

Robert L. McGee, Jr. Regulatory & Pricing Manager

FILED OCT 12, 2016 DOCUMENT NO. 08163-16 FPSC - COMMISSION CLERK

Pensacola, FL 32520-0780 850 444 6530 tel 850 444 6026 fax rlmcgee@southernco.com

October 12, 2016

VIA ELECTRONIC FILING

Ms. Carlotta Stauffer Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: Petition for an increase in rates by Gulf Power Company, Docket No. 160186-EI

Re: Petition for approval of 2016 depreciation and dismantlement studies, approval of proposed depreciation rates and annual dismantlement accruals and Plant Smith Units 1 and 2 regulatory asset amortization by Gulf Power Company, Docket No. 160170-EI

Dear Ms. Stauffer:

Attached is Gulf Power Company's Minimum Filing Requirements Section F – Miscellaneous Schedules Volume Three.

(Document 29 of 29)

Sincerely,

Robert L. McGee, Jr.

Regulatory & Pricing Manager

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 160186-EI



MINIMUM FILING REQUIREMENTS

SECTION F – MISCELLANEOUS SCHEDULES VOLUME THREE

GULF POWER COMPANY

Docket No. 160186-EI Minimum Filing Requirements

Index

F. Miscellaneous Schedules Volume Three

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Schedule	e F-3	BUSINESS C	<u>ONTRACTS WITH OFFICE</u>	RS OR DIRECTORS	Page 1 o	<u>f 2</u>
FLORIDA	A PUBLIC SERVICE COM	MMISSION EXPLAI	NATION: Provide a copy of	the	Type of Data Shown:	
		"Busine:	ss Contracts with Officers, D	irectors,	Projected Test Year Ended 12/31/1	7
COMPAN	NY: GULF POWER COM	1PANY and Affil	liates" schedule included in t	the	Prior Year Ended 12/31/16	
		compan	ny's most recently filed Annua	al Report	X Historical Year Ended 12/31/15	
DOCKET	NO.: 160186-EI	as requi	ired by Rule 25-6.135, Florid	la	Witness: X. Liu	
		Adminis	strative Code. Provide any s	ubsequent		
		changes	s affecting the test year.			
(1)	(2)	(3)	(4)	(5)	(6)	
Line	Name of	Name and Address	Relationship With	Amount of Contract	Description of	
No.	Officer or Director	of Affiliated Entity	Affiliated Entity	or Transaction	Product or Service	
1	See the attached	schedule. Note the following	ı change for subsequent yea	rs:		
_						
2	Xia Liu elected eff	fective June 1, 2015.				
_	5.1.10 7.1.					
3	Richard S. Teel tr	ansferred to an affiliate effect	tive May 31, 2015.			

Business Contracts with Officers, Directors and Affiliates

Company:

For the Year Ended December 31, 2015

List all contracts, agreements, or other business arrangements* entered into during the calendar year (other than compensation-related to position with respondent) between the respondent and each officer and director listed in Part 1 of the Executive Summary. In addition, provide the same information with respect to professional services for each firm, partnership, or organization with which the officer or director is affiliated.

Note: * Business agreement, for this schedule, shall mean any oral or written business deal which binds the concerned parties for products or services during the reporting year or future years.

Name of Officer or Director	Name and Address of Affiliated Entity	Amount	Identification of Product or Service
J. Mort O'Sullivan, III	Warren Averett 316 S. Baylen St., Suite 300 Pensacola, FL 32502	1,065.00	Accounting Services
		age 452	

COMPANY: GULF POWER COMPANY

EXPLANATION: If a projected test year is used, provide a brief description of each method or model used in the forecasting process. Provide a flow chart which shows the position of each model in the forecasting process.

Type of Data Shown:

X Projected Test Year Ended 12/31/17

_ Prior Year Ended 12/31/16

_ Historical Year Ended 12/31/15

Witness: J. J. Mason, J. K. Park,

M. L. Burroughs

DOCKET NO.: 160186-EI

		Witness	<u>Page</u>
1.	Overview		
	A. Flow Chart of Forecasting Process B. Narrative	Mason	2
II.	Customer, Energy, Peak Demand, & Revenue Forecasts	Park, Mason	4
III.	Fuel Budget Interchange Budget	Burroughs Burroughs	5
iV.	Capital Additions Budget	Mason	8
٧.	Operations and Maintenance Budget	Mason	10
VI.	Financial Model	Mason	11



EXPLANATION: If a projected test year is used, provide a brief description of each method or model used in the forecasting process. Provide a flow chart which shows the position of each model in the forecasting process.

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

Type of Data Shown:

X Projected Test Year Ended 12/31/17

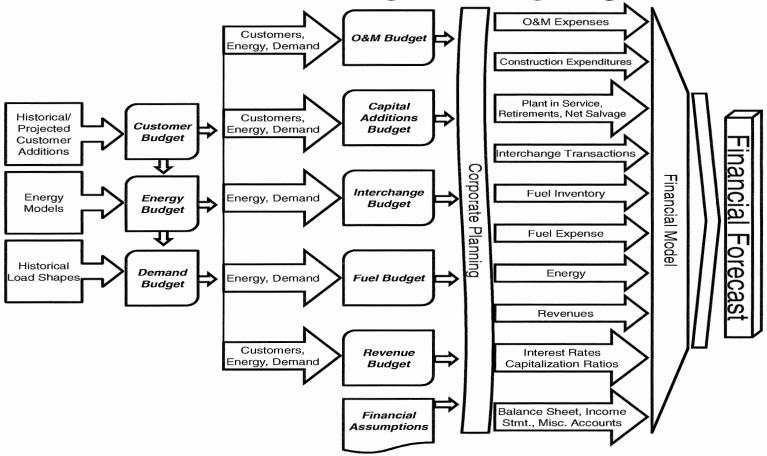
Prior Year Ended 12/31/16

_ Historical Year Ended 12/31/15

Witness: J. J. Mason, J. K. Park,

M. L. Burroughs

Gulf Power Planning and Budgeting Process



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Supporting Schedules: Recap Schedules:

EXPLANATION: If a projected test year is used, provide a brief description of each method or model used in the forecasting process. Provide a flow chart which shows the position of each model in the forecasting process.

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

X Projected Test Year Ended 12/31/17
Prior Year Ended 12/31/16

_ Historical Year Ended 12/31/15

Witness: J. J. Mason, J. K. Park,

M. L. Burroughs

Type of Data Shown:

I. OVERVIEW

This schedule describes the process Gulf Power uses in developing its annual financial forecast. The financial forecast is comprised of eight component budgets which are used by management to assess departmental performance and to control the Company's operations and activities. Gulf's financial forecast is a logically developed and detailed tool that management uses in making decisions affecting the future direction of the Company.

Gulf's forecasting process is outlined on the flow chart on page 2 of this schedule. The chart shows the process beginning with information obtained by the Forecasting Department which leads to the development of the customer, energy, and demand budgets. These budgets in turn provide the basis for developing the revenue, fuel, interchange, capital additions, and operations and maintenance budgets. Although not reflected on the chart, there are numerous management reviews of each budget, along with approval of the capital additions budget by the Board of Directors.

A list of assumptions that are incorporated in the eight component budgets of Gulf's financial forecast are shown on MFR Schedule F-8. The information and budgets included in the eight component budgets along with other financial assumptions and data are input to Gulf's Financial Model which generates the accounting statements that comprise the Company's financial forecast. The 2016 financial forecast of 2017 is the basis of the test year data in this proceeding.



EXPLANATION: If a projected test year is used, provide a brief description of each method or model used in the forecasting process. Provide a flow chart which shows the position of each model in the forecasting process.

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

Prior Year Ended 12/31/16

Type of Data Shown:

Historical Year Ended 12/31/15

X Projected Test Year Ended 12/31/17

Witness: J. J. Mason, J. K. Park,

M. L. Burroughs

II. CUSTOMER, ENERGY, PEAK DEMAND, & REVENUE FORECASTS

Methodology Overview

Gulf annually produces a new forecast of customers, energy, peak demand and retail base rate revenue. Gulf begins by projecting the number of new non-lighting customers it expects to add in each customer class – residential, commercial and industrial. Next, Gulf estimates how much energy these customers will use under normal weather conditions. For customers on demand rates, Gulf then estimates monthly billing demands. Finally, the base charges, energy charges, and demand charges from the appropriate rate schedules are applied to the number of customers, monthly energy and aggregate monthly billing demands to estimate retail base rate revenues. Outdoor lighting customers, energy and base rate revenue are projected by rate and class. Gulf also forecasts total Company peak demand using total energy projections and historical relationships between energy and demand. Additional detail is supplied in Gulf Witness Park's testimony.

Fuel, Purchased Power Capacity, Conservation and Environmental Clause revenues are calculated by the Financial Model based on energy and recoverable fuel, purchased power capacity, environmental, and conservation costs. These factors are then multiplied times the billed energy by rate class to arrive at the respective clause revenues.

Other Operating Revenues include miscellaneous service revenues (including franchise fees), rent from electric property, and other miscellaneous revenue. Franchise fee revenues (net of revenue taxes) are projected to equal the franchise fee expense which is calculated by the Financial Model. The remaining revenue items are projected by the Corporate Planning Department.

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EXPLANATION: If a projected test year is used, provide a brief description of each method or model used in the forecasting process. Provide a flow chart which shows the position of each model in the forecasting process.

 \underline{X} Projected Test Year Ended 12/31/17

Type of Data Shown:

Prior Year Ended 12/31/16

_ Historical Year Ended 12/31/15 Witness: J. J. Mason, J. K. Park,

M. L. Burroughs

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

III. OVERVIEW OF THE FUEL/INTERCHANGE PROCESS

Description

The Fuel and Interchange Budgets are an integral part of Gulf's operating budget and the budgets of each of the other Operating Companies within the Southern electric system. Data provided by the fuel and interchange forecast includes unit capacity factors, unit performance, pool interchange, off-system sales, and fuel expenses.

The Interchange Budget is produced using PROSYM, a computer model used to simulate the economic dispatch of the Southern electric system. Inputs to the model are provided by the Operating Companies and include unit data, loads and sales information. In addition, marginal fuel prices and fuel cost data are provided by FUELPRO, a fuel optimization model that determines a least cost fuel purchase plan based on fuel burn, inventory, quality, transportation and emission constraints. The development of fuel costs for the Energy Budget is based on an iterative process. FUELPRO determines marginal prices for every fossil unit on the Southern electric system, then PROSYM determines the burn by unit based on the marginal costs. The burns are then input to FUELPRO and optimized fuel costs are provided back to PROSYM. A Fuel & Interchange Budget process flowchart is shown on page 7 of this schedule.

Once the budgets are complete, the results are provided to Corporate Planning to be incorporated into the operating budget.



EXPLANATION: If a projected test year is used, provide a brief description of each method or model used in the forecasting process. Provide a flow chart which shows the position of each model in the forecasting process.

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

Prior Year Ended 12/31/16

Type of Data Shown:

Historical Year Ended 12/31/15

X Projected Test Year Ended 12/31/17

Witness: J. J. Mason, J. K. Park,

M. L. Burroughs

The following is a brief description of the models utilized in the forecast:

Fuel Cost Model, FUELPRO

FUELPRO is a linear optimization model that determines a least fuel cost solution allowing for a variety of constraints related to each of the fossil power plants in the Southern electric system. This includes such things as contract obligations, fuel quality, transportation and emissions constraints. The program receives an input of the burn requirements in mmBtu's for each unit at a plant, as well as the desired inventory levels, and the availabilities of fuel supplies from each applicable source. The price of each fuel commodity and its associated transportation costs are also provided as inputs to the fuel model, including any applicable escalation of pricing over time. With this data, the program calculates marginal prices to be used in economically dispatching the system and formulates and solves for the mimimum cost fuel mix to each plant (Fuel Budget).

Production Costing Model, PROSYM

Gulf Power Company and the Southern electric system utilize PROSYM, a chronological modeling system, to project future fuel requirements and system production costs. PROSYM is a complete electric utility/regional pool analysis and accounting system. One of the principal purposes of PROSYM is to provide an economical dispatch of all the fossil fuel plants within the Southern electric system based on marginal prices provided by FUELPRO plus other variable operation costs. PROSYM is designed for performing planning and operational studies, and because of its chronological structure, the model accommodates detailed investigations of operations of electric utilities with power pools such as the Southern electric system pool.

The basic PROSYM inputs include data related to generating units, marginal prices, fuel costs, demand and energy, and system operating characteristics. The basic outputs are energy produced and Btu requirements for each generating unit and the cost of generation (Interchange Budget) to the financial models.



EXPLANATION: If a projected test year is used, provide a brief description of each method or model used in the forecasting process. Provide a flow chart which shows the position of each model in the forecasting process.

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

Type of Data Shown:

X Projected Test Year Ended 12/31/17

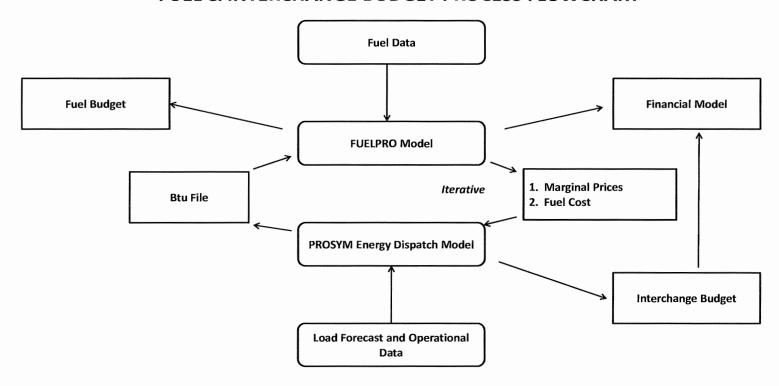
_ Prior Year Ended 12/31/16

_ Historical Year Ended 12/31/15

Witness: J. J. Mason, J. K. Park,

M. L. Burroughs

FUEL & INTERCHANGE BUDGET PROCESS FLOWCHART



EXPLANATION: If a projected test year is used, provide a brief description of each method or model used in the forecasting process. Provide a flow chart which shows the position of each model in the forecasting process.

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

_ Historical Year Ended 12/31/15 Witness: J. J. Mason, J. K. Park,

Prior Year Ended 12/31/16

X Projected Test Year Ended 12/31/17

M. L. Burroughs

Type of Data Shown:

IV. CAPITAL ADDITIONS BUDGET

A. Construction Expenditures

Gulf's construction requirements are determined through a detailed analysis of existing facilities and projections of customer growth, energy, demand, and patterns of energy usage. The construction budget is driven off of inputs obtained from the Customer, Energy, and Demand Budgets and is comprised of the following components:

- (1) Major Generation and Production Plant Analysis. Utilizing inputs from the budgets mentioned above, the need for and timing of major generation additions necessary to maintain reliable service is projected. The resulting Generation Expansion Plan is coordinated with associated operating companies such that projected customer requirements are met and economies of scale are realized. Other production plant additions are based on age of existing facilities, operating experience, environmental requirements and necessary expansions.
- (2) Distribution Analysis. The results of monitoring circuit loads on the Gulf system and the inputs from the Customer, Energy, and Demand Budgets are utilized in studies which project the need for and timing of additions to Gulf's distribution system.
- (3) Transmission Analysis. Combines the results of the major generation and distribution analysis and the inputs from the three budgets mentioned above to determine future transmission facility requirements.
- (4) General Facilities Analysis. Involves combining periodic reviews of existing facilities, equipment, and their related costs and projections of future general facility requirements.

