



Report
04/01/2019

April 1, 2019

Mr. Adam Teitzman, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee FL 32399-0870

Re: 2019 Ten Year Site Plan

Dear Ms. Stauffer:

Attached for electronic filing is Gulf Power Company's 2019 Ten Year Site Plan filed pursuant to FPSC Rule No. 25-22.071.

Sincerely,

A handwritten signature in blue ink that reads 'C. Shane Boyett'.

C. Shane Boyett
Regulatory Issues Manager

md

Attachments

cc: Florida Public Service Commission
Adam Teitzman, Office of the Commission Clerk (10 copies)
Gulf Power Company
Russell Badders, Esq., VP & Associate General Counsel

TEN YEAR SITE PLAN 2019-2028

**FOR ELECTRIC GENERATING FACILITIES
AND
ASSOCIATED TRANSMISSION LINES**

APRIL 2019



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, 2019

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GULF POWER COMPANY

TEN-YEAR SITE PLAN

Executive Summary

The Gulf Power Company (Gulf Power, Gulf, or Company) 2019 Ten-Year Site Plan (TYSP) 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 oversight of the TYSP. This TYSP is being filed in compliance with FPSC Rule No. 25-22.071, F.A.C.

Gulf's 2019 TYSP presents a resource plan for the years 2019 through 2028 that is based on resource planning analyses performed during 2018. In 2018, as in previous years, these resource planning analyses were performed by Southern Company Services (SCS) on behalf of Gulf Power.

Gulf's 2019 TYSP provides 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 described in this TYSP was coordinated with the Southern electric system Integrated Resource Planning (SES IRP) process. That process included Gulf and three Southern electric system (SES) retail operating companies: Alabama Power Company, Georgia Power Company, and Mississippi Power Company.

The resource needs are driven by the demand forecast that includes the load reduction effects of projected demand-side measures that are embedded in the forecast prior to entering the generation mix process. The generation mix process involves screening available technologies in order to produce a listing of preferred resources from which to select the most cost-effective plan. The resulting resource needs are then allocated among Gulf and the three SES retail operating companies based on reserve requirements, and each company then determines the resource(s) that will best meet its customers' load and reliability needs.

Gulf indicated in its 2018 TYSP that generating capacity would be needed following the expiration of Gulf's 885 megawatt (MW) Power Purchase Agreement (PPA) with Shell Energy North America (Shell PPA). Although Gulf's peak demand and energy loads for the 2019-2028 planning cycle are forecast to be slightly lower than the loads discussed in Gulf's 2018 TYSP, Gulf's reserve margin target deficit will be approximately 300 MWs in 2023 when the Shell PPA expires. If no new resources are added and future Gulf unit retirements were to occur, this deficit could increase to approximately 500 MWs by 2028. With the expiration of the Shell PPA, a future capacity resource addition(s), combined with capacity and energy supplied from Gulf's existing generation fleet, will be required to reliably serve Gulf's retail customers through the planning cycle.

Consistent with last year's TYSP, Gulf's 2019 TYSP indicates that the leading option for Gulf's next self-build resource needed to meet Gulf's obligation to serve its customers is a dual-fuel 1-on-1 combined cycle (CC) unit with a summer rating of 595 MWs with an in-service date of June 2024 located at the

North Escambia site. Details associated with this proposed CC unit are shown on Schedule 9 of this TYSP. The current natural gas price forecast projects low prices to continue through the current planning cycle, in turn reinforcing the value of adding natural gas resources to Gulf's system.

Gulf continues to purchase renewable energy generated by municipal solid waste (MSW), solar, and wind facilities. Gulf's contract with the Bay County MSW facility provides for the purchase of energy for a six-year period ending July 2023. Gulf's solar energy purchase agreements, each having terms of 25 years, provide for the purchase of energy from three solar facilities located in Northwest Florida that came on-line in 2017. The Company's two wind energy purchase agreements with Morgan Stanley Capital Group have terms extending through 2035 and began delivering energy to Gulf in 2016 and 2017, respectively. These renewable energy purchase agreements, as well as the potential to add additional renewable resources to Gulf's system, are discussed in more detail in the Renewable Resources section of this TYSP.

On January 1, 2019, Gulf Power became a subsidiary of NextEra Energy, Inc., which also owns Florida Power & Light Company (FPL). Beginning in 2019, the resource planning analyses for Gulf Power that were formerly performed by SCS will be performed by the resource planning group at FPL. At the time of Gulf Power's 2019 TYSP filing, new resource planning analyses have been initiated and are expected to continue throughout 2019. It is expected that a number of resource options will be analyzed to determine if they would be cost-effective for Gulf Power's customers. These resource options may include, but not necessarily be limited to: new solar, battery storage, coal-to-gas conversions, combustion

turbines, combined cycle units, unit upgrades, retirements, and new transmission lines.

Therefore, the resource plan presented in Gulf Power's 2019 TYSP is subject to future change based on the results of the new resource planning analyses. Any changes to Gulf Power's resource plan will be shown and discussed in Gulf Power's 2020 TYSP filing.

CHAPTER I

DESCRIPTION OF EXISTING FACILITIES

DESCRIPTION OF EXISTING FACILITIES

Gulf owns and operates generating facilities at four sites in Northwest Florida (Plants Crist, Smith, Pea Ridge, and Perdido). Gulf also owns a 50 percent undivided ownership interest in Unit 1 and Unit 2 and a proportional undivided ownership interest in the associated common facilities at Mississippi Power Company's Daniel Electric Generating Facility. Gulf has a 25 percent 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, which is operated on Gulf's behalf by Georgia Power Company, the unit's other co-owner.

As of December 31, 2018, Gulf's fleet of generating units consists of seven coal-fired steam units, one natural gas-fired CC unit, three small natural gas-fired combustion turbines (CTs), one oil-fired CT, 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 577 MW (summer rating) of CC and 32 MW (summer rating) of CT generating facilities. Gulf's Pea Ridge Facility, in Pace, Florida, consists of three CTs 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 shows Gulf's total net summer generating capability, as of December 31, 2018, to be 2,265 MW and its total net winter generating capability to be 2,304 MW.

Gulf's existing system in Northwest Florida, including major generating plants, substations, and transmission lines, is shown on the system map on page 9 of this TYSP. Specific data related to Gulf's existing generating facilities is presented on Schedule 1 of this TYSP.

