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GULF POWER
A SOUTHERN COMPANY

April 1, 2016

Ms. Carlotta Stauffer, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0870

Re: 2016 Ten Year Site Plan

Dear Ms. Stauffer:

Attached for electronic filing is Gulf Power Company's 2016 Ten Year Site Plan filed pursuant to FPSC Rule No. 25-22.071.

Sincerely,

Robert L. McGee, Jr.
Regulatory and Pricing Manager

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Attachments

cc: Florida Public Service Commission
Carlotta Stauffer, Office of the Commission Clerk (5 copies)
Beggs & Lane
Jeffrey A. Stone, Esq.

TEN YEAR SITE PLAN
2016-2025

FOR ELECTRIC GENERATING FACILITIES
AND
ASSOCIATED TRANSMISSION LINES

APRIL 2016

GULF POWER

A SOUTHERN COMPANY

GULF POWER COMPANY
TEN YEAR SITE PLAN

FOR ELECTRIC GENERATING FACILITIES
AND
ASSOCIATED TRANSMISSION LINES

Submitted To The
State of Florida
Public Service Commission

APRIL 1, 2016

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GULF POWER COMPANY

TEN-YEAR SITE PLAN

Executive Summary

The Gulf Power Company (Gulf) 2016 Ten-Year Site Plan is filed with the Florida Public Service Commission (FPSC) in accordance with the requirements of Chapter 186.801, Florida Statutes, as revised by the Legislature in 1995. The revision designated the FPSC as the state agency responsible for the oversight of the Ten-Year Site Plan (TYSP). Gulf's 2016 TYSP is being filed in compliance with FPSC Rule No. 25-22.071, F.A.C.

Included in Gulf's 2016 TYSP is the documentation of assumptions used for Gulf's load forecast, fuel forecasts, planning processes, existing resources, and future capacity needs and resources. The resource planning process utilized by Gulf to determine its future capacity needs is coordinated within the Southern electric system Integrated Resource Planning (SES IRP) process. Gulf participates in the IRP process along with other Southern electric system retail operating companies, Alabama Power Company, Georgia Power Company, and Mississippi Power Company, (collectively, the "Southern electric system" or SES), and it shares in a number of benefits gained from planning in conjunction with a large system such as the SES. These benefits include the economic sharing of SES generating reserves, the ability to install large, efficient generating units, and reduced requirements for operating reserves.

The capacity resource needs set forth in the SES IRP are driven by the demand forecast that includes the load reduction effects of projected demand-

side measures that are embedded into the forecast prior to entering the generation mix process. The generation mix process uses Strategist® (which utilizes PROVIEW™) to screen the available technologies in order to produce a listing of preferred capacity resources from which to select the most cost-effective plan for the system. The resulting SES resource needs are then allocated among the operating companies based on reserve requirements, and each company then determines the resources that will best meet its capacity and reliability needs.

During the 2016 TYSP cycle, Gulf's 885 MW Power Purchase Agreement (PPA) with Shell Energy North America (Shell PPA) will provide firm capacity and energy to serve customers from an existing gas-fired combined cycle generating unit located in Alabama. This PPA resource will serve customers until it expires on May 24, 2023.

In addition to the Shell PPA, Gulf has executed energy purchase agreements with providers of renewable energy generated by municipal solid waste (MSW), solar, and wind facilities. The MSW agreement was approved by the FPSC on December 19, 2014 and provides for the purchase of energy for a three year period ending July 2017 from the existing waste-to-energy facility located in Bay County, Florida. On April 22, 2015, the FPSC approved Gulf's solar energy purchase agreements that provide energy produced by three solar facilities located in Northwest Florida. These agreements each have a term of 25 years. The FPSC approved a wind energy purchase agreement between Gulf and Morgan Stanley Capital Group on May 13, 2015. This agreement has a term

of 20 years. The above mentioned renewable energy purchase agreements are discussed in more detail in the Renewable Resources section of this TYSP.

Gulf has completed the transmission and generation facility projects discussed in Gulf's 2015 TYSP which will enable the Company's coal-fired generating units to comply with emission standards required by the Environmental Protection Agency's (EPA) Mercury and Air Toxics Standards (MATS) rule. Future environmental regulations, including the EPA's Clean Power Plan, continue to be evaluated in order to better understand the potential operational impacts to its remaining generation fleet.

Gulf's diverse fleet of existing coal, natural gas, oil, and renewable generating units that remain in-service following retirement of the coal-fired units at Plant Smith and Plant Scholz, combined with the capacity from the Shell PPA and the wind energy purchase agreement, will enable Gulf to meet its reserve margin requirements until June 2023 of the 2016 TYSP cycle. Although Gulf's peak demand and energy loads for the 2016-2025 planning cycle are forecasted to be slightly lower than the loads discussed in Gulf's 2015 TYSP, the current analysis continues to indicate that combustion turbine capacity (CT) will be needed as early as 2023 in order to provide adequate capacity reserves on its system. Therefore, the schedules in Gulf's 2016 TYSP reflect the addition of CT capacity in June 2023 following the expiration of the 885 MW Shell PPA in May 2023.

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CHAPTER I

DESCRIPTION OF EXISTING FACILITIES

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DESCRIPTION OF EXISTING FACILITIES

Gulf owns and operates generating facilities at five sites in Northwest Florida (Plants Crist, Smith, Scholz, Pea Ridge, and Perdido). Gulf also owns a 50% undivided ownership interest in Unit 1 and Unit 2 at Mississippi Power Company's Daniel Electric Generating Facility. Gulf has a 25% undivided ownership share in Unit 3 and a proportional undivided ownership interest in the associated common facilities at the Scherer Electric Generating Facility located near Macon, Georgia. Gulf's ownership interest in Plant Scherer Unit 3 was acquired as part of its resource planning for meeting the long term needs of its retail customers. With the encouragement and support of the FPSC, Gulf has historically committed its ownership interest in Plant Scherer to off-system sales through a succession of several wholesale power sales contracts since Unit 3 began commercial operation in 1987. As of December 31, 2015, Gulf's fleet of generating units consists of nine fossil steam units, one combined cycle unit, four combustion turbines, and two internal combustion engine units fueled by landfill gas. Schedule 1 shows 924 MW of steam generation located at the Crist Electric Generating Facility near Pensacola, Florida. The Lansing Smith Electric Generating Facility near Panama City, Florida, includes 96 MW of steam generation(1), 556 MW (summer rating) of combined cycle generation, and 32 MW (summer rating) of combustion turbine facilities.

(1) One coal-fired unit on minimum, one coal-fired unit off-line per Florida Department of Environmental Protection's Mercury and Air Toxics Standards deadline extension.

The coal-fired Units 1 and 2 at Plant Smith retired in late March 2016. Gulf's Pea Ridge Facility, in Pace, Florida, consists of three combustion turbines associated with an existing customer's cogeneration facility, which adds 12 MW (summer rating) to Gulf's existing capacity. The Perdido Landfill Gas-to-Energy Facility in Escambia County, Florida provides 3 MW from two internal combustion generating units.

Including Gulf's ownership interest in the Daniel fossil steam Units 1 and 2 and the Scherer fossil steam Unit 3, Schedule 1, as of December 31, 2015, shows Gulf's total net summer generating capability to be 2,348 MW and its total net winter generating capability to be 2,387 MW.

The existing Gulf system in Northwest Florida, including major generating plants, substations, and transmission lines, are shown on the system map on page 8 of this TYSP. Specific data related to Gulf's existing generating facilities is presented on Schedule 1 of this TYSP.

GULF POWER COMPANY

SCHEDULE 1

EXISTING GENERATING FACILITIES
AS OF DECEMBER 31, 2015

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Fuel		Fuel Transp		Alt. Fuel	Com'l In-Service	Exptd Retrmnt	Gen Max Nameplate	Net Capability	
Plant Name	Unit No.	Location	Unit Type	Pri	Alt	Pri	Alt	Days Use	Mo/Yr	Mo/Yr	KW	Summer MW	Winter MW
Crist		Escambia County 25/1N/30W									1,135,250	924.0	924.0
	4		FS	C	NG	WA	PL	1	07/59	12/24	93,750	75.0	75.0
	5		FS	C	NG	WA	PL	1	06/61	12/26	93,750	75.0	75.0
	6		FS	C	NG	WA	PL	1	05/70	12/35	369,750	299.0	299.0
	7		FS	C	--	--	--	--	08/73	12/38	578,000	475.0	475.0
Lansing Smith [A]		Bay County 36/2S/15W									1,001,500	684.0	720.0
	1		FS	C	--	WA	--	--	06/65	03/16	149,600	96.0	96.0
	2		FS	C	--	WA	--	--	06/67	03/16	190,400	0.0	0.0
	3		CC	NG	--	PL	--	--	04/02	12/42	619,650	556.0	584.0
	A		CT	LO	--	TK	--	--	05/71	12/27	41,850	32.0	40.0
Daniel [B]		Jackson County, MS 42/5S/6W									548,250	510.0	510.0
	1		FS	C	HO	RR	TK	--	09/77	12/42	274,125	255.0	255.0
	2		FS	C	HO	RR	TK	--	06/81	12/46	274,125	255.0	255.0
Scherer [B]	3	Monroe County, GA	FS	C	--	RR	--	--	01/87	12/52	222,750	215.0	215.0
Pea Ridge		Santa Rosa County 15/1N/29W									14,250	12.0	15.0
	1		CT	NG	--	PL	--	--	05/98	12/18	4,750	4.0	5.0
	2		CT	NG	--	PL	--	--	05/98	12/18	4,750	4.0	5.0
	3		CT	NG	--	PL	--	--	05/98	12/18	4,750	4.0	5.0

SCHEDULE 1
EXISTING GENERATING FACILITIES
AS OF DECEMBER 31, 2015

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
				Fuel		Fuel Transp		Alt. Fuel	Com'l In-	Exptd	Gen Max	Net Capability	
Plant Name	Unit No.	Location	Unit Type	Pri	Alt	Pri	Alt	Days Use	Service Mo/Yr	Retrmnt Mo/Yr	Nameplate KW	Summer MW	Winter MW
Perdido LFG		Escambia County									3,200.0	3.0	3.0
	1		IC	LFG	--	PL	--	--	10/10	12/29	1,600.0	1.5	1.5
	2		IC	LFG	--	PL	--	--	10/10	12/29	1,600.0	1.5	1.5
											Total System	2,348	2,387

Abbreviations:

Type and Fuel

FS - Fossil Steam
CT - Combustion Turbine
CC - Combined Cycle
NG - Natural Gas
C - Coal
LO - Light Oil
HO - Heavy Oil
IC - Internal Combustion
LFG - Landfill Gas

LO - Light Oil
HO - Heavy Oil
IC - Internal Combustion
LFG - Landfill Gas

Fuel Transportation

PL - Pipeline
WA - Water
TK - Truck
RR - Railroad

NOTES:

(A) One Smith coal-fired unit derated to minimum load and one coal-fired unit off-line per Florida Department of Environmental Protection MATS Deadline Extension.

(B) Unit capabilities shown represent Gulf's portion of Daniel Units 1 & 2 (50%) and Scherer Unit 3 (25%)

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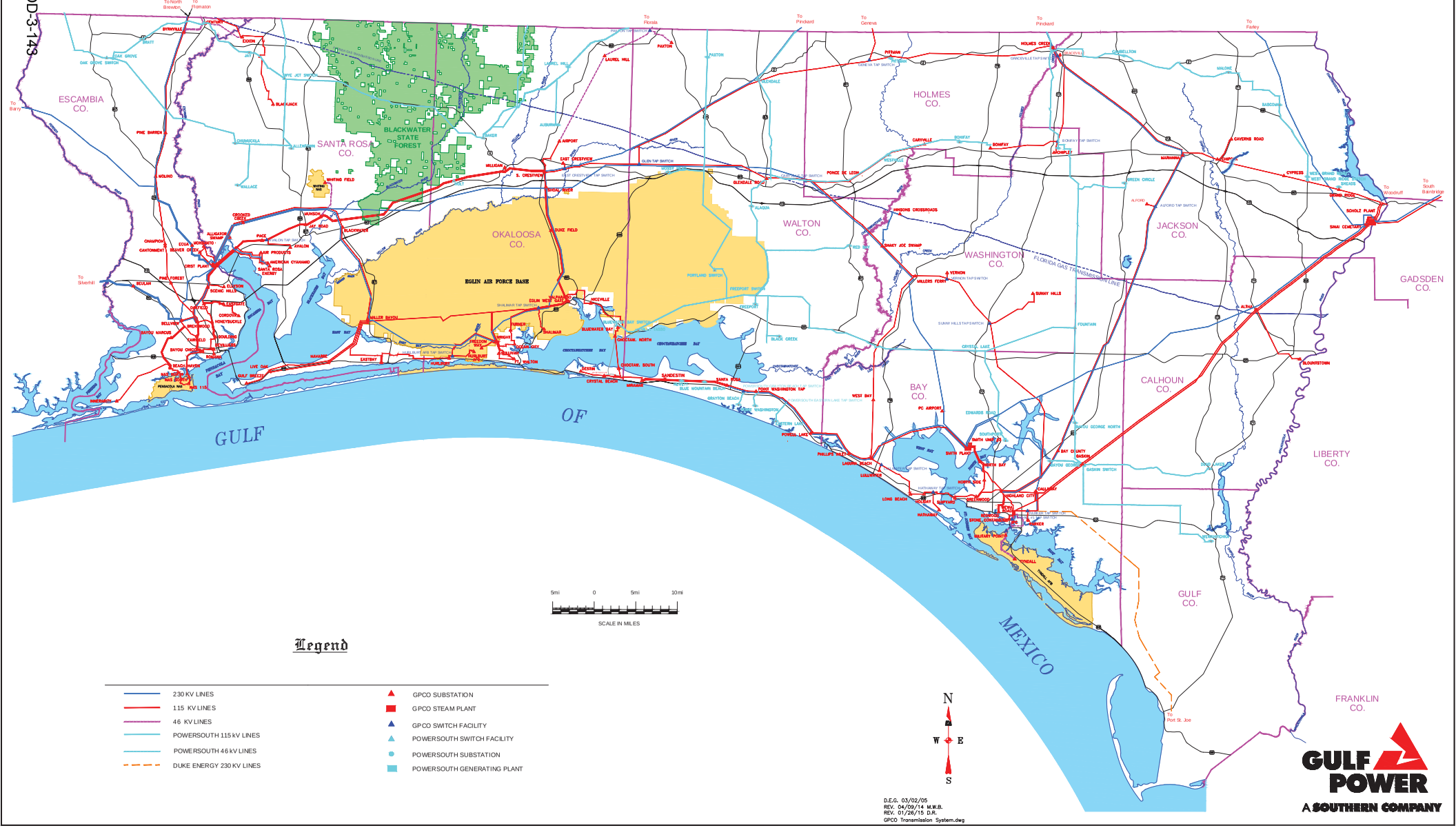
GULF POWER COMPANY TRANSMISSION & SUBSTATION SYSTEM



D.E.G. 03/02/05
REV. 04/09/14 M.W.B.
REV. 01/26/15 D.R.
GPCO Transmission System.dwg

GULF POWER
A SOUTHERN COMPANY

CHAPTER II

FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION

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GULF POWER COMPANY
FORECASTING METHODOLOGY
OVERVIEW

Gulf views the forecasting effort as a dynamic process requiring ongoing activities to yield results that allow informed planning and decision-making. The total forecast is an integration of different techniques and methodologies, each applied to the task for which it is best suited. Many of the techniques take advantage of the extensive data made available through the Company's customer service efforts. These efforts are predicated on the philosophy of knowing and understanding the needs, perceptions, and motivations of its customers while actively promoting wise and efficient uses of energy to satisfy customer needs. Gulf has been a pacesetter in the energy efficiency market since the development and implementation of the GoodCents Home program in the mid-70s. This program brought high levels of customer awareness, understanding, and expectations of energy efficient construction standards to Northwest Florida.