EXPLANATION: If a projected test year is used, provide a brief description of each method or model used in the forecasting process. Provide a flow chart which shows the position of each model in the forecasting process.

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

_ Historical Year Ended 12/31/15

X Projected Test Year Ended 12/31/17

Witness: J. J. Mason, J. K. Park,

Prior Year Ended 12/31/16

M. L. Burroughs

Type of Data Shown:

These analyses are reviewed by the appropriate members of management and a construction plan for each function is established. The details of the construction plan are communicated to the affected departments and become the foundation for scheduling projects and budgeting the related expenditures. Each project, its justification, and related costs are summarized as Plant Expenditure items (PEs). The PEs are reviewed by the appropriate managers and officers. The PEs are then summarized by Corporate Planning and presented to executive management for their review and approval. Once approved by executive management, the Capital Additions Budget is presented to the Board of Directors for approval.

B. Plant - In - Service, Retirements, Cost of Removal and Salvage

Each PE contains pertinent information such as the project's functional classification, starting date and completion date, expenditures, clearings to service, retirements, and cost of removal and salvage by month and year. The PE may contain one or more projects with varying completion dates. The monthly breakdown of expenditures, clearings to service, retirements, cost of removal and salvage for the budget year and the forecast years are input to the Financial Model which calculates the various plant balances on a monthly basis.

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

Prior Year Ended 12/31/16Historical Year Ended 12/31/15

X Projected Test Year Ended 12/31/17

Witness: J. J. Mason, J. K. Park,

M. L. Burroughs

Type of Data Shown:

V. OPERATIONS AND MAINTENANCE EXPENSES EXCLUDING FUEL AND PURCHASED POWER

The development of Gulf's Operations and Maintenance Budget (O&M), excluding direct fuel and purchased power, begins with the development of appropriate budget guidelines. The Budget Message that communicates the O&M guidelines to support Company goals is reviewed and approved by the Chief Financial Officer and is distributed to the planning units to aid them in developing and submitting their budget and forecast requests. Once the planning units have submitted their budget, Corporate Planning and Budgeting compile the data for review and approval by executive management. Once the final budget has been approved by executive management, the Chief Financial Officer sends the final approved budget and forecast to executive management and all Planning Units.

Each Planning Unit monitors their budget to actual comparison using the accounting and reporting system. Explanations are required for quarterly variances of 10 percent or more that equal or exceed \$25,000; or any variance that exceeds \$500,000. The Planning Units also submit any year-end projections with their quarterly reports.

The Budgeting department is responsible for coordinating the O&M Budget process, providing the necessary information to the Chief Financial Officer and executive management for their review and approval to ensure business plans and goals are met. The O&M Budget reflects the Company's best expectations of the cost of providing service.

EXPLANATION: If a projected test year is used, provide a brief description of each method or model used in the forecasting process. Provide a flow chart which shows the position of each model in the forecasting process.

Prior Year Ended 12/31/16

Type of Data Shown:

_ Historical Year Ended 12/31/15

X Projected Test Year Ended 12/31/17

Witness: J. J. Mason, J. K. Park,

M. L. Burroughs

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

VI. FINANCIAL MODEL

Gulf's Financial Model is a complex and detailed computer based model that closely simulates Gulf's actual financial/accounting practices.

Information contained in the approved budgets developed by Gulf's planning process (see page 2 of this schedule) is input to the model as follows:

- (1) Energy Budget. The Energy Budget is interfaced with the Financial Model and is used in conjunction with the Fuel and Interchange Budgets in developing fuel revenues on the income statement. The Energy Budget is described in Section II of this schedule.
- (2) Fuel Budget. The Fuel Budget is produced by the FUELPRO and PROSYM models as described in Section III of this schedule, which interface with the Financial Model. The Fuel Budget contains the projected fuel expense that is included on the Financial Model's income statement and the projected fuel stockpile amounts that are included on the balance sheet. The Fuel Budget also operates in conjunction with the Energy and Interchange Budgets in projecting the fuel revenues included on the income statement. Additionally, the Fuel Budget is used in deriving a portion of the Other Accounts Payable account contained on the balance sheet.
- (3) Interchange Budget. The Interchange Budget is produced by the FUELPRO and PROSYM models as described in Section III of this schedule, which interface with the Financial Model. The Interchange Budget provides the non-territorial sales and purchased power transactions that appear on the model's income statement. In conjunction with the Energy and Fuel Budgets, the Interchange Budget is used to project the Fuel and Capacity Revenues on the income statement. The Interchange Budget is also used in calculating a portion of the Associated Companies Accounts Receivable, Associated Companies Accounts Payable and a portion of the Other Accounts Payable account contained on the balance sheet.

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COMPANY: GULF POWER COMPANY

EXPLANATION: If a projected test year is used, provide a brief description of each method or model used in the forecasting process. Provide a flow chart which shows the position of each model in the forecasting process.

Type of Data Shown:

X Projected Test Year Ended 12/31/17

Prior Year Ended 12/31/16

_ Historical Year Ended 12/31/15

Witness: J. J. Mason, J. K. Park,

M. L. Burroughs

DOCKET NO.: 160186-EI

- (4) Revenue Budget. The Revenue Budget as described in Section II of this schedule, is contained on the income statement of the financial model and is used in calculating numerous other items on the income statement and balance sheet.
- (5) Capital Additions Budget. The Capital Additions Budget is utilized in projecting the Plant-In-Service, Plant Held for Future Use, CWIP, Accumulated Depreciation, and Construction Related Accounts Payable accounts. The Capital Additions Budget is described in Section IV of this schedule.
- (6) Operations and Maintenance Budget (excluding Direct Fuel and Purchased Power). The O&M Budget is directly input to the financial model's income statement and is utilized in deriving a portion of the Other Accounts Payable account on the balance sheet. The O&M Budget is described in Section V of this schedule.

Other inputs to the Financial Model such as miscellaneous balance sheet accounts and miscellaneous revenue and expense items are developed by the Corporate Planning Department using trend-line methodologies and expertise from other departments. Corporate Planning is the administrator of the financial model and is responsible for coordinating and implementing any necessary changes to the model's logic.

Supporting Schedules:

	· · · · · · · · · · · · · · · · · · ·	S - SENSITIVITY OF OUTPUT TO CHA		Page 1		
	for each sa ANY: GULF POWER COMPANY quantified of	FION: If a projected test year is used, ales forecasting model, give a explanation of the impact of changes as to changes in outputs.	Prior Year End Historical Year	Year Ended 12/31/17 ed 12/31/16 Ended 12/31/15		
OCK	ET NO.: 160186-EI		Witness: J. K. Park	(
(1)	(2)	(3) Percent	(4)	(5) Percent		
Line		Change	Output Variable	Change		
No.	Input Variable	(Input)	Affected	(Output)		
1	RESIDENTIAL					
2 3	Residential Customer Gains	+10%	Annual Residential kWh	0.1%		
4	12-Month Average Real Residential Cents per kWh	+10%	Annual Residential kWh	-3.4%		
5	Real Disposable Personal Income per Household	+10%	Annual Residential kWh	5.1%		
6	Economic Efficiency	+10%	Annual Residential kWh	-3.2%		
7	Heating Degree Hours	+10%	Annual Residential kWh	1.2%		
8	Cooling Degree Hours	+10%	Annual Residential kWh	3.2%		
9 10	SMALL COMMERCIAL					
11	Small Commercial Customer Gains	+10%	Annual Small Commercial kWh	0.1%		
12	12-Month Average Real Commercial Cents per kWh	+10%	Annual Small Commercial kWh	-1.5%		
13	Real Gross Domestic Product per Capita	+10%	Annual Small Commercial kWh	3.6%		
14	Heating Degree Hours	+10%	Annual Small Commercial kWh	0.6%		
15	Cooling Degree Hours	+10%	Annual Small Commercial kWh	2.3%		
16	LARGE COMMERCIAL					
17		400/		0.40/		
18	Large Commercial Customer Gains	+10%	Annual Large Commercial kWh	0.1%		
19	12-Month Average Real Commercial Cents per kWh	+10%	Annual Large Commercial kWh	-1.3%		
20	Real Gross Domestic Product per Capita Heating Degree Hours	+10%	Annual Large Commercial kWh	2.3%		
21	Heating Degree Hours	+10%	Annual Large Commercial kWh	0.1%		

Schedule	F-7				FORECAS'	TING MODE	LS - HISTOF	RICAL DATA			Pa	ge 1 of 96
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For e	ach forecast	ing model us	ed to estimate	e test year	projections	Type of Data Shown:	
				for custor	mers, demand	l, and energy	, provide the	historical and	d projected	l values for	Projected Test Year Ended	12/31/17
COMPAN	Y: GULF	POWER	COMPANY	the input	variables and	the output v	ariables used	d in estimating	g and/or va	lidating the	Prior Year Ended 12/31/16	
				model. A	llso, provide a	description	of each varia	ble, specifying	g the unit o	of	X Historical Years 1995 - 201	5
DOCKET	NO.: 160	186-EI		measurer	ment and the t	time span or	cross section	nal range of th	ne data.		Witness: J. K. Park	
		***************************************			FORECASTI	NG MODEL:	RESIDENTIAL	ENERGY				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			<u>ResSales</u>	ResSales	RealDisplnc	ResPrice	<u>EnergEff</u>	<u>lvan</u>	<u>Isaac</u>	JunJulAug08	<u>Oct98</u>	
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	1995	OCT		39.622	63.726	9.375	8.833	0	0	0	0	
2	1995	NOV	28.942	28.726	63.741	9.366	8.842	0	0	0	0	
3	1995	DEC	32.246	32.429	63.818	9.358	8.850	0	0	0	0	
4	1996	JAN	43.349	44.219	63.928	9.349	8.858	0	0	0	0	
5	1996	FEB	41.945	43.051	64.009	9.320	8.867	0	0	0	0	
6	1996	MAR	35.078	34.883	64.031	9.297	8.875	0	0	0	0	
7	1996	APR	29.648	30.326	64.024	9.272	8.883	0	0	0	0	
8	1996	MAY	32.332	30.237	64.044	9.247	8.892	0	0	0	0	
9	1996	JUN	45.303	44.167	64.121	9.234	8.900	0	0	0	0	
10	1996	JUL	52.568	51.565	64.218	9.223	8.908	0	0	0	0	
11	1996	AUG	51.808	51.386	64.275	9.209	8.917	0	0	0	0	
12	1996	SEP	46.774	47.313		9.199	8.925	0	0	0	0	
13	1996	OCT	37.121	37.314	64.202	9.190	8.933	0	0	0	0	
14	1996	NOV	30.011	29.370	64.176	9.194	8.942	0	0	0	0	
15	1996	DEC	31.154	31.664	64.221	9.190	8.950	0	0	0	0	

VARIABLE	DESCRIPTION
ResSales	Billing Cycle Residential kWh per Customer per Billing Day
RealDisplnc	Real Disposable Personal Income Per Household (\$000s)
ResPrice	12-Month Average of Real Residential Price (cents per kWh)
EnergEff	Energy Efficiency Variable
Ivan	Binary Variable for Hurricane Ivan September 2004
Isaac	Binary Variable for Hurricane Isaac August-September 2012
JunJulAug08	Binary Variable for June-August 2008
Oct98	Binary Variable for October 1998
Cupporting Cohodul	oe.

Supporting Schedules:

Schedule F	Schedule F-7					ING MODE	Page 2 of 96					
FLORIDA F	PUBLIC	SERVICE	COMMISSION	EXPLAN	ATION: For ea	ch forecast	ing model us	ed to estimate	e test year	projections	Type of Data Shown:	
				for custor	for customers, demand, and energy, provide the historical and projected values for Projected Test Year Ende							17
COMPANY	: GULI	FPOWER	COMPANY	the input	variables and t	he output v	ariables used	l in estimating	g and/or va	lidating the	Prior Year Ended 12/31/16	
				model. A	lso, provide a d	description	of each varia	ble, specifyin	g the unit o	f	X Historical Years 1995 - 2015	
DOCKET N	IO.: 160	0186-EI		measurer	ment and the ti	me span or	cross section	nal range of th	ne data.		Witness: J. K. Park	
		· · · · · · · · · · · · · · · · · · ·			FORECASTIN	G MODEL:	RESIDENTIAL	ENERGY				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE		, ,	ResSales		RealDisplnc	ResPrice	EnergEff	<u>lvan</u>	Isaac	JunJulAug08	Oct98	
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	1997	JAN	36.273	37.657	64.308	9.189	8.958	Ó	Ó	0	Ó	
2	1997		36.831	34.022	64.385	9.188	8.967	0	0	0	0	
3	1997	MAR	28.183	29.742	64.430	9.186	8.975	0	0	0	0	
4	1997	APR	28.110	27.509	64.479	9.188	8.983	0	0	0	0	
5	1997		29.543	27.802	64.588	9.170	8.992	0	0	0	0	
6	1997	JUN	39.144	38.266	64.782	9.153	9.000	0	0	0	0	
7	1997	JUL	49.546	49.588	64.992	9.139	9.008	0	0	0	0	
8	1997	AUG	50.294	50.906	65.118	9.115	9.017	0	0	0	0	
9	1997	SEP	49.265	50.851	65.118	9.088	9.025	0	0	0	0	
10	1997	OCT	41.551	43.935	65.130	9.058	9.033	0	0	0	0	
11	1997	NOV	30.940	31.844	65.345	9.002	9.042	0	0	0	0	
12	1997	DEC	34.414	34.375	65.868	8.953	9.050	0	0	0	0	
13	1998	JAN	37.409	37.600	66.540	8.902	9.058	0	0	0	0	
14	1998	FEB	36.987	36.952	67.075	8.871	9.067	0	0	0	0	
15	1998	MAR	33.082	32.712	67.342	8.842	9.075	0	0	0	0	
16	1998	APR	29.487	29.236	67.418	8.799	9.083	0	0	0	0	
17	1998	MAY	33.551	32.367	67.441	8.725	9.092	0	0	0	0	
18	1998	JUN	50.044	51.327	67.519	8.640	9.100	0	0	0	0	
19	1998		57.085	56.794	67.617	8.550	9.108	0	0	0	0	
20	1998		53.150	53.227	67.650	8.473	9.117	0	0	0	0	
21	1998	SEP	49.676	47.541	67.575	8.404	9.125	0	0	0	0	
22	1998		45.356	45.538	67.472	8.298	9.133	0	0	0	1	
23	1998		29.967	30.329	67.462	8.302	9.142	0	0	0	0	
24	1998	DEC	29.451	29.384	67.616	8.213	9.150	0	0	0	0	
VARIABLE		DESCRIPT										
ResSales			e Residential kWh									
RealDispInc			sable Personal Inco		, ,							
ResPrice		12-Month A	verage of Real Res	sidential Pric	e (cents per kWh	ገ)						
EnergEff		Energy Effic	ciency Variable									
Ivan		Binary Varia	able for Hurricane I	van Septem	ber 2004							
Isaac		Binary Varia	able for Hurricane I	saac August	t-September 201	2						
JunJulAug08	3	•	able for June-Augu	_								
Oct98		-	able for October 19									
Supporting S	Schedule										Recap Schedu	ıles:
0												