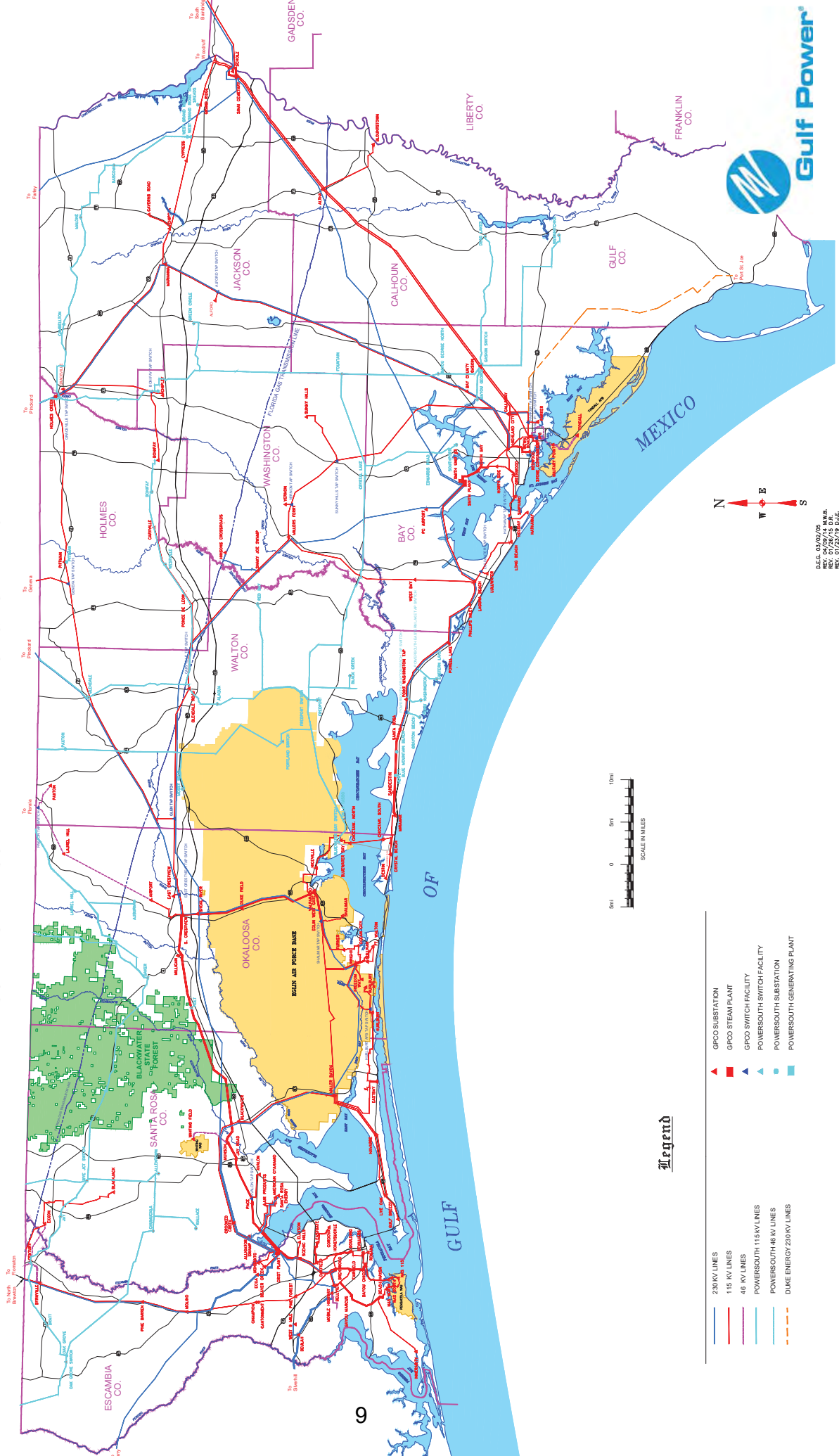
GULF POWER COMPANY

SCHEDULE 1
EXISTING GENERATING FACILITIES
AS OF DECEMBER 31, 2018

Page 1 of 2

(1) Plant Name	(2) Unit No.	(3) Location	(4) Unit Type	(5) Fuel		(6) Fuel		(7) Fuel Transp		(9) Alt. Fuel Days Use	(10) Com'l In-Service Mo/Yr	(11) Exptd Retrmnt Mo/Yr	(12) Gen Max Nameplate KW	(13) Net Capability Summer MW		(14) Winter MW
				Pri	Alt	Pri	Alt	Pri	Alt					MW		MW
Crist	4	Escambia County 25/1N/30W	FS	C	NG	WA	PL	1		1	07/59	12/24	1,135,250	924.0	924.0	
	5		FS	C	NG	WA	PL	1		1	06/61	12/26	93,750	75.0	75.0	
	6		FS	C	NG	WA	PL	1		1	05/70	12/35	93,750	75.0	75.0	
	7		FS	C	--	WA	--	--		--	08/73	12/38	369,750	299.0	299.0	
Lansing Smith		Bay County 36/2S/15W											578,000	475.0	475.0	
													697,950	609.0	645.0	
													656,100	577.0	605.0	
Daniel ^(A)	3	Jackson County, MS 42/5S/6W	CC	NG	--	PL	--	--		--	04/02	12/42	41,850	32.0	40.0	
	A		CT	LO	--	TK	--	--		--	05/71	12/27				
	1		FS	C	--	RR	--	--		--	09/77	12/42	548,250	502.0	502.0	
	2		FS	C	--	RR	--	--		--	06/81	12/46	274,125	251.0	251.0	
Scherer ^(A)	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	04/25	4,750	4.0	5.0	
	2		CT	NG	--	PL	--	--		--	05/98	04/25	4,750	4.0	5.0	
	3		CT	NG	--	PL	--	--		--	05/98	04/25	4,750	4.0	5.0	

GULF POWER COMPANY TRANSMISSION & SUBSTATION SYSTEM



Legend

- 230 kV LINES
- 115 kV LINES
- 46 kV LINES
- POWERSOUTH 115 kV LINES
- POWERSOUTH 46 kV LINES
- DUKE ENERGY 230 kV LINES
- GPCC SUBSTATION
- GPCC STEAM PLANT
- GPCC SWITCH FACILITY
- POWERSOUTH SWITCH FACILITY
- POWERSOUTH SUBSTATION
- POWERSOUTH GENERATING PLANT

D.E.S. 03/20/05
REV. 04/29/14 M.B.B.
REV. 01/23/19 S.L.C.
GPO Transmission System 2019.dwg



CHAPTER II

FORECAST OF ELECTRIC POWER DEMAND AND ENERGY CONSUMPTION

GULF POWER COMPANY
LOAD 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 striving to understand the needs, perceptions, and motivations of customers.

The Forecasting group in Gulf Power's Finance organization 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 May 2018 economic projection provided by IHS Markit.

The May 2018 economic projection assumed the Federal Reserve would continue the normalization of monetary policy. U.S. real gross domestic product (GDP) was expected to grow 2.8% in 2018 and 2019. The U.S. economic expansion was projected to continue because of steady growth in consumer spending, which is supported by improving household finances, low unemployment, and higher home values.

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. IHS Markit projected that the economy in Northwest Florida would experience steady growth throughout the forecast period. IHS Markit's May 2018 economic projection was developed prior to Hurricane Michael, which occurred in October 2018; therefore, the economic outlook for Northwest Florida does not reflect the impacts from Hurricane Michael.

Northwest Florida's real disposable personal income increased 2.1% in 2017 and 2.8% in 2018. Real disposable personal income was projected to grow over the next five years at an average annual rate of 2.7%. Since 2013, the

region's employment has shown steady year over year growth. Employment was projected to grow at an average annual rate of 0.8% over the next five years. Single family housing starts have shown modest improvements since 2009 and returned to near normal levels in 2016. Population growth in Northwest Florida was 1.2% in 2018 and was projected to maintain an average annual rate of 0.8% 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 2018 Gulf Power Official Long-Range Forecast. The following tables provide a 5-year summary of assumptions associated with Gulf's forecast:

TABLE 1

**NATIONAL ECONOMIC SUMMARY
AVERAGE ANNUAL GROWTH RATES
(2018-2023)**

GDP Growth	1.9 %
Interest Rate (30 Year AAA Bonds)	4.2 %
Inflation	2.4 %

TABLE 2

**AREA DEMOGRAPHIC SUMMARY
(2018-2023)**

Population Gain	42,000
Average Annual Household Gain	5,100
Average Annual Population Growth	0.8 %
Average Annual Household Growth	1.3 %

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 IHS Markit, 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, 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 continued 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, changes in average lighting efficiencies, 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 forecast 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. 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 were multiplied by the expected number of smaller industrial customers 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, national energy efficiency standards, and MSA-level employment. The model output was then multiplied by the number of days in each month to expand to the total wholesale energy forecast. No wholesale energy sales are projected after December 2019 due to the expiration of a wholesale contract.

F. COMPANY USE FORECAST

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

IV. PEAK DEMAND FORECAST

Gulf's 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 forecast energy sales described previously. PDM spreads the energy projections using the historical load shapes to develop hourly system load shapes. The monthly forecast system peak demands are the single highest hour of demand for each month. Gulf's projected annual system peak demand 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 IHS Markit. IHS Markit relies on the U.S. Census Bureau for information on households.

VI. CONSERVATION PROGRAMS

Gulf's forecast of energy sales reflects the impacts of improving appliance energy efficiency standards, which are projected to reduce residential and commercial energy sales by 892 GWhs by year 2028. Additionally, Gulf's forecasts of energy sales and peak demand reflect the expected impacts of programs included in Gulf's 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-EG in December of 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

1. Commercial/Industrial (C/I) Energy Analysis – This program is an interactive one that provides commercial and industrial customers assistance in identifying energy conservation opportunities. It is a prime tool for the Gulf Power Company C/I Energy Specialists to use to personally introduce a customer to conservation measures, including low or no-cost improvements or new electro-technologies to replace old or inefficient equipment.
2. 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.
3. 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.

4. 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 approved conservation programs.

HISTORICAL
TOTAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2018	500,064	556,692	1,079,433,000

2019 BUDGET FORECAST
TOTAL CONSERVATION PROGRAMS
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2019	7,100	5,500	10,500,000
2020	8,000	6,600	11,800,000
2021	8,800	7,700	12,800,000
2022	9,600	8,600	13,900,000
2023	10,300	9,600	14,700,000
2024	10,900	10,700	15,500,000
2025	10,900	10,700	15,500,000
2026	10,900	10,700	15,500,000
2027	10,900	10,700	15,500,000
2028	10,900	10,700	15,500,000

2019 BUDGET FORECAST
TOTAL CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2019	507,164	562,192	1,089,933,000
2020	515,164	568,792	1,101,733,000
2021	523,964	576,492	1,114,533,000
2022	533,564	585,092	1,128,433,000
2023	543,864	594,692	1,143,133,000
2024	554,764	605,392	1,158,633,000
2025	565,664	616,092	1,174,133,000
2026	576,564	626,792	1,189,633,000
2027	587,464	637,492	1,205,133,000
2028	598,364	648,192	1,220,633,000

HISTORICAL
RESIDENTIAL CONSERVATION
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2018	267,814	379,427	646,582,000

2019 BUDGET FORECAST
RESIDENTIAL CONSERVATION
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2019	6,000	5,300	8,200,000
2020	6,800	6,400	9,300,000
2021	7,500	7,400	10,100,000
2022	8,200	8,300	10,900,000
2023	8,800	9,300	11,500,000
2024	9,300	10,300	12,000,000
2025	9,300	10,300	12,000,000
2026	9,300	10,300	12,000,000
2027	9,300	10,300	12,000,000
2028	9,300	10,300	12,000,000

2019 BUDGET FORECAST
RESIDENTIAL CONSERVATION
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2019	273,814	384,727	654,782,000
2020	280,614	391,127	664,082,000
2021	288,114	398,527	674,182,000
2022	296,314	406,827	685,082,000
2023	305,114	416,127	696,582,000
2024	314,414	426,427	708,582,000
2025	323,714	436,727	720,582,000
2026	333,014	447,027	732,582,000
2027	342,314	457,327	744,582,000
2028	351,614	467,627	756,582,000

HISTORICAL
COMMERCIAL/INDUSTRIAL CONSERVATION
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2018	232,250	177,265	432,851,000

2019 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL CONSERVATION
INCREMENTAL ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2019	1,100	200	2,300,000
2020	1,200	200	2,500,000
2021	1,300	300	2,700,000
2022	1,400	300	3,000,000
2023	1,500	300	3,200,000
2024	1,600	400	3,500,000
2025	1,600	400	3,500,000
2026	1,600	400	3,500,000
2027	1,600	400	3,500,000
2028	1,600	400	3,500,000

2019 BUDGET FORECAST
COMMERCIAL/INDUSTRIAL CONSERVATION
CUMULATIVE ANNUAL REDUCTIONS
AT GENERATOR

	SUMMER PEAK (KW)	WINTER PEAK (KW)	NET ENERGY FOR LOAD (KWH)
2019	233,350	177,465	435,151,000
2020	234,550	177,665	437,651,000
2021	235,850	177,965	440,351,000
2022	237,250	178,265	443,351,000
2023	238,750	178,565	446,551,000
2024	240,350	178,965	450,051,000
2025	241,950	179,365	453,551,000
2026	243,550	179,765	457,051,000
2027	245,150	180,165	460,551,000
2028	246,750	180,565	464,051,000

VII. SMALL POWER PRODUCTION / RENEWABLE ENERGY

At the end of 2018, net metered interconnections of customer-owned renewable systems totaled 1,173 in number. In 2018, these interconnected renewable energy systems delivered 4.46 GWhs to Gulf's grid. Since the implementation of the net metering rule in October 2008, net metered interconnections have delivered 12.9 GWhs to Gulf's utility grid.