The Forecasting section of Gulf's Accounting, Finance, and Treasury Department is responsible for preparing forecasts of customers, energy, and peak demand. A description of the assumptions and methods used in the development of these forecasts follows.

I. ASSUMPTIONS

A. ECONOMIC OUTLOOK

The economic assumptions used to develop Gulf's forecast of customers, energy sales, and peak demand for this Ten Year Site Plan were derived from the October 2015 economic projection provided by Moody's Analytics.

The October 2015 economic projection assumed the Federal Reserve would begin normalizing monetary policy in December of 2015. U.S. real gross domestic product (GDP) was expected to grow 3.2% in both 2016 and 2017. The U.S. economy was projected to reach full employment by mid-2016 with wage growth following.

B. NORTHWEST FLORIDA ECONOMIC OUTLOOK

Gulf's retail service area is generally represented by three Metropolitan Statistical Areas (MSAs): Pensacola-Ferry Pass-Brent, Crestview-Fort Walton Beach-Destin, and Panama City. Moody's projected that the economy in Northwest Florida would continue to improve and return to a healthy state by early 2016 and sustain normal growth throughout the forecast period.

Northwest Florida's real disposable personal income increased 2.7% in 2014 and 2.6% in 2015, compared to an average annual growth rate of 0.4% for the period 2010 to 2013. Real disposable personal income was projected to grow over the next five years at an average annual rate of 2.7%. The region's employment bottomed out in late 2009 to early 2010, but since then has shown positive year over year growth with an increase of 2.0% in 2015. Employment

was projected to grow at an average annual rate of 1.5% over the next five years. Single family housing starts have shown modest improvements since 2009 and were projected to return to more normal levels by 2016. Population growth in Northwest Florida was 1.5% in 2015 and was projected to maintain an average annual rate of 1.7% for the next five years. Over the long-run, Northwest Florida was projected to see steady growth throughout the forecast period.

Gulf's projections incorporate electric price assumptions derived from the 2015 Gulf Power Official Long-Range Forecast. Fuel price projections for gas and oil are developed by Southern Company Services (SCS) Fuel Services staff with input from outside consultants. The following tables provide a 5-year summary of assumptions associated with Gulf's forecast:

TABLE 1

NATIONAL ECONOMIC SUMMARY
AVERAGE ANNUAL GROWTH RATES
(2015-2020)

GDP Growth	2.5 %
Interest Rate (30 Year AAA Bonds)	4.5 %
Inflation	2.6 %

TABLE 2

AREA DEMOGRAPHIC SUMMARY
(2015-2020)

Population Gain	81,700
Average Annual Net Migration	3,400
Average Annual Population Growth	1.7 %
Average Annual Labor Force Growth	2.0 %

II. CUSTOMER FORECAST

A. RESIDENTIAL, COMMERCIAL, AND INDUSTRIAL CUSTOMER FORECAST

The short-term forecasts of residential, commercial, and industrial non-lighting customers were based primarily on projections prepared by Gulf's field marketing managers with the assistance of their field employees. These projections reflect recent historical trends in net customer gains and anticipated effects of changes in the local economy, the real estate market, planned construction projects, and factors affecting population such as military personnel movements and changes in local industrial production.

After collecting initial input from field managers, forecasters reviewed the one-year-out customer projections by rate schedule, checking for consistency with historical trends, consistency with economic outlooks, and consistency across the three MSAs in Gulf's service area. Forecasters then supplied field managers with draft second-year-out customer projections based on number of households from Moody's Analytics, which the field managers reviewed and modified as necessary.

Gulf utilized growth in the number of households to extend the short-term residential forecast of customers to the long-term horizon. Beyond the short-term period, commercial customers were forecast as a function of residential customers, reflecting the growth of commercial services to meet the needs of new residents. Long-term projections of industrial customers are based on input from Gulf's field marketing managers.

B. OUTDOOR LIGHTING CUSTOMER FORECAST

Gulf projected the number of outdoor lighting customers by rate and class based on historical growth rates and input from Gulf's lighting team to gain insight into future trends.

III. ENERGY SALES FORECAST

A. RESIDENTIAL SALES FORECAST

The short-term non-lighting residential energy sales forecast was developed utilizing a multiple linear regression analysis. Monthly use per customer per billing day was estimated based on historical data, normal weather, real disposable income per household, national energy efficiency standards, and price of electricity. The model output was then multiplied by the projected number of non-lighting residential customers and projected billing days by month to expand to the total residential class.

Long-term projections of residential sales were developed utilizing the LoadMAP-R model, an electric utility end-use forecasting tool. LoadMAP-R forecasts end-use or appliance-specific residential energy demand using a variety of demographic, housing, economic, energy, and weather information. Gulf utilized growth rates from the LoadMAP-R projection to extend the short-term residential sales forecast to the long-term horizon.

The residential sales forecast was adjusted to reflect the expected impacts of conservation programs approved in Gulf's 2015 DSM plan. Additional information on the residential conservation programs and program features are provided in the Conservation Programs section of this document. The residential sales forecast was also adjusted to reflect the anticipated impact of the introduction of electric vehicles to the market.

B. COMMERCIAL SALES FORECAST

The short-term non-lighting commercial energy sales forecast was also developed utilizing multiple linear regression analyses. The energy forecast for the commercial class was separated into two segments, small commercial (rate schedules GS and Flat-GS) and large commercial (all other commercial rate schedules). Separate models were developed for each segment to estimate monthly use per customer per billing day. The estimates were based upon historical data, normal weather, MSA-level GDP per capita, and price of electricity. The outputs from each model were multiplied by the projected number of customers in each segment and the projected number of billing days by month. The forecast for the commercial class is the sum of the forecasted energy sales for each segment.

Long-term projections of commercial sales were developed utilizing the LoadMAP-C model, an electric utility end-use forecasting tool that provides a conceptual framework for organizing commercial market building-type and end-use information. Gulf utilized growth rates from the LoadMAP-C projection to extend the short-term commercial sales forecast to the long-term horizon.

The commercial sales forecast was adjusted to reflect the expected impacts of conservation programs approved in Gulf's 2015 DSM plan. Additional information on the commercial conservation programs and program features are provided in the Conservation Programs section of this document.

C. INDUSTRIAL SALES FORECAST

The short-term non-lighting industrial energy sales forecast was developed using a combination of on-site surveys of major industrial customers and historical average consumption per customer per billing day. Gulf's largest industrial customers were interviewed by Gulf's industrial account representatives to identify expected load changes due to equipment additions, replacements, or changes in operating schedules and characteristics. The short-term forecast of monthly sales to these major industrial customers was a synthesis of the detailed survey information and historical monthly to annual energy ratios.

The forecast of sales to the remaining smaller industrial customers was developed by rate schedule and month, using historical averages. The resulting estimates of energy purchases per customer per billing day were multiplied by the expected number of small industrial customers and projected billing days by month to expand to the rate level totals. The sum of the energy sales forecast for the major industrial customers and the remaining smaller industrial customers resulted in the total industrial energy sales forecast. Long-term projections of industrial sales were developed using historical averages.

D. OUTDOOR LIGHTING SALES FORECAST

Outdoor lighting energy forecasts were developed by rate and class using historical growth rates and input from Gulf's lighting team to gain insight into future trends.

E. WHOLESALE ENERGY FORECAST

The forecast of territorial wholesale energy sales was developed utilizing a multiple linear regression analysis. Monthly wholesale energy purchases per day were estimated based on historical data, normal weather, and MSA-level GDP. The model output was then multiplied by the projected number of days by month to expand to the total wholesale energy forecast.

F. COMPANY USE FORECAST

The forecast of company energy use was based on recent historical averages by month.

IV. PEAK DEMAND FORECAST

The annual system peak demand forecast was prepared using the Peak Demand Model (PDM). PDM inputs include historical load shapes and projections of net energy for load, which were based on the forecasted energy sales described previously. PDM spreads the energy projections using the historical load shapes to develop hourly system load shapes. The monthly

forecasted system peak demands are the single highest hour of demand for each month. Gulf's annual system peak demand typically occurs in the month of July.

The resulting monthly system peak demand projections were adjusted to reflect the anticipated impacts of conservation programs approved in Gulf's 2015 DSM plan. Additional information on the peak demand impacts of Gulf's conservation programs are provided in the Conservation Programs section of this document.

V. DATA SOURCES

Gulf utilized historical customer, energy and revenue data by rate and class, and historical hourly load data coupled with weather information from the National Oceanic and Atmospheric Administration (NOAA) to support the energy and demand models. Individual customer historical data was utilized in developing projections for Gulf's largest industrial customers.

Gulf's models also utilized economic projections provided by Moody's Analytics, a renowned economic services provider. Moody's relies on the Bureau of Labor Statistics for data on employment, unemployment rate and labor force. Moody's obtains personal income and GDP data from the Bureau of Economic Analysis. Moody's obtains population, households and housing starts information from the U.S. Census Bureau.

VI. CONSERVATION PROGRAMS

Gulf's forecast of energy sales and peak demand reflect the continued impacts of energy efficiency and conservation activities, including the impacts of programs proposed by Gulf in its most recent DSM plan, which was approved by the Commission in Order No. PSC-15-0330-PAA-EG on August 19, 2015. Gulf's conservation programs were designed to meet the goals established by the Commission in Order No. PSC-14-0696-FOF-EU in December 16, 2014. Following is a brief description of the currently approved programs and tables indicating the historical and projected conservation impacts of Gulf's ongoing conservation efforts.

A. RESIDENTIAL CONSERVATION

1. Residential Energy Audit and Education – This program is the primary educational program to help customers improve the energy efficiency of their new or existing home through energy conservation advice and information that encourages the implementation of efficiency measures and behaviors resulting in energy and utility bill savings.
2. *EnergySelect* - This program is designed to provide the customer with a means of conveniently and automatically controlling and monitoring energy purchases in response to prices that vary during the day and by season in relation to Gulf's cost of producing or purchasing energy. The

EnergySelect system includes field units utilizing a communication gateway, major appliance load control relays, and a programmable thermostat, all operating at the customer's home.

3. Community Energy Saver Program - This program is designed to assist low-income families with escalating energy costs through the direct installation of conservation measures at no cost to them. The program will also educate families on energy efficiency techniques and behavioral changes to help control their energy use and reduce their utility operating costs.
4. HVAC Efficiency Improvement Program - This program is designed to increase energy efficiency and improve HVAC cooling system performance for new and existing homes through maintenance, quality installation, and duct repair.
5. Residential Custom Incentive Program - This program will promote the installation of various energy efficiency measures available through other programs including HVAC, insulation, windows, water heating, lighting, appliances, etc. including additional incentives as appropriate to overcome the split-incentive barrier which exists in a landlord/renter situation.
6. Residential Building Efficiency Program - This program is designed as an umbrella efficiency program to promote the purchase and installation of energy saving measures – high

performance windows, reflective roofs, and ENERGY STAR window A/C - for residential customers as a means of reducing energy and demand.

B. COMMERCIAL/INDUSTRIAL CONSERVATION

- Commercial/Industrial (C/I) Energy Analysis – This is an interactive program that provides commercial and industrial customers assistance in identifying energy conservation opportunities. The program is a prime tool for the Gulf Power Company C/I Energy Specialists to personally introduce a customer to conservation measures, including low or no-cost improvements or new electro-technologies to replace old or inefficient equipment.
- Commercial HVAC Retrocommissioning Program - This program offers basic retrocommissioning at a reduced cost for qualifying commercial and industrial customers designed to diagnose the performance of the HVAC cooling unit(s) with the support of an independent computerized quality control process and make improvements to the system to bring it to its full efficiency.
- Commercial Building Efficiency Program - This program is designed as an umbrella efficiency program for existing commercial and industrial customers to increase awareness and

customer demand for high-efficiency, energy-saving equipment; increase availability and market penetration of energy efficient equipment; and contribute toward long-term energy savings and peak demand reductions.

- Commercial/Industrial Custom Incentive - This program is designed to establish the capability and process to offer advanced energy services and energy efficient end-user equipment (including comprehensive audits, design, and construction of energy conservation projects) not offered through other programs to Commercial or Industrial customers.

C. CONSERVATION RESULTS SUMMARY

The following tables provide estimates of the reductions in peak demand and net energy for load realized by Gulf's customers as a result of participation in Gulf's conservation programs.

HISTORICAL
TOTAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2015	487,484	547,262	1,069,853,000

2016 BUDGET FORECAST
TOTAL CONSERVATION PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2016	5,722	3,660	7,558,302
2017	6,061	3,802	8,293,586
2018	6,574	3,976	9,399,710
2019	7,141	5,510	10,502,833
2020	8,026	6,593	11,783,649
2021	8,828	7,620	12,862,948
2022	9,583	8,626	13,829,154
2023	10,292	9,627	14,693,193
2024	10,971	10,620	15,493,316
2025	10,971	10,620	15,493,316

2016 BUDGET FORECAST
TOTAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2016	493,206	550,922	1,077,411,302
2017	499,267	554,724	1,085,704,888
2018	505,841	558,699	1,095,104,598
2019	512,982	564,209	1,105,607,431
2020	521,009	570,802	1,117,391,080
2021	529,836	578,422	1,130,254,028
2022	539,419	587,048	1,144,083,182
2023	549,711	596,676	1,158,776,375
2024	560,682	607,296	1,174,269,691
2025	571,653	617,916	1,189,763,006

HISTORICAL
RESIDENTIAL CONSERVATION
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2015	259,304	372,127	642,442,000

2016 BUDGET FORECAST
RESIDENTIAL CONSERVATION
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2016	4,743	3,541	5,462,964
2017	5,026	3,638	6,069,650
2018	5,521	3,804	7,148,870
2019	6,028	5,320	8,166,015
2020	6,834	6,367	9,267,558
2021	7,533	7,363	10,131,650
2022	8,174	8,337	10,853,640
2023	8,772	9,299	11,479,753
2024	9,342	10,252	12,041,950
2025	9,342	10,252	12,041,950

2016 BUDGET FORECAST
RESIDENTIAL CONSERVATION
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2016	264,047	375,668	647,904,964
2017	269,073	379,306	653,974,614
2018	274,594	383,110	661,123,484
2019	280,622	388,431	669,289,499
2020	287,456	394,798	678,557,057
2021	294,989	402,160	688,688,707
2022	303,163	410,498	699,542,347
2023	311,936	419,796	711,022,100
2024	321,277	430,049	723,064,050
2025	330,619	440,301	735,106,000

HISTORICAL
COMMERCIAL/INDUSTRIAL CONSERVATION
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2015	228,180	175,135	427,411,000

2016 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL CONSERVATION
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2016	979	119	2,095,338
2017	1,035	164	2,223,936
2018	1,053	171	2,250,840
2019	1,113	189	2,336,818
2020	1,192	226	2,516,091
2021	1,295	257	2,731,298
2022	1,408	289	2,975,515
2023	1,519	329	3,213,440
2024	1,630	368	3,451,365
2025	1,630	368	3,451,365

2016 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL CONSERVATION
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2016	229,159	175,254	429,506,338
2017	230,194	175,418	431,730,274
2018	231,247	175,589	433,981,115
2019	232,360	175,778	436,317,932
2020	233,553	176,005	438,834,023
2021	234,847	176,261	441,565,321
2022	236,256	176,551	444,540,835
2023	237,775	176,879	447,754,276
2024	239,405	177,247	451,205,641
2025	241,035	177,615	454,657,006

VII. SMALL POWER PRODUCTION / RENEWABLE ENERGY

Gulf's 2015 DSM Plan does not have any small power production programs that affect the forecast.

