities (co-firing), if applicable, with estimates of its energy payments. As part of this response, please include a description of the unit's generator type, fuel type, annual capacity payments, annual energy payments, total annual payments to the facility, and the resulting levelized cost of electricity from the facility. Please complete the table below and provide an electronic copy in Excel (.xls file format) and hard copy.

ANSWER:

Gulf has one renewable purchased power agreement for the purchase of as-available energy from the Bay County Waste-to-Energy Facility. Gulf's total nominal payments are shown in the table below. Also, Gulf is not aware of any renewable resources in areas served by Gulf that provide fuel to conventional facilities.

Renewable Purchased Power Agreements

Facility Name	Unit Type	Fuel Type	Capacity Payments	Energy Payments ⁽¹⁾	Total Payments ⁽¹⁾	Levelized Cost of Electricity
-	-	-	\$	\$	\$	\$/Mwh
Bay County Solid Waste	ST	MSW	0	13,265,829	13,265,829	74

(1) Estimated nominal payments over the remaining contract term ending 7/22/14

3. Please provide, on a system-wide basis, the hourly system load for the period January 1, 2010, through December 31, 2010. Please complete the table below (expanding as necessary) and provide an electronic copy in Excel (.xls file format).

ANSWER:

Please refer to the enclosed disk containing an electronic copy of the hourly system load for the period January 1, 2010, through December 31, 2010.

4. Please identify which climate station from the list below would most accurately represent the company's service territory, as a whole, for the purposes of determining a typical meteorological year. Alternatively, provide a data set for a typical meteorological year in appropriate electronic format (TMY2, TMY3, or EPW). The stations below are drawn from the National Solar Radiation Data Base. Other publically available databases can be utilized, so long as an electronic copy is provided.

ANSWER:

USAF # 722223, Pensacola Regional Airport

5. Please provide, if available, the hourly output, for the period January 1, 2010, through December 31, 2010, for an existing solar photovoltaic system in the company's service territory. As part of the data response, please provide the array's DC rating, AC rating, Array Orientation (degrees from south), and whether it is a fixed or tracking array. If a fixed array, please provide the degree of tilt, specifying if the tilt is seasonally changed (if so, when, and by how much). If a tracking array, specify whether it is a one or two axis tracking system. Please also provide general information about the installation, including panel height, whether shading issues exist, or other notable factors which may influence the array's output. Please complete the table below (expanding as necessary) and provide an electronic copy in Excel (.xls file format).

ANSWER:

Solar Photovoltaic System Information <i>For System Located in Area Served by Gulf</i>		
DC Rating:	2.10 kW	
AC Rating:	1.79 kW	<i>(0.85* DC Rating)</i>
Array Type:	Fixed Tilt	
Array Orientation:	0°	<i>(Degrees from South)</i>
Array Tilt:	11°	
Panel Height:	37 feet	
Shading:	No Shading Issues	

Please refer to the enclosed disk containing an electronic copy of hourly generation output data collected from the solar photovoltaic system referenced in the above table.