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		
	Population*	Members per Household*	GWH	Average No. of Customers	Average KWH Consumption Per Customer	GWH	Average No. of Customers	Average KWH Consumption Per Customer
Year	866,490	2.55	5,254	374,010	14,049	3,896	53,414	72,942
2009	866,490	2.55	5,254	374,010	14,049	3,896	53,414	72,942
2010	872,790	2.54	5,651	375,847	15,036	3,997	53,349	74,912
2011	881,820	2.52	5,305	378,157	14,028	3,911	53,409	73,235
2012	897,620	2.52	5,054	379,897	13,303	3,859	53,706	71,846
2013	910,890	2.58	5,089	382,599	13,301	3,810	54,261	70,215
2014	922,640	2.59	5,362	386,765	13,865	3,838	54,749	70,104
2015	935,340	2.56	5,365	391,465	13,705	3,898	55,234	70,566
2016	947,810	2.57	5,358	396,408	13,515	3,869	55,876	69,236
2017	960,920	2.57	5,229	401,793	13,015	3,814	56,428	67,583
2018	972,720	2.56	5,519	406,949	13,563	3,829	56,892	67,298
2019	981,780	2.55	5,448	413,652	13,170	3,760	57,629	65,238
2020	990,780	2.54	5,489	420,349	13,057	3,756	58,338	64,386
2021	999,380	2.53	5,556	426,034	13,041	3,773	59,040	63,901
2022	1,007,690	2.52	5,588	430,996	12,966	3,773	59,661	63,245
2023	1,015,390	2.51	5,626	435,209	12,928	3,773	60,179	62,689
2024	1,022,420	2.50	5,647	438,641	12,874	3,757	60,595	62,002
2025	1,029,050	2.49	5,677	441,711	12,852	3,741	60,971	61,349
2026	1,035,310	2.48	5,706	444,842	12,827	3,723	61,352	60,677
2027	1,041,390	2.48	5,738	447,994	12,808	3,707	61,736	60,054
2028	1,047,410	2.47	5,774	451,119	12,800	3,694	62,118	59,473
CAAG								
09-18	1.3%	0.1%	0.5%	0.9%	-0.4%	-0.2%	0.7%	-0.9%
18-23	0.9%	-0.4%	0.4%	1.4%	-1.0%	-0.3%	1.1%	-1.4%
18-28	0.7%	-0.4%	0.5%	1.0%	-0.6%	-0.4%	0.9%	-1.2%

* 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					
		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
Year	GWH						
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	1,830	247	7,402,625	0	25	0	11,082
2017	1,740	255	6,815,486	0	26	0	10,809
2018	1,757	253	6,931,497	0	28	0	11,132
2019	1,689	255	6,622,652	0	27	0	10,924
2020	1,678	255	6,581,621	0	28	0	10,951
2021	1,596	255	6,259,155	0	28	0	10,953
2022	1,596	255	6,258,264	0	29	0	10,987
2023	1,596	255	6,257,424	0	29	0	11,023
2024	1,596	255	6,257,428	0	29	0	11,029
2025	1,596	255	6,257,424	0	29	0	11,042
2026	1,596	255	6,257,424	0	29	0	11,053
2027	1,596	255	6,257,424	0	29	0	11,070
2028	1,596	255	6,257,428	0	29	0	11,093
CAAG							
09-18	0.2%	-1.1%	1.3%	0.0%	1.1%	0.0%	0.2%
18-23	-1.9%	0.1%	-2.0%	0.0%	0.9%	0.0%	-0.2%
18-28	-1.0%	0.1%	-1.0%	0.0%	0.5%	0.0%	0.0%

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)
	Sales for Resale <u>GWH</u>	Utility Use & Losses <u>GWH</u>	Net Energy for Load <u>GWH</u>	Other Customers (Average No.) <u>(Average No.)</u>	Total No. of Customers <u>Customers</u>
Year					
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	629	12,037	598	442,370
2015	330	580	11,996	610	447,557
2016	331	618	12,030	609	453,140
2017	318	588	11,715	574	459,050
2018	302	623	12,057	589	464,682
2019	303	591	11,818	600	472,136
2020	0	577	11,528	605	479,547
2021	0	577	11,530	611	485,939
2022	0	579	11,565	617	491,528
2023	0	581	11,604	619	496,261
2024	0	581	11,610	619	500,110
2025	0	582	11,623	619	503,556
2026	0	582	11,636	619	507,068
2027	0	583	11,653	619	510,604
2028	0	584	11,678	619	514,111
CAAG					
09-18	-2.8%	-1.0%	0.1%	1.8%	0.9%
18-23	0.0%	-1.4%	-0.8%	1.0%	1.3%
18-28	0.0%	-0.6%	-0.3%	0.5%	1.0%

GULF POWER COMPANY

Schedule 3.1

History and Forecast of Summer Peak Demand - MW

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
<u>Year</u>	<u>Total</u>	<u>Wholesale</u>	<u>Retail</u>	<u>Interruptible</u>	<u>Residential Load Management</u>	<u>Residential Conservation</u>	<u>Comm/Ind Load Management</u>	<u>Comm/Ind Conservation</u>	<u>Net Firm Demand</u>
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	256	0	231	2,495
2016	3,000	76	2,924	0	0	261	0	231	2,508
2017	2,931	74	2,857	0	0	266	0	232	2,434
2018	2,991	72	2,920	0	0	268	0	232	2,491
2019	2,909	66	2,843	0	0	274	0	233	2,402
2020	2,862	0	2,862	0	0	281	0	235	2,347
2021	2,872	0	2,872	0	0	288	0	236	2,348
2022	2,894	0	2,894	0	0	296	0	237	2,360
2023	2,911	0	2,911	0	0	305	0	239	2,367
2024	2,923	0	2,923	0	0	314	0	240	2,368
2025	2,936	0	2,936	0	0	324	0	242	2,370
2026	2,951	0	2,951	0	0	333	0	244	2,374
2027	2,966	0	2,966	0	0	342	0	245	2,379
2028	2,986	0	2,986	0	0	352	0	247	2,388

CAAG

09-18	0.3%	-2.8%	0.4%	0.0%	0.0%	4.7%	0.0%	2.5%	-0.2%
18-23	-0.5%	0.0%	-0.1%	0.0%	0.0%	2.6%	0.0%	0.6%	-1.0%
18-28	0.0%	0.0%	0.2%	0.0%	0.0%	2.8%	0.0%	0.6%	-0.4%

GULF POWER COMPANY

Schedule 3.2

History and Forecast of Winter Peak Demand - MW

(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
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	3,038	85	2,953	0	0	369	0	176	2,492
15-16	2,593	74	2,519	0	0	374	0	176	2,043
16-17	2,765	80	2,686	0	0	377	0	177	2,211
17-18	3,366	81	3,284	0	0	379	0	177	2,809
18-19	2,833	70	2,763	0	0	385	0	177	2,271
19-20	2,779	55	2,724	0	0	391	0	178	2,210
20-21	2,847	0	2,847	0	0	399	0	178	2,271
21-22	2,801	0	2,801	0	0	407	0	178	2,216
22-23	2,817	0	2,817	0	0	416	0	179	2,222
23-24	2,827	0	2,827	0	0	426	0	179	2,222
24-25	2,840	0	2,840	0	0	437	0	179	2,224
25-26	2,857	0	2,857	0	0	447	0	180	2,230
26-27	2,873	0	2,873	0	0	457	0	180	2,236
27-28	2,894	0	2,894	0	0	468	0	181	2,246
CAAG									
09-18	2.2%	-2.1%	2.4%	0.0%	0.0%	3.1%	0.0%	1.9%	2.1%
18-23	-3.5%	0.0%	-3.0%	0.0%	0.0%	1.9%	0.0%	0.1%	-4.6%
18-28	-1.5%	0.0%	-1.3%	0.0%	0.0%	2.1%	0.0%	0.2%	-2.2%

GULF POWER COMPANY

Schedule 3.3

History and Forecast of Annual Net Energy for Load - GWH

(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 %
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	13,048	595	416	11,075	332	629	12,037	51.0%
2015	13,056	630	430	11,086	330	580	11,996	54.9%
2016	13,097	637	430	11,082	331	618	12,030	54.6%
2017	12,789	642	432	10,809	318	588	11,715	54.9%
2018	13,136	647	433	11,132	302	623	12,057	49.0%
2019	12,908	655	435	10,924	303	591	11,818	56.2%
2020	12,630	664	438	10,951	0	577	11,528	55.9%
2021	12,645	674	440	10,953	0	577	11,530	56.1%
2022	12,694	685	443	10,987	0	579	11,565	55.9%
2023	12,747	697	447	11,023	0	581	11,604	56.0%
2024	12,768	709	450	11,029	0	581	11,610	55.8%
2025	12,798	721	454	11,042	0	582	11,623	56.0%
2026	12,825	733	457	11,053	0	582	11,636	56.0%
2027	12,858	745	461	11,070	0	583	11,653	55.9%
2028	12,898	757	464	11,093	0	584	11,678	55.7%
CAAG								
09-18	0.4%	6.0%	2.6%	0.2%	-2.8%	-1.0%	0.1%	-1.0%
18-23	-0.6%	1.5%	0.6%	-0.2%	0.0%	-1.4%	-0.8%	2.7%
18-28	-0.2%	1.6%	0.7%	0.0%	0.0%	-0.6%	-0.3%	1.3%