FORECASTING MODELS - HISTORICAL DATA

Page 3 of 96

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:

__ Projected Test Year Ended 12/31/17 __ Prior Year Ended 12/31/16

X Historical Years 1995 - 2015

Witness: J. K. Park

					FORECASTI	NG MODEL:	RESIDENTIAL	ENERGY				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			<u>ResSales</u>	<u>ResSales</u>	<u>RealDispInc</u>	<u>ResPrice</u>	<u>EnergEff</u>	<u>lvan</u>	<u>Isaac</u>	<u>JunJulAug08</u>	Oct98	
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	1999	JAN	39.785	38.169	67.861	8.164	9.158	0	0	0	0	
2	1999	FEB	29.919	30.910	68.060	8.104	9.167	0	0	0	0	
3	1999	MAR	32.056	30.588	68.150	8.059	9.175	0	0	0	0	
4	1999	APR	29.988	29.849	68.186	8.007	9.183	0	0	0	0	
5	1999	MAY	33.980	33.905	68.263	7.996	9.192	0	0	0	0	
6	1999	JUN	43.033	43.661	68.433	7.989	9.200	0	0	0	0	
7	1999	JUL	51.017	52.044	68.603	7.995	9.208	0	0	0	0	
8	1999	AUG	56.256	56.174	68.631	7.997	9.217	0	0	0	0	
9	1999	SEP	50.750	51.103	68.464	7.991	9.225	0	0	0	0	
10	1999	OCT	38.949	38.350	68.307	8.028	9.233	0	0	0	0	
11	1999	NOV	30.425	29.979	68.441	7.964	9.242	0	0	0	0	
12	1999	DEC	31.895	32.014	69.014	7.977	9.250	0	0	0	0	
13	2000	JAN	37.471	36.370	69.752	7.954	9.258	0	0	0	0	
14	2000	FEB	39.779	40.064	70.212	7.974	9.267	0	0	0	0	
15	2000	MAR	29.931	28.426	70.159	7.967	9.275	0	0	0	0	
16	2000	APR	28.946	28.620	69.791	7.990	9.283	0	0	0	0	
17	2000	MAY	33.160	33.351	69.458	8.014	9.292	0	0	0	0	
18	2000	JUN	47.491	48.775	69.406	8.028	9.300	0	0	0	0	
19	2000	JUL	56.497	56.383	69.549	8.037	9.308	0	0	0	0	
20	2000	AUG	56.271	55.441	69.692	8.048	9.317	0	0	0	0	
21	2000	SEP	50.160	51.217	69.705	8.062	9.325	0	0	0	0	
22	2000	OCT	37.557	37.315	69.689	8.072	9.333	0	0	0	0	
23	2000	NOV	32.360	31.983	69.807	8.088	9.342	0	0	0	0	
24	2000	DEC	37.935	38.046	70.141	8.102	9.350	0	0	0	0	
VARIABLE	1	DESCRIPTION	I									

VARIABLE DESCRIPTION

ResSales Billing Cycle Residential kWh per Customer per Billing Day
RealDispInc Real Disposable Personal Income Per Household (\$000s)
ResPrice 12-Month Average of Real Residential Price (cents per kWh)
EnergEff Energy Efficiency Variable

Ivan Binary Variable for Hurricane Ivan September 2004

Isaac Binary Variable for Hurricane Isaac August-September 2012

JunJulAug08 Binary Variable for June-August 2008
Oct98 Binary Variable for October 1998

Supporting Schedules:

Schedule F							LS - HISTOF					Page 4 of 96
FLORIDA P	UBLIC	SERVICE	COMMISSION	EXPLANA	TION: For e	ach forecast	ing model us	ed to estimate	e test year	projections	Type of Data Shown:	
				for custon	or customers, demand, and energy, provide the historical and projected values for 🛚 🔔 Projected Test `							Ended 12/31/17
COMPANY:	GULF	POWER	COMPANY	the input v	ariables and	the output v	ariables used	l in estimating	and/or va	lidating the	Prior Year Ended 12/3	31/16
				model. Al	lso, provide a	description	of each varia	ble, specifying	the unit o	of	X Historical Years 1995	
DOCKET N	O.: 160	186-EI				•		nal range of th	-		Witness: J. K. Park	
BOOKETH	0 100	7100 21					RESIDENTIAL				77,0000 0170 0000	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			ResSales	<u>ResSales</u>	RealDisplnc	<u>ResPrice</u>	<u>EnergEff</u>	<u>lvan</u>	<u>Isaac</u>	JunJulAug08	<u>Oct98</u>	
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2001	JAN	51.135	`51.173	70.523	8.109	9.358	Ó	Ó	Ó	Ó	
2	2001	FEB	38.476	38.376	70.687	8.063	9.367	0	0	0	0	
3	2001	MAR	30.932	30.104	70.541	8.041	9.375	0	0	0	0	
4	2001	APR	30.770	31.879	70.357	8.008	9.383	0	0	0	0	
5	2001	MAY	33.770	33.642	70.567	7.968	9.392	0	0	0	0	
6	2001	JUN	45.772	44.889	71.376	7.941	9.400	0	0	0	0	
7	2001	JUL	50.173	51.065	72.336	7.919	9.408	0	0	0	0	
8	2001	AUG	52.373	53.917	72.785	7.896	9.417	0	0	0	0	
9	2001	SEP	48.850	47.344	72.347	7.876	9.425	0	0	0	0	
10	2001	OCT	36.064	35.210	71.564	7.857	9.433	0	0	0	0	
11	2001	NOV	30.287	29.700	71.241	7.837	9.442	0	0	0	0	
12	2001	DEC	30.767	30.020	71.888	7.817	9.450	0	0	0	0	
13	2002	JAN	43.460	43.992	73.106	7.816	9.458	0	0	0	0	
14	2002	FEB	37.026	36.450	74.128	7.836	9.467	0	0	0	0	
15	2002	MAR	37.972	37.134	74.544	7.853	9.475	0	0	0	0	
16	2002	APR	30.701	31.561	74.492	7.849	9.483	0	0	0	0	
17	2002		39.547	41.099	74.291	7.866	9.492	0	0	0	0	
18	2002	JUN	45.955	44.625	74.216	7.866	9.500	0	0	0	0	
19	2002	JUL	50.804	53.372	74.322	7.945	9.508	0	0	0	0	
20	2002		54.053	54.182	74.587	8.030	9.517	0	0	0	0	
21	2002	SEP	51.199	50.576	74.962	8.114	9.525	0	0	0	0	
22	2002		43.924	45.755	75.363	8.194	9.533	0	0	0	0	
23	2002		32.542	32.410	75.690	8.262	9.542	0	0	0	0	
24	2002		37.588	36.868	75.882	8.352	9.550	0	0	0	0	
VARIABLE		DESCRIPTI										
ResSales		Billing Cycle	Residential kWh	per Custome	r per Billing Da	V						
RealDisplnc			able Personal Inco									
ResPrice			verage of Real Res									
EnergEff			ciency Variable		- (p-/ //	,						
Ivan			able for Hurricane I	van Sentemb	ner 2004							
Isaac			able for Hurricane I			19						
		-	able for June-Augu	_	Oehreninei 20	12						
JunJulAug08		-	_									
Oct98 Supporting S			able for October 19	90								Recap Schedule

	7				FORECAS	TING MODE	LS - HISTOR	ICAL DATA			Page 5	5 of 96
FLORIDA PI	UBLIC	SERVICE	COMMISSION	EXPLANA	TION: For ea	ach forecast	ing model use	ed to estimate	e test year p	projections	Type of Data Shown:	
				for custom	ers, demand	, and energy	, provide the	historical and	d projected	values for	Projected Test Year Ended 12/	/31/17
COMPANY:	GULF	POWER	COMPANY	the input v	ariables and	the output v	ariables used	in estimating	and/or val	idating the	Prior Year Ended 12/31/16	
				model. Al	so, provide a	description	of each varial	ole, specifying	g the unit of	f	X Historical Years 1995 - 2015	
DOCKET NO	D.: 160)186-EI					cross section				Witness: J. K. Park	
							RESIDENTIAL					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			ResSales	ResSales	RealDispInc	ResPrice	<u>EnergEff</u>	<u>lvan</u>	Isaac .	JunJulAug08	Oct98	
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2003	JAN	44.302	44.780	76.008	8.421	9.558	Ó	Ó	Ó	Ó	
2	2003	FEB	43.025	42.104	76.166	8.502	9.567	0	0	0	0	
3	2003	MAR	30.590	31.421	76.441	8.575	9.575	0	0	0	0	
4	2003	APR	31.114	30.128	76.856	8.679	9.583	0	0	0	0	
5	2003	MAY	37.050	38.759	77.395	8.771	9.592	0	0	0	0	
6	2003	JUN	46.578	48.036	78.019	8.860	9.600	0	0	0	0	
7	2003	JUL	50.165	50.224	78.622	8.875	9.608	0	0	0	0	
8	2003	AUG	50.843	51.870	79.076	8.886	9.617	0	0	0	0	
9	2003	SEP	49.615	50.019	79.295	8.897	9.625	0	0	0	0	
10	2003	OCT	37.918	37.365	79.386	8.907	9.633	0	0	0	0	
11	2003	NOV	31.628	31.601	79.499	8.932	9.642	0	0	0	0	
12	2003	DEC	37.237	37.389	79.741	8.945	9.650	0	0	0	0	
13	2004	JAN	43.369	42.902	80.084	8.955	9.658	0	0	0	0	
14	2004	FEB	42.152	42.709	80.433	8.968	9.667	0	0	0	0	
15	2004	MAR	34.556	34.450	80.729	8.976	9.675	0	0	0	0	
16	2004	APR	31.612	29.688	80.933	8.973	9.683	0	0	0	0	
17	2004	MAY	32.950	33.871	81.001	8.979	9.692	0	0	0	0	
18	2004	JUN	46.857	48.182	80.936	8.997	9.700	0	0	0	0	
19	2004	JUL	52.700	54.305	80.847	9.000	9.708	0	0	0	0	
20	2004	AUG	53.889	54.119	80.884	9.002	9.717	0	0	0	0	
21	2004	SEP	38.856	39.475	81.126	9.002	9.725	1	0	0	0	
22	2004	OCT	44.053	45.283	81.460	9.009	9.733	0	0	0	0	
23	2004	NOV	34.566	34.811	81.712	9.009	9.742	0	0	0	0	
24	2004	DEC	34.714	34.784	81.769	8.992	9.750	0	0	0	0	
/ARIABLE		DESCRIPTI										
ResSales		Billing Cycle	Residential kWh	per Customer	per Billing Day	y						
RealDispInc		Real Dispos	able Personal Inc	ome Per Hous	sehold (\$000s)							
ResPrice		12-Month A	verage of Real Re	sidential Price	(cents per kW	/h)						
EnergEff		Energy Effic	eiency Variable									
van			ble for Hurricane I	van Septemb	er 2004							
saac			ble for Hurricane I			12						
JunJulAug08		-	ble for June-Augu	-								
Oct98		-	ble for October 19									

FLORIDA PUBLIC SERVICE COMMISSION EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of DOCKET NO.: 160186-EI EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data. Type of Data Shown: Projected Test Year Ended 12/31/16 X Historical Years 1995 - 2015 Witness: J. K. Park	/17
COMPANY: GULF POWER COMPANY the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of DOCKET NO.: 160186-EI the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data. Witness: J. K. Park	/17
model. Also, provide a description of each variable, specifying the unit of DOCKET NO.: 160186-EI measurement and the time span or cross sectional range of the data. X Historical Years 1995 - 2015 Witness: J. K. Park	
DOCKET NO.: 160186-EI measurement and the time span or cross sectional range of the data. Witness: J. K. Park	
FORECASTING MODEL: RESIDENTIAL ENERGY	
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12)	
LINE ResSales ResSales RealDisplnc ResPrice EnergEff Ivan Isaac JunJulAug08 Oct98	
NO. YEAR MONTH (OUTPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT)	
1 2005 JAN 39.910 40.003 81.704 9.000 9.758 0 0 0 0	
2 2005 FEB 38.265 38.168 81.654 9.027 9.767 0 0 0 0	
3 2005 MAR 33.600 33.389 81.711 9.060 9.775 0 0 0 0	
4 2005 APR 29.660 29.429 81.871 9.087 9.783 0 0 0 0	
5 2005 MAY 31.924 32.014 82.095 9.137 9.792 0 0 0 0	
6 2005 JUN 45.956 46.631 82.328 9.198 9.800 0 0 0 0	
7 2005 JUL 53.795 53.169 82.482 9.247 9.825 0 0 0 0	
8 2005 AUG 53.527 54.324 82.461 9.293 9.850 0 0 0 0	
9 2005 SEP 53.602 55.466 82.259 9.335 9.875 0 0 0 0	
10 2005 OCT 47.379 45.885 82.140 9.371 9.900 0 0 0 0	
11 2005 NOV 31.724 32.640 82.446 9.399 9.925 0 0 0 0	
12 2005 DEC 35.603 36.472 83.349 9.460 9.950 0 0 0 0	
13 2006 JAN 37.514 38.032 84.500 9.505 9.975 0 0 0 0	
14 2006 FEB 35.891 35.046 85.312 9.552 10.000 0 0 0	
15 2006 MAR 32.690 31.661 85.503 9.601 10.025 0 0 0 0	
16 2006 APR 32.341 31.504 85.242 9.648 10.050 0 0 0 0	
17 2006 MAY 36.319 37.187 84.865 9.660 10.075 0 0 0	
18 2006 JUN 49.323 49.195 84.662 9.652 10.100 0 0 0 0	
19 2006 JUL 56.884 57.219 84.710 9.666 10.125 0 0 0 0	
20 2006 AUG 54.876 56.483 85.019 9.676 10.150 0 0 0 0	
21 2006 SEP 51.632 51.987 85.535 9.691 10.175 0 0 0 0	
22 2006 OCT 41.688 40.035 86.075 9.713 10.200 0 0 0 0	
23 2006 NOV 31.121 31.581 86.412 9.747 10.225 0 0 0 0	
24 2006 DEC 36.085 35.638 86.404 9.770 10.250 0 0 0 0	
VARIABLE DESCRIPTION	
ResSales Billing Cycle Residential kWh per Customer per Billing Day	
RealDispInc Real Disposable Personal Income Per Household (\$000s)	
ResPrice 12-Month Average of Real Residential Price (cents per kWh)	
EnergEff Energy Efficiency Variable	
Ivan Binary Variable for Hurricane Ivan September 2004	
Isaac Binary Variable for Hurricane Isaac August-September 2012	
JunJulAug08 Binary Variable for June-August 2008	
Oct98 Binary Variable for October 1998	

Oct98 Bir Supporting Schedules:

Type of Data Shown: Projected Test Year Ended 12/3	Schedule F-7 FORECASTING MODELS - HISTORICAL DATA Page 7 of 96											
COMPANY: GULF POWER COMPANY												
COMPANY: GULF POWER COMPANY	/31/17											
DOCKET NO.: 160186-EI												
DOCKET NO.: 160186-EI measurement and the time span or cross sectional range of the data. Witness: J. K. Park												
FORECASTING MODEL: RESIDENTIAL ENERGY (1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (11) (12) (11) (12) (11) (12) (11) (12) (11) (12) (12) (12) (13) (14) (14) (14) (14) (15) (14) (15) (16)												
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) LINE ResSales ResSales RealDispInc ResPrice EnergEff Ivan Isaac JunJulAug08 Oct98 NO. YEAR MONTH (OUTPUT) (INPUT) (INPUT) <td></td>												
LINE ResSales ResSales RealDispInc ResPrice EnergEff Ivan Isaac JunJulAug08 Oct98 NO. YEAR MONTH (OUTPUT) (INPUT) (INPUT) <td></td>												
NO. YEAR MONTH (OUTPUT) (INPUT) (INPUT												
1 2007 JAN 34.878 35.934 86.181 9.790 10.275 0 0 0 0 2 2007 FEB 43.165 40.272 85.979 9.856 10.300 0 0 0 0 3 2007 MAR 32.426 32.641 85.940 9.898 10.325 0 0 0 0 4 2007 APR 30.999 30.418 86.049 9.950 10.350 0 0 0 0 5 2007 MAY 34.922 35.143 86.235 10.012 10.375 0 0 0 0 6 2007 JUN 44.563 44.168 86.425 10.083 10.400 0 0 0 0 7 2007 JUL 52.898 53.254 86.573 10.153 10.417 0 0 0 0 8 2007 AUG 56.357 56.427 86.644 10.222 10.433 0 0 0 0 <td></td>												
2 2007 FEB 43.165 40.272 85.979 9.856 10.300 0 0 0 0 0 3 2007 MAR 32.426 32.641 85.940 9.898 10.325 0 0 0 0 4 2007 APR 30.999 30.418 86.049 9.950 10.350 0 0 0 0 5 2007 MAY 34.922 35.143 86.235 10.012 10.375 0 0 0 0 6 2007 JUN 44.563 44.168 86.425 10.083 10.400 0 0 0 0 7 2007 JUL 52.898 53.254 86.573 10.153 10.417 0 0 0 0 8 2007 AUG 56.357 56.427 86.644 10.222 10.433 0 0 0 0												
3 2007 MAR 32.426 32.641 85.940 9.898 10.325 0 0 0 0 0 0 0 4 2007 APR 30.999 30.418 86.049 9.950 10.350 0 0 0 0 0 0 0 5 2007 MAY 34.922 35.143 86.235 10.012 10.375 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0												
4 2007 APR 30.999 30.418 86.049 9.950 10.350 0 0 0 0 0 5 2007 MAY 34.922 35.143 86.235 10.012 10.375 0 0 0 0 0 6 2007 JUN 44.563 44.168 86.425 10.083 10.400 0 0 0 0 7 2007 JUL 52.898 53.254 86.573 10.153 10.417 0 0 0 0 8 2007 AUG 56.357 56.427 86.644 10.222 10.433 0 0 0 0												
5 2007 MAY 34.922 35.143 86.235 10.012 10.375 0 0 0 0 0 6 2007 JUN 44.563 44.168 86.425 10.083 10.400 0 0 0 0 0 7 2007 JUL 52.898 53.254 86.573 10.153 10.417 0 0 0 0 8 2007 AUG 56.357 56.427 86.644 10.222 10.433 0 0 0 0												
6 2007 JUN 44.563 44.168 86.425 10.083 10.400 0 0 0 0 0 0 7 2007 JUL 52.898 53.254 86.573 10.153 10.417 0 0 0 0 0 0 0 0 8 2007 AUG 56.357 56.427 86.644 10.222 10.433 0 0 0 0 0												
7 2007 JUL 52.898 53.254 86.573 10.153 10.417 0 0 0 0 0 0 0 8 2007 AUG 56.357 56.427 86.644 10.222 10.433 0 0 0 0												
8 2007 AUG 56.357 56.427 86.644 10.222 10.433 0 0 0 0												
0 200 021 02.012 01.001 00.001 10.200 10.100 0 0 0												
10 2007 OCT 43.200 43.437 86.401 10.350 10.467 0 0 0 0												
11 2007 NOV 30.654 30.120 86.027 10.406 10.483 0 0 0 0												
12 2007 DEC 31.025 31.051 85.524 10.473 10.500 0 0 0 0												
13 2008 JAN 38.245 37.890 85.193 10.553 10.517 0 0 0 0												
14 2008 FEB 37.806 37.708 85.411 10.531 10.533 0 0 0 0												
15 2008 MAR 32.665 31.496 86.310 10.533 10.550 0 0 0 0												
16 2008 APR 29.371 29.572 87.343 10.530 10.567 0 0 0 0												
17 2008 MAY 33.876 32.241 87.690 10.524 10.583 0 0 0 0												
18 2008 JUN 45.862 46.338 86.887 10.519 10.600 0 0 1 0												
19 2008 JUL 51.221 50.886 85.470 10.501 10.617 0 0 1 0												
20 2008 AUG 52.674 50.844 84.308 10.490 10.633 0 0 1 0												
21 2008 SEP 49.640 48.451 84.026 10.481 10.650 0 0 0												
22 2008 OCT 36.870 36.989 84.317 10.562 10.667 0 0 0 0												
23 2008 NOV 29.365 30.011 84.615 10.654 10.683 0 0 0 0												
24 2008 DEC 34.117 33.761 84.537 10.745 10.700 0 0 0 0												
VARIABLE DESCRIPTION												
ResSales Billing Cycle Residential kWh per Customer per Billing Day												
RealDispInc Real Disposable Personal Income Per Household (\$000s)												
ResPrice 12-Month Average of Real Residential Price (cents per kWh)												
EnergEff Energy Efficiency Variable												
Ivan Binary Variable for Hurricane Ivan September 2004												
Isaac Binary Variable for Hurricane Isaac August-September 2012												
JunJulAug08 Binary Variable for June-August 2008												
Oct98 Binary Variable for October 1998												

Oct98 Bir Supporting Schedules: Recap Schedules:

Oct98

Supporting Schedules:

Binary Variable for October 1998

Schedule F-												
FLORIDA P	UBLIC	SERVICE	COMMISSION	EXPLAN	ATION: For ea	ach forecast	ing model us	ed to estimate	e test year p	orojections	Type of Data Shown:	
				for custor	mers, demand	, and energy	, provide the	historical and	d projected	values for	Projected Test Year Ended 12/31/	17
COMPANY:	GULF	POWER	COMPANY	the input	variables and	the output v	ariables used	l in estimating	and/or val	idating the	Prior Year Ended 12/31/16	
				model. A	llso, provide a	description	of each varia	ble, specifying	g the unit of	f	X Historical Years 1995 - 2015	
DOCKET N	O.: 160	0186-EI		measure	ment and the t	ime span or	cross section	nal range of th	ne data.		Witness: J. K. Park	
					FORECASTI	NG MODEL:	RESIDENTIAL	ENERGY				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE	. ,	, ,	ResSales		RealDisplnc	ResPrice	<u>EnergEff</u>	<u>lvan</u>	Isaac	JunJulAug08	Oct98	
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2009	JAN	` 33.990	33.509	84.246	10.819	`10.717	Ó	Ó	Ó	Ó	
2	2009	FEB	38.921	38.010	84.095	10.999	10.733	0	0	0	0	
3	2009	MAR	31.188	31.838	84.269	11.161	10.750	0	0	0	0	
4	2009	APR	27.004	27.629	84.588	11.348	10.767	0	0	0	0	
5	2009	MAY	33.257	33.057	84.719	11.531	10.783	0	0	0	0	
6	2009	JUN	44.110	44.859	84.453	11.700	10.800	0	0	0	0	
7	2009	JUL	54.042	54.282	83.956	11.883	10.817	0	0	0	0	
8	2009	AUG	49.270	50.304	83.518	12.036	10.833	0	0	0	0	
9	2009	SEP	43.872	43.172	83.374	12.197	10.850	0	0	0	0	
10	2009	OCT	40.143	41.353	83.517	12.277	10.867	0	0	0	0	
11	2009	NOV	28.629	28.665	83.875	12.337	10.883	0	0	0	0	
12	2009	DEC	31.802	32.552	84.375	12.402	10.900	0	0	0	0	
13	2010	JAN	46.687	45.956	84.937	12.469	10.917	0	0	0	0	
14	2010	FEB	42.153	42.724	85.438	12.454	10.933	0	0	0	0	
15	2010	MAR	38.181	39.436	85.838	12.454	10.950	0	0	0	0	
16	2010	APR	28.224	27.424	86.145	12.426	10.967	0	0	0	0	
17	2010	MAY	31.519	32.534	86.356	12.433	10.983	0	0	0	0	
18	2010	JUN	46.062	46.194	86.491	12.448	11.000	. 0	0	0	0	
19	2010	JUL	52.743	51.585	86.574	12.448	11.017	0	0	0	0	
20	2010	AUG	55.851	54.331	86.634	12.480	11.033	0	0	0	0	
21	2010	SEP	48.028	48.968	86.696	12.496	11.050	0	0	0	0	
22	2010	OCT	38.650	36.959	86.789	12.509	11.067	0	0	0	0	
23	2010	NOV	28.461	29.098	86.937	12.542	11.083	0	0	0	0	
24	2010		35.162	35.039	87.145	12.557	11.100	0	0	0	0	
VARIABLE		DESCRIPT										
ResSales	Billing Cycle Residential kWh per Customer per Billing Day											
RealDispInc												
ResPrice			verage of Real Re	sidential Pric	e (cents per kW	/h)						
EnergEff		Energy Effic	ciency Variable									
Ivan		•	able for Hurricane									
Isaac		Binary Varia	able for Hurricane	Isaac Augus	t-September 20	12						
JunJulAug08		Binary Varia	able for June-Augu	st 2008								

Schedule F-														
FLORIDA P	UBLIC	SERVICE CO	OMMISSION	EXPLANA	TION: For ea	ch forecast	ing model use	ed to estimate	e test year	projections	Type of Data Shown:			
				for custom	ners, demand,	and energy	, provide the	historical and	d projected	values for	Projected Test Year End	ded 12/31/17		
COMPANY:	GULF	POWER CC	MPANY	the input v	ariables and	the output v	ariables used	in estimating	and/or va	lidating the	Prior Year Ended 12/31	[/] 16		
				model. Al	lso, provide a	description	of each varia	ble, specifying	g the unit o	of	X Historical Years 1995 - 2	2015		
DOCKET NO	D.: 160	186-EI			nent and the ti						Witness: J. K. Park			
							RESIDENTIAL							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)			
LINE			ResSales	ResSales	RealDispInc	ResPrice	EnergEff	<u>lvan</u>	<u>Isaac</u>	JunJulAug08	Oct98			
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)			
1	2011	JAN	43.372	43.539	87.353	12.567	11.117	Ó	Ó	Ó	Ó			
2	2011	FEB	41.116	42.618	87.466	12.528	11.133	0	0	0	0			
3	2011	MAR	30.214	29.156	87.440	12.484	11.150	0	0	0	0			
4	2011	APR	28.827	28.812	87.302	12.467	11.167	0	0	0	0			
5	2011	MAY	33.134	33.697	87.107	12.416	11.183	0	0	0	0			
6	2011	JUN	47.166	46.795	86.912	12.354	11.200	0	0	0 0 0				
7	2011	JUL	54.069	52.293	86.755	12.304	11.217	0	0	0	0			
8	2011	AUG	53.342	52.582	86.666	12.254	11.233	0	0	0	0			
9	2011										0			
10	2011	OCT	33.703	34.380	86.578	12.175	11.267	0	0	0	0			
11	2011										0			
12	2011	DEC	29.936	30.291	85.824	12.150	11.300	0	0	0	0			
13	2012	JAN	30.703	30.927	85.274	12.152	11.317	0	0	0	0			
14	2012	FEB	28.747	30.417	84.978	12.175	11.333	0	0	0	0			
15	2012	MAR	27.796	28.353	85.063	12.238	11.350	0	0	0	0			
16	2012	APR	28.896	29.840	85.266	12.217	11.367	0	0	0	0			
17	2012	MAY	34.317	33.207	85.189	12.210	11.383	0	0	0	0			
18	2012	JUN	45.119	43.811	84.662	12.226	11.400	0	0	0	0			
19	2012	JUL	48.784	48.549	84.191	12.232	11.417	0	0	0	0			
20	2012	AUG	48.251	48.125	84.518	12.162	11.433	0	1	0	0			
21	2012	SEP	44.456	43.806	85.944	12.095	11.450	0	1	0	0			
22	2012	OCT	36.836	35.945	87.545	12.015	11.467	0	0	0	, 0			
23	2012	NOV	28.267	28.265	88.028	11.907	11.483	0	0	0	0			
24	2012	DEC	28.986	29.239	86.632	11.805	11.500	0	0	0	0			
VARIABLE		DESCRIPTION												
ResSales		Billing Cycle R	esidential kWh	per Custome	r per Billing Day									
RealDisplnc		Real Disposab	le Personal Inco	ome Per Hou	sehold (\$000s)									
ResPrice		12-Month Aver	age of Real Re	sidential Price	e (cents per kW	h)								
EnergEff		Energy Efficier	ncy Variable											
Ivan		Binary Variable	e for Hurricane I	van Septemb	er 2004									
Isaac		-			September 201	2								
JunJulAug08			e for June-Augu											
Oct98		-	for October 19											
Supporting Sc											Be	can Schedules:		

Schedule F-	.7				FORECAS	TING MODE	LS - HISTOF	IICAL DATA			Page 10 of 9
FLORIDA P	UBLIC	SERVICE	COMMISSION	EXPLAN	ATION: For e	ach forecast	ing model us	ed to estimate	test year	projections	Type of Data Shown:
				for custor	ners, demand	, and energy	, provide the	historical and	projected	l values for	Projected Test Year Ended 12/31/17
COMPANY:	GULF	POWER	COMPANY	the input	variables and	the output v	ariables used	l in estimating	and/or va	lidating the	Prior Year Ended 12/31/16
				model. A	lso, provide a	description	of each varia	ble, specifying	g the unit o	of	X Historical Years 1995 - 2015
DOCKET N	O.: 160)186-EI			ment and the						Witness: J. K. Park
						<u>.</u>	RESIDENTIAL				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
LINE	(-)	(-)	ResSales		RealDisplnc	ResPrice	EnergEff	<u>lvan</u>		JunJulAug08	Oct98
NO.	YFAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2013	JAN	33.538	34.506	84.240	11.710	11.517	0	0	0	0
2	2013	FEB	29.727	30.676	82.411	11.639	11.533	0	0	0	0
3	2013	MAR	31.828	32.309	81.961	11.543	11.550	0	0	0	0
4	2013	APR	28.969	29.109	82.513	11.482	11.567	0	0	0	0
5	2013	MAY	29.560	29.179	83.271	11.417	11.583	0	0	0	0
6	2013	JUN	44.008	42.377	83.596	11.363	11.600	0	0	0	0
7	2013	JUL	48.246	47.144	83.511	11.293	11.617	0	0	0	0
8	2013	AUG	49.343	47.677	83.259	11.299	11.633	0	0	0	0
9	2013	SEP	46.071	45.010	83.054	11.303	11.650	0	0	0	0
10	2013	OCT	38.047	38.171	82.972	11.302	11.667	0	0	0	0
11	2013	NOV	27.034	27.766	83.055	11.296	11.683	0	0	0	0
12	2013	DEC	31.958	31.741	83.310	11.300	11.700	0	0	0	0
13	2014	JAN	40.608	41.212	83.641	11.289	11.717	0	0	0	0
14	2014	FEB	41.137	43.295	83.899	11.353	11.733	0	0	0	0
15	2014	MAR	32.116	31.406	84.010	11.387	11.750	0	0	0	0
16	2014	APR	27.285	27.232	84.005	11.475	11.767	0	0	0	0
17	2014	MAY	31.277	30.403	83.945	11.576	11.783	0	0	0	0
18	2014	JUN	42.107	41.059	83.892	11.650	11.800	0	0	0	0
19	2014	JUL	48.102	48.975	83.876	11.734	11.822	0	0	0	0
20	2014	AUG	47.183	48.941	83.917	11.806	11.844	0	0	0	0
21	2014	SEP	46.888	48.255	84.026	11.880	11.867	0	0	0	0
22	2014	OCT	35.938	35.695	84.194	11.953	11.889	0	0	0	0
23	2014	NOV	29.289	28.854	84.404	12.046	11.911	0	0	0	0
24	2014	DEC	31.257	31.762	84.633	12.123	11.933	0	0	0	0
VARIABLE		DESCRIPT									
ResSales			e Residential kWh								
RealDispInc		Real Dispos	sable Personal Inco	ome Per Hou	isehold (\$000s)						
ResPrice		12-Month A	verage of Real Res	sidential Pric	e (cents per kW	/h)					
EnergEff		Energy Effic	ciency Variable								
Ivan		Binary Varia	able for Hurricane I	van Septem	ber 2004						
Isaac		Binary Varia	able for Hurricane I	saac August	-September 20	12					
JunJulAug08			able for June-Augu		,						
Oct98		-	able for October 19								
											Donn Cahadula