Please refer to the Renewable Resources section of this TYSP for additional information concerning Gulf's efforts to promote and develop supply-side renewable energy resources.

160170-OPC-POD-3-164

GULF POWER COMPANY

Schedule 2.1

History and Forecast of Energy Consumption and
Number of Customers by Customer Class

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Rural and Residential					Commercial		
Year	Population*	Members per Household*	GWH	Average No. of Customers	Average KWH Consumption Per Customer	GWH	Average No. of Customers	Average KWH Consumption Per Customer
2006	859,890	2.57	5,425	360,930	15,032	3,843	53,479	71,862
2007	860,260	2.56	5,477	371,213	14,755	3,971	53,791	73,821
2008	863,080	2.55	5,349	374,709	14,274	3,961	53,810	73,610
2009	866,520	2.55	5,254	374,010	14,049	3,896	53,414	72,942
2010	872,760	2.54	5,651	375,847	15,036	3,997	53,349	74,912
2011	882,080	2.55	5,305	378,157	14,028	3,911	53,409	73,235
2012	899,870	2.55	5,054	379,897	13,303	3,859	53,706	71,846
2013	914,410	2.54	5,089	382,599	13,301	3,810	54,261	70,215
2014	928,620	2.54	5,362	386,765	13,865	3,838	54,749	70,104
2015	942,670	2.53	5,365	391,465	13,705	3,898	55,234	70,566
2016	957,700	2.52	5,282	395,467	13,358	3,897	55,835	69,797
2017	973,840	2.51	5,358	401,542	13,343	3,943	56,376	69,949
2018	990,580	2.50	5,434	407,810	13,326	3,993	56,852	70,232
2019	1,007,560	2.50	5,516	413,423	13,343	4,037	57,277	70,479
2020	1,024,530	2.50	5,549	418,009	13,275	4,058	57,625	70,422
2021	1,040,990	2.50	5,551	421,523	13,169	4,069	57,890	70,296
2022	1,057,030	2.50	5,548	424,681	13,064	4,095	58,128	70,449
2023	1,072,880	2.50	5,581	427,840	13,045	4,129	58,367	70,742
2024	1,088,600	2.50	5,631	430,998	13,065	4,168	58,606	71,117
2025	1,104,080	2.49	5,639	434,138	12,989	4,196	58,843	71,301
CAAG								
06-15	1.0%	-0.2%	-0.1%	0.9%	-1.0%	0.2%	0.4%	-0.2%
15-20	1.7%	-0.2%	0.7%	1.3%	-0.6%	0.8%	0.9%	0.0%
15-25	1.6%	-0.1%	0.5%	1.0%	-0.5%	0.7%	0.6%	0.1%

* Historical and projected figures include Pensacola, Crestview, and Panama City MSAs

GULF POWER COMPANY

Schedule 2.2

History and Forecast of Energy Consumption and
Number of Customers by Customer Class

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Industrial						
Year	GWH	Average No. of Customers	Average KWH Consumption Per Customer	Railroads and Railways GWH	Street & Highway Lighting GWH	Other Sales to Public Authorities GWH	Total Sales to Ultimate Consumers GWH
2006	2,136	294	7,260,626	0	24	0	11,429
2007	2,048	303	6,769,670	0	24	0	11,521
2008	2,211	291	7,592,204	0	23	0	11,543
2009	1,727	280	6,164,567	0	25	0	10,903
2010	1,686	275	6,133,961	0	26	0	11,359
2011	1,799	273	6,586,591	0	25	0	11,040
2012	1,725	267	6,453,071	0	25	0	10,663
2013	1,700	258	6,581,320	0	21	0	10,620
2014	1,849	258	7,165,343	0	25	0	11,075
2015	1,798	249	7,235,499	0	25	0	11,086
2016	1,703	251	6,785,229	0	25	0	10,907
2017	1,698	253	6,710,779	0	23	0	11,023
2018	1,698	253	6,710,779	0	22	0	11,147
2019	1,698	253	6,710,779	0	21	0	11,272
2020	1,698	253	6,712,534	0	21	0	11,326
2021	1,698	253	6,710,779	0	21	0	11,339
2022	1,698	253	6,710,779	0	21	0	11,361
2023	1,698	253	6,710,779	0	21	0	11,428
2024	1,698	253	6,712,534	0	21	0	11,518
2025	1,698	253	6,710,779	0	21	0	11,553
CAAG							
06-15	-1.9%	-1.9%	0.0%	0.0%	0.6%	0.0%	-0.3%
15-20	-1.1%	0.4%	-1.5%	0.0%	-4.0%	0.0%	0.4%
15-25	-0.6%	0.2%	-0.8%	0.0%	-2.0%	0.0%	0.4%

GULF POWER COMPANY

Schedule 2.3

History and Forecast of Energy Consumption and
Number of Customers by Customer Class

(1)	(2)	(3)	(4)	(5)	(6)
Year	Sales for Resale GWH	Utility Use & Losses GWH	Net Energy for Load GWH	Other Customers (Average No.)	Total No. of Customers
2006	415	743	12,586	482	415,185
2007	417	733	12,671	486	425,793
2008	398	676	12,617	493	429,302
2009	390	682	11,975	502	428,206
2010	409	750	12,518	559	430,030
2011	382	663	12,086	564	432,403
2012	339	597	11,598	572	434,441
2013	330	602	11,552	579	437,698
2014	332	645	12,052	598	442,370
2015	330	580	11,996	610	447,557
2016	330	616	11,854	610	452,163
2017	339	623	11,985	610	458,781
2018	348	630	12,125	610	465,525
2019	354	637	12,263	610	471,564
2020	360	640	12,326	610	476,497
2021	363	641	12,343	610	480,277
2022	367	642	12,371	610	483,673
2023	370	646	12,445	610	487,070
2024	375	651	12,544	610	490,467
2025	377	653	12,583	610	493,845
CAAG					
06-15	-2.5%	-2.7%	-0.5%	2.6%	0.8%
15-20	1.7%	2.0%	0.5%	0.0%	1.3%
15-25	1.4%	1.2%	0.5%	0.0%	1.0%

Note: Sales for Resale and Net Energy for Load include contracted energy allocated to certain customers by Southeastern Power Administration (SEPA).

GULF POWER COMPANY

Schedule 3.1

History and Forecast of Summer Peak Demand - MW

Base Case

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Residential Load Management	Residential Conservation	Comm/Ind Load Management	Comm/Ind Conservation	Net Firm Demand
2006	2,828	93	2,734	0	0	171	0	173	2,483
2007	2,989	99	2,891	0	0	175	0	180	2,634
2008	2,898	91	2,807	0	0	176	0	182	2,541
2009	2,909	92	2,817	0	0	177	0	186	2,546
2010	2,896	88	2,807	0	0	178	0	192	2,525
2011	2,919	89	2,830	0	0	186	0	198	2,535
2012	2,769	76	2,693	0	0	206	0	212	2,351
2013	2,810	74	2,736	0	0	229	0	220	2,362
2014	2,905	75	2,830	0	0	243	0	224	2,437
2015	2,982	78	2,904	0	0	259	0	228	2,495
2016	2,943	69	2,874	0	0	264	0	229	2,450
2017	2,990	71	2,919	0	0	269	0	230	2,491
2018	3,026	72	2,954	0	0	275	0	231	2,520
2019	3,059	73	2,986	0	0	281	0	232	2,546
2020	3,073	74	2,999	0	0	287	0	234	2,552
2021	3,084	75	3,009	0	0	295	0	235	2,554
2022	3,093	76	3,018	0	0	303	0	236	2,554
2023	3,114	76	3,038	0	0	312	0	238	2,564
2024	3,137	77	3,060	0	0	321	0	239	2,576
2025	3,158	77	3,080	0	0	331	0	241	2,586
CAAG									
06-15	0.6%	-1.9%	0.7%	0.0%	0.0%	4.7%	0.0%	3.1%	0.1%
15-20	0.6%	-1.1%	0.6%	0.0%	0.0%	2.1%	0.0%	0.5%	0.5%
15-25	0.6%	-0.1%	0.6%	0.0%	0.0%	2.5%	0.0%	0.5%	0.4%

NOTE: Wholesale and total columns include contracted capacity allocated to certain Resale customers by Southeastern Power Administration (SEPA).

GULF POWER COMPANY

Schedule 3.2
History and Forecast of Winter Peak Demand - MW
Base Case

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Year	Total	Wholesale	Retail	Interruptible	Residential Load Management	Residential Conservation	Comm/Ind Load Management	Comm/Ind Conservation	Net Firm Demand
05-06	2,476	94	2,382	0	0	262	0	142	2,072
06-07	2,644	91	2,554	0	0	275	0	146	2,224
07-08	2,793	97	2,696	0	0	276	0	147	2,370
08-09	2,757	98	2,659	0	0	287	0	150	2,320
09-10	2,996	107	2,890	0	0	289	0	154	2,553
10-11	2,950	99	2,851	0	0	297	0	157	2,495
11-12	2,621	89	2,532	0	0	317	0	165	2,139
12-13	2,275	70	2,205	0	0	341	0	169	1,766
13-14	3,223	90	3,132	0	0	356	0	172	2,694
14-15	3,039	85	2,954	0	0	372	0	175	2,492
15-16	2,675	72	2,603	0	0	376	0	175	2,124
16-17	2,708	74	2,634	0	0	379	0	175	2,153
17-18	2,736	76	2,660	0	0	383	0	176	2,177
18-19	2,769	77	2,692	0	0	388	0	176	2,205
19-20	2,781	79	2,702	0	0	395	0	176	2,210
20-21	2,788	80	2,709	0	0	402	0	176	2,210
21-22	2,796	80	2,716	0	0	410	0	177	2,209
22-23	2,812	81	2,731	0	0	420	0	177	2,215
23-24	2,830	82	2,748	0	0	430	0	177	2,223
24-25	2,848	83	2,765	0	0	440	0	178	2,230
CAAG									
06-15	2.3%	-1.1%	2.4%	0.0%	0.0%	4.0%	0.0%	2.4%	2.1%
15-20	-1.8%	-1.5%	-1.8%	0.0%	0.0%	1.2%	0.0%	0.1%	-2.4%
15-25	-0.6%	-0.3%	-0.7%	0.0%	0.0%	1.7%	0.0%	0.1%	-1.1%

NOTE: Wholesale and total columns include contracted capacity allocated to certain Resale customers by Southeastern Power Administration (SEPA).

GULF POWER COMPANY

Schedule 3.3

History and Forecast of Annual Net Energy for Load - GWH

Base Case

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Year	Total	Residential Conservation	Comm/Ind Conservation	Retail	Wholesale	Utility Use & Losses	Net Energy for Load	Load Factor %
2006	13,273	365	322	11,429	415	743	12,586	57.9%
2007	13,373	375	327	11,521	417	733	12,671	54.9%
2008	13,326	378	331	11,543	398	676	12,617	56.5%
2009	12,704	384	345	10,903	390	682	11,975	53.7%
2010	13,256	388	350	11,359	409	750	12,518	56.0%
2011	12,864	417	361	11,040	382	663	12,086	54.4%
2012	12,453	482	374	10,663	339	597	11,598	56.2%
2013	12,502	551	399	10,620	330	602	11,552	55.8%
2014	13,064	595	416	11,075	332	645	12,052	51.1%
2015	13,066	642	427	11,086	330	580	11,996	54.9%
2016	12,931	648	430	10,907	330	616	11,854	55.1%
2017	13,071	654	432	11,023	339	623	11,985	54.9%
2018	13,220	661	434	11,147	348	630	12,125	54.9%
2019	13,369	669	436	11,272	354	637	12,263	55.0%
2020	13,444	679	439	11,326	360	640	12,326	55.0%
2021	13,473	689	442	11,339	363	641	12,343	55.2%
2022	13,515	700	445	11,361	367	642	12,371	55.3%
2023	13,604	711	448	11,428	370	646	12,445	55.4%
2024	13,718	723	451	11,518	375	651	12,544	55.4%
2025	13,773	735	455	11,553	377	653	12,583	55.5%
CAAG								
06-15	-0.2%	6.5%	3.2%	-0.3%	-2.5%	-2.7%	-0.5%	-0.6%
15-20	0.6%	1.1%	0.5%	0.4%	1.7%	2.0%	0.5%	0.0%
15-25	0.5%	1.4%	0.6%	0.4%	1.4%	1.2%	0.5%	0.1%

NOTE: Wholesale and total columns include contracted capacity and energy allocated to certain Resale customers by Southeastern Power Administration (SEPA).

GULF POWER COMPANY

Schedule 4

Previous Year Actual and Two Year Forecast of Peak Demand and Net Energy for Load by Month

(1)	(2)	(3)	(4)	(5)	(6)	(7)
	2015 Actual		2016 Forecast		2017 Forecast	
	Peak Demand	NEL	Peak Demand	NEL	Peak Demand	NEL
Month	MW	GWH	MW	GWH	MW	GWH
January	2,492	948	2,124	936	2,153	948
February	2,230	896	1,996	824	1,970	813
March	1,914	830	1,619	810	1,658	828
April	1,729	874	1,687	812	1,711	823
May	2,086	1,053	2,137	1,022	2,213	1,056
June	2,408	1,184	2,312	1,182	2,346	1,198
July	2,495	1,326	2,450	1,279	2,491	1,301
August	2,420	1,267	2,355	1,266	2,364	1,270
September	2,297	1,074	2,179	1,109	2,229	1,133
October	1,876	893	2,001	912	2,030	923
November	1,790	820	1,602	800	1,564	782
December	1,483	831	1,943	901	1,958	909

NOTE: Includes contracted capacity and energy allocated to certain Resale customers by Southeastern Power Administration (SEPA)

Gulf Power Company

Schedule 5
Fuel Requirements

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Fuel Requirements		Units	Actual 2014	Actual 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
(1)	Nuclear		Trillion BTU	None	None	None	None	None	None	None	None	None	None	None	None
(2)	Coal		1000 TON	3,678	2,490	1,747	2,205	2,745	2,840	3,437	3,633	3,901	4,252	4,304	4,528
(3)	Residual	Total	1000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(4)		Steam	1000 BBL	0	0	0	0	0	0	0	0	0	0	0	0
(5)		CC	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(6)		CT	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(7)		Diesel	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(8)	Distillate	Total	1000 BBL	25	19	10	12	10	11	11	9	9	7	8	6
(9)		Steam	1000 BBL	17	17	10	12	10	11	11	9	9	7	8	6
(10)		CC	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(11)		CT	1000 BBL	8	2	0	0	0	0	0	0	0	0	0	0
(12)		Diesel	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(13)	Natural Gas	Total	1000 MCF	58,285	54,704	64,188	70,773	67,987	60,144	33,010	30,593	31,275	16,987	11,809	14,602
(14)		Steam	1000 MCF	514	383	0	0	0	0	0	0	0	0	0	0
(15)		CC	1000 MCF	57,464	53,333	62,989	69,577	66,791	60,144	33,010	30,593	31,275	16,051	9,830	9,292
(16)		CT	1000 MCF	307	988	1,199	1,196	1,196	0	0	0	0	936	1,979	5,310
(17)	Other [A]		1000 MCF	259	258	240	240	240	240	240	240	240	240	240	240

(A) Perdido Units' landfill gas burn included in Other

GULF POWER COMPANY

Schedule 6.1
Energy Sources

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Energy Sources		Units	Actual 2014	Actual 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
(1)	Annual Firm Interchange		GWH	(3,760)	(903)	(1,799)	(3,899)	(4,673)	(3,780)	(1,364)	(1,467)	(2,180)	(990)	(266)	(1,023)
(2)	Nuclear		GWH	None	None	None	None	None	None	None	None	None	None	None	None
(3)	Coal		GWH	7,394	4,876	4,036	5,102	6,357	6,591	8,053	8,524	9,175	10,027	10,140	10,687
(4)	Residual	Total	GWH	0	0	0	0	0	0	0	0	0	0	0	0
(5)		Steam	GWH	0	0	0	0	0	0	0	0	0	0	0	0
(6)		CC	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(7)		CT	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(8)		Diesel	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(9)	Distillate	Total	GWH	0.9	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(10)		Steam	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(11)		CC	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(12)		CT	GWH	0.9	0.8	0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
(13)		Diesel	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(14)	Natural Gas	Total	GWH	8,207	7,787	8,746	9,683	9,362	8,372	4,553	4,202	4,291	2,321	1,579	1,828
(15)		Steam	GWH	24	23	0	0	0	0	0	0	0	0	0	0
(16)		CC	GWH	8,107	7,697	8,664	9,602	9,281	8,372	4,553	4,202	4,291	2,228	1,383	1,302
(17)		CT	GWH	76	67	82	81	81	0	0	0	0	93	196	526
(18)	NUGs		GWH	210	235	871	1,099	1,079	1,080	1,084	1,084	1,085	1,087	1,091	1,091
(19)	Net Energy for Load		GWH	12,052	11,996	11,854	11,985	12,125	12,263	12,326	12,343	12,371	12,445	12,544	12,583

NOTE: Line (18) includes energy received from Non-Renewable and Renewable resources. See Schedule 6.3 for details on Gulf's renewable resources .