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)
	2018		2019		2020	
	Actual		Forecast		Forecast	
	Peak Demand	NEL	Peak Demand	NEL	Peak Demand	NEL
	MW	GWH	MW	GWH	MW	GWH
Month						
January	2,809	1,123	2,271	955	2,210	928
February	1,661	748	1,947	812	1,954	813
March	1,622	814	1,512	797	1,473	775
April	1,615	795	1,704	820	1,653	796
May	2,090	1,052	2,137	1,015	2,081	988
June	2,491	1,200	2,342	1,184	2,276	1,152
July	2,408	1,288	2,402	1,277	2,347	1,248
August	2,396	1,216	2,379	1,265	2,325	1,237
September	2,354	1,174	2,210	1,085	2,151	1,057
October	2,133	933	1,969	918	1,907	889
November	1,845	832	1,558	793	1,514	773
December	1,972	883	1,953	897	1,894	870

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 2017	Actual 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
(1)	Nuclear		Trillion BTU	None	None	None	None	None	None	None	None	None	None	None	None
(2)	Coal		1000 TON	2,609	2,935	2,753	2,485	2,793	2,791	3,345	3,069	2,943	2,898	2,967	2,877
(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	15	30	15	13	17	14	13	14	12	11	17	15
(9)		Steam	1000 BBL	15	27	13	12	16	13	13	13	12	11	16	15
(10)		CC	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(11)		CT	1000 BBL	0.1	2.7	1.6	0.8	0.7	0.6	0.3	0.7	0.3	0.2	1.0	0.0
(12)		Diesel	1000 BBL	None	None	None	None	None	None	None	None	None	None	None	None
(13)	Natural Gas	Total	1000 MCF	65,817	59,283	73,143	74,937	71,394	63,791	36,084	23,095	50,567	49,343	48,298	47,601
(14)		Steam	1000 MCF	1,673	1,255	0	0	0	0	0	0	0	0	0	0
(15)		CC	1000 MCF	62,989	56,948	72,155	73,946	70,406	62,803	35,096	22,104	50,242	49,343	48,298	47,601
(16)		CT	1000 MCF	1,155	1,080	988	991	988	988	988	991	325	0	0	0
(17)	Other ^(A)		1000 MCF	265	250	239	240	239	239	239	240	239	239	239	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 2017	Actual 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
(1)	Annual Firm Interchange		GWH	(3,644)	(3,095)	(6,100)	(5,986)	(6,234)	(5,228)	(2,673)	(2,607)	(4,209)	(3,961)	(3,955)	(3,624)
(2)	Nuclear		GWH	None	None	None	None	None	None	None	None	None	None	None	None
(3)	Coal		GWH	4,973	5,526	6,172	5,519	6,250	6,315	7,647	6,998	6,747	6,665	6,837	6,637
(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	0.2	1.1	0.7	0.3	0.3	0.3	0.1	0.3	0.1	0.1	0.4	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	0.2	1.1	0.7	0.3	0.3	0.3	0.1	0.3	0.1	0.1	0.4	0.0
(13)		Diesel	GWH	None	None	None	None	None	None	None	None	None	None	None	None
(14)	Natural Gas	Total	GWH	8,983	8,150	10,256	10,504	10,025	8,989	5,178	5,789	7,658	7,505	7,345	7,237
(15)		Steam	GWH	94	29	0	0	0	0	0	0	0	0	0	0
(16)		CC	GWH	8,810	8,048	10,189	10,437	9,958	8,922	5,111	5,722	7,636	7,505	7,345	7,237
(17)		CT	GWH	79	73	67	67	67	67	67	67	22	0	0	0
(18)	NUGs ^(A)		GWH	188	148	148	149	150	151	151	152	153	154	154	155
(19)	Renewables	Total	GWH	1,215	1,327	1,341	1,342	1,339	1,338	1,301	1,278	1,274	1,273	1,272	1,273
(20)		LFG	GWH	25	23	25	25	25	25	25	25	25	25	25	25
(21)		MSW	GWH	62	46	60	60	60	60	25	0	0	0	0	0
(22)		Solar	GWH	122	227	225	224	223	222	220	220	218	217	216	215
(23)		Wind	GWH	1,006	1,031	1,031	1,033	1,031	1,031	1,031	1,033	1,031	1,031	1,031	1,033
(24)	Net Energy for Load		GWH	11,715	12,057	11,818	11,528	11,530	11,565	11,604	11,610	11,623	11,636	11,653	11,678

(A) Energy received from Non-Renewable sources. 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 2017	Actual 2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
(1)	Annual Firm Interchange		%	(31.11)	(25.67)	(51.61)	(51.93)	(54.07)	(45.21)	(23.04)	(22.46)	(36.21)	(34.04)	(33.94)	(31.03)
(2)	Nuclear		%	None	None	None	None	None	None	None	None	None	None	None	None
(3)	Coal		%	42.45	45.83	52.23	47.87	54.21	54.60	65.90	60.28	58.05	57.28	58.67	56.83
(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	%	0.00	0.01	0.01	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	%	0.00	0.01	0.01	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	%	76.68	67.60	86.78	91.12	86.95	77.73	44.62	49.86	65.89	64.50	63.03	61.97
(15)		Steam	%	0.80	0.24	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
(16)		CC	%	75.20	66.75	86.22	90.54	86.37	77.15	44.05	49.29	65.70	64.50	63.03	61.97
(17)		CT	%	0.67	0.61	0.57	0.58	0.58	0.58	0.58	0.58	0.19	0.00	0.00	0.00
(18)	NUGs		%	1.60	1.23	1.25	1.29	1.30	1.31	1.30	1.31	1.32	1.32	1.32	1.33
(19)	Renewables	Total	%	10.37	11.01	11.35	11.64	11.61	11.57	11.21	11.01	10.96	10.94	10.92	10.90
(20)		LFG	%	0.21	0.19	0.21	0.22	0.22	0.22	0.22	0.22	0.22	0.21	0.21	0.21
(21)		MSW	%	0.53	0.38	0.51	0.52	0.52	0.52	0.22	0.00	0.00	0.00	0.00	0.00
(22)		Solar	%	1.04	1.88	1.90	1.94	1.93	1.92	1.90	1.89	1.88	1.86	1.85	1.84
(23)		Wind	%	8.59	8.55	8.72	8.96	8.94	8.91	8.88	8.90	8.87	8.86	8.85	8.85
(24)	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 resources. See Schedule 6.3 for details on Gulf's renewable resources .

CHAPTER III

PLANNING ASSUMPTIONS AND PROCESSES

INTEGRATED RESOURCE PLANNING PROCESS

In preparing for the 2019 TYSP filing, Gulf participated in the SES IRP process during 2018, coordinating its plans for future resource additions with the SES retail operating companies.

As described in previous Gulf TYSPs, the SES IRP planning process begins with a determination of the various historical, current and future economic trends and conditions which would impact the business over the next 20 to 25 years, including general inflation and escalation assumptions that will affect fuel costs, construction costs, labor rates and variable operation and maintenance (O&M) expenses. Other activities included in the SES IRP process include: energy and demand forecasting, fuel price forecasting, generation technology screening analysis and evaluation, engineering cost estimation, and evaluation of dispatchable and non-dispatchable demand-side management (DSM) programs.

The impact of DSM programs on system loads is assessed and included as an input into the SES IRP process. DSM programs that 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 approved conservation programs.

The supply side of the IRP process focuses on the system as a whole. The reserve margin for the system determines the reserves needed to maintain the proper economic and reliability balance that allows the system to reliably meet its energy and demand requirements after accounting for load forecast error,

abnormal weather conditions, and unit forced outage conditions, adjusted as appropriate for risk.

The current SES IRP used in the development of Gulf's 2019 TYSP has as its planning criterion a 16.25 percent summer reserve margin target for the year 2022 and beyond. With the addition of a resource such as the proposed 1-on-1 CC at North Escambia, Gulf would meet its reserve margin target.

Once the above mentioned planning assumptions are determined, resource 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 system. 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 generation additions. An indicative schedule of generation 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 20-year planning horizon. The leading combinations from the program are then reviewed for reasonableness and validity. It is important to note that supply-side additions from the PROVIEW™ program output are for the entire Southern system and are reflective of the various technology candidates selected.

After the system 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 generation additions. When all companies are satisfied with their generation additions, the system base supply-side plan is complete. The result is an individual operating company supply plan that fits within the system planning criteria.

In summary, the SES IRP process involves a significant amount of manpower and computer resources in order to produce an integrated demand-side and supply-side resource plan. The analysis seeks a broad range of alternatives in order to meet the system's projected demand and energy requirements. The resulting product is an integrated indicative plan which meets the needs of the company's customers in a cost-effective and reliable manner. On January 1, 2019, Gulf Power became a subsidiary of NextEra Energy, Inc., which also owns Florida

Power & Light Company (FPL). Prior to this transaction, resource planning analyses for Gulf Power were performed by SCS. Such planning was based on Gulf remaining a part of the Southern Company system. Going forward, these planning services will be performed for Gulf Power by the resource planning group at FPL, and Gulf's 2020 TYSP will reflect the results of these analyses.