EXPLANATION: For each forecasting model used to estimate test year projections of crustomers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying tunt of the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying tunt of the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of the input variables and the output variables used to estimate test year projected values for the input variables used to estimate the introduction of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the unit of the input variables used to estimate the value to the value to the input variables used	Schedule F	-7	FORECASTING MODELS - HISTORICAL DATA Page 1											
Part	FLORIDA P	UBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For e	ach forecast	ing model use	ed to estimate	e test year p	orojections			
Ministry Ministry					for custor	ners, demand	, and energy	, provide the	historical and	d projected	values for	Projected Test Year Ended 12/31/17		
The color	COMPANY:	GULF	POWER	COMPANY	the input	variables and	the output v	ariables used	l in estimating	g and/or val	idating the	X Prior Year Ended 12/31/16		
Company Comp					model. A	lso, provide a	description	of each varial	ble, specifyin	g the unit o	f	X Historical Years 1995 - 2015		
Company Comp	DOCKET N	O.: 160	186-EI		measurer	nent and the t	ime span or	cross section	nal range of th	ne data.		Witness: J. K. Park		
NO. YEAR MOTH QUITPUT QUI						FORECASTI	NG MODEL:	RESIDENTIAL	ENERGY					
NO. YEAR MONTH OLTPUT (INPUT) (INP	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
1	LINE			ResSales	<u>ResSales</u>	RealDisplnc	<u>ResPrice</u>	EnergEff	<u>lvan</u>	Isaac .	JunJulAug08	Oct98		
2	NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
3 2015 MAR 32551 34.436 85.041 12.364 12.000 0 0 0 0 4 2015 MAY 33.012 33.483 84.948 12.421 12.044 0 0 0 0 6 2015 JUN 43.097 43.837 84.851 12.450 12.0667 0 0 0 0 7 2015 JUN 43.0955 50.737 84.730 12.466 12.069 0 0 0 0 8 2015 AUG 52.975 52.287 84.580 12.526 12.111 0 0 0 0 9 2015 SEP 44.815 45.141 84.580 12.526 12.111 0 0 0 0 0 10 2015 SEP 44.815 45.141 12.266 12.118 0 0 0 0 0 0 0 0 0 0	1	2015	JAN	35.819	35.041	84.846	12.216	11.956	0	0	0	0		
May 1	2	2015	FEB	37.560	37.041	84.987	12.287	11.978	0	0	0	0		
S	3	2015	MAR	32.551	34.436	85.041	12.354	12.000	0	0	0	0		
Part	4	2015	APR	27.846	28.981	85.020	12.385	12.022	0	0	0	0		
The color of the	5	2015	MAY	33.012	33.483	84.948	12.421	12.044	0	0	0	0		
Real Disport AUG 52.975 52.287 84.580 12.526 12.111 0 0 0 0 0 0 0 0 0	6	2015	JUN	43.067	43.837	84.851	12.450	12.067	0	0	0	0		
9	7	2015	JUL	50.955	50.737	84.730	12.486	12.089	0	0	0	0		
10	8	2015	AUG	52.975	52.287	84.580	12.526	12.111	0	0	0	0		
11	9	2015	SEP	44.815	45.141	84.415	12.562	12.133	0	0	0	0		
12 2015 DEC 29.807 84.228 12.707 12.200 0 0 0 0 0 0 0 13 2016 JAN 36.164 84.342 12.744 12.222 0 0 0 0 0 0 0 0 0	10	2015	OCT	36.370		84.272	12.616	12.156	0	0	0	0		
13	11	2015	NOV	26.939		84.199	12.664	12.178	0	0	0	0		
14 2016 FEB 34.621 84.500 12.716 12.244 0 0 0 0 0 0 15 2016 MAR 29.027 84.676 12.703 12.267 0 0 0 0 0 0 0 0 0	12	2015	DEC	29.807		84.228	12.707	12.200	0	0	0	0		
15	13	2016	JAN	36.164		84.342	12.744		0	0	0	0		
16	14	2016	FEB	34.621		84.500		12.244	0	0	0	0		
17	15	2016	MAR	29.027		84.676	12.703	12.267	0	0	0	0		
18	16	2016	APR	26.218		84.861	12.705	12.289	0	0	0	0		
19	17	2016	MAY	30.233		85.045	12.687	12.311	0	0	0	0		
2016 AUG	18	2016	JUN			85.223	12.677		0	0	0	0		
2016 SEP 45.979 85.767 12.649 12.400 0 0 0 0 0 0 0 0 0	19	2016				85.400			0	0	0	0		
22 2016 OCT 36.414 85.944 12.630 12.422 0 0 0 0 0 0 0 0 0	20	2016	AUG	49.767		85.583	12.657	12.378	0	0	0	0		
23 2016 NOV 27.128 86.098 12.610 12.444 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	21	2016	SEP	45.979		85.767	12.649	12.400	0	0	0	0		
24 2016 DEC 30.096 86.218 12.588 12.467 0 0 0 0 0 0 VARIABLE ResSales Billing Cycle Residential kWh per Customer per Billing Day RealDisplnc ResPrice 12-Month Average of Real Residential Price (cents per kWh) EnergEff Energy Efficiency Variable Ivan Binary Variable for Hurricane Ivan September 2004 Isaac Binary Variable for June-August 2008	22	2016	OCT	36.414		85.944	12.630	12.422	0	0	0	0		
VARIABLE ResSales Billing Cycle Residential kWh per Customer per Billing Day RealDispInc Real Disposable Personal Income Per Household (\$000s) ResPrice 12-Month Average of Real Residential Price (cents per kWh) EnergEff Energy Efficiency Variable Ivan Binary Variable for Hurricane Ivan September 2004 Isaac Binary Variable for Hurricane Isaac August-September 2012 JunJulAug08 Binary Variable for June-August 2008							12.610		0	0	0			
ResSales Billing Cycle Residential kWh per Customer per Billing Day Real Disposable Personal Income Per Household (\$000s) ResPrice 12-Month Average of Real Residential Price (cents per kWh) EnergEff Energy Efficiency Variable Ivan Binary Variable for Hurricane Ivan September 2004 Isaac Binary Variable for Hurricane Isaac August-September 2012 JunJulAug08 Binary Variable for June-August 2008	24	2016	DEC	30.096		86.218	12.588	12.467	0	0	0	0		
Real Disposable Personal Income Per Household (\$000s) ResPrice 12-Month Average of Real Residential Price (cents per kWh) EnergEff Energy Efficiency Variable Ivan Binary Variable for Hurricane Ivan September 2004 Isaac Binary Variable for Hurricane Isaac August-September 2012 JunJulAug08 Binary Variable for June-August 2008	VARIABLE		DESCRIPT	ION										
ResPrice 12-Month Average of Real Residential Price (cents per kWh) EnergEff Energy Efficiency Variable Ivan Binary Variable for Hurricane Ivan September 2004 Isaac Binary Variable for Hurricane Isaac August-September 2012 JunJulAug08 Binary Variable for June-August 2008	ResSales		Billing Cycle	e Residential kWh	per Custome	r per Billing Da	У							
EnergEff Energy Efficiency Variable Ivan Binary Variable for Hurricane Ivan September 2004 Isaac Binary Variable for Hurricane Isaac August-September 2012 JunJulAug08 Binary Variable for June-August 2008	RealDispInc		Real Dispos	sable Personal Inco	ome Per Hou	sehold (\$000s)								
EnergEff Energy Efficiency Variable Ivan Binary Variable for Hurricane Ivan September 2004 Isaac Binary Variable for Hurricane Isaac August-September 2012 JunJulAug08 Binary Variable for June-August 2008	ResPrice		12-Month A	verage of Real Res	sidential Pric	e (cents per kW	/h)							
Ivan Binary Variable for Hurricane Ivan September 2004 Isaac Binary Variable for Hurricane Isaac August-September 2012 JunJulAug08 Binary Variable for June-August 2008	EnergEff													
Isaac Binary Variable for Hurricane Isaac August-September 2012 JunJulAug08 Binary Variable for June-August 2008	_		٠,	•	van Septemi	per 2004								
JunJulAug08 Binary Variable for June-August 2008			•		•		12							
			-		_									
	-		•											

Scriedule	Γ-/				FUNEUAS	TING WOOL			1 age 12 01 30			
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For e	ach forecast	ing model us	ed to estimate	e test year	projections	Type of Data Sh	own:
				for custon	ners, demand	, and energy	, provide the	historical and	l projected	l values for .	X Projected Test Y	ear Ended 12/31/17
COMPAN'	Y: GULF	POWER	COMPANY	the input	variables and	the output v	ariables use	d in estimating	j and/or va	lidating the	Prior Year Ended	d 12/31/16
				model. A	lso, provide a	description	of each varia	ıble, specifyinç	g the unit o	of .	Historical Years	1995 - 2015
DOCKET	NO.: 160	186-EI		measurer	ment and the t	ime span or	cross sectio	nal range of th	ne data.		Witness: J. K. P	ark
					FORECASTI	NG MODEL: I	RESIDENTIAL	ENERGY				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			ResSales	<u>ResSales</u>	<u>RealDispInc</u>	ResPrice	<u>EnergEff</u>	<u>Ivan</u>	<u>Isaac</u>	JunJulAug08	<u>Oct98</u>	
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2017	JAN	36.516		86.312	12.566	12.489	0	0	0	0	
2	2017	FEB	34.926		86.385	12.569	12.511	0	0	0	0	
3	2017	MAR	29.293		86.452	12.573	12.533	0	0	0	0	
4	2017	APR	26.458		86.518	12.576	12.556	0	0	0	0	
5	2017	MAY	30.427		86.584	12.579	12.578	0	0	0	0	
6	2017	JUN	42.538		86.650	12.582	12.600	0	0	0	0	
7	2017	JUL	49.271		86.717	12.583	12.622	0	0	0	0	
8	2017	AUG	49.853		86.785	12.584	12.644	0	0	0	0	
9	2017	SEP	46.030		86.851	12.585	12.667	0	0	0	0	
10	2017	OCT	36.421		86.917	12.585	12.689	0	0	0	0	
11	2017	NOV	27.097		86.982 87.044	12.585 12.585	12.711 12.733	0	0	0	0	
12	2017	DEC	30.030		67.044	12.363	12.733	U	U	U	U	

VARIABLE	DESCRIPTION
ResSales	Billing Cycle Residential kWh per Customer per Billing Day
RealDisplnc	Real Disposable Personal Income Per Household (\$000s)
ResPrice	12-Month Average of Real Residential Price (cents per kWh)
EnergEff	Energy Efficiency Variable
Ivan	Binary Variable for Hurricane Ivan September 2004
Isaac	Binary Variable for Hurricane Isaac August-September 2012
JunJulAug08	Binary Variable for June-August 2008
Oct98	Binary Variable for October 1998
Supporting Scheo	dules:

Schedule	F-7				FORECAS	STING MOD		Page 13 of 96					
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estima	te test year	projections	Type of Data	Shown:	
				for custor	ners, deman	d, and energ	gy, provide th	e historical ar	nd projected	values for	Projected Te	st Year Ende	ed 12/31/17
COMPAN	IY: GULF	POWER	COMPANY	•		•		ed in estimatir	_		Prior Year Er	nded 12/31/1	6
								able, specifyi		of .	X Historical Yea	ars 1995 - 20	015
DOCKET	NO.: 160	186-EI		measurer	nent and the	time span c	or cross section	onal range of	the data.		Witness: J. I	K. Park	
					FORECAST	ING MODEL:	RESIDENTIA	L ENERGY					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	CDHBD_12	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	1995	OCT	0	0	0	0	0	0	0	232	0	0	
2	1995	NOV	0	0	0	0	0	0	0	0	79	0	
3	1995	DEC	0	0	0	0	0	0	0	0	0	21	
4	1996	JAN	0	0	0	0	0	0	0	0	0	0	
5	1996	FEB	0	0	0	0	0	0	0	0	0	0	
6	1996	MAR	21	0	0	0	0	0	0	0	0	0	
7	1996	APR	0	22	0	0	0	0	0	0	0	0	
8	1996	MAY	0	0	133	0	0	0	0	0	0	0	
9	1996	JUN	0	0	0	298	0	0	0	0	0	0	
10	1996	JUL	0	, 0	0	0	379	0	0	0	0	0	
11	1996	AUG	0	0	0	0	0	367	0	0	0	0	
12	1996	SEP	0	0	0	0	0	0	316	0	0	0	
13	1996	OCT	0	0	0	0	0	0	0	190	0	0	
14	1996	NOV	0	0	0	0	0	0	0	0	94	0	
15	1996	DEC	0	Ü	0	Ü	0	0	0	0	0	31	