GULF POWER COMPANY

Schedule 6.2
Energy Sources

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)	(16)
	Energy Sources		Units	Actual 2014	Actual 2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
(1)	Annual Firm Interchange		%	(31.20)	(7.53)	(15.18)	(32.53)	(38.54)	(30.82)	(11.07)	(11.89)	(17.62)	(7.96)	(2.12)	(8.13)
(2)	Nuclear		%	None	None	None	None	None	None	None	None	None	None	None	None
(3)	Coal		%	61.35	40.65	34.05	42.57	52.43	53.75	65.33	69.06	74.17	80.57	80.84	84.93
(4)	Residual	Total	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(5)		Steam	%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(6)		CC	%	None	None	None	None	None	None	None	None	None	None	None	None
(7)		CT	%	None	None	None	None	None	None	None	None	None	None	None	None
(8)		Diesel	%	None	None	None	None	None	None	None	None	None	None	None	None
(9)	Distillate	Total	%	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(10)		Steam	%	None	None	None	None	None	None	None	None	None	None	None	None
(11)		CC	%	None	None	None	None	None	None	None	None	None	None	None	None
(12)		CT	%	0.01	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(13)		Diesel	%	None	None	None	None	None	None	None	None	None	None	None	None
(14)	Natural Gas	Total	%	68.10	64.91	73.78	80.79	77.21	68.27	36.94	34.04	34.69	18.65	12.59	14.53
(15)		Steam	%	0.20	0.19	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(16)		CC	%	67.27	64.16	73.09	80.12	76.54	68.27	36.94	34.04	34.69	17.90	11.03	10.35
(17)		CT	%	0.63	0.56	0.69	0.68	0.67	0.00	0.00	0.00	0.00	0.75	1.56	4.18
(18)	NUGs		%	1.74	1.96	7.35	9.17	8.90	8.81	8.79	8.78	8.77	8.73	8.70	8.67
(19)	Net Energy for Load		%	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

NOTE: Line (18) based on energy received from Non-Renewable and Renewable resources. See Schedule 6.3 for details on Gulf's renewable resources .

CHAPTER III

PLANNING ASSUMPTIONS AND PROCESSES

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THE INTEGRATED RESOURCE PLANNING PROCESS

In order to coordinate its plans for future resource additions, Gulf participates in the SES IRP process. This planning process begins with a determination of the various escalation and inflation rates that will impact the financial condition of the SES. Experts from within and outside the SES meet to discuss current and historical economic trends and conditions, as well as future expected economic conditions which would impact the SES's business over the next twenty to twenty-five years. Information gathered from these discussions serves as a basis for developing the general inflation and escalation assumptions that will affect fuel costs, construction costs, labor rates and variable O&M.

In addition to the work on the economic assumptions, there are a number of activities that are conducted in parallel with one another in the IRP process. These activities include energy and demand forecasting, fuel price forecasting, generation technology screening analysis and evaluation, engineering cost estimation, evaluation of dispatchable and non-dispatchable demand-side management (DSM) programs, and other planning activities.

The SES operating companies remain active in offering customers various DSM programs which result in modified consumption patterns. The impact of such DSM programs on system loads is assessed and included as an input into the SES IRP process. DSM programs which are identified as cost-effective alternatives to the supply-side resources are integrated with the supply-side options to produce a final integrated resource plan. Gulf's forecast of energy

sales and peak demand reflects the continued impacts of its conservation programs. The DSM programs' costs and benefits are regularly updated in order to facilitate cost-effectiveness evaluations against the selected supply-side technologies from the IRP process.

A number of existing generating units on the SES are also evaluated with respect to their anticipated compliance costs. These evaluations are extremely important in order to maximize the benefit of existing investment from both a capital and an operations and maintenance expense perspective.

Additionally, the market for potential power purchases is analyzed in order to determine its cost-effectiveness in comparison to the available supply-side and demand-side options for meeting any identified capacity need. Power purchases are evaluated on both a near-term and long-term basis as a possible means of meeting the system's demand requirements. These power purchases can be procured from utility sources as well as from non-utility generators which utilize conventional or renewable fuels.

The supply side of the IRP process focuses on the SES as a whole. The current SES IRP used in the development of Gulf's 2016 TYSP has as its planning criterion a 15% reserve margin target for the year 2019 and beyond.(2) The reserve margin is the optimum economic point at which the system can meet its energy and demand requirements after accounting for load forecast error, abnormal weather conditions, and unit forced outage conditions.

(2) The SES recently completed a revised reserve margin study which recommends a change in the planning reserve margin target from 15% to 17%. If ultimately adopted by the retail SES operating companies, this criterion will be used to develop the system's future IRP, and will be reflected in subsequent Gulf TYSPs.

It also balances the cost of adding additional generation with the cost of not serving all the energy requirements of the customer.

Once the above mentioned planning assumptions are determined, generating unit technologies are screened to determine the most acceptable candidates, the necessary planning inputs are defined and the generation mix analysis is initiated. The main optimization tool used in the generation mix analysis is the Strategist® model. Strategist® employs a generation mix optimization module named PROVIEW™. The supply-side technology candidates are input into Strategist® in specific MW block sizes for selection over the planning horizon for the entire SES. Although this model uses many data inputs and assumptions in the process of optimizing system generation additions, the key assumptions are fuel forecasts, load forecasts, DSM programs, candidate units, reserve margin requirements, cost of capital, and escalation rates.

PROVIEW™ uses a dynamic programming technique to develop the optimum resource mix. This technique allows PROVIEW™ to evaluate many combinations of generation additions that satisfy the reserve margin constraint for every year. Annual system operating costs are simulated and are added to the construction costs required to build each combination of resource additions. An indicative schedule of least cost resource additions is developed by evaluating each year sequentially and comparing the results of each combination. PROVIEW™ produces a number of different combinations over the planning horizon, evaluating both the capital cost components for unit

additions as well as the operating and maintenance cost of existing and future supply-side additions. The program produces a report which ranks all of the different combinations with respect to the total net present value cost over the entire twenty-year planning horizon. The leading combinations from the program are then evaluated for reasonableness and validity. It is important to note that supply-side additions from the PROVIEW™ program output are for the entire SES and are reflective of the various technology candidates selected.

After the SES results are verified, each individual operating company's specific needs over the planning horizon are evaluated. Each company is responsible for recommending the type and timing of its unit additions. When all companies are satisfied with their capacity additions, the system base supply-side plan is complete. The result is an individual operating company supply plan that fits within the SES planning criteria.

Finally, a financial analysis of the plan is performed to assess the impact on the system's cost. Once the plan has proven to be robust and financially feasible, it is reviewed with and presented for approval to executive management.

In summary, the SES IRP process involves a significant amount of manpower and computer resources in order to produce a truly least-cost, integrated demand-side and supply-side resource plan. During the entire process, the SES is continually looking at a broad range of alternatives in order to meet the SES's projected demand and energy requirements. The SES updates its IRP each year to account for the changes in the demand and energy

forecast, as well as the other major assumptions previously mentioned in this section. A mix study is again performed to ensure that the IRP is the most economical and cost-effective plan. The resulting product of the SES IRP process is an integrated indicative plan which meets the needs of the SES's customers in a cost-effective and reliable manner.

TRANSMISSION PLANNING PROCESS

The transmission system is not studied as a part of the IRP process, but it is studied, nonetheless, for reliability purposes. Commonly, a transmission system is viewed as a resource used to transport electric power from its generation source to the point of its conversion to distribution voltages under a number of system conditions known as contingencies. The results of the IRP are factored into transmission studies in order to determine the impacts of various generation site options upon the transmission system. The transmission system is studied under different contingencies for various load levels to ensure that the system can operate adequately without exceeding conductor thermal and system voltage limits.

When the study reveals a potential problem with the transmission system that warrants the consideration of correction in order to maintain or restore reliability, a number of possible solutions are identified. These solutions and their costs are evaluated to determine which is the most cost-effective. Once a solution is chosen to correct the problem, a capital budget expenditure request is prepared for executive approval.

In prior years, Gulf has entered into a series of power purchase agreements to meet its needs, and it will continue this practice in the future when economically attractive opportunities are available. In order to ensure that adequate transmission facilities are in place to handle these purchase transactions when Gulf has the need for additional capacity, it has been and will continue to be Gulf's practice to perform a transmission analysis of viable power purchase proposals to determine any transmission constraints. Gulf will formulate a plan, if needed, to resolve any transmission issues in a reasonable, cost-effective manner prior to proceeding with negotiations for power purchase agreements.

FUEL PRICE FORECAST PROCESS

FUEL PRICE FORECASTS

Fuel price forecasts are used for a variety of purposes within the SES, including such diverse uses as long-term generation planning and short-term fuel budgeting. The SES fuel price forecasting process is designed to support these various uses.

The delivered price of any fuel consists of a variety of components. The main components are commodity price and transportation cost. Domestic coal commodity prices are forecast on either a mine-mouth basis or free on board (FOB) barge basis, while import coals are forecast on an FOB ship basis at the port of import. Natural gas prices are forecast at the Henry Hub, Louisiana benchmark delivery point. Because mine-mouth coal prices vary by source, sulfur content, and Btu level, commodity price forecasts are prepared for different coal classifications used on the SES. Because natural gas does not possess the same quality variations as coal, a single commodity price forecast for gas at Henry Hub is prepared, and a basis differential between Henry Hub and the various pipelines serving SES plants is applied. One price forecast is developed for ultra-low sulfur diesel (ULSD) oil, which is the only oil used in the SES.

Transportation costs, to be used in the delivered price forecast, are developed for potential sites when modeling generic unit additions in the resource planning process. Site-specific transportation costs are developed for existing units to produce delivered price forecasts for both the resource planning process and the fuel budget process. Similarly, when site-specific unit additions

are under consideration, site-specific transportation costs are developed for each option.

SES GENERIC FUEL FORECAST

The SES develops short-term (current year +2) and long-term (year 4 and beyond) fuel price forecasts for coal, oil, and natural gas which extend through the Company's 10-year planning horizon. The short-term forecasts are developed by SCS Fuel Services for use in the system's fuel budgeting process and marginal pricing dispatch procedures.

The long-term forecasts are developed in the spring of each year for use in system planning activities. Charles River & Associates (CRA) is the modeling vendor used by the system to develop the long-term forecasts. This process is a collaborative effort between CRA and members of cross-functional SES planning teams, including Gulf Power personnel, and is governed by an SES executive team.

Fuel market assumptions, developed in collaboration between CRA and SES, are integrated into CRA's model to develop commodity forecast prices. Transportation prices are developed by the SES and are combined with the CRA commodity prices to produce the total delivered prices used in the resource planning process. These prices are developed for existing units and potential green field/brown field sites for future expansion.

COAL PRICE FORECAST

In 2015, coal production in the United States was approximately 900 million short tons, a decrease from the 994 million short tons for 2014, and the lowest level since 1986. The largest decline in coal production was in the Central Appalachian region, largely because of its difficult mining geology and high operating costs. Coal production in Central Appalachia in 2015 was 40% below its annual level for the 2010-2014 period. In other major coal regions, Northern Appalachia, Western Bituminous (Colorado and Utah), and Powder River, production in 2015 was 10% to 20% below their corresponding regional average levels for 2010-2014. By contrast, coal production from Illinois Basin in 2015 was 8% higher than average production levels for 2010-2014. It is estimated that Colombian production in 2015 was up approximately 3.5% over 2014 levels.

Overall global demand for coal continues to decrease. The major importers continue to be China and India. Although China has demanded less over the last few years, India has had increases in demand over the same period. The primary supply for China and India continues to be from Indonesia and Australia. European demand remains relatively flat with its primary supply coming from Colombia and its secondary source being supplied from the United States (U.S.) when an imbalance occurs.

From an overall global market perspective the coal market is oversupplied, leading to lower prices than experienced over the last few years. In the U.S., this price decrease continues to be driven by the abundance of low priced natural gas which has led to the displacement of coal generation. With the exception of the Western Bituminous region, steam coal prices in major basins experienced

double-digit percentage declines in 2015. Central Appalachian coal spot prices dropped by 22% in 2015, following a decline of 13% the year before. Coal prices in the Powder River, Illinois, and Northern Appalachian basins, which had remained largely unchanged during 2014, decreased 18%, 26%, and 29%, respectively in 2015. Colombian coal prices have been relatively flat to declining over the last couple of years.

Coal production from the Central Appalachian coal region continues to decline as a result of the inability of mines to compete with lower price coal basins, including the Illinois Basin and the Powder River Basin. Illinois Basin coal production has seen steady increases, in large part, as a result of the widespread installation of scrubbers at eastern power generation stations. Capital investment is typically required to enable Illinois Basin or Central Appalachian coal-fired generating units to utilize the less expensive Powder River Basin coal.

Historically, Powder River Basin (PRB) regional coal production has grown at 5% per year over sustained periods, but recently production levels have decreased. Production costs in the PRB have increased slightly as mining moves from East to West across the basin and deeper reserves are accessed. Increased overburden and distance to rail load outs have put upward pressure on costs, but the continued decrease in fuel oil prices will provide some cost relief. Overall, the economics of surface mining in this region remain favorable.

Demand for Western Bituminous coal is expected to remain relatively flat to declining as several generators in Colorado have ceased burning this coal. The quality of the coal that can be exported from this region will have a major

impact on its long term production levels. As for the movements into the southeast, the high transportation costs make Western Bituminous coals less economic to this region.