TRANSMISSION PLANNING PROCESS

The transmission system is commonly 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, generally known as "contingencies". Although the transmission system is not studied as part of the SES IRP process, it is separately studied by SCS in an ongoing process in order to address potential reliability concerns. The results of the IRP are factored into transmission studies to determine the impacts of interconnecting planned resource additions at various sites on the transmission system. On January 1, 2019, Gulf Power became a subsidiary of NextEra Energy, Inc., which also owns Florida Power & Light Company (FPL). Prior to this transaction, transmission planning analyses for Gulf Power were performed by SCS. Such planning was based on Gulf remaining a part of the Southern Company system. Going forward, these planning services will be performed for Gulf Power by the transmission planning group at FPL.

FUEL PRICE FORECAST PROCESS

FUEL PRICE FORECASTS

The underlying fuel price forecast reflected in Gulf Power's 2019 TYSP has been developed as part of the coordinated planning process in which Gulf participated during 2018 in order to produce the SES IRP.

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 system. Natural gas does not possess the same quality variations as coal, so a single commodity price forecast for gas at Henry Hub is prepared, and a basis differential between Henry Hub and the various pipelines serving applicable plants is applied. A single price forecast is also developed for ultra-low sulfur diesel (ULSD) oil, which is the only oil used.

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.

GENERIC FUEL FORECAST

During 2018, short-term (current year +2) and long-term (year 4 and beyond) fuel price forecasts for coal, oil, and natural gas were developed, and these extend through the 10-year planning horizon. The short-term forecasts were developed for use in the system's fuel budgeting process and marginal pricing dispatch procedures.

The long-term forecasts were developed in the spring of 2018 for use in system planning activities. Charles River & Associates (CRA) is the modeling vendor used to develop the long-term forecasts.

Fuel market assumptions, developed in collaboration with CRA, are integrated into CRA's model to develop commodity forecast prices. Transportation prices are developed and 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.

NATURAL GAS PRICES

2018 began with below-average temperatures, record demand and frigid temperatures in production basins. Consequently, Gas Daily natural gas prices at Henry Hub jumped from \$2.97 per MMBtu on December 31, 2017, to as much as \$6.88 on January 4, 2018. Prices moderated by late January 2018 and remained below \$4.00 until November, when cold temperatures returned and concerns arose over storage levels being below the 5-year average. Overall, Henry Hub prices averaged \$3.15 in 2018. Total U.S. natural gas consumption in 2018 was a record

high of 81.58 billion cubic feet (Bcf)/day. On the supply side, dry gas production in 2018 continued to grow from 2017 levels with new production records being set.

NATURAL GAS PRICE OUTLOOK

The outlook for natural gas prices in the United States is influenced by multiple factors. The most important factors in projecting natural gas prices are demand and shale gas production. Once a domestic commodity, natural gas is increasingly evolving into a global commodity because of growing LNG markets. Commodities such as oil, LNG, natural gas liquids, and power are interconnected to natural gas more now than ever before. Impacts from an evolving technology, regulatory and political landscape are also impacting the natural gas markets.

Flat demand in the U.S. residential and commercial sectors is expected for several decades as energy efficiency increases. However, in the long-term, the industrial sector, particularly the chemical industry, is expected to account for the most growth in natural gas consumption. The power sector is projected to also increase its natural gas consumption as a result of continued low natural gas prices and installation of new natural gas plants as utility and/or regulatory decisions are made on the retirements of coal-fired and nuclear power plants.

The United States became a net exporter of natural gas in 2017 and continued as such in 2018. As more export terminals are placed in service, LNG exports from the U.S. are projected to increase through the end of the 2020's. After 2030, LNG is projected to become less competitive as additional suppliers enter the global LNG market.

The U.S. Energy Information Administration (EIA) estimates U.S. dry natural gas production averaged an estimated 83.3 Bcf/day in 2018. The EIA forecasts

production to be 90.2 Bcf/day in 2019 and 92.2 Bcf/day in 2020. Reserve estimates continue to increase. According to the most current data from the EIA, the United States had 464.3 Tcf of proven natural gas reserves at the end of 2017. Dry natural gas production is projected to increase through at least 2050. Drilling growth in the Southwest region, particularly in the Permian basin, is the main driver for production from shale gas and tight oil plays. Production of gas from “liquids-rich” shale resources will be especially important since the liquids value is sufficient to cover much of the drilling costs allowing natural gas to become a low-cost byproduct. Crude oil prices, not natural gas prices, will determine the level of drilling in the oil formations.

The outlook for natural gas prices remains low. Henry Hub spot prices are projected to remain below \$5 through 2050 according to the EIA’s Annual Energy Outlook 2019 reference case. For 2019, the EIA expects the Henry Hub natural gas spot price to average \$2.89 per MMBtu and \$2.92 per MMBtu in 2020.

COAL PRICE OUTLOOK

The U.S. Energy Information Administration (EIA) estimates that total 2018 U.S. coal production was 755 million short tons (MMst), which was 20 MMst less than 2017. In 2018, coal prices rose in three of the five major U.S. coal-producing regions, particularly the Northern and Central Appalachian regions. Although U.S. coal exports increased by about 10 MMst in 2018, volumes were not enough to offset the decline in U.S. coal consumption, resulting in an overall decline in coal production. Of the five major U.S. coal producing regions, two saw increased production in 2018. In the Central Appalachian and Illinois Basins, production increased 4 percent (3 MMst) and 2 percent (2 MMst) respectively. The Rocky

Mountain region experienced the largest decline, with production 12 percent, or 6 MMst lower than in 2017. The Powder River and Northern Appalachian Basins also declined by 3 percent and 2 percent, respectively.

Major factors that continue to contribute to the decline in coal production are low natural gas prices, continued coal-fired generating unit retirements, and the addition of renewable energy generation. Though production from the Central Appalachian coal supply region saw a slight increase in 2018 due to the export demand from Europe, production from this region will continue to decline in the long term because of the inability of these mines to compete with lower cost coal basins such as the Illinois Basin and the Powder River Basin.

Prior to 2016, Illinois Basin coal production saw a steady increase due to the widespread installation of scrubbers at eastern power generating stations. With the completion of these controlled units, Illinois Basin coal will again be forced to compete with Powder River Basin coal domestically. Production levels of Illinois Basin coal were also up in 2018 as compared to 2017, the result of slightly higher domestic demand and the Illinois coal continuing to ship to markets in Europe, Africa and India. Competition with other coals could lead to reduced production from the Illinois Basin in the future.

Powder River Basin coal production decreased by 3 percent in 2018. Production costs have increased slightly as mining moves from east to west across the basin and deeper reserves are accessed. Increased overburden and the relative distance to rail load outs have put upward pressure on costs. Overall, the economics of surface mining in this region remain favorable although production is forecast to remain relatively flat over the next several years. Growth in export

opportunities off the West Coast into Asian markets will be contingent on terminal capacity.

Demand for Western Bituminous coal is expected to remain flat as several generators in Colorado have ceased burning this coal. The inherent low sulfur content of this coal allows for export opportunities, and these export opportunities will have a major impact on this coal's long-term viability and production levels. As for movements into the Southeast, the high transportation costs make Western Bituminous coals less economic to this region.

The demand for Colombian coal is largely affected by the global demand for coal. In the Atlantic Basin, Colombia is the major supplier of coal into Europe, and demand there continues to increase. In the Pacific Basin, the major importer of coal is China, and its governmental policies regulating domestic coal production have caused an increase in imports from Australia and Indonesia over the last few years, in turn affecting the world market demand. Even though coal demand and production have declined in the U.S., greater world market demand has increased U.S. exports, especially from the Central Appalachian and Illinois Basin regions. This factor has led to an increase in U.S. coal prices from other domestic coal supplying regions.

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ENVIRONMENTAL COMPLIANCE

Gulf Power, under the leadership of its new parent company, NextEra Energy, Inc., is committed to remaining an industry leader in environmental protection and stewardship. This commitment to compliance, conservation, communication, and continuous improvement fosters a culture of environmental excellence and drives the sustainable management of its business planning, operations, and daily work.

In accordance with commitments to environmental protection and stewardship, Gulf Power endeavors to:

Comply

- Comply with all applicable environmental laws, regulations, and permits
- Proactively identify environmental risks and take action to mitigate those risks
- Pursue opportunities to exceed environmental standards
- Participate in the legislative and regulatory process to develop environmental laws, regulations, and policies that are technically sound and economically feasible
- Design, construct, operate, and maintain facilities in an environmentally sound and responsible manner

Conserve

- Prevent pollution, minimize waste, and conserve natural resources
- Avoid, minimize, and/or mitigate impacts to habitat and wildlife
- Promote the efficient use of energy, both within our company and in our communities

Communicate

- Invest in environmental training and awareness to achieve a corporate culture of environmental excellence
- Maintain an open dialogue with stakeholders on environmental matters and performance
- Communicate this policy to all employees and publish it on the corporate website

Continuously Improve

- Establish, monitor, and report progress toward environmental targets
- Review and update this policy on a regular basis
- Drive continuous improvement through ongoing evaluations of our environmental management system to incorporate lessons learned and best practices.