DESCRIPTION

VARIABLE CDHBD_XX

Billing Cycle Residential Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

	Schedule F-7 FORECASTING MODELS - HISTORICAL DATA Page 14 of 96												
FLORID	A PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estima	ate test year	projections	Type of Data	Shown:	
								e historical a			Projected Te	st Year Ended 1	2/31/17
COMPA	NY: GULF	POWER	COMPANY	the input	variables an	d the output	variables us	ed in estimati	ng and/or va	lidating the		nded 12/31/16	
				model. A	lso, provide	a description	n of each var	iable, specifyi	ng the unit of	of	X Historical Yea	ars 1995 - 2015	
DOCKE	T NO.: 160)186-EI		measurer	nent and the	time span o	r cross secti	onal range of	the data.		Witness: J. I	K. Park	
					FORECAST	ING MODEL:	RESIDENTIA	L ENERGY					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
LINE			CDHBD_03	CDHBD_04	CDHBD_05		CDHBD_07	CDHBD_08	. , .	CDHBD_10	CDHBD_11		
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	1997	JAN	Ó	Ó	0	0	0	0	0	0	0	0	
2	1997	FEB	0	0	0	0	0	0	0	0	0	0	
3	1997	MAR	46	0	0	0	0	0	0	0	0	0	
4	1997	APR	0	65	0	0	0	0	0	0	0	0	
5	1997	MAY	0	0	102	0	0	0	0	0	0	0	
6	1997	JUN	0	0	0	221	0	0	0	0	0	0	
7	1997	JUL	0	0	0	0	340	0	0	0	0	0	
8	1997	AUG	0	0	0	0	0	339	0	0	0	0	
9	1997	SEP	0	0	0	0	0	0	335	0	0	0	
10	1997	OCT	0	0	0	0	0	0	0	231	0	0	
11	1997	NOV	0	0	0	0	0	0	0	0	50	0	
12	1997	DEC	0	0	0	0	0	0	0	0	0	8	
13	1998	JAN	0	0	0	0	0	0	0	0	0	0	
14	1998	FEB	0	0	0	0	0	0	0	0	0	0	
15	1998	MAR	7	0	0	0	0	0	0	0	0	0	
16	1998	APR	0	44	0	0	0	0	0	0	0	0	
17	1998	MAY	0	0	145	0	0	0	0	0	0	0	
18	1998	JUN	0	0	0	341	0	0	0	0	0	0	
19	1998	JUL	0	0	0	0	403	0	0	0	0	0	
20	1998	AUG	0	0	0	0	0	355	0	0	0	0	
21	1998	SEP	0	0	0	0	0	0	326	0	0	0	
22	1998	OCT	0	0	0	0	0	0	0	229	0	0	
23	1998	NOV	0	0	0	0	0	0	0	0	93	0	
24	1998	DEC	0	0	0	0	0	0	0	0	0	45	

VARIABLE CDHBD_XX

DESCRIPTION
Billing Cycle Residential Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Schedule l	F-7				FORECAS	STING MOD	ELS - HISTO	RICAL DATA	١				age 15 of 96
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estima	te test year	projections	Type of Data	Shown:	
				for custor	ners, deman	id, and energ	gy, provide th	ne historical a	nd projected	l values for	Projected Te	st Year Ende	ed 12/31/17
COMPANY	Y: GULF	POWER	COMPANY	the input	variables an	d the output	variables us	ed in estimatir	ng and/or va	lidating the	Prior Year Er	nded 12/31/1	6
				model. A	lso, provide	a description	n of each var	iable, specifyi	ng the unit	of	X Historical Ye	ars 1995 - 20	015
DOCKET I	NO.: 160	186-EI		measurer	nent and the	time span c	r cross secti	onal range of	the data.		Witness: J. I	K. Park	
					FORECAST	ING MODEL:	RESIDENTIA	AL ENERGY					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	CDHBD_12	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	1999	JAN	0	0	0	0	0	0	0	0	0	0	
2	1999	FEB	0	0	0	0	0	0	0	0	0	0	
3	1999	MAR	13	0	0	0	0	0	0	0	0	0	
4	1999	APR	0	65	0	0	0	0	0	0	0	0	
5	1999	MAY	0	0	143	0	0	0	0	0	0	0	
6	1999	JUN	0	0	0	239	0	0	0	0	0	0	
7	1999	JUL	0	0	0	0	323	0	0	0	0	0	
8	1999	AUG	0	0	0	0	0	378	0	0	0	0	
9	1999	SEP	0	0	0	0	0	0	331	0	0	0	
10	1999	OCT	0	0	0	0	0	0	0	185	0	0	
11	1999	NOV	0	0	0	0	0	0	0	0	67	0	
12	1999	DEC	0	0	0	0	0	0	0	0	0	17	
13	2000	JAN	0	0	0	0	0	0	0	0	0	0	
14	2000	FEB	0	0	0	0	0	0	0	0	0	0	
15	2000	MAR	29	0	0	0	0	0	0	0	0	0	
16	2000	APR	0	52	0	0	0	0	0	0	0	0	
17	2000	MAY	0	0	131	0	0	0	0	0	0	0	
18	2000	JUN	0	0	0	293	0	0	0	0	0	0	
19	2000	JUL	0	0	0	0	384	0	0	0	0	0	
20	2000	AUG	0	0	0	0	0	382	0	0	0	0	
21	2000	SEP	0	0	0	0	0	0	329	164	0	0	
22	2000	OCT	0	0	0	0	0	0	0	164	93	0	
23 24	2000 2000	NOV DEC	0	0	0	0	0	0	0	0	93	11	
24	2000	DEC	Ü	U	U	O	U	U	O	O	O		
VADIADIE		DECODIDE	TION										

VARIABLE CDHBD_XX

DESCRIPTION

Billing Cycle Residential Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Supporting Schedules: Recap Schedules:

Schedule					FORECAS	STING MOD	Page 16 of 96							
FLORIDA	A PUBLIC	SERVICE	COMMISSION	EXPLAN	ATION: For	each forecas	Type of Data Shown:							
				for custor	for customers, demand, and energy, provide the historical and projected values for							Projected Test Year Ended 12/31/17		
COMPAN	NY: GULF	POWER	COMPANY	the input	variables an	d the output	Prior Year Ended 12/31/16							
					model. Also, provide a description of each variable, specifying the unit of							X Historical Years 1995 - 2015		
DOCKET	NO.: 160	186-EI			measurement and the time span or cross sectional range of the data.							Witness: J. K. Park		
FORECASTING MODEL: RESIDENTIAL ENERGY														
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11			
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
1	2001	JAN	0	0	0	0	Ó	Ó	Ó	Ó	0	0		
2	2001	FEB	0	0	0	0	0	0	0	0	0	0		
3	2001	MAR	20	0	0	0	0	0	0	0	0	0		
4	2001	APR	0	53	0	0	0	0	0	0	0	0		
5	2001	MAY	0	0	124	0	0	0	0	0	0	0		
6	2001	JUN	0	0	0	262	0	0	0	0	0	0		
7	2001	JUL	0	0	0	0	311	0	0	0	0	0		
8	2001	AUG	0	0	0	0	0	326	0	0	0	0		
9	2001	SEP	0	0	0	0	0	0	289	0	0	0		
10	2001	OCT	0	0	0	0	0	0	0	147	0	0		
11	2001	NOV	0	0	0	0	0	0	0	0	71	0		
12	2001	DEC	0	0	0	0	0	0	0	0	0	43		
13	2002	JAN	0	0	0	0	0	0	0	0	0	0		
14	2002	FEB	0	0	0	0	0	0	0	0	0	0		
15	2002	MAR	11	0	0	0	0	0	0	0	0	0		
16	2002	APR	0	56	0	0	0	0	0	0	0	0		
17	2002	MAY	0	0	197	0	0	0	0	0	0	0		
18	2002	JUN	0	0	0	248	0	0	0	0	0	0		
19	2002	JUL	0	0	0	0	313	0	0	0	0	0		
20	2002	AUG	0	0	0	0	0	333	0	0	0	0		
21	2002	SEP	0	0	0	0	0	0	319	0	0	0		
22	2002	OCT	0	0	0	0	0	0	0	239	0	0		
23	2002	NOV	0	0	0	0	0	0	0	0	73	0		
24	2002	DEC	0	0	0	0	0	0	0	0	0	8		

VARIABLE CDHBD_XX

DESCRIPTION

Billing Cycle Residential Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Schedul	e F-7				FORECASTING MODELS - HISTORICAL DATA							Page 17 of 96		
FLORID	A PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	Type of Data Shown:							
				for custor	ners, deman	d, and energ	Projected Test Year Ended 12/31/17							
COMPA	NY: GULF	POWER	COMPANY	the input	variables and	d the output	Prior Year Ended 12/31/16							
				model. A	model. Also, provide a description of each variable, specifying the unit of							X Historical Years 1995 - 2015		
DOCKE	T NO.: 160	186-EI		measurer	nent and the	time span o	Witness: J. K. Park							
FORECASTING MODEL: RESIDENTIAL ENERGY														
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	CDHBD_12		
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
1	2003	JAN	0	0	0	0	0	0	0	0	0	0		
2	2003	FEB	0	0	0	0	0	0	0	0	0	0		
3	2003	MAR	18	0	0	0	0	0	0	0	0	0		
4	2003	APR	0	57	0	0	0	0	0	0	0	0		
5	2003	MAY	0	0	174	0	0	0	0	0	0	0		
6	2003	JUN	0	0	0	261	0	0	0	0	0	0		
7	2003	JUL	0	0	0	0	290	0	0	0	0	0		
8	2003	AUG	0	0	0	0	0	301	0	0	0	0		
9	2003	SEP	0	0	0	0	0	0	296	0	0	0		
10	2003	OCT	0	0	0	0	0	0	0	153	0	0		
11	2003	NOV	0	0	0	0	0	0	0	0	91	0		
12		DEC	0	0	0	0	0	0	0	0	0	24		
13	2004	JAN	0	0	0	0	0	0	0	0	0	0		
14	2004	FEB	0	0	0	0	0	0	0	0	0	0		
15	2004	MAR	17	0	0	0	0	0	0	0	0	0		
16	2004	APR	0	45	J	0	0	0	0	0	0	0		
17	2004	MAY	0	0	117	268	0	0	0	0	0	0		
18	2004	JUN	0	0	0	208	323	0	0	0	0	0		
19	2004	JUL AUG	0	0	0	0	323 0	329	0	0	0	0		
20 21	2004 2004	SEP	0	0	0	0	0	0	290	0	0	0		
		OCT	0	0	0	0	0	0	290	228	0	0		
22 23	2004 2004	NOV	0	0	0	0	0	0	0	220	124	0		
23 24	2004	DEC	0	0	0	0	0	0	0	0	0	26		
24	2004	DLO	U	U	Ü	O	O	Ü	U	O	O	20		

DESCRIPTION
Billing Cycle Residential Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Supporting Schedules:

VARIABLE CDHBD_XX

FLORIDA PUBLIC SERVICE COMMISSION COMPANY COULF POWER COULF PO	Schedule F	-7				FORECA:	STING MOD	ELS - HISTO	RICAL DATA					age 18 of 96
Prior Year Ended 12/31/16 Prior Year Company The input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of model. Nace, provide a description of each variable, specifying the unit of model. Nace, provide a description of each variable, specifying the unit of model. Nace, provide a description of each variable, specifying the unit of model. Nace, provide a description of each variable, specifying the unit of model. Nace, provide a description of each variable, specifying the unit of model. Nace, provide a description of each variable, specifying the unit of model. Nace, provide a description of each variable, specifying the unit of model. Nace, provide a description of each variable, specifying the unit of model. Nace, provided a description of each variable, specifying the unit of model. Nace, provided a description of each variable, specifying the unit of model. Nace, provided and secretary in the description of each variable, specifying the unit of model. Nace, provided and secretary in the description of each variable, specifying the unit of model. Nace, provided and secretary in the description of each variable, specifying the unit of model. Nace, provided and secretary in the description of each variable, specifying the unit of model. Nace, provided and secretary in the description of each variable, specifying the unit of model. Nace, provided and secretary in the description of each variable, specifying the unit of model. Nace, provided and secretary in the description of each variable specified to deach variable specified of each	LORIDA F	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estima	te test year	projections	Type of Data	Shown:	
Miles Mile					for custor	ners, deman	id, and energ	gy, provide th	e historical ar	nd projected	values for	Projected Test	st Year Ended	d 12/31/17
	COMPANY	: GULF	POWER	COMPANY	the input	variables an	d the output	variables use	ed in estimatir	ng and/or va	lidating the	Prior Year En	ded 12/31/16	ì
Total					model. A	lso, provide	a description	n of each vari	iable, specifyi	ng the unit o	of	X Historical Yea	ars 1995 - 20°	15
(1)	OCKET N	IO.: 160	186-EI		measurer	nent and the	time span o	or cross section	onal range of	the data.		Witness: J. k	C. Park	
NO. YEAR MONTH (INPUT) (IN						FORECAST	ING MODEL:	RESIDENTIA	L ENERGY					
NO. YEAR MONTH (INPUT) (IN	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
1 2005 JAN 0 <td></td> <td></td> <td></td> <td>CDHBD_03</td> <td>CDHBD_04</td> <td>CDHBD_05</td> <td>CDHBD_06</td> <td>CDHBD_07</td> <td>CDHBD_08</td> <td>CDHBD_09</td> <td>CDHBD_10</td> <td>CDHBD_11 (</td> <td>CDHBD_12</td> <td></td>				CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11 (CDHBD_12	
2 2005 FEB 0 <td>NO.</td> <td>YEAR</td> <td>MONTH</td> <td>(INPUT)</td> <td></td>	NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
3 2005 MAR 11 0 </td <td>1</td> <td>2005</td> <td>JAN</td> <td>0</td> <td></td>	1	2005	JAN	0	0	0	0	0	0	0	0	0	0	
4 2005 APR 0 29 0 </td <td>2</td> <td>2005</td> <td>FEB</td> <td>0</td> <td></td>	2	2005	FEB	0	0	0	0	0	0	0	0	0	0	
5 2005 MAY 0 0 92 0 </td <td>3</td> <td>2005</td> <td>MAR</td> <td>11</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>. 0</td> <td>0</td> <td>0</td> <td></td>	3	2005	MAR	11	0	0	0	0	0	0	. 0	0	0	
6 2005 JUN 0 0 0 257 0<	4	2005	APR	0	29	0	0	0	0	0	0	0	0	
7 2005 JUL 0 0 0 340 0<	5	2005	MAY	0	0	92		0	0	0	0	0	0	
8 2005 AUG 0 0 0 0 0 0 341 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	6	2005	JUN	0	0	0	257	-	0	0	0	0	0	
9 2005 SEP 0 0 0 0 0 0 0 0 353 0 0 0 0 0 1 1 2 2005 OCT 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 1 1 2 2005 NOV 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7	2005		0	0	0	0	340	0	0	0	0	0	
10 2005 OCT 0 0 0 0 0 0 0 0 270 0 0 0 1 1 2005 NOV 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	8			0	0	0	0	0	341	•	0	0	0	
11 2005 NOV 0 0 0 0 0 0 79 0 12 2005 DEC 0 0 0 0 0 0 0 0 27 13 2006 JAN 0	9			0	0	0	0	•	0		ū	0	0	
12 2005 DEC 0 0 0 0 0 0 0 27 13 2006 JAN 0				0	0	0	•	•	0	_		· ·	0	
13 2006 JAN 0 </td <td></td> <td></td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>Ū</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td>0</td> <td></td>				0	0	0	0	Ū	0	0	0		0	
14 2006 FEB 0 </td <td></td> <td></td> <td></td> <td>0</td> <td>0</td> <td>0</td> <td>•</td> <td>•</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>27</td> <td></td>				0	0	0	•	•	0	0	0	0	27	
15 2006 MAR 31 0<				0	0	0	· ·	ū	0	0	0	0	0	
16 2006 APR 0 86 0<				0	0	0	O	J	0	0	0	0	0	
17 2006 MAY 0 0 164 0 0 0 0 0 0 0 0 0 10 0				31	0	0	Ü	J	0	0	0	0	0	
18 2006 JUN 0 0 0 301 0				0		O	_	ū	0	0	0	0	0	
19 2006 JUL				0	0			•	0	0	0	0	0	
20 2006 AUG 0 0 0 0 0 355 0 0 0 0 21 2006 SEP 0 0 0 0 0 0 320 0 0 0 22 2006 OCT 0 0 0 0 0 0 0 200 0 0 23 2006 NOV 0 0 0 0 0 0 0 54 0				0	0				0	0	0	0	0	
21 2006 SEP 0 0 0 0 0 320 0 0 0 22 2006 OCT 0 0 0 0 0 0 0 0 0 0 23 2006 NOV 0 0 0 0 0 0 0 0 54 0				0	0	0			Ü	0	0	0	0	
22 2006 OCT 0 0 0 0 0 0 0 0 200 0 0 0 23 2006 NOV 0 0 0 0 0 0 0 0 54 0				0	0	0	•	_		ū	0	-	0	
23 2006 NOV 0 0 0 0 0 0 0 54 0				0	0	0	_	_	0		Ü	Ü	0	
				0	0	0	ū	_	0	_		· ·	0	
				0	· ·	0	_	_	0	_	_		ū	
ADUDI E DESCRIPTION														