NATURAL GAS PRICE FORECAST

Gas Daily Henry Hub prices averaged $2.61/MMBtu in 2015. That was a $1.71/MMBtu decrease over the average of $4.32/MMBtu for 2014. December 2014 was warmer than normal, which when combined with robust production, contributed to lower prices throughout 2015. In the first quarter, prices averaged from $2.99/MMBtu in January to $2.80/MMBtu in March. While the January average monthly price of $2.99/MMBtu was the highest monthly average in 2015, it was the lowest monthly average on record since September 2012. Entering the second quarter, prices retreated even more, with April settling at an average of $2.58/MMBtu. Gas prices in May settled the month at $2.83/MMBtu on forecasts of warmer weather and increased power sector burn nationwide during the month. By the end of the second quarter prices fell to an average of $2.76/MMBtu. A return to warmer temperatures at the beginning of the third quarter saw July prices average higher at $2.82/MMBtu. Natural gas production set consecutive records in July, August and September, which increased storage levels during the summer season despite warmer temperatures and higher natural gas consumption. Although natural gas consumption in August was the highest on record for that month, above average storage levels and increased production led to August prices closing the month at $2.76/MMBtu, or $0.06/MMBtu lower than July. Demand remained highly dependent on

temperatures. Prices continued to fall for the remainder of the quarter with September settling at a monthly average of $2.65/MMBtu due primarily to slightly cooler weather following the summer peak season. Warmer than normal temperatures in the first half of the heating season, record inventory levels, production growth, and forecasts for a warm winter contributed to prices remaining low. The last quarter of 2015 experienced the most substantial drop of the year with prices averaging $2.33/MMBtu in October, $2.07/MMBtu in November, and $1.86/MMBtu in December. December's monthly average price was the lowest monthly average on record since April 2012.

After a mild 2014-2015 winter season, natural gas storage inventory consistently registered above previous year levels, with the first net injection of 2015 occurring before the end of the traditional November–March heating season. By the end of March, working gas inventories were 1,461 Bcf, or 75.4% higher than last year at that time. Record setting shale gas production during the summer months led to high levels of injections following the heating season. The industry refilled 2.447 trillion cubic feet (Tcf) of storage from April through October 2015, resulting in natural gas storage inventories at the end of October being 3.93 Tcf, a record level for the industry's summer season.

The 2015-2016 winter heating season began with warmer than average temperatures in November. Inventory levels began the 2015 withdrawal season at 3.98 Tcf, or 6.2% less than the same time in 2014, and 6.8% below the five year average. By mid-November 2015, inventory levels hit 4.0 Tcf with an injection of 15 Bcf. This marks the second time in five years that a net injection has occurred this late in the year. Subsequent withdrawals in late November and

early December brought stocks back below 4.0 Tcf. Even with these withdrawals, early December 2015 inventories were still higher than the previous year's December levels and higher than the five year average.

By the end of January 2016, withdrawals from storage saw a dramatic increase, as the first triple digit withdrawals of the winter season occurred. Withdrawals began in the first week of January and increased steadily throughout the month. Despite these consecutive weeks of triple-digit storage withdrawals, inventories remained well above the five year average. The U.S. Energy Information Administration (EIA) announced that working gas in storage was 2.7 Tcf as of February 12, 2016, and industry analysts were predicting storage levels above the five year average at the end of the heating season by March 2016.

With the warmer temperatures, daily Henry Hub prices traded below $2.00/MMBtu for the first time during 2015 in November. In the following weeks, prices dropped to historically low levels. On December 24, 2015, day ahead Henry Hub spot prices fell to $1.54/MMBtu, the lowest level since December 1998. For 2015, the Henry Hub average was $2.61/MMBtu, the lowest annual average since 1999. Since the end of December, prices have traded above $2/MMBtu, with the Henry Hub averaging $2.27/MMBtu for the entire month. Henry Hub prices began February $0.14/MMBtu higher and fell within the first week to $2.03/MMBtu on February 3, following forecasts for warmer weather. The Henry Hub average as of February 18, 2016 was $2.09/MMBtu. The EIA expects the monthly average spot prices to remain low for the next couple of years. The projected Henry Hub price averages are $2.64/MMBtu in 2016 and $3.22/MMBtu in 2017.

NATURAL GAS AVAILABILITY

U.S. production growth will continue to reduce demand for natural gas imports from Canada and will support growth in exports to Mexico. Exports to Mexico will increase as demand grows from the electric power sector and natural gas production rate in that country remain flat. The EIA projects gross exports will increase to an average of 0.5 Bcf/day in 2016 and average 1.3 Bcf/day in 2017. U.S. natural gas production is poised to reach another record year in 2016. Most growth is expected to come from the Marcellus and Utice Shales, as a backlog of drilled wells is completed and new pipeline capacity is placed in service to deliver Marcellus/Utica gas to markets. U.S. natural gas production is estimated to have averaged over 74 Bcf/day in 2015, which was an increase from 2014 levels and was the sixth consecutive annual record increase for U.S. gas production. The EIA reports that growth will slow to 0.7% in 2016, as low natural gas prices and declining rig activity begin to affect production. In 2017, forecast production growth increases to 2.0%. The continued growth in domestic production should provide more than a sufficient supply of natural gas to meet operating needs.

STRATEGIC ISSUES

Power Purchase Agreements have provided supply-side diversity and the flexibility allowing Gulf to adapt its future generation expansion plans to changing market conditions without negative financial impacts to the Company and its customers. Gulf's Shell PPA provides 885 MW of firm capacity and energy from an existing gas-fired combined cycle (CC) generating unit that is interconnected with the SES in Alabama. With the Shell PPA in place, Gulf will have sufficient capacity to meet its load service and reliability requirements until June 2023. This strategy of supplementing Gulf's development of long-term capacity resources with shorter-term power purchases has proven to be effective over the years, and Gulf will continue to follow this strategy in the future when appropriate and cost-effective to do so.

Another important strategic advantage for Gulf is its association with the SES as it relates to integrated planning and operations. Drawing on the planning resources of Southern Company Services to perform coordinated planning and having the capacity resources of the SES available to Gulf through the Intercompany Interchange Contract's (IIC) reserve sharing mechanism in times when Gulf is temporarily short of reserves are key benefits that Gulf and its customers realize through its association with the SES. In addition, the SES's generation organization actively pursues firm energy market products at prices that can lead to significant savings to the SES and its customers.

Over the next decade, Gulf will face significant challenges in developing a generation expansion plan that serves not only its customers' load growth but its existing base need for capacity. As discussed in the Environmental Compliance section of this TYSP, compliance with additional environmental regulations has led to retirements of several Gulf coal-fired units. The current system resource plan indicates that the addition of new gas-fired units will be needed in 2023 to replace this capacity. Gulf continues to monitor the development of state and national policy in the area of air, land, and water regulations. Gulf will consider options for compliance with the resulting regulations that fulfill its obligation to serve the energy needs of its retail customers in Northwest Florida with reliable and reasonably priced electricity. With Gulf's Shell PPA that provides firm gas-fired generating capacity until May 2023 of the current planning cycle, Gulf is well positioned to meet current and future load requirements as proposed state and federal environmental compliance standards are finalized.

ENVIRONMENTAL COMPLIANCE

Gulf has developed and routinely updates its environmental compliance strategy to serve as a road map for a reasonable, least-cost compliance plan. This road map establishes general direction, but allows for individual decisions to be made based on specific information available at the time. The focus of the strategy updates is centered on compliance with the acid rain requirements and other significant clean air requirements, as well as new land and water requirements. This approach is necessary to preserve the flexibility to match a dynamic regulatory environment with the available compliance options.

Gulf will continue to take all necessary actions to fully comply with all environmental laws and regulations as they apply to the operation of its existing generation facilities and the installation of new generation. The following is a summary of each major area of existing and emerging environmental regulations and Gulf's actions taken to comply with these regulations.

Existing Environmental Regulations

Clean Air Act Amendments of 1990

In 1990, Congress passed major revisions to the Clean Air Act requiring existing coal-fired generating plants to substantially reduce air emissions of sulfur dioxide (SO_2) and nitrogen oxides (NO_X). Gulf's compliance actions for SO_2 have included fuel switching to lower sulfur coals coupled with the use of banked emission allowances and the acquisition of additional allowances for future year compliance. Also, Gulf completed installation and began operating flue gas de-sulfurization equipment on Plant Crist Units 4 through 7 in December

2009 which is now achieving significant reductions of SO_2 emissions at these coal-fired units. In addition to reducing SO_2 emissions, Gulf has installed low NO_X burners and/or additional post-combustion NO_X controls on its coal-fired units. The Company utilizes a system-wide NO_X emissions averaging plan to meet the requirements of the Act.

Air Quality Standards for Ozone

In 1997, the Environmental Protection Agency (EPA) announced a stringent new eight-hour National Ambient Air Quality Standard (NAAQS) for ozone based on an eight-hour average. In 2002, Gulf entered into an agreement with the Florida Department of Environmental Protection (FDEP) to reduce NO_X emissions at Plant Crist in order to help ensure that the new ozone standard is attained in the Pensacola area. Gulf installed Selective Catalytic Reduction (SCR) controls on Crist Unit 7 in May 2005. In addition to the SCR control on Unit 7, the Company installed Selective Non-Catalytic Reduction Controls (SNCR) and over-fire air on Crist Unit 6 in February 2006 and SNCR controls on Crist Unit 4 and Unit 5 in April 2006. These controls have achieved the overall plant-wide NO_X emissions average of 0.20 lbs/MMBtu as outlined in the FDEP Agreement. In accordance with the FDEP agreement, Gulf also retired Crist Unit 1 in 2003 and Crist Units 2 and 3 in 2006. The Crist 6 SNCR was replaced with SCR technology in April 2012 in order to further reduce NO_X emissions.

In 2008, the EPA adopted a revised eight-hour ozone NAAQS, and published its final area designations in 2012. The regions where Gulf's generation resources are located have achieved attainment of the 2008 standard. On October 26, 2015, the EPA published a more stringent eight-hour

ozone NAAQS. This new standard may result in the need for additional emission controls, improvements to control efficiency, and operational fuel changes that could affect the siting of new generating units. States will recommend area designations by October 2016, and the EPA is expected to finalize them by October 2017.

Air Quality Standards for Fine Particulate Matter

The EPA regulates fine particulate matter concentrations on an annual and 24-hour average basis. Attainment with the 1997 and 2006 particulate matter NAAQS has been achieved in all geographical areas served by the Company. In 2012, the EPA issued a final rule that increases the stringency of the annual fine particulate matter standard. The EPA promulgated final designations for the 2012 annual standard in December 2014, and no new non-attainment areas were designated within the Company's service area. The EPA has, however, deferred designation decisions for certain areas in Florida, so future non-attainment designations in these areas are possible.

Air Quality Standards for SO_2 and NO_2

In December 2009, the EPA proposed revisions to the NAAQS for SO_2. These revisions, which include the establishment of a new one-hour standard, became effective in August 2010. No areas within the Company's service area have been designated as non-attainment under this rule. However, the EPA may designate additional areas as non-attainment in the future. Implementation of the revised SO_2 NAAQS could result in additional required reductions in SO_2 emissions and increased compliance and operation costs.

Revisions to the NAAQS for Nitrogen Dioxide (NO_2), which established a new one-hour standard, became effective in April 2010. Although none of the geographical areas served by the Company were designated as non-attainment for the NO_2 standard, based on current ambient air quality monitoring data, the new NO_2 NAAQS could result in additional compliance and operational costs for units that require new source permitting.

Clean Air Interstate Rule / Cross State Air Pollution Rule

The EPA issued its final Clean Air Interstate Rule (CAIR) in 2005 which called for phased reductions in SO_2 and NO_x emissions from power plants in 28 eastern states. In 2008, the U.S. Court of Appeals for the District of Columbia Circuit issued decisions invalidating certain aspects of CAIR, but left CAIR compliance requirements in place while the EPA developed a revised rule. In 2011, the EPA promulgated the Cross State Air Pollution Rule (CSAPR) to replace CAIR. Like the CAIR, the CSAPR was intended to address interstate emissions of SO_2 and NO_x that interfere with downwind states' ability to meet or maintain national ambient air quality standards for ozone and/or particulate matter. The first phase of CSAPR took effect on January 1, 2015 and Phase II will begin in 2017.

On July 28, 2015, the U.S. Court of Appeals for the District of Columbia Circuit issued an opinion invalidating certain emissions budgets under the CSAPR Phase II emissions trading program for a number of states, including Florida and Georgia, but rejected all other pending challenges to the rule. The court's decision leaves the emissions trading program in place and remanded the rule to the EPA for further action consistent with the court's decision. On

December 3, 2015, the EPA published a proposed revision to CSAPR that would revise existing ozone-season emissions budgets for nitrogen oxide in Mississippi and would remove Florida from the CSAPR program. The EPA proposes to finalize this rulemaking by summer 2016. The revised CSAPR program could result in additional compliance and operational costs for Gulf's affected units as early as 2017.

Decisions regarding Gulf's CAIR/CSAPR compliance strategy were made jointly with the Clean Air Visibility Rule (CAVR) and CAMR/MATS compliance plans due to co-benefits of proposed controls. Compliance is being accomplished by operation of emission controls installed for CAIR at Gulf's coal-fired facilities and/or by the purchase of emission allowances as needed.

Clean Air Visibility Rule

The CAVR was finalized in 2005 in order to restore natural visibility conditions in certain areas (primarily national parks and wilderness areas) by 2064. The rule involves the application of Best Available Retrofit Technology (BART) to certain sources built between 1962 and 1977 and any additional emission reductions necessary for each designated area to achieve reasonable progress toward the natural conditions goal by 2018 and for each 10-year planning period thereafter. In 2012 the EPA determined that compliance with CSAPR is an alternative means of satisfying BART obligations.

Florida submitted a revised State Implementation Plan (SIP) on September 17, 2012. This SIP proposed a series of Electric Generating Unit (EGU)-specific BART and Reasonable Progress determinations which included BART limits for the coal-fired units at Plant Smith and no further controls for

Plant Crist. The EPA completed a review of the Florida SIP and published final approval on August 29, 2013 with an effective date of September 30, 2013. On October 15, 2013, environmental groups challenged EPA's approval of Florida's SIP in the U.S. Court of Appeals, Eleventh Circuit. On August 13, 2014, the Sierra Club and the National Parks Conservation Association filed a motion with the court seeking to voluntarily dismiss their challenge and the 11th Circuit granted that motion on September 2, 2014.

The Mississippi Department of Environmental Quality (MDEQ) requested that a source-specific BART analysis be submitted by December 15, 2012. The BART analysis for Plant Daniel submitted in December of 2012 demonstrated that the plant already meets "top level control" relative to BART. The EPA had until June 7, 2014 to finalize an approval or disapproval. Following the Supreme Court ruling and the lower court's reinstatement of CSAPR, neither MDEQ nor the EPA has taken any action. Until these issues are resolved, it remains uncertain what additional controls, if any, will ultimately be required for CAVR and BART compliance.

Mercury and Air Toxics Standards

In 2012 the EPA finalized the Mercury and Air Toxics Standards (MATS) rule which imposes stringent emissions limits for acid gases, mercury, and particulate matter on coal- and oil-fired electric utility steam generating units. The compliance deadline set by the final MATS rule was April 16, 2015 or April 16, 2016 for affected units for which extensions have been granted. On June 29, 2015, the Supreme Court of the United States (Supreme Court) issued a decision finding that in developing the MATS rule the EPA had failed to properly

consider costs in its decision to regulate hazardous air pollutant emissions from electric generating units. On December 15, 2015, the U.S. Court of Appeals for the District of Columbia Circuit remanded the MATS rule to the EPA without vacatur to respond to the U.S. Supreme Court's decision. The EPA's supplemental finding in response to the U.S. Supreme Court's decision, which the EPA proposes to finalize in April 2016, is not expected to have any impact on the MATS rule compliance requirements and deadlines.

Gulf has evaluated a number of options for its coal-fired generation to comply with emission standards required by the EPA's final MATS rule and EPA's proposed land and water rules. As described in Gulf's Air Quality Compliance Program Update that was filed with the FPSC, Gulf has determined that transmission upgrades are the best MATS compliance option for Plant Crist. For the Plant Daniel coal units, the best options to meet MATS limits include installing scrubbers, bromine injection, and activated carbon injection. The Plant Daniel scrubbers were placed in-service in November 2015 and the Plant Daniel bromine and activated carbon injection systems were placed in service in December 2015. The Plant Daniel and the Plant Crist MATS continuous emission monitoring systems (CEMS) were also placed in-service during 2015.