Gulf Power complies with all environmental laws, regulations, and permit requirements, and it designs, constructs, and operates its facilities in an environmentally sound and responsible manner. Gulf has developed and routinely updates its environmental compliance strategy to serve as a road map for a cost-effective compliance plan. This road map establishes general direction, but it also 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 (SO₂) and nitrogen oxides (NO_x). Gulf's compliance activities for SO₂ 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 desulfurization equipment (scrubbers) on Plant Crist Units 4 through 7 in December 2009, Plant Scherer Unit 3 in March 2011, and Plant Daniel Units 1 and 2 in November 2015, which are now achieving significant reductions of SO₂ emissions at these coal-fired units. In addition to reducing SO₂ emissions, Gulf has installed low NO_x burners and/or additional post-combustion NO_x controls on its coal-fired units. Compliance with the Clean Air Act and resulting regulations has been and will continue to be a significant focus for the Company.

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 0.2 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 Company installed SCR controls on Scherer 3 in December 2010 as required by the Georgia Multipollutant Rule to reduce NO_x. The Crist 6 SNCR and over-fire air were replaced with SCR technology in April 2012 to further reduce NO_x emissions.

The EPA regulates ground level ozone concentrations through implementation of an eight-hour ozone NAAQS. In 2008, the EPA adopted a revised eight-hour ozone NAAQS and published its final area designations in 2012. All areas within the Company's geographic service area have achieved attainment of the 2008 standard. In October 2015, the EPA published a more stringent eight-hour ozone NAAQS. While the stringency of the standard is being challenged, with oral argument held in the D.C. Circuit in December 2018, no areas in the Company's geographic service area have been, or are anticipated to be, designated non-attainment under the 2015 ozone NAAQS. The EPA is required by the Clean Air Act to review the standards every 5 years and the next review of the 2015 NAAQS is due by late 2020.

Air Quality Standards for Fine Particulate Matter

The EPA regulates ambient fine particulate matter concentrations on an annual and 24-hour average basis. All areas within the Company's geographic service area have achieved attainment with the 1997 and 2006 particulate matter NAAQS. On January 15, 2013, the EPA published a final rule that increased the stringency of the annual fine particulate matter standard. In May 2018, the EPA indicated that it plans to complete the review of the particulate matter NAAQS by December 2020. While the Company does not anticipate that the EPA will revise

the standard, a lower ambient particulate standard could result in the designation of new non-attainment areas within the Company's geographic service area.

Air Quality Standards for SO₂ and NO₂

In 2010, the EPA revised the NAAQS for sulfur dioxide (SO₂), establishing a new one-hour standard and is completing designations in multiple phases. The EPA issued several rounds of area designations, and no areas within the vicinity of Company-owned SO₂ sources have been designated nonattainment under the 2010 one-hour SO₂ NAAQS. Additionally, on April 18, 2018, the EPA published a final rule retaining the current primary NO₂ standards, without revision, maintaining the NO₂ attainment designation for all counties in which the Company operates its generating facilities.

Clean Air Interstate Rule / Cross-State Air Pollution Rule

The EPA issued the Clean Air Interstate Rule (CAIR) in 2005, which called for phased reductions in SO₂ 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 they left CAIR compliance requirements in place while the EPA developed a revised rule. In 2011, the EPA finalized the Cross-State Air Pollution Rule (CSAPR) and its NO_x annual, NO_x seasonal, and SO₂ annual programs to replace CAIR. In October 2016, the EPA published a final rule to address ozone impacts that updated the CSAPR ozone-season NO_x program based on revised data that identified changes in impacts to downwind non-attainment areas. The revised rule removed all of Florida from the CSAPR programs, left the Georgia seasonal NO_x budget unchanged, and established more stringent NO_x emissions budgets in Mississippi.

As a result of predicted impacts to downwind fine particulate standard non-attainment areas, Georgia remains in the CSAPR annual SO₂ and NO_x programs. In December 2018, the EPA finalized the determination that CSAPR satisfies the Good Neighbor obligations for the 2008 ozone standard. The outcome of ongoing CSAPR litigation is unknown at this time and could have an impact on the State of Mississippi's allowance allocations under the CSAPR seasonal NO_x program.

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 pollution reduction co-benefits of controls that were installed on affected generating units. 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.

Regional Haze Rule

The Regional Haze Rule (formerly called the Clean Air Visibility Rule) was finalized in 2005, with a goal of restoring natural visibility conditions in certain areas (primarily national parks and wilderness areas) to natural conditions by 2064. On January 10, 2017, the EPA published a final rule to review and amend the Regional Haze Rule and associated State Implementation Plan (SIP) requirements. The rule extended the deadline for the next SIP submittal from July 31, 2018, to July 31, 2021. Subsequently, in January 2018, the EPA announced its decision to revisit certain aspects of the rule. State implementation of the reasonable progress requirements defined in this final rule could require further additional reductions of SO₂ or NO_x emissions from affected units.

Startup, Shutdown, and Malfunction

In 2015, the EPA published a final rule requiring certain states (including Florida, Georgia, and Mississippi) to revise or remove the provisions of their SIPs providing allowable excess emissions at industrial facilities, including electric generating facilities, during periods of startup, shut-down, or malfunction (SSM). While the EPA has not yet responded to the SIP revisions proposed by the states of Florida, Georgia, and Mississippi, the operating permits for the Company's generating facilities affected by the rule provide for compliance with the rule requirements.

Mercury and Air Toxics Standards

In 2012, the EPA finalized the Mercury and Air Toxics Standards (MATS) rule which imposes stringent emissions limits for Hazardous Air Pollutants (HAPs), including acid gases, mercury, and particulate metal emissions, from coal and oil-fired electric utility steam generating units. The compliance deadline set by the final MATS rule was April 16, 2015. An April 16, 2016 deadline was set for affected units that were granted extensions to accommodate installation of controls or other compliance options.

Gulf evaluated a number of options for its coal-fired generation to comply with emission standards required by the MATS rule and the EPA's proposed land and water rules. As described in Gulf's Air Quality Compliance Program Update that was filed with the FPSC, Gulf determined that transmission upgrades provided the best MATS compliance option for Plant Crist. For the Plant Daniel coal units, the best options to meet MATS limits included installation of 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. For Plant Scherer Unit 3, installation of a scrubber, SCR, carbon injection/baghouse and mercury monitoring was completed for compliance with the Georgia Multipollutant Rule previously which also provided compliance with the MATS limits.

In 2013, the Company determined that the most cost-effective MATS compliance option for Plant Scholz was to retire the plant. Accordingly, Plant Scholz was retired in April 2015. In early 2015, the Company finalized its MATS compliance strategy for the Plant Smith coal units. The most cost-effective compliance option was to retire the Plant Smith coal-fired Units 1 and 2 in March 2016, retaining the remaining non-MATS units which will continue to operate and generate electricity. All of the Company's units that are subject to the MATS rule completed the measures necessary to achieve compliance with this rule or were retired prior to or during 2016. In December 2018, the EPA published a revised MATS cost analysis for which it noted that MATS was not appropriate and necessary to regulate coal and oil-fired EGUs under MATS. States and industry have petitioned the EPA to retain the MATS program as compliance with the requirements had already been completed.

EMERGING ENVIRONMENTAL REGULATIONS

316(b) Intake Structures

The EPA published a final 316(b) rule in 2014 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. 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 (NPDES) industrial wastewater permits issued after July 14, 2018, must include conditions to implement and ensure compliance with the standards and measures required by the rule, unless the permittee has requested and has been granted an alternative schedule for compliance.

Effluent Limitations

In 2015, the EPA finalized the steam electric effluent limitations guidelines (ELG) rule which imposes stringent technology-based requirements for certain waste streams from steam electric generating units. The revised technology-based limits and compliance dates will likely require extensive modifications to existing ash and wastewater management systems or the installation and operation of new ash and wastewater management systems. Compliance applicability dates range from November 1, 2018, to December 31, 2023, with state environmental agencies incorporating specific applicability dates in the NPDES permitting process based on information provided for each waste stream. The

EPA has committed to a new rulemaking that could potentially revise the 2015 limitations and applicability dates of the bottom ash transport water and flue gas desulfurization (FGD) wastewater requirements. The EPA plans to propose rule revisions in mid- 2019 and to finalize the rulemaking in 2020.

Waters of the U.S. (WOTUS) Final Rule

In 2015, the EPA and the U.S. Army Corps of Engineers (jointly, “the Agencies”) 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 expanded the scope of federal jurisdiction over waterbodies (such as rivers, streams, and canals), which could impact new generation projects and permitting and reporting requirements associated with the installation, expansion, and maintenance of transmission and distribution projects. This rule could have significantly increased permitting and regulatory requirements and costs associated with the siting of new facilities and the installation, expansion, and maintenance of transmission and distribution lines. On February 14, 2019, the EPA and the U.S. Army Corp of Engineers published the proposed replacement WOTUS rule. The new rule’s proposed definitions are much more reasonable and functional compared to the 2015 rule. The proposed definitions establish six defined categories of jurisdictional waters providing more acceptable definitions for adjacent wetlands and tributaries. When adopted the rule should reduce the regulatory burden and mitigation cost for future Gulf Power development projects. Following a 60-day comment period the EPA plans to publish the final WOTUS rule in 3rd quarter of 2019, however, rule challenges are anticipated.

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. The impact of these standards 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 (CCR)

The Company currently manages CCR at four onsite storage units. These consist of an ash pond at one facility and landfills and a surface impoundment (CCR units) at a second electric generating plant in Florida. Gulf is a co-owner of units at generating plants located in Mississippi and Georgia operated by Mississippi Power and Georgia Power, respectively. In addition to on-site storage, the Company sells a portion of its CCR to third parties for beneficial reuse. In addition to federal CCR rule requirements, individual states regulate CCR, and the States of Florida, Mississippi, and Georgia each have their own regulatory requirements. The Company has an inspection program in place to assist in maintaining the integrity of its coal ash surface impoundments.