DESCRIPTION

Schedule	F-7				FORECAS	STING MOD	Page 19 of 96						
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model ι	ised to estima	ate test year	projections	Type of Data	a Shown:	
				for custon	ners, deman	d, and energ	gy, provide th	e historical a	nd projected	l values for	Projected Te	est Year Ende	ed 12/31/17
COMPAN	Y: GULF	POWER	COMPANY	the input	variables and	d the output	variables us	ed in estimati	ng and/or va	lidating the	Prior Year E	nded 12/31/1	6
				model. A	lso, provide	a description	n of each var	iable, specify	ing the unit o	of	X Historical Ye	ears 1995 - 20)15
DOCKET	NO.: 160	186-EI						onal range of			Witness: J.		
							RESIDENTIA						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
LINE	. ,	. ,	CDHBD_03	CDHBD_04	CDHBD_05		CDHBD_07		CDHBD_09	CDHBD_10	CDHBD_11	CDHBD_12	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2007	JAN	Ó	Ó	Ò	Ò	Ò	Ò	Ò	Ò	Ò	Ò	
2	2007	FEB	0	0	0	0	0	0	0	0	0	0	
3	2007	MAR	20	0	0	0	0	0	0	0	0	0	
4	2007	APR	0	63	0	0	0	0	0	0	0	0	
5	2007	MAY	0	0	147	0	0	0	0	0	0	0	
6	2007	JUN	0	0	0	248	0	0	0	0	0	0	
7	2007	JUL	0	0	0	0	344	0	0	0	0	0	
8	2007	AUG	0	0	0	0	0	380	0	0	0	0	
9	2007	SEP	0	0	0	0	0	0	353	0	0	0	
10	2007	OCT	0	0	0	0	0	0	0	243	0	0	
11	2007	NOV	0	0	0	0	0	0	0	0	70	0	
12	2007	DEC	0	0	0	0	0	0	0	0	0	19	
13	2008	JAN	0	0	0	0	0	0	0	0	. 0	0	
14	2008	FEB	0	0	0	0	0	0	0	0	0	0	
15	2008	MAR	10	0	0	0	0	0	0	0	0	0	
16	2008	APR	0	43	0	0	0	0	0	0	0	0	
17	2008	MAY	0	0	133	0	0	0	0	0	0	0	
18	2008	JUN	0	0	0	318		0	0	0	0	0	
19	2008	JUL	0	0	0	0		0	0	0	0	0	
20	2008	AUG	0	0	0	0	0	387	0	0	0	0	
21	2008	SEP	0	0	0	0	0	0	339	0	0	0	
22	2008	OCT	0	0	0	0	0	0	0	182	0	0	
23	2008	NOV	0	0	0	0	0	0	0	0	47	0	
24	2008	DEC	0	0	0	0	0	0	0	0	0	15	

Schedule				FORECASTING MODELS - HISTORICAL DATA							Page 20 of 96		
FLORIDA	A PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	ised to estima	ate test year	projections	Type of Data	Shown:	
				for custor	ners, deman	d, and energ	gy, provide th	ne historical a	nd projected	values for	Projected Tes	st Year Ended	1 12/31/17
COMPA	NY: GULF	POWER	COMPANY	the input	variables an	d the output	variables us	ed in estimatii	ng and/or va	lidating the	Prior Year Ended 12/31/16		
				•		•		iable, specifyi	•	•	X Historical Yea		
DOCKET	Γ NO.: 160	186-FI						onal range of			Witness: J. H		
BOOKE	110100	100 L1					RESIDENTIA		W.			· · · · · · ·	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
LINE	()	` '	CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06		CDHBD_08	. ,	CDHBD_10	CDHBD_11 (
NO.	YFAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2009	JAN	0	0	0	0	0	0	0	0	0	0	
2	2009	FEB	0	0	0	0	0	0	0	0	0	0	
3	2009	MAR	19	0	0	0	0	0	0	0	0	0	
4	2009	APR	0	38	0	0	0	0	0	0	0	0	
5	2009	MAY	0	0	142	0	0	0	0	0	0	0	
6	2009	JUN	0	0	0	270	0	0	0	0	0	0	
7	2009	JUL	0	0	0	0	382	0	0	0	0	0	
8	2009	AUG	0	0	0	0	0	325	0	0	0	0	
9	2009	SEP	0	0	0	0	0	0	270	0	0	0	
10	2009	OCT	0	0	0	0	0	0	0	236	0	0	
11	2009	NOV	0	0	0	0	0	0	0	0	69	0	
12	2009	DEC	0	0	0	0	0	0	0	0	0	9	
13	2010	JAN	0	0	0	0	0	0	0	0	0	0	
14	2010	FEB	0	0	0	0	0	. 0	0	0	0	0	
15	2010	MAR	1	0	0	0	0	0	0	0	0	0	
16	2010	APR	0	33	0	0	0	0	0	0	0	0	
17	2010	MAY	0	0	133	0	0	0	0	0	0	0	
18	2010	JUN	0	0	0	295	0	0	0	0	0	0	
19	2010	JUL	0	0	0	0	369	0	0	0	0	0	
20	2010	AUG	0	0	0	0	0	413	0	0	0	0	
21	2010	SEP	0	0	0	0	0	0	340	0	0	0	
22	2010	OCT	0	0	0	0	0	0	0	213	0	0	
23	2010	NOV	0	0	0	0	0	0	0	0	94	0	
24	2010	DEC	0	0	0	0	0	0	0	0	0	22	

Schedule	F-7				FORECAS	STING MOD	Page 21 of 96						
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estima	ite test year	projections	Type of Data	Shown:	
								e historical a			Projected Te	st Year End	ed 12/31/17
COMPAN	Y: GULF	POWER	COMPANY	the input	variables and	d the output	variables use	ed in estimatii	ng and/or va	lidating the	Prior Year Ended 12/31/16		
				model. A	lso, provide	a descriptior	of each var	able, specifyi	ng the unit o	of	X Historical Years 1995 - 2015		
DOCKET	NO.: 160	186-EI		measurer	ment and the	time span c	r cross secti	onal range of	the data.		Witness: J.	K. Park	
					FORECAST	ING MODEL:	RESIDENTIA	L ENERGY					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	CDHBD_12	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2011	JAN	0	0	0	0	0	0	0	0	0	0	
2	2011	FEB	0	0	0	0	0	0	0	0	0	0	
3	2011	MAR	28	0	0	0	0	0	0	0	0	0	
4	2011	APR	0	89	0	0	0	0	0	0	0	0	
5	2011	MAY	0	0	157	0	0	0	0	0	0	0	
6	2011	JUN	0	0	0	312	0	0	0	0	0	0	
7	2011	JUL	0	0	0	0	390	0	0	0	0	0	
8	2011	AUG	0	0	0	0	0	388	0	0	0	0	
9	2011	SEP	0	0	0	0	0	0	328	0	0	0	
10	2011	OCT	0	0	0	0	0	0	0	161	0	0	
11	2011	NOV	0	0	0	0	0	0	0	0	52	0	
12	2011	DEC	0	0	0	0	0	0	0	0	0	22	
13	2012	JAN	0	0	0	0	0	0	0	0	0	0	
14	2012	FEB	0	0	0	0	0	0	0	0	0	0	
15	2012	MAR	37	0	0	0	0	0	0	0	0	0	
16	2012	APR	0	104	0	0	0	0	0	0	0	0	
17	2012	MAY	0	0	166	0	0	0	0	0	0	0	
18	2012	JUN	0	0	0	298	0	0	0	0	0	0	
19	2012	JUL	0	0	0	0	342	0	0	0	0	0	
20	2012	AUG	0	0	0	0	0	353	0	0	0	0	
21	2012	SEP	0	0	0	0	0	0	314	100	0	0	
22	2012	OCT	0	0	0	0	0	0	0	192 0	0 67	0	
23	2012	NOV	0	0	0	0	0	0	0	0	0	21	
24	2012	DEC	0	Ü	0	U	U	U	U	U	U	21	

Schedule F	-7			FORECASTING MODELS - HISTORICAL DATA								Page 22 of 96		
FLORIDA F	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estima	ite test year	projections	Type of Data	Shown:		
				for custor	ners, deman	d, and energ	gy, provide th	e historical a	nd projected	values for	Projected Te	st Year End	ed 12/31/17	
COMPANY	: GULF	POWER	COMPANY	the input	variables and	d the output	variables us	ed in estimatii	ng and/or va	lidating the	Prior Year E	Prior Year Ended 12/31/16		
								iable, specifyi			X Historical Ye	ars 1995 - 2	.015	
DOCKET N	IO.: 160	186-EI		measurer	nent and the	time span o	r cross secti	onal range of	the data.		Witness: J.	K. Park		
FORECASTING MODEL: RESIDENTIAL ENERGY														
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)		
LINE			CDHBD_03	CDHBD_04	CDHBD_05		CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	CDHBD_12		
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
1	2013	JAN	0	Ó	Ó	Ò	Ó	Ò	Ó	Ò	Ó	Ò		
2	2013	FEB	0	0	0	0	0	0	0	0	0	0		
3	2013	MAR	9	0	0	0	0	0	0	0	0	0		
4	2013	APR	0	43	0	0	0	0	0	0	0	0		
5	2013	MAY	0	0	103	0	0	0	0	0	0	0		
6	2013	JUN	0	0	0	277	0	0	0	0	0	0		
7	2013	JUL	0	0	0	0	329	0	0	0	0	0		
8	2013	AUG	0	0	0	0	0	343	0	0	0	0		
9	2013	SEP	0	0	0	0	0	0	322	0	0	0		
10	2013	OCT	0	0	0	0	0	0	0	223	0	0		
11	2013	NOV	0	0	0	0	0	0	0	0	70	0		
12	2013	DEC	0	0	0	0	0	0	0	0	0	28		
13	2014	JAN	0	0	0	0	0	0	0	0	0	0		
14	2014	FEB	0	0	0	0	0	0	0	0	0	0		
15	2014	MAR	10	0	0	0	0	0	0	0	0	0		
16	2014	APR	0	38	0	0	0	0	0	0	0	0		
17	2014	MAY	0	0	134	0	0	0	0	0	0	0		
18	2014	JUN	0	0	0	263	0	0	0	0	0	0		
19	2014	JUL	0	0	0	0	333	0	0	0	0	0		
20	2014	AUG	0	0	0	0	0	311	0	0	0	0		
21	2014	SEP	0	0	0	0	0	0	311	0	0	0		
22	2014	OCT	0	0	0	0	0	0	0	174	0	0		
23	2014	NOV	0	0	0	0	0	0	0	0	60	0		
24	2014	DEC	0	0	0	0	0	0	0	0	0	12		
VARIARIE		DESCRIPT	ION											

FLORIDA PUBLIC SERVICE COMMISSION EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data. FORECASTING MODEL: RESIDENTIAL ENERGY Type of Data Shown: Projected Test Year Ended 12/3 X Historical Years 1995 - Witness: J. K. Park	/16 2015
the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data. X Prior Year Ended 12/3*	/16 2015
model. Also, provide a description of each variable, specifying the unit of DOCKET NO.: 160186-EI measurement and the time span or cross sectional range of the data. FORECASTING MODEL: RESIDENTIAL ENERGY X Historical Years 1995 - Witness: J. K. Park	2015
DOCKET NO.: 160186-EI measurement and the time span or cross sectional range of the data. Witness: J. K. Park FORECASTING MODEL: RESIDENTIAL ENERGY	
DOCKET NO.: 160186-EI measurement and the time span or cross sectional range of the data. Witness: J. K. Park FORECASTING MODEL: RESIDENTIAL ENERGY	
FORECASTING MODEL: RESIDENTIAL ENERGY	
(4) (0) (2) (4) (5) (6) (7) (9) (0) (10) (44) (40) (40)	
(1) (2) (3) (4) (5) (6) (7) (8) (9) (10) (11) (12) (13)	
LINE CDHBD_03 CDHBD_04 CDHBD_05 CDHBD_06 CDHBD_07 CDHBD_08 CDHBD_09 CDHBD_10 CDHBD_11 CDHBD_12	
NO. YEAR MONTH (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT)	
1 2015 JAN 0 0 0 0 0 0 0 0 0 0	
2 2015 FEB 0 0 0 0 0 0 0 0 0 0	
3 2015 MAR 23 0 0 0 0 0 0 0 0 0	
4 2015 APR 0 87 0 0 0 0 0 0 0 0	
5 2015 MAY 0 0 159 0 0 0 0 0 0 0	
6 2015 JUN 0 0 0 272 0 0 0 0 0 0	
7 2015 JUL 0 0 0 0 360 0 0 0 0	
8 2015 AUG 0 0 0 0 0 388 0 0 0 0	
9 2015 SEP 0 0 0 0 0 0 310 0 0	
10 2015 OCT 0 0 0 0 0 0 0 205 0 0	
11 2015 NOV 0 0 0 0 0 0 0 0 75 0	
12 2015 DEC 0 0 0 0 0 0 0 0 0 0 21	
13 2016 JAN 0 0 0 0 0 0 0 0 0 0	
14 2016 FEB 0 0 0 0 0 0 0 0 0 0	
15 2016 MAR 19 0 0 0 0 0 0 0 0 0	
16 2016 APR 0 56 0 0 0 0 0 0 0 0	
17 2016 MAY 0 0 140 0 0 0 0 0 0 0	
18 2016 JUN 0 0 0 277 0 0 0 0 0 0	
19 2016 JUL 0 0 0 0 350 0 0 0 0	
20 2016 AUG 0 0 0 0 0 355 0 0 0	
21 2016 SEP 0 0 0 0 0 0 323 0 0 0	
22 2016 OCT 0 0 0 0 0 0 0 205 0 0	
23 2016 NOV 0 0 0 0 0 0 0 0 75 0	
24 2016 DEC 0 0 0 0 0 0 0 0 0 0 21	

DESCRIPTION

Billing Cycle Residential Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Recap Schedules: Supporting Schedules:

D	OCKET N
	(1)
	LINE
	NO.
	1
	2
	3
	4
	_

FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections
	for customers, demand, and energy, provide the historical and projected values for _
COMPANY: GULF POWER COMPANY	the input variables and the output variables used in estimating and/or validating the
	model. Also, provide a description of each variable, specifying the unit of
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data.