In 2013, the Company determined that the most cost-effective MATS compliance option for Plant Scholz was to retire the plant. Therefore, Plant Scholz was retired in April 2015. In early 2015, the Company finalized its MATS compliance strategy for Plant Smith. The most cost-effective compliance option was to retire the Plant Smith coal-fired Units 1 and 2 in March of 2016. Plant Smith's remaining units will continue to operate and generate electricity.

EMERGING ENVIRONMENTAL REGULATIONS

316(B) Intake Structures

The EPA published a proposed rule in 2011 that establishes standards for reducing effects on fish and other aquatic life caused by cooling water intake structures at existing power plants and manufacturing facilities. The rule also addresses cooling water intake structures for new units at existing facilities. EPA's final rule became effective in October 2014. Compliance with the final rule may require changes to existing cooling water intake structures at certain Gulf generating facilities; however, the ultimate effect of this final rule will depend on the results of additional studies and implementation of the rule by regulators based on site-specific factors. National Pollutant Discharge Elimination System permits issued after July 14, 2018 must include conditions to implement and ensure compliance with the standards and protective measures required by the rule.

Effluent Limitations

In 2009, the EPA announced plans to revise current effluent limitations guidelines for steam electric power plants. The EPA completed a multi-year study of power plant wastewater discharges and concluded that pollutant discharges from coal-fired power plants will increase significantly in the next few years as new air pollution controls are installed. On November 3, 2015, the EPA published a final effluent guidelines rule which imposes stringent technology-based requirements for certain waste streams from steam electric power plants. The revised technology-based limits and compliance dates will be incorporated into future renewals of National Pollutant Discharge Elimination System permits

at affected units and may require the installation and operation of multiple technologies sufficient to ensure compliance with applicable new numeric wastewater compliance limits. Compliance deadlines between November 1, 2018 and December 31, 2023 will be established in permits based on information provided for each applicable waste stream.

Waters of the U.S. Final Rule

On June 29, 2015, the EPA and the U.S. Army Corps of Engineers jointly published a final rule revising the regulatory definition of waters of the U.S. for all Clean Water Act (CWA) programs. The final rule significantly expands the scope of federal jurisdiction under the CWA. This rule could significantly increase permitting and regulatory requirements and costs associated with the siting of new facilities and the installation, expansion, and maintenance of transmission and distribution lines.

This CWA rule became effective August 28, 2015, but on October 9, 2015, the U.S. Court of Appeals for the Sixth Circuit issued an order staying implementation of the final rule. The ultimate impact of the final rule will depend on the outcome of this and other pending legal challenges.

Water Quality and Total Maximum Daily Loads

In addition to this federal action, State of Florida nutrient water quality standards that limit the amount of nitrogen and phosphorous allowed in state waters are in effect for the State's streams and estuaries. These standards only require periodic collection of water quality samples. The impact of future requirements will depend on further regulatory action in connection with their site-specific implementation through the State of Florida's National Pollutant

Discharge Elimination System permitting program and Total Maximum Daily Load restoration program and cannot be determined at this time.

Coal Combustion Residuals

On April 17, 2015, the EPA published the Coal Combustion Residuals (CCR) Rule in the Federal Register, which became effective on October 19, 2015. The CCR Rule regulates the disposal of CCR, including coal ash and gypsum, as non-hazardous solid waste in CCR Units at active generating power plants. The CCR Rule does not automatically require closure of CCR Units but includes minimum criteria for active and inactive surface impoundments containing CCR and liquids, lateral expansions of existing units, and active landfills. Failure to meet the minimum criteria can result in the required closure of a CCR Unit. Although the EPA does not require individual states to adopt the final criteria, states have the option to incorporate the federal criteria into their state solid waste management plans in order to regulate CCR in a manner consistent with federal standards. The EPA's final rule continues to exclude the beneficial use of CCR from regulation. The Company is currently completing an analysis of the plan of closure for all ash ponds, including the timing of closure and related cost recovery through regulated rates subject to Florida PSC approval.

Global Climate Issues

On October 23, 2015, the EPA published two final actions that would limit CO_2 emissions from fossil fuel-fired electric generating units. One of the final actions contains specific emission standards governing CO_2 emissions from new, modified, and reconstructed units. The other final action, known as the

Clean Power Plan, establishes guidelines for states to develop plans to meet EPA-mandated CO_2 emission rates or emission reduction goals for existing units. The EPA's final guidelines require state plans to meet interim CO_2 performance rates between 2022 and 2029 and final rates in 2030 and thereafter. At the same time, the EPA published a proposed federal plan and model rule that, when finalized, states can adopt or that would be put in place if a state either does not submit a state plan or its plan is not approved by the EPA. On February 9, 2016, the Supreme Court of the United States granted a stay of the Clean Power Plan, pending disposition of petitions for its review with the courts. The stay will remain in effect through the resolution of the litigation, whether resolved in the U.S. Court of Appeals for the District of Columbia Circuit or the Supreme Court.

These guidelines and standards could result in operational restrictions and material compliance costs, including capital expenditures, which could affect future unit retirement and replacement decisions. The ultimate financial and operational impact of the final rules on the Company cannot be determined at this time and will depend upon numerous factors, including the Company's ongoing review of the final rules; the outcome of legal challenges, individual state implementation of the EPA's final guidelines, additional rulemaking activities in response to legal challenges and related court decisions, the impact of future changes in generation and emissions-related technology and costs, the impact of future decisions regarding unit retirement and replacement, and the time periods over which compliance will be required.

Conclusion

Gulf has made substantial investments in environmental controls to comply with current and pending laws and regulations. Gulf will continue its involvement in the development of strategies to address any future clean air, water, or other requirements in order to minimize the uncertainty related to the scope and cost of compliance. As new initiatives emerge, Gulf will support any proposal that would help it meet environmental goals and objectives in a logical and cost-effective way, provided that the standards are based on sound science and economics which allow for adequate time to comply without compromising the safe, reliable and affordable supply of electricity to Gulf's customers.

AVAILABILITY OF SYSTEM INTERCHANGE

Gulf coordinates its operations with the other operating companies of the SES: Alabama Power Company, Georgia Power Company, Mississippi Power Company, and Southern Power Company. In any year, an individual operating company may have a temporary surplus or deficit in generating capacity, depending on the relationship of its generating capacity to its load and reserve responsibility. Each SES operating company either buys or sells its temporary deficit or surplus capacity from or to the pool in order to satisfy its reserve responsibility requirement. This is accomplished through the reserve sharing provisions of the SES Intercompany Interchange Contract (IIC) that is reviewed and updated annually.

OFF-SYSTEM SALES

Gulf and other SES operating companies have engaged in the sale of firm capacity and energy to several utilities outside the SES through a series of long-term wholesale power sales agreements with initial terms beginning prior to 1987. Gulf's share of these long-term off-system sales of capacity and energy varies from year to year and is reflected in the reserve calculations on Schedules 7.1 and 7.2, while the fuel use and the energy associated with Gulf’s portion of these sales are included on Schedules 5 and 6.1 respectively. Gulf's primary contribution to these long-term off-system sales has historically come from its ownership interest in Unit 3 at Plant Scherer which Gulf acquired as part of its

long range resource planning to meet the needs of its retail electric service customers. The initial contracts for sales out of Plant Scherer Unit 3 became effective with its commercial operation in 1987 for terms through 2010 and were succeeded by subsequent contracts that became effective in 2005 for terms beginning in 2010. The expiration dates for the 2005 vintage agreements vary by contract with one having termed out at the end of 2015. The two remaining contracts are scheduled to end May 2016 and December 2019, respectively.

CHAPTER IV

FORECAST OF FACILITIES REQUIREMENTS

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CAPACITY RESOURCE ALTERNATIVES

POWER PURCHASES

Gulf's use of power purchase agreements in previous years has proven to be a successful approach to meeting its reliability needs. As Gulf considers resources that can potentially meet its future need for capacity, longer-term power purchases from the market will be evaluated in order to determine their effect on supply flexibility and reduced commitment risk during periods in which environmental regulations (with considerable economic impacts) and legislative initiatives focusing on generation additions are in various stages of development. Gulf will continue to utilize both short-term and longer-term market purchases in the future to balance its approach to supply side resource development.

CAPACITY ADDITIONS

In conjunction with the SES, Gulf will conduct economic evaluations of its potential supply options in order to determine the most cost-effective means of meeting its future capacity obligations. Gulf will evaluate its internal construction options versus external development of capacity resources in order to determine how to best meet its future capacity obligations. Commercially available generating technologies such as gas combustion turbine, combined cycle, and nuclear will be included in future SES IRP mix studies. In addition, emerging Integrated Gasification Combined Cycle (IGCC) technologies, such as air blown IGCC, and generating facilities with carbon capture technology may be added to the future generation mix studies so that their potential economic and technical

viabilities may be evaluated. The potential benefits of these technologies include greater efficiency and lower environmental emissions.

If subsequent mix studies or market solicitations identify alternative power supply technologies or power purchase options that are more economical or that deliver more desirable results, Gulf will modify its expansion plan to reflect the proposed procurement of these resources. Gulf will continue to review all available capacity resource possibilities in order to serve the energy needs of its retail customers in Northwest Florida with reliable and cost-effective electricity.

RENEWABLE RESOURCES

Gulf has secured the supply of capacity and/or energy from several renewable facilities. Schedule 6.3 of this TYSP includes the amount of renewable energy that Gulf has produced or purchased from existing renewable resources, and the amounts currently projected to be produced or purchased from existing renewable resources during the 2016-2025 planning cycle.

Gulf will continue to purchase renewable energy produced by the Bay County Resource Recovery Facility through a negotiated energy purchase agreement that was executed in 2014. This facility, operated and maintained by Engen, LLC, is located in Panama City, Florida and uses municipal solid waste to produce energy for delivery to Gulf on a non-firm basis. Gulf will purchase the energy delivered to its system at fixed prices until the agreement expires in July 2017.

In 2010, Gulf constructed a landfill gas-fired generating facility that is located on leased property adjacent to Escambia County's Perdido Landfill which is just north of Pensacola, Florida. Gulf's Perdido Landfill Gas To Energy Facility consists of two Caterpillar G3520C internal combustion generating units that have a maximum capacity rating of 1.6 MW each. The facility is operated and maintained under contract with LFG Technologies, Inc. Gulf has an agreement with Escambia County, Florida for the purchase of their landfill gas to fuel this Gulf-owned facility. The agreement has a term of 20 years and can be renewed for additional, successive 12 month periods.

Gulf Power has energy purchase agreements that secure cost-effective renewable energy from three solar facilities (Gulf Coast Solar Center I, Gulf Coast Solar Center II, and Gulf Coast Solar Center III) and one wind project (Kingfisher Wind) to serve Gulf's customers. The solar projects will be constructed at three military bases in Northwest Florida. The Kingfisher Wind project produces renewable energy from a facility located in Oklahoma.

On October 30, 2014 and November 7, 2014, Gulf Power and Gulf Coast Solar Center I, II, & III, LLC (subsidiaries of Coronal Development Services, LLC) executed three separate agreements that provide for the sale of energy produced by the solar facilities to Gulf. Each solar energy purchase agreement has a term of twenty-five years and contains robust performance security provisions to protect Gulf and its customers in case of contract default.

Gulf Coast Solar Center I, LLC will develop, construct, own, operate and maintain a 30 MW solar generation facility on Eglin Air Force Base in Okaloosa County, Florida. Gulf Coast Solar Center II, LLC will develop, construct, own, operate and maintain a 40 MW solar generation facility on the U.S. Navy's Holley Outlying Field in Santa Rosa County, Florida. Gulf Coast Solar Center Ill, LLC will develop, construct, own, operate and maintain a 50 MW solar generation facility on the U.S. Navy's Saufley Outlying Field in Escambia County, Florida. Each of the facilities will be directly interconnected to Gulf Power transmission facilities and the owners are fully responsible for the costs of interconnection. These solar energy purchase agreements are expected to provide multiple benefits to Gulf Power and its customers including, but not limited to, cost

savings over the term of the agreements, fuel diversity, promotion of renewable energy generation in Florida, and assistance to the United States Air Force and the United States Navy in achieving their goals for the promotion of renewable generation.

On December 18, 2014, Gulf Power and Morgan Stanley executed an energy purchase agreement with a term of approximately twenty years which is subject to early termination provisions. The Kingfisher Wind project, constructed as a result of this agreement, is located in Kingfisher and Canadian Counties, Oklahoma. Included in the agreement are performance security provisions designed to protect Gulf and its customers in case of default . Morgan Stanley is obligated to deliver a fixed number of MWhs to Gulf in each hour of the agreement's twenty year term, and Gulf will purchase the energy at prices as specified in the agreement. Morgan Stanley bears all risks and responsibilities associated with delivering energy to the Southern Companies Transmission System. The agreement is expected to provide multiple benefits to Gulf and its customers including, but not limited to, substantial cost savings over the term of the agreement, reduced exposure to future fuel cost increases and volatility, and promotion of new renewable wind energy generation.

Under the solar and wind energy purchase agreements, Gulf retains the flexibility to serve its retail customers with renewable energy by retiring the associated environmental attributes or selling the energy and/or environmental attributes separately or bundled together to third parties. To the extent that Gulf Power opts to sell renewable attributes, the proceeds from such sales would be

returned to Gulf's retail customers in the form of credits to the Fuel and Purchased Power Cost Recovery Clause.

Gulf is continuously looking for opportunities to provide cost-effective renewable energy to increase its fuel diversity. Gulf has access to possible purchases of renewable energy through its Renewable Standard Offer Contract (RSOC) on file with the FPSC. Consistent with state law, Gulf updates its pricing for the RSOC as needed so that a standard offer for the purchase of renewable energy is continually available to developers of renewable resources. Gulf may also negotiate a PPA with a renewable energy supplier.

GULF POWER COMPANY

Schedule 6.3
Renewable Energy Sources

(1)	(2)	(3) Actuals	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
	Renewable Energy Sources [A]	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
(1)	Renewable Generating Capacity											
	Perdido (MW)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
	Kingfisher Wind [B] (MW)	0.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0	58.0
	Perdido (MWh)	24,554	24,789	24,720	24,720	24,720	24,789	24,720	24,720	24,720	24,789	24,720
	Bay County (MWh)	54,177	36,950	21,998	0	0	0	0	0	0	0	0
	Gulf Coast Solar Center I @ Eglin (MWh)	0	0	60,296	59,995	59,695	59,544	59,099	58,804	58,510	58,362	57,926
	Gulf Coast Solar Center II @ Holley (MWh)	0	0	81,203	80,797	80,393	80,198	79,591	79,193	78,797	78,606	78,011
	Gulf Coast Solar Center III @ Saufley (MWh)	0	0	99,701	99,202	98,706	98,455	97,721	97,234	96,747	96,500	95,782
	Kingfisher Wind (MWh)	0	675,570	674,409	674,409	674,409	675,570	674,409	674,409	674,409	675,570	674,409
	Total MWh	78,731	737,309	962,327	939,123	937,923	938,556	935,540	934,360	933,183	933,827	930,848
	% of Capacity Mix	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1
	% of NEL	0.7	6.2	8.0	7.7	7.6	7.6	7.6	7.6	7.5	7.4	7.4
	% of Fuel Mix	0.6	5.4	6.1	5.6	5.8	6.9	6.8	6.4	6.9	7.3	6.8
(2)	Self-Service Generation By											
	Renewable Generation MW	68	68	68	68	68	68	68	68	68	68	68
	MWh [C]	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies	varies

(A) Owned and/or Purchased by Gulf.
(B) MWs scheduled during the system peak hour per contract obligation to deliver fixed amount per hour.
(C) Energy produced by these customers' generators varies depending on demand for their product.