The CCR rule, which became effective in October 2015, regulates the disposal of CCR, including coal ash and gypsum, as non-hazardous solid waste in landfills and surface impoundments (CCR units) at active generating power plants. The CCR rule requires CCR units to be evaluated against a set of performance criteria and potentially closed if minimum criteria are not met. Closure of existing

CCR units will require installation of equipment and infrastructure to manage CCR in accordance with the rule.

In March 2018, the EPA proposed its Phase I Remand rule that included potential revisions which would provide site-specific risk-based groundwater monitoring, correction actions, and location restriction requirements. On July 30, 2018, the EPA finalized Phase I, Part One amendments to the rule, establishing risk-based groundwater protection standards, extending closure deadlines, and providing greater certainty regarding continued operation and closure of CCR units. The Phase I rule was challenged, and the court is expected to rule on this in the future.

On August 21, 2018, the DC Circuit Court of Appeals issued its opinion addressing both industry and environmental group challenges to the final CCR rule. The court found, in part, for the environmental groups on their challenges to: (1) the ability of unlined impounds to continue operating and (2) the EPA's failure to regulate legacy ponds. The consequences of the court finding for environmental groups will require the EPA to revisit elements of the CCR rule. A revised rule is expected during 2019.

The EPA's reconsideration of the CCR rule is also due, in part, to a legislative development that impacts the potential oversight role of state agencies. Under the Water Infrastructure Improvements for the Nation Act, which became law in 2016, states are allowed to establish permit programs for implementing the CCR rule.

The Company has posted the following documents to its public website as required by the CCR rule: location restriction demonstrations, report of annual

inspections, annual fugitive dust reports, annual groundwater monitoring and corrective action reports, notices of establishing assessment groundwater monitoring, and notices of groundwater protection standards exceedances. However, the ultimate impact of the CCR rule will depend on the results of initial and ongoing minimum criteria assessments and implementation of state or federal permit programs. As further analysis is performed, including evaluation of the expected method of compliance, refinement of assumptions underlying the cost estimates, such as the quantities of CCR at each site, and the determination of timing with respect to compliance, the Company expects to continue to periodically update cost estimates and schedules for the CCR compliance activities.

Greenhouse Gas Regulations, Clean Power Plan and Global Climate Update

In 2015, the EPA published final rules limiting CO₂ emissions from new, modified, and reconstructed fossil fuel-fired electric generating units and proposed guidelines for states to develop plans to meet EPA-mandated CO₂ emission performance standards for existing units (known as the Clean Power Plan or CPP). In February 2016, the U.S. Supreme Court granted a stay of the CPP, which will remain in effect through the resolution of litigation in the U.S. Court of Appeals for the District of Columbia challenging the legality of the CPP and any review by the U.S. Supreme Court. On March 28, 2017, the U.S. President signed an executive order directing agencies to review actions that potentially burden the development or use of domestically-produced energy resources, including review of the CPP and other CO₂ emissions rules. During October, 2017, the EPA published a proposed rule to repeal the CPP and, on December 28, 2017, published an advanced notice of proposed rulemaking regarding a CPP replacement rule. On

August 21, 2018, the EPA proposed the Affordable Clean Energy (ACE) rule which establishes emission guidelines for GHG emissions from existing electric generating units and establishes a preliminary applicability test for defining major modifications. The EPA is expected to finalize the ACE rule in the second quarter of 2019. The ultimate implications of the ACE rule will depend on the outcome of current rulemaking and any subsequent litigation by those challenging the re-proposed rule.

Conclusion

Gulf has made substantial investments in environmental controls to comply with current and pending laws and regulations. Gulf continues its development of strategies to address any future environmental requirements in order to minimize the uncertainty related to the scope and cost of compliance. As new initiatives emerge, Gulf will support proposals that would 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 cost-effective supply of electricity to Gulf's customers.

AVAILABILITY OF SYSTEM INTERCHANGE

Through the Southern Company Intercompany Interchange Contract (IIC), Gulf's unit operations are coordinated with the three SES retail operating companies and Southern Power Company. The coordinated pooling of Gulf's generating resources with these Southern Company generating resources will continue until Gulf's system is either operated as a stand-alone utility or its generation is operated in combination with FPL generation.

As currently operated, 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 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 process is accomplished through the reserve sharing provisions of the IIC.

OFF-SYSTEM SALES

Gulf and other SES operating companies have engaged in the sale of firm capacity and energy to several utilities outside the system 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 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 remaining wholesale contract is scheduled to end in December 2019.

CHAPTER IV

FORECAST OF FACILITIES REQUIREMENTS

CAPACITY RESOURCE ALTERNATIVES

CAPACITY ADDITIONS

The SES IRP process in which Gulf participated during 2018 considered natural gas-fired CT and natural gas-fired CC generating technologies as potential candidates in generation mix studies to determine Gulf's next generating unit addition.

In conjunction with the resource planning group at FPL, Gulf has initiated the evaluation of a number of potential resource options to determine the most cost-effective means of meeting its future capacity obligations. This evaluation is expected to continue through 2019. The resource options may include generating technologies such as natural gas-fired CT, natural gas-fired CC, utility-scale solar PV, and battery storage. In addition, coal-to-natural gas conversions of Gulf's coal-fired units and plant upgrades may be evaluated in order to determine if this would provide cost savings for Gulf's customers.

RENEWABLE RESOURCES

Gulf has contracted for 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 purchased or produced from existing renewable resources and the amounts currently projected to be produced or purchased from existing renewable resources.

Gulf purchases renewable energy produced by the Bay County Resource Recovery Facility through a negotiated energy purchase agreement that was executed in 2017. 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. Per terms of the agreement, Gulf purchases the energy delivered to its system at fixed prices and the agreement expires in July 2023.

In 2010, Gulf began receiving energy from its Perdido landfill gas-fired generating facility that is located on leased property adjacent to Escambia County's Perdido Landfill which is northwest of Pensacola, Florida. Gulf's Perdido 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 landfill gas purchase agreement has a term of 20 years, expiring in 2030.

Gulf Power has energy purchase agreements that provide renewable energy from three solar facilities (Gulf Coast Solar Center I, Gulf Coast Solar Center II, and Gulf Coast Solar Center III) and two energy purchase agreements for renewable energy produced by the Kingfisher Wind project.

In 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 25 years.

Gulf Coast Solar Center I, LLC owns, operates and maintains a 30 MW solar generation facility on Eglin Air Force Base in Okaloosa County, Florida. Gulf Coast Solar Center II, LLC owns, operates and maintains a 40 MW solar generation facility on the U.S. Navy's Holley Outlying Field in Santa Rosa County, Florida. Gulf Coast Solar Center III, LLC owns, operates and maintains a 50 MW solar generation facility on the U.S. Navy's Saufley Outlying Field in Escambia County, Florida. Each of the facilities is directly interconnected to Gulf Power transmission facilities.

In 2014, Gulf Power and Morgan Stanley executed an energy purchase agreement (Kingfisher I) which has a term of 20 years. The Kingfisher Wind project, constructed as a result of this agreement, is located in Kingfisher and Canadian Counties, Oklahoma. Morgan Stanley is obligated to deliver a fixed number of MWhs to Gulf in each hour of the agreement's 20-year term, and Gulf will purchase the energy at prices specified in the agreement. In 2016, Gulf and Morgan Stanley executed a second energy purchase agreement (Kingfisher II).

The Kingfisher II agreement is substantially similar to the Kingfisher I agreement,

wherein Morgan Stanley is obligated to deliver a fixed number of MWhs to Gulf in each hour of the agreement's remaining term, and Gulf will purchase the energy at prices specified in the agreement.

Gulf will continue to evaluate opportunities to provide cost-effective renewable energy. This includes opportunities to construct its own facilities, purchase existing facilities, or purchase energy from new or existing renewable facilities.

Consistent with state law, Gulf maintains a Renewable Standard Offer Contract (RSOC) on file with the FPSC which is continually available to developers of renewable resources.

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)		2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028
(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)	101.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0	89.0
	Gulf Coast Solar Centers ^(C) (MW)	44.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0	34.0
	Perdido (MWh)	23,291	24,699	24,765	24,699	24,699	24,699	24,765	24,699	24,699	24,699	24,765
	Bay County (MWh)	46,173	60,000	60,000	60,000	60,000	25,000	0	0	0	0	0
	Gulf Coast Solar Center I @ Eglin (MWh)	56,572	56,246	56,101	55,678	55,394	55,110	54,962	54,542	54,257	53,973	53,823
	Gulf Coast Solar Center II @ Holley (MWh)	77,212	75,750	75,563	74,985	74,602	74,220	74,029	73,455	73,072	72,690	72,494
	Gulf Coast Solar Center III @ Saufley (MWh)	93,229	93,003	92,762	92,064	91,594	91,124	90,878	90,185	89,715	89,245	88,995
	Kingfisher Wind I (MWh)	674,232	674,437	675,597	674,437	674,437	674,437	675,597	674,437	674,437	674,437	675,597
	Kingfisher Wind II (MWh)	356,767	356,843	357,458	356,843	356,843	356,843	357,458	356,843	356,843	356,843	357,458
	Total MWh	1,327,476	1,340,978	1,342,246	1,338,706	1,337,569	1,301,433	1,277,689	1,274,161	1,273,023	1,271,887	1,273,132
	% of Capacity Mix	4.6	3.9	3.8	3.9	3.9	5.2	4.2	4.3	4.3	4.4	4.4
	% of NEL	11.0	11.3	11.6	11.6	11.6	11.2	11.0	11.0	10.9	10.9	10.9
	% of Fuel Mix	8.8	7.6	7.7	7.5	8.0	9.1	9.0	8.0	8.2	8.1	8.3
(2) Self-Service Generation By Renewable Generation	MW	68	68	68	68	68	68	68	68	68	68	68
	MWh ^(D)	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) Projected summer incremental capacity equivalent megawatts for Gulf Coast Solar Centers.

(D) Energy produced by these customers' generators varies depending on demand for their product.

PREFERRED AND POTENTIAL SITES FOR CAPACITY ADDITIONS

In its 2018 TYSP, Gulf indicated that natural gas-fired generation would be needed to replace its 885 MW Shell PPA that expires in May 2023. Gulf evaluated both CT and CC gas-fired generation at its existing Florida plant sites, as well as its greenfield sites at Shoal River in Walton County, at Caryville in Holmes County, and at North Escambia in Escambia County.

Each of these potential sites has unique characteristics that offer construction and/or operational advantages related to the potential installation of natural gas-fired CTs or CCs. Site selection for Gulf's next generating unit addition is based on existing infrastructure, available acreage and land use, water availability, transmission, fuel facilities, environmental standards, and overall project economics. Utilizing analysis of the individual sites and technologies under 2018 planning assumptions, Gulf determined, consistent with last year's TYSP filing, that the addition of a dual-fuel 1-on-1 CC at its North Escambia site would provide the best long-term value for its customers. Gulf will continue to offer this CC as its next resource addition in this TYSP as evaluations of other possible resource additions take place in 2019.

As discussed below, Gulf refers to the North Escambia site as the preferred site for its next resource need; however, further land acquisitions may be required to complete Gulf's North Escambia site, and therefore, it does not actually meet the definition of a "preferred site" found in Form PSC/ENG 43-E (11/97) as adopted in Rule 25-22.072 (1) Florida Administrative Code.

Gulf Preferred Site: North Escambia Property, Escambia County

The project site is located on undeveloped Gulf property in the northern part of Escambia County, Florida, approximately 5 miles southwest of Century, Florida. It is situated just west of the Escambia River and can be accessed via County Road 4 from nearby U. S. Highway 29. Detailed studies to determine the exact size and position of the project site within the property's boundaries would need to be completed in order to finalize Gulf's plan.

U. S. Geological Survey (USGS) Map

The determination of the actual footprint of the site is not complete at this time.

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 Gulf's proposed 1-on-1 CC. The site is currently 2,728 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. Although final linear facility routes and associated land costs have not yet been determined, additional land purchases would be required for gas and water pipelines and directly associated transmission lines.

Water Supply Sources

For industrial processing, cooling, and other water needs, Gulf's proposed 1-on-1 CC would likely use a combination of groundwater from on-site production wells and available surface water from the Escambia River. The estimated peak water usage for the proposed 1-on-1 CC is approximately 4,800 gallons per minute (GPM), with the majority of the CC water needs being required for cooling purposes. More precise water usage estimates are highly dependent upon the final engineering of the selected generation technology and quality of the water body at this preferred site.

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)
YEAR	TOTAL INSTALLED CAPACITY MW	FIRM CAPACITY IMPORT MW	FIRM CAPACITY EXPORT MW	NUG MW	TOTAL CAPACITY AVAILABLE MW	FIRM PEAK DEMAND MW	RESERVE MARGIN BEFORE MAINTENANCE MW	RESERVE MARGIN BEFORE MAINTENANCE %	SCHEDULED MAINTENANCE MW	RESERVE MARGIN AFTER MAINTENANCE MW	RESERVE MARGIN AFTER MAINTENANCE %
2019	2,282	1,008	(50)	0	3,240	2,402	838	34.9%	NONE	838	34.9%
2020	2,282	1,008	0	0	3,290	2,347	943	40.2%		943	40.2%
2021	2,282	1,008	(40)	0	3,250	2,348	902	38.4%		902	38.4%
2022	2,282	1,008	(30)	0	3,260	2,360	900	38.1%		900	38.1%
2023	2,282	123	0	0	2,405	2,367	38	1.6%		38	1.6%
2024	2,877	123	0	0	3,000	2,368	632	26.7%		632	26.7%
2025	2,790	123	0	0	2,913	2,370	543	22.9%		543	22.9%
2026	2,790	123	0	0	2,913	2,374	539	22.7%		539	22.7%
2027	2,715	123	0	0	2,838	2,379	459	19.3%		459	19.3%
2028	2,715	123	0	0	2,838	2,388	450	18.8%		450	18.8%

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)
YEAR	TOTAL INSTALLED CAPACITY MW	FIRM CAPACITY IMPORT MW	FIRM CAPACITY EXPORT MW	NUG MW	TOTAL CAPACITY AVAILABLE MW	FIRM PEAK DEMAND MW	RESERVE MARGIN BEFORE MAINTENANCE %		SCHEDULED MAINTENANCE MW	RESERVE MARGIN AFTER MAINTENANCE %	
							MW	OF PEAK		MW	OF PEAK
2018-19	2,304	994	(50)	0	3,248	2,271	977	43.0%	NONE	977	43.0%
2019-20	2,320	994	(50)	0	3,264	2,210	1,054	47.7%		1,054	47.7%
2020-21	2,320	994	0	0	3,314	2,271	1,043	45.9%		1,043	45.9%
2021-22	2,320	994	(40)	0	3,274	2,216	1,058	47.7%		1,058	47.7%
2022-23	2,320	994	(30)	0	3,284	2,222	1,062	47.8%		1,062	47.8%
2023-24	2,320	109	0	0	2,429	2,222	207	9.3%		207	9.3%
2024-25	2,843	109	0	0	2,952	2,224	728	32.7%		728	32.7%
2025-26	2,828	109	0	0	2,937	2,230	707	31.7%		707	31.7%
2026-27	2,753	109	0	0	2,862	2,236	626	28.0%		626	28.0%
2027-28	2,753	109	0	0	2,862	2,246	616	27.4%		616	27.4%

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)
Plant Name	Unit No.	Location	Unit Type	Fuel Pri	Fuel Alt	Fuel Transport Pri	Fuel Transport Alt	Const Start Mo/Yr	Com'l In-Service Mo/Yr	Effective Date Mo/Yr	Gen Max Nameplate KW	Net Capability Summer MW	Net Capability Winter MW	Status
Smith	3	Bay County 36/2S/15W	CC	NG	--	PL	--	--	04/02	06/19	656,100	17.0	16.0	CR
Pea Ridge	1 - 3	Santa Rosa County 15/1N/29W	CT	NG	--	PL	--	--	05/98	04/25	14,250	(12.0)	(15.0)	R
Combined Cycle 2	1	North Escambia 20/05N/31W	CC	NG	DFO	PL	TK	10/21	06/24	06/24	625,000	595.0	598.0	P
Crist	4	Escambia County 25/1N/30W	FS	C	NG	WA	PL	--	07/59	12/24	93,750	(75.0)	(75.0)	NC
Crist	5	Escambia County 25/1N/30W	FS	C	NG	WA	PL	--	06/61	12/26	93,750	(75.0)	(75.0)	NC

Abbreviations:

Unit Type	Fuel	Status	Fuel Transportation
FS - Fossil Steam	C - Coal	CR - Certified Rating change	PL - Pipeline
S - Steam	NG - Natural Gas	D - Environmental derate	TK - Truck
CT - Combustion Turbine	DFO - Distillate Fuel Oil	P - Planned, but not authorized by utility	RR - Railroad
CC - Combined Cycle	LFG - Landfill Gas	NC - Not yet committed for retirement	WA - Water
IC - Internal Combustion	WDS - Wood Waste Solid	R - To effective retirement dates shown	
		U - Under construction, less than or equal to 50% complete	
		V - Under construction, more than 50% complete	

GULF POWER COMPANY

Schedule 9

Status Report and Specifications of Proposed Generating Facilities

(1)	Plant Name and Unit Number:	Combined Cycle 2	
(2)	Net MW Capacity	NG	DFO
	a. Summer:	595	468
	b. Winter	598	488
	Gross MW Capacity		
	a. Summer:	608	481
	b. Winter	611	501
(3)	Technology Type:	Dual Fuel 1-on-1 Combined Cycle	
(4)	Anticipated Construction Timing		
	a. Field construction start - date:	10/21	
	b. Commercial in-service date:	06/24	
(5)	Fuel		
	a. Primary fuel:	NG	
	b. Alternate fuel:	DFO	
(6)	Air Pollution Control Strategy:	SCR w/ CO catalyst	
(7)	Cooling Method:	Evaporative Cooling	
(8)	Total Site Area:	2,720 acres (entire site)	
(9)	Construction Status:	Pending	
(10)	Certification Status:	Not Applied	
(11)	Status with Federal Agencies:	Not Applied	
(12)	Projected Unit Performance Data		
	Planned Outage Factor (POF):	6.0%	
	Unplanned Outage Factor (UOF):	6.0%	
	Equivalent Availability Factor (EAF):	88.0%	
	Capacity Factor (%):	78.0%	
	Average Net Operating Heat Rate (ANOHR):	NG	6,920
		DFO	6,918
(13)	Projected Unit Financial Data		
	Book Life (Years):	40	
	Total Installed Cost (In-Service Year \$/kW):	976	
	Direct Construction Cost ('19 \$/kW):	830	
	AFUDC Amount (\$/kW):	94	
	Escalation (\$/kW):	52	
	Fixed O&M ('24 \$/kW - Yr) ^(A) :	55.93	
	Variable O&M ('24 \$/MWH):	1.58	
	K Factor:	1.3067	

(A) Fixed O&M with Firm Gas Transportation cost

GULF POWER COMPANY

Schedule 10

Status Report and Specifications of Proposed Directly Associated Transmission Lines

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