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PREFERRED AND POTENTIAL SITES FOR CAPACITY ADDITIONS

Gulf's current plan is to either construct new generating facilities or purchase additional generating capacity by June 2023 of the current planning cycle following the expiration of its 885 MW Shell PPA. The Company's next need is anticipated to be for CT capacity. Gulf will consider its existing Florida sites at Plant Crist in Escambia County, Plant Smith in Bay County, and Plant Scholz in Jackson County, as well as its greenfield sites in Florida at Shoal River in Walton County, at Caryville in Holmes County, and at North Escambia in Escambia County as potential sites for locating future generating units in Northwest Florida.

Each of these potential sites has unique characteristics that may offer construction and/or operational advantages related to the potential installation of natural gas-fired CTs, which is the next potential type of capacity needed. Please note that the sites discussed herein are not listed in any particular order based on their individual attributes. Site selection for Gulf's next generating unit addition will be based on existing infrastructure, available acreage and land use, transmission, fuel facilities, environmental factors including evolving ozone standards, and overall project economics. The required environmental and land use information for each potential site is set forth below. The estimated peak water usage for the proposed CTs should be identical for each site mentioned below. Gulf projects that approximately 500 gallons per minute would be required for domestic, irrigation, and other potable and non-potable water uses.

Potential Site #1: Plant Crist, Escambia County

The project site would be located on Gulf's existing Plant Crist property in Escambia County, Florida. If a future project is ultimately located on this property, detailed studies must first be completed to determine the exact size and location of the project site within the plant property's boundaries in order to meet Gulf's needs while ensuring full compliance with local, state, and federal requirements. The plant property, approximately 10 miles north of Pensacola, Florida, can be accessed via county roads from nearby U. S. Highway 29. As shown on Schedule 1, the existing Plant Crist facility consists of 924 MW of steam generation.

U. S. Geological Survey (USGS) Map

A USGS map showing the general location of the Plant Crist property is found on page 83 of this chapter.

Land Uses and Environmental Features

The Plant Crist property is dedicated to industrial use. The land adjacent to the property is currently being used for residential, commercial, and industrial purposes. General environmental features of the undeveloped portion of the property include mixed scrub, mixed hardwood/pine forest, and some open grassy areas. This property is located on the Escambia River. There are no unique or significant environmental features on the property that would substantially affect project development.

Water Supply Sources

For industrial processing, cooling, and other water needs, Gulf would likely use a combination of groundwater from on-site wells, available surface water, and reclaimed water sources.

Potential Site #2: Plant Smith, Bay County

The project site would be located on Gulf's existing Plant Smith property in Bay County, Florida. If a future project is ultimately located on this property, detailed studies must first be completed to determine the exact size and location of the project site within the plant property's boundaries in order to meet Gulf's needs while ensuring full compliance with local, state, and federal requirements. The plant property, approximately 10 miles northwest of Panama City, Florida, is located on North Bay and can be accessed via a county road from nearby State Road 77. As shown on Schedule 1, the existing Plant Smith facility consists of 96 MW of steam generation per the FDEP MATS deadline extension, 556 MW of combined cycle generation, and 32 MW of CT generation.

U. S. Geological Survey (USGS) Map

A USGS map showing the general location of the Plant Smith property is found on page 84 of this chapter.

Land Uses and Environmental Features

The Plant Smith property is dedicated to industrial use. The land adjacent to the property is rural and consists of planted pine plantations. General environmental features of the property include a mixture of upland and

wetland areas. This property is located on North Bay, which connects to St. Andrews Bay. The property has no unique or significant environmental features that would substantially affect project development.

Water Supply Sources

For industrial processing, cooling, and other water needs, Gulf would likely use a combination of groundwater from on-site wells and available surface water.

Potential Site #3: Plant Scholz, Jackson County

The project site would be located on Gulf's existing Plant Scholz property in Jackson County, Florida. If a future project is ultimately located on this property, detailed studies must first be completed to determine the exact size and location of the project site within the plant property's boundaries in order to meet Gulf's needs while insuring full compliance with local, state, and federal requirements. The plant property, approximately 3 miles southeast of Sneads, Florida, is located on the Apalachicola River and can be accessed via a private road from nearby U. S. Highway 90. The Plant Scholz facility was retired in April 2015.

U. S. Geological Survey (USGS) Map

A USGS map showing the general location of the Plant Scholz property is found on page 85 of this chapter.

Land Uses and Environmental Features

The Plant Scholz property is dedicated to industrial use. The land adjacent to the property is primarily rural and in a natural state, but some agricultural development exists. General environmental features of the property include a mixture of hardwood and pine forest areas. This property is located on the Apalachicola River. Because the river is designated as Outstanding Florida Waters, certain criteria must be satisfied to ensure that the river is not significantly degraded. Water withdrawals for any future generation sited here would be limited to volumes currently permitted for Plant Scholz. There are no other unique or significant environmental features that would substantially affect project development.

Water Supply Sources

For industrial processing, cooling, and other water needs, Gulf would likely use a combination of groundwater from on-site wells and available surface water.

Potential Site #4: Shoal River Property, Walton County

The project site would be located on undeveloped Gulf property in Walton County, Florida. If the project is ultimately located on this property, detailed studies will be required to determine the exact size and location of the project site within the property's boundaries in order to meet Gulf's needs, while insuring full compliance with local, state, and federal requirements. This property, also

referred to as the Mossy Head property, is approximately 3 miles northwest of Mossy Head, Florida. It is located on the Shoal River and can be accessed via a county road from nearby U. S. Highway 90.

U. S. Geological Survey (USGS) Map

A USGS map showing the general location of the Shoal River property is found on page 86 of this chapter.

Land Uses and Environmental Features

The Shoal River property is currently dedicated to agricultural and rural residential use. The northern part of the site, some 150 acres, is designated General Agricultural in Walton County's Comprehensive Future Land Use Plan. The land adjacent to the property is rural and in a natural state. General environmental features of the property mainly include wooded upland areas. This property is located on the Shoal River. Because the river is designated as Outstanding Florida Waters, certain criteria must be satisfied to ensure that the river is not significantly degraded. There are no other unique or significant environmental features on the property that would substantially affect project development.

Water Supply Sources

For industrial processing, cooling, and other water needs, Gulf would likely use groundwater from on-site wells.

Potential Site #5: Caryville Property, Holmes County

The project site would be located on undeveloped Gulf property that is bisected by the Holmes/Washington County, Florida line. If the project is ultimately located on this property, detailed studies will be required to determine the exact size and location of the project site within the property's boundaries in order to meet Gulf's needs while ensuring full compliance with local, state, and federal requirements. This property is approximately 1.5 miles northeast of Caryville, Florida. It is located just east of the Choctawhatchee River and can be accessed via County Road 179 from nearby U. S. Highway 90.

U. S. Geological Survey (USGS) Map

A USGS map showing the general location of the Caryville property is found on page 87 of this chapter.

Land Uses and Environmental Features

The Caryville property is certified under the Power Plant Siting Act for two 500 MW coal-fired units, but is also suitable for CT generating units. The site is approximately 2,200 acres in size and is adjacent to a major railroad line on its southern boundary. The land surrounding the property is primarily rural and is used mainly for agriculture and timber harvesting. General environmental features of the property mainly include wooded upland areas, with areas of wetlands. There are no other unique or significant environmental features on the property that would substantially affect project development.

Water Supply Sources

For industrial processing, cooling, and other water needs, Gulf would likely use groundwater from on-site wells and available surface water.

Potential Site #6: North Escambia Property, Escambia County

The project site would be located on undeveloped Gulf property that is located in the northern part of Escambia County, Florida, approximately 5 miles southwest of Century, Florida. It is located just west of the Escambia River and can be accessed via County Road 4 from nearby U. S. Highway 29. If the project is ultimately located on this property, detailed studies will be required to determine the exact size and location of the project site within the property's boundaries in order to meet Gulf's needs, while insuring full compliance with local, state, and federal requirements.

U. S. Geological Survey (USGS) Map

A USGS map showing the general location of the North Escambia property is found on page 88 of this chapter.

Land Uses and Environmental Features

The North Escambia property is primarily dedicated to timber harvesting and agricultural use. The property is in close proximity to transmission, natural gas pipelines, railroad, major highways and access to water, all suitable to accommodate new generation needs. The site is currently 2728 acres and includes property located directly on the Escambia River to support the water supply needs for any future generating facility. The

land surrounding the property is primarily rural and is used mainly for timber harvesting and agriculture. General environmental features of the property mainly include wooded upland areas, with areas of hardwood/pine forest and wetlands. There are no other unique or significant environmental features on the property that would substantially affect future project development.

Water Supply Sources

For industrial processing, cooling, and other water needs, Gulf would likely use a combination of groundwater from on-site wells and available surface water.

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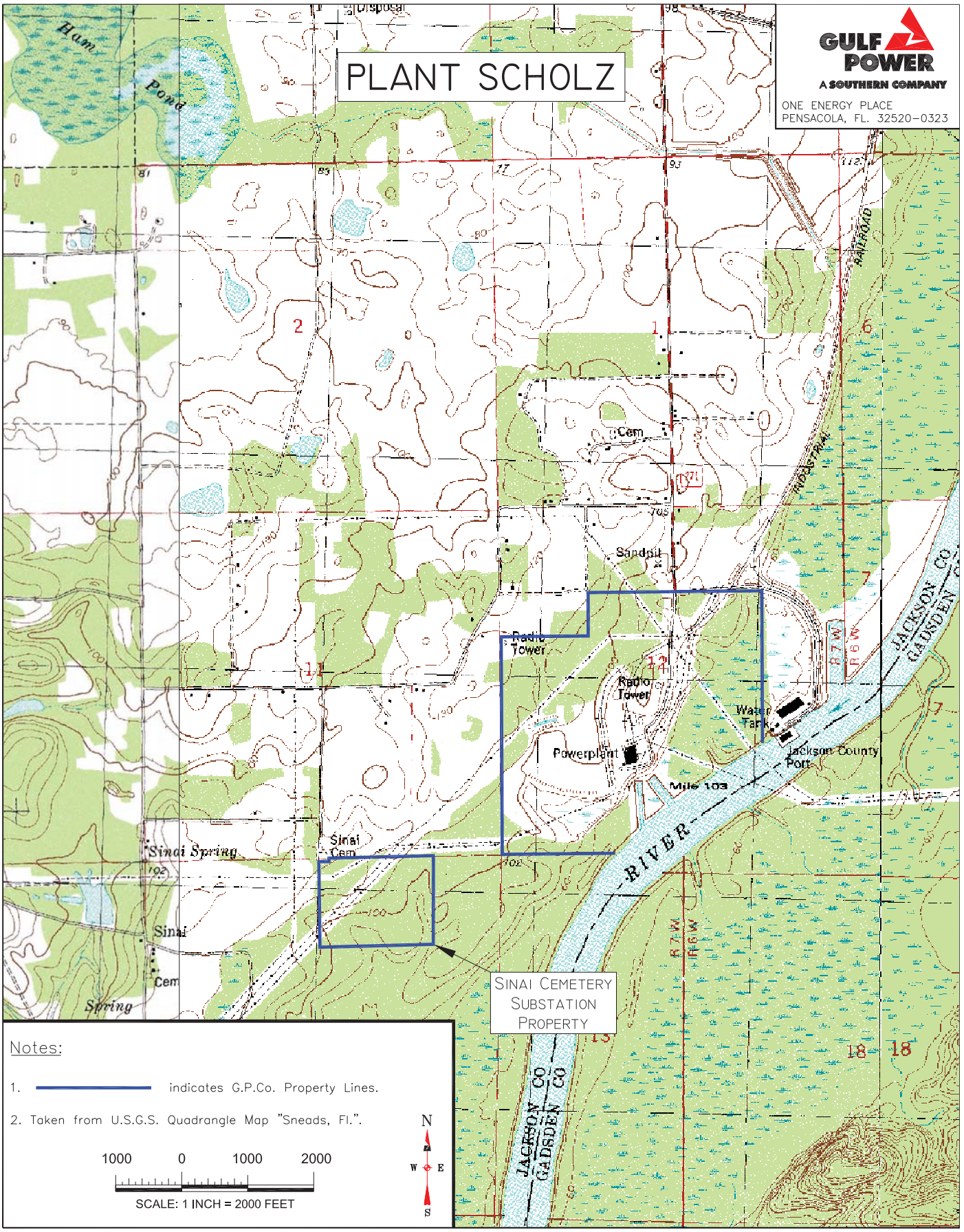
160170-OPC-POD-3-227



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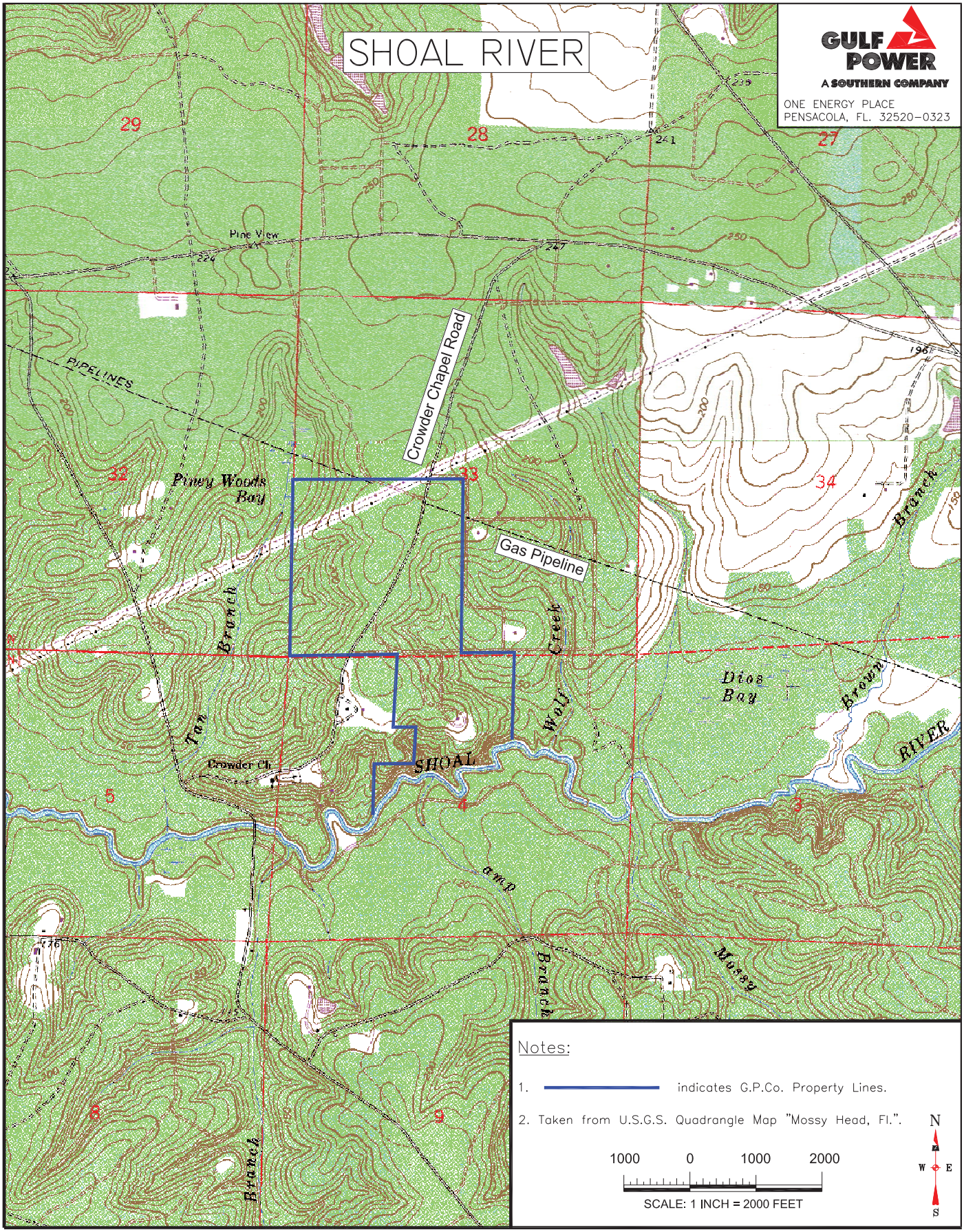

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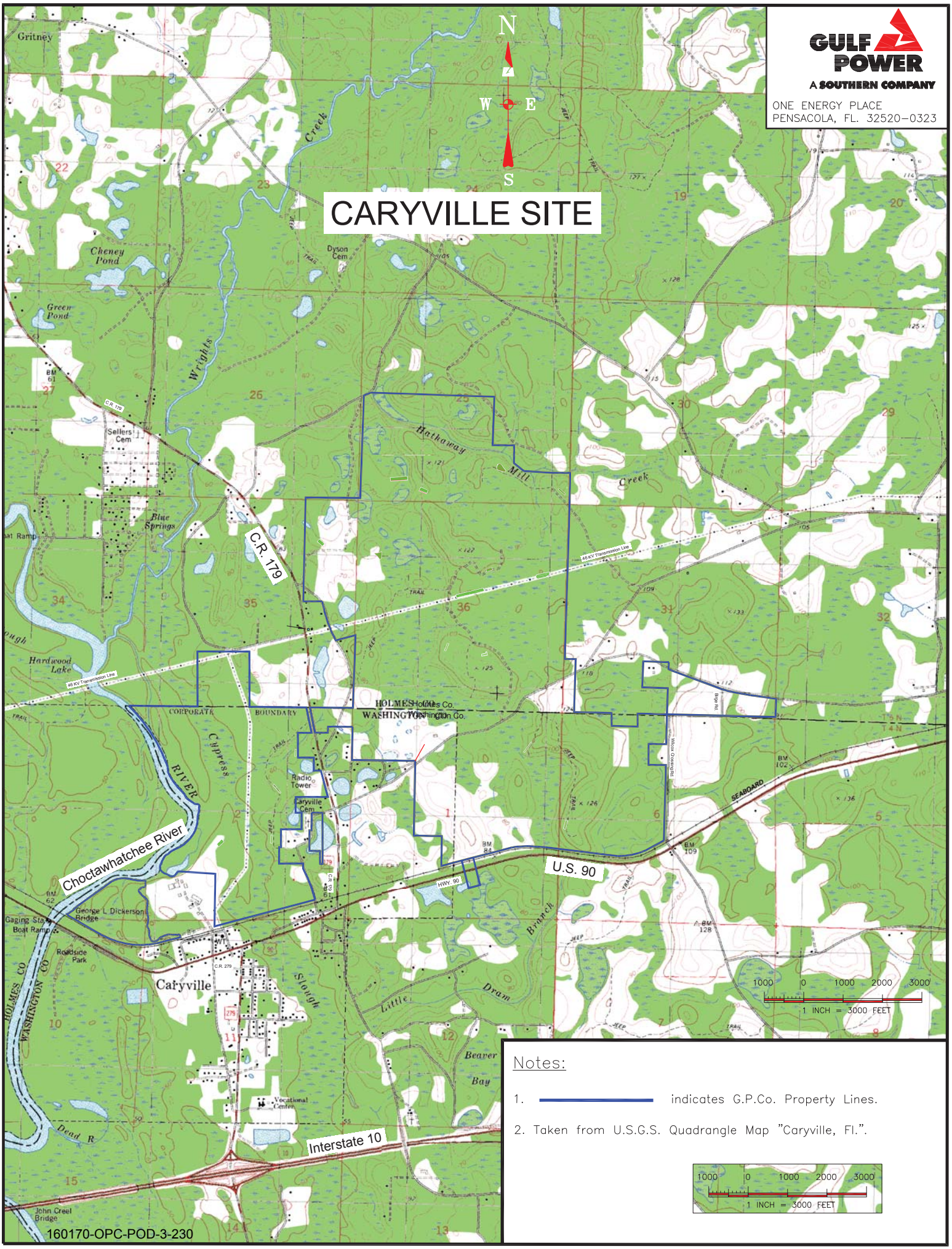


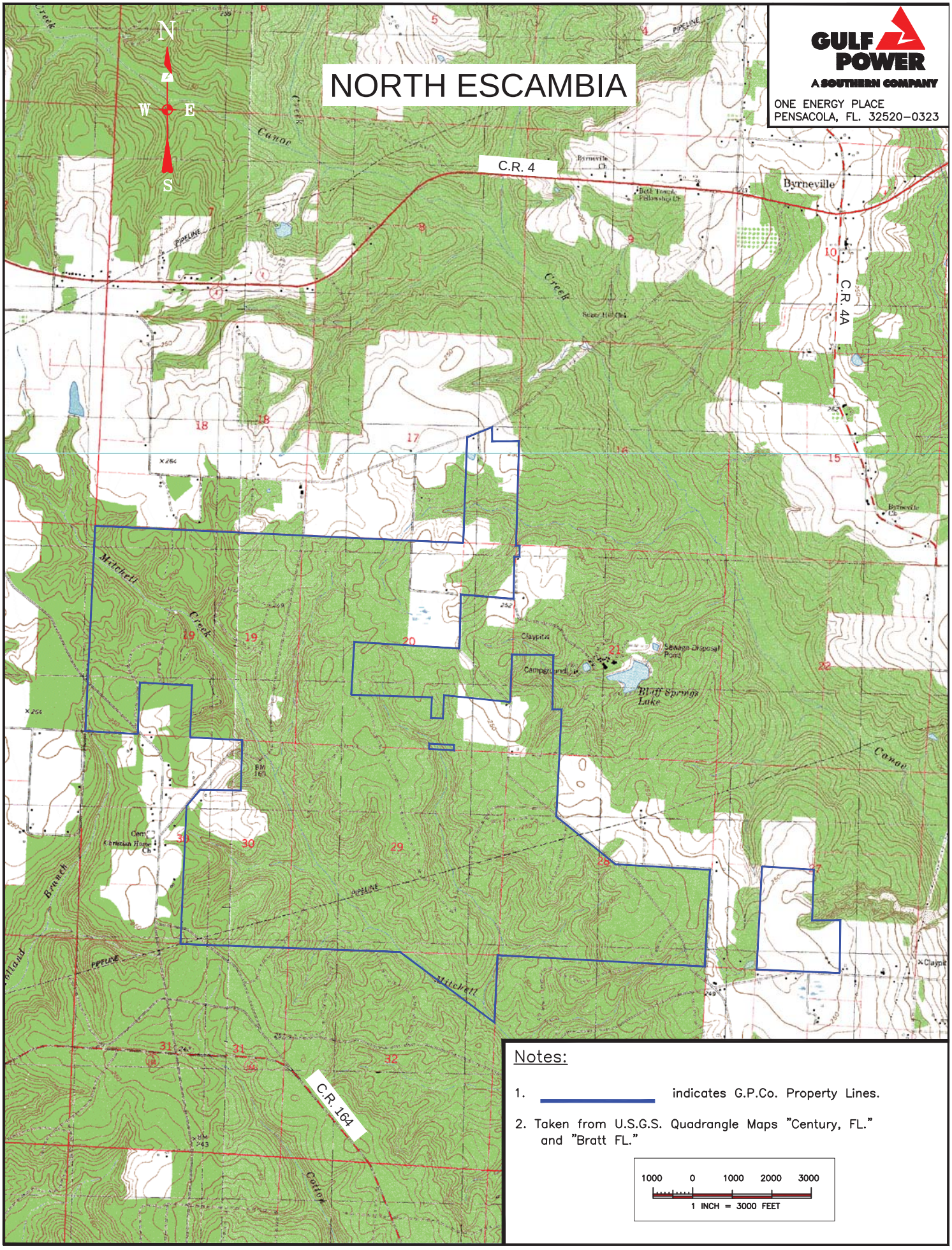
Notes:

1. ——— indicates G.P.Co. Property Lines.

2. Taken from U.S.G.S. Quadrangle Map "Caryville, Fl.".

1000 0 1000 2000 3000
1 INCH = 3000 FEET

160170-OPC-POD-3-230



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GULF POWER COMPANY

SCHEDULE 7.1

FORECAST OF CAPACITY, DEMAND, AND SCHEDULED MAINTENANCE AT TIME OF SUMMER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
							RESERVE MARGIN BEFORE MAINTENANCE			RESERVE MARGIN AFTER MAINTENANCE	
YEAR	TOTAL INSTALLED CAPACITY MW	FIRM CAPACITY IMPORT MW	FIRM CAPACITY EXPORT MW	NUG MW	TOTAL CAPACITY AVAILABLE MW	FIRM PEAK DEMAND MW	MW	% OF PEAK	SCHEDULED MAINTENANCE MW	MW	% OF PEAK
2016	2,251	943	(55)	0	3,139	2,450	689	28.1%	NONE	689	28.1%
2017	2,251	943	(50)	0	3,144	2,491	653	26.2%		653	26.2%
2018	2,251	943	(50)	0	3,144	2,520	624	24.8%		624	24.8%
2019	2,239	943	(50)	0	3,132	2,546	586	23.0%		586	23.0%
2020	2,239	943	0	0	3,182	2,552	630	24.7%		630	24.7%
2021	2,239	943	0	0	3,182	2,554	628	24.6%		628	24.6%
2022	2,239	943	0	0	3,182	2,554	628	24.6%		628	24.6%
2023	2,893	58	0	0	2,951	2,564	387	15.1%		387	15.1%
2024	2,893	58	0	0	2,951	2,576	375	14.6%		375	14.6%
2025	2,893	58	0	0	2,951	2,586	365	14.1%		365	14.1%

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GULF POWER COMPANY

SCHEDULE 7.2

FORECAST OF CAPACITY, DEMAND, AND SCHEDULED MAINTENANCE AT TIME OF WINTER PEAK

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL INSTALLED	FIRM CAPACITY	FIRM CAPACITY		TOTAL CAPACITY	FIRM PEAK	RESERVE MARGIN BEFORE MAINTENANCE		SCHEDULED	RESERVE MARGIN AFTER MAINTENANCE	
YEAR	CAPACITY MW	IMPORT MW	EXPORT MW	NUG MW	AVAILABLE MW	DEMAND MW	MW	% OF PEAK	MAINTENANCE MW	MW	% OF PEAK
2015-16	2,387	956	(216)	0	3,127	2,124	1,003	47.2%	NONE	1,003	47.2%
2016-17	2,290	956	(55)	0	3,191	2,153	1,038	48.2%		1,038	48.2%
2017-18	2,290	956	(50)	0	3,196	2,177	1,019	46.8%		1,019	46.8%
2018-19	2,275	956	(50)	0	3,181	2,205	976	44.3%		976	44.3%
2019-20	2,275	956	(50)	0	3,181	2,210	971	43.9%		971	43.9%
2020-21	2,275	956	0	0	3,231	2,210	1,021	46.2%		1,021	46.2%
2021-22	2,275	956	0	0	3,231	2,209	1,022	46.3%		1,022	46.3%
2022-23	2,275	956	0	0	3,231	2,215	1,016	45.9%		1,016	45.9%
2023-24	2,952	71	0	0	3,023	2,223	800	36.0%		800	36.0%
2024-25	2,952	71	0	0	3,023	2,230	793	35.6%		793	35.6%

GULF POWER COMPANY

SCHEDULE 8

PLANNED AND PROSPECTIVE GENERATING FACILITY ADDITIONS AND CHANGES

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
				Fuel		Fuel Transport		Const	Com'l In-	Effective	Gen Max	Net Capability		
Plant Name	Unit No.	Location	Unit Type	Pri	Alt	Pri	Alt	Start Mo/Yr	Service Mo/Yr	Date Mo/Yr	Nameplate KW	Summer MW	Winter MW	Status
Scherer	3	Monroe County, GA	FS	C	--	RR	--		01/87	06/16	222,750	(1.0)	(1.0)	CR
Lansing Smith [1]	1	Bay County 36/2S/15W	FS	C	--	WA	--	--	06/65	03/16	149,600	(96.0)	(96.0)	R
Lansing Smith [2]	2	Bay County 36/2S/15W	FS	C	--	WA	--	--	06/65	03/16	149,600	n/a	n/a	R
Pea Ridge	1 - 3	Santa Rosa County 15/1N/29W	CT	NG	--	PL	--	--	05/98	12/18	14,250	(12.0)	(15.0)	R
Combustion Turbines	1 - 3	Unknown	CT	NG	--	PL	--	06/19	06/23	06/23	696,000	654.0	677.0	P

Footnotes:

1) Smith 1 retires in 3/2016 following derated status.
2) Smith 2 retires in 3/2016 following off-line status.

Abbreviations:

Unit Type
FS - Fossil Steam
S - Steam
CT - Combustion Turbine
CC - Combined Cycle
IC - Internal Combustion

Fuel
C - Coal
NG - Natural Gas
LO - Light Oil
HO - Heavy Oil
LFG - Landfill Gas
WDS - Wood Waste Solid

Status
CR - Certified Rating change
D - Environmental derate
P - Planned, but not authorized by utility
R - To be retired
U - Under construction, less than or equal to 50% complete
V - Under construction, more than 50% complete

Fuel Transportation
PL - Pipeline
TK - Truck
RR - Railroad
WA - Water

GULF POWER COMPANY

Schedule 9

Status Report and Specifications of Proposed Generating Facilities

(1)	Plant Name and Unit Number:	Combustion Turbines
(2)	Net MW Capacity	
	a. Summer:	654
	b. Winter	677
	Gross MW Capacity	
	a. Summer:	662
	b. Winter	685
(3)	Technology Type:	GT
(4)	Anticipated Construction Timing	
	a. Field construction start - date:	06/19
	b. Commercial in-service date:	06/23
(5)	Fuel	
	a. Primary fuel:	NG
	b. Alternate fuel:	DFO
(6)	Air Pollution Control Strategy:	Dry Low NOx Burners
(7)	Cooling Method:	Evaporative Cooling
(8)	Total Site Area:	Unknown
(9)	Construction Status:	Planned Not Committed
(10)	Certification Status:	Not Applied
(11)	Status with Federal Agencies:	Not Applied
(12)	Projected Unit Performance Data	
	Planned Outage Factor (POF):	1.4%
	Unplanned Outage Factor (UOF):	3.6%
	Equivalent Availability Factor (EAF):	95.0%
	Capacity Factor (%):	9.7%
	Average Net Operating Heat Rate (ANOHR):	10,304
(13)	Projected Unit Financial Data	
	Book Life (Years):	40
	Total Installed Cost (In-Service Year $/kW):	598
	Direct Construction Cost ('16 $/kW):	461
	AFUDC Amount ($/kW):	62
	Escalation ($/kW):	75
	Fixed O&M ('23 $/kW - Yr):	14.42
	Variable O&M ('23 $/MWH):	4.92
	K Factor:	1.3775

GULF POWER COMPANY

Schedule 10

Status Report and Specifications of Proposed Directly Associated Transmission Lines

(1) Point of Origin and Termination:	Unknown
(2) Number of Lines:	Unknown
(3) Right-of-Way:	Unknown
(4) Line Length:	Unknown
(5) Voltage:	Unknown
(6) Anticipated Construction Timing:	Unknown
(7) Anticipated Capital Investment:	Unknown
(8) Substations:	Unknown
(9) Participation with Other Utilities:	N/A

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