Type of Data Shown:
X Projected Test Year Ended 12/31/17
Prior Year Ended 12/31/16
Historical Years 1995 - 2015
Witness: J. K. Park

FORECASTING MODEL: RESIDENTIAL ENERGY													
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08 (CDHBD_09	CDHBD_10	CDHBD_11 (CDHBD_12	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2017	JAN	0	0	0	0	0	0	0	0	0	0	
2	2017	FEB	0	0	0	0	0	0	0	0	0	0	
3	2017	MAR	19	0	0	0	0	0	0	0	0	0	
4	2017	APR	0	56	0	0	0	0	0	0	0	0	
5	2017	MAY	0	0	140	0	0	0	0	0	0	0	
6	2017	JUN	0	0	0	277	0	0	0	0	0	. 0	
7	2017	JUL	0	0	0	0	350	0	0	0	0	0	
8	2017	AUG	0	0	0	0	0	355	0	0	0	0	
9	2017	SEP	0	0	0	0	0	0	323	0	0	0	
10	2017	OCT	0	0	0	0	0	0	0	205	0	0	
11	2017	NOV	0	0	0	0	0	0	0	0	75	0	
12	2017	DEC	0	0	0	0	0	0	0	0	0	21	

VARIABLE

DESCRIPTION

CDHBD_XX

Billing Cycle Residential Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Supporting Schedules: Recap Schedules: FLORIDA PUBLIC SERVICE COMMISSION

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:

Projected Test Year Ended 12/31/16

Witness: J. K. Park

					FORECASTING MODEL: RESIDENTIAL ENERGY						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)			
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_11	HDHBD_12			
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)			
1	1995	OCT	0	0	0	0	0	0			
2	1995	NOV	0	0	0	0	50	0			
3	1995	DEC	0	0	0	0	0	144			
4	1996	JAN	275	0	0	0	0	0			
5	1996	FEB	0	252	0	0	0	0			
6	1996	MAR	0	0	156	0	0	0			
7	1996	APR	0	0	0	81	0	0			
8	1996	MAY	0	0	0	0	0	0			
9	1996	JUN	0	0	0	0	0	0			
10	1996	JUL	0	0	0	0	0	0			
11	1996	AUG	0	0	0	0	0	0			
12	1996	SEP	0	0	0	0	0	0			
13	1996	OCT	0	0	0	0	0	0			
14	1996	NOV	0	0	0	0	42	0			
15	1996	DEC	0	0	0	0	0	115			

VARIABLE DESCRIPTION

	Schedule F	-7				FORECAS	STING MOD	Page 2	6 of 96			
	FLORIDA F	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For e	each forecas	sting model u	sed to estimate	test year projections	Type of Data Shown:	
										projected values for	Projected Test Year Ended 12/3	31/17
	COMPANY	: GULF	POWER	COMPANY	the input	variables and	the output	variables use	ed in estimating	and/or validating the	Prior Year Ended 12/31/16	
					model. A	lso, provide a	a descriptior	of each var	iable, specifying	the unit of	X Historical Years 1995 - 2015	
	DOCKET N	IO.: 160	186-EI		measurer	nent and the	time span o	r cross secti	onal range of the	e data.	Witness: J. K. Park	
						FORECAST	ING MODEL:	RESIDENTIA	L ENERGY			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)			
	LINE			HDHBD_01		HDHBD_03	HDHBD_04	HDHBD_11	HDHBD_12			
	NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)			
	1	1997	JAN	179	0	0	0	0	0			
	2	1997	FEB	0	179	0	0	0	0			
	3	1997	MAR	0	0	63	0	0	0			
	4	1997	APR	0	0	0	22	0	0			
	5	1997	MAY	0	0	0	0	0	0			
	6	1997	JUN	0	0	0	0	0	0			
	7	1997	JUL	0	0	0	0	0	0			
	8	1997	AUG	0	0	0	0	0	0			
	9	1997	SEP	0	0	0	0	0	0			
	10	1997	OCT	0	0	0	0	0	0			
•	11	1997	NOV	0	0	0	0	75	0			
)	12	1997	DEC	0	0	0	0	0	155			
	13	1998	JAN	179	0	0	0	0	0			
	14	1998	FEB	0	175	0	0	0	0			
	15	1998	MAR	0	0	131	0	0	0			
	16	1998	APR	0	0	0	51	0	0			
	17	1998	MAY	0	0	0	0	0	0			
	18	1998	JUN	0	0	0	0	0	0			
	19	1998	JUL	0	0	0	0	0	0			
	20	1998	AUG	0	0	0	0	0	0			
	21	1998	SEP	0	0	0	0	0	0			
	22	1998	OCT	0	0	0	0	0	0			
	23	1998	NOV	0	0	0	0	24	0			

46

VARIABLE HDHBD_XX

24

1998

DESCRIPTION

DEC

Billing Cycle Residential Heating Degree Hours per Billing Day for Month XX (01=January, etc.)

0

Schedule F-7	FORECASTING MODELS - HISTORICAL DATA	Page 27 of 96		
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections	Type of Data Shown:		
	for customers, demand, and energy, provide the historical and projected values for	Projected Test Year Ended 12/31/17		
COMPANY: GULF POWER COMPANY	the input variables and the output variables used in estimating and/or validating the	Prior Year Ended 12/31/16		
	model. Also, provide a description of each variable, specifying the unit of	X Historical Years 1995 - 2015		
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data.	Witness: J. K. Park		
(4)	(5) (7) (0)			

					IONLOADI	IIIG MODEL.	HEODENIA	AL LINLING!
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_11	HDHBD_12
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	1999	JAN	206	0	0	0	0	0
2	1999	FEB	0	87	0	0	0	0
3	1999	MAR	0	0	102	0	0	0
4	1999	APR	0	0	0	37	0	0
5	1999	MAY	0	0	0	0	0	0
6	1999	JUN	0	0	0	0	0	0
7	1999	JUL	0	0	0	0	0	0
8	1999	AUG	0	0	0	0	0	0
9	1999	SEP	0	0	0	0	0	0
10	1999	OCT	0	0	0	0	0	0
11	1999	NOV	0	0	0	0	50	0
12	1999	DEC	0	0	0	0	0	109
13	2000	JAN	170	0	0	0	0	0
14	2000	FEB	0	207	0	0	0	0
15	2000	MAR	0	0	57	0	0	0
16	2000	APR	0	0	0	31	0	0
17	2000	MAY	0	0	0	0	0	0
18	2000	JUN	0	0	0	0	0	0
19	2000	JUL	0	0	0	0	0	0
20	2000	AUG	0	0	0	0	0	0
21	2000	SEP	0	0	0	0	0	0
22	2000	OCT	0	0	0	0	0	0
23	2000	NOV	0	0	0	0	52	0
24	2000	DEC	0	0	0	0	0	208

Schedule	F-7				FORECAS	STING MOD	Page 28 of 9			
FLORIDA	PUBLIC	SERVICE	E COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estimate	test year projections	Type of Data Shown:
									projected values for	Projected Test Year Ended 12/31/17
COMPAN	Y: GULF	POWER	COMPANY						and/or validating the	Prior Year Ended 12/31/16
								iable, specifying		X Historical Years 1995 - 2015
DOCKET	NO.: 160	186-EI		measurer	ment and the	time span c	or cross secti	onal range of the	e data.	Witness: J. K. Park
					FORECAST	ING MODEL:	RESIDENTIA	AL ENERGY		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_11	HDHBD_12		
NO.	YEAR		(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
1	2001	JAN	348	0	0	0	0	0		
2	2001	FEB	0	183	0	0	0	0		
3	2001	MAR	0	0	77	0	0	0		
4	2001	APR	0	0	0	51	0	0		
5	2001	MAY	0	0	0	0	0	0		
7	2001 2001	JUN JUL	0	0	0	0	0	0		
8	2001	AUG	0	0	0	0	0	0		
9	2001	SEP	0	0	0	0	0	0		
10	2001	OCT	0	0	0	0	0	0		
11	2001	NOV	0	0	0	0	39	0		
12	2001	DEC	0	0	0	0	0	61		

JAN

FEB

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

DESCRIPTION

VARIABLE HDHBD_XX

Billing Cycle Residential Heating Degree Hours per Billing Day for Month XX (01=January, etc.)

FLORIDA PUBLIC SERVICE COMMISSION
COMPANY: GULF POWER COMPANY

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:

Projected Test Year Ended 12/31/17

Prior Year Ended 12/31/16

X Historical Years 1995 - 2015

Witness: J. K. Park

DOCKET NO.: 160186-EI

JOUNE	110 100	100			.,			
					FORECAST	ING MODEL:	RESIDENTIA	AL ENERGY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_11	HDHBD_12
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2003	JAN	251	0	0	0	0	0
2	2003	FEB	0	233	0	0	0	0
3	2003	MAR	0	0	71	0	0	0
4	2003	APR	0	0	0	35	0	0
5	2003	MAY	0	0	0	0	0	0
6	2003	JUN	0	0	0	0	0	0
7	2003	JUL	0	0	0	0	0	0
8	2003	AUG	0	0	0	0	0	0
9	2003	SEP	0	0	0	0	0	0
10	2003	OCT	0	0	0	0	0	0
11	2003	NOV	0	0	0	0	20	0
12	2003	DEC	0	0	0	0	0	166
13	2004	JAN	233	0	0	0	0	0
14	2004	FEB	0	221	0	0	0	0
15	2004	MAR	0	0	113	0	0	0
16	2004	APR	0	0	0	47	0	0
17	2004	MAY	0	0	0	0	0	0
18	2004	JUN	0	0	0	0	0	0
19	2004	JUL	0	0	0	0	0	0
20	2004	AUG	0	0	0	0	0	0
21	2004	SEP	0	0	0	0	0	0
22	2004	OCT	0	0	0	0	0	0
23	2004	NOV	0	0	0	0	14	0
24	2004	DEC	0	0	0	0	0	110

VARIABLE

DESCRIPTION

HDHBD_XX

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:
____ Projected Test Year Ended 12/31/17
___ Prior Year Ended 12/31/16
X Historical Years 1995 - 2015

Witness: J. K. Park

					FORFOAGT	INO MODEL	DECIDENTIA	U ENEDOV
							RESIDENTIA	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_11	HDHBD_12
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2005	JAN	182	0	0	0	0	0
2	2005	FEB	0	164	0	0	0	0
3	2005	MAR	0	0	105	0	0	0
4	2005	APR	0	0	0	35	0	0
5	2005	MAY	0	0	0	0	0	0
6	2005	JUN	0	0	0	0	0	0
7	2005	JUL	0	0	0	0	0	0
8	2005	AUG	0	0	0	0	0	0
9	2005	SEP	0	0	0	0	0	0
10	2005	OCT	0	0	0	0	0	0
11	2005	NOV	0	0	0	0	43	0
12	2005	DEC	0	0	0	0	0	132
13	2006	JAN	148	0	0	0	0	0
14	2006	FEB	0	127	0	0	0	0
15	2006	MAR	0	0	80	0	0	0
16	2006	APR	0	0	0	33	0	0
17	2006	MAY	0	0	0	0	0	0
18	2006	JUN	0	0	0	0	0	0
19	2006	JUL	0	0	0	0	0	0
20	2006	AUG	0	0	0	0	0	0
21	2006	SEP	0	0	0	0	0	0
22	2006	OCT	0	0	0	0	0	0
23	2006	NOV	0	0	0	0	62	0
24	2006	DEC	0	0	0	0	0	159

VARIABLE

DESCRIPTION

HDHBD XX

Schedule F-7	FORECASTING MODELS - HISTORICAL DATA	Page 31 of 96		
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections	Type of Data Shown:		
COMPANY: GULF POWER COMPANY	for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the			
	model. Also, provide a description of each variable, specifying the unit of	X Historical Years 1995 - 2015		
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data.	Witness: J. K. Park		
(1) (2) (3) (4)	(5) (6) (7) (8) (9)			

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_11	HDHBD_12
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2007	JAN	128	0	0	0	0	0
2	2007	FEB	0	230	0	0	0	0
3	2007	MAR	0	0	107	0	0	0
4	2007	APR	0	0	0	38	0	0
5	2007	MAY	0	0	0	0	0	0
6	2007	JUN	0	0	0	0	0	0
7	2007	JUL	0	0	0	0	0	0
8	2007	AUG	0	0	0	0	0	0
9	2007	SEP	0	0	0	0	0	0
10	2007	OCT	0	0	0	0	0	0
11	2007	NOV	0	0	0	0	44	0
12	2007	DEC	0	0	0	0	0	94
13	2008	JAN	186	0	0	0	0	0
14	2008	FEB	0	182	0	0	0	0
15	2008	MAR	0	0	113	0	0	0
16	2008	APR	0	0	0	41	0	0
17	2008	MAY	0	0	0	0	0	0
18	2008	JUN	0	0	0	0	0	0
19	2008	JUL	0	0	0	0	0	0
20	2008	AUG	0	0	0	0	0	0
21	2008	SEP	0	0	0	0	0	0
22	2008	OCT	0	0	0	0	0	0
23	2008	NOV	0	0	0	0	70	0
24	2008	DEC	0	0	0	0	0	152

Schedule F-7	FORECASTING MODELS - HISTORICAL DATA	Page 32 of 96		
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections	Type of Data Shown:		
	for customers, demand, and energy, provide the historical and projected values for	Projected Test Year Ended 12/31/17		
COMPANY: GULF POWER COMPANY	the input variables and the output variables used in estimating and/or validating the	Prior Year Ended 12/31/16		
	model. Also, provide a description of each variable, specifying the unit of	X Historical Years 1995 - 2015		
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data.	Witness: J. K. Park		
(1) (2) (3) (4)	(5) (6) (7) (8) (9)			

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LINE	()	()	HDHBD_01	HDHBD_02	HDHBD 03	HDHBD_04	HDHBD_11	HDHBD_12
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2009	JAN	139	Ò	Ó	Ó	Ó	Ó
2	2009	FEB	0	210	0	0	0	0
3	2009	MAR	0	0	110	0	0	0
4	2009	APR	0	0	0	25	0	0
5	2009	MAY	0	0	0	0	0	0
6	2009	JUN	0	0	0	0	0	0
7	2009	JUL	0	0	0	0	0	0
8	2009	AUG	0	0	0	0	0	0
9	2009	SEP	0	0	0	0	0	0
10	2009	OCT	0	0	0	0	0	0
11	2009	NOV	0	0	0	0	46	0
12	2009	DEC	0	0	0	0	0	147
13	2010	JAN	317	0	0	0	0	0
14	2010	FEB	0	267	0	0	0	0
15	2010	MAR	0	0	227	0	0	0
16	2010	APR	0	0	0	49	0	0
17	2010	MAY	0	0	0	0	0	0
18	2010	JUN	0	0	0	0	0	0
19	2010	JUL	0	0	0	0	0	0
20	2010	AUG	0	0	0	0	0	0
21	2010	SEP	0	0	0	0	0	0
22	2010	OCT	0	0	0	0	0	0
23	2010	NOV	0	0	0	0	38	0
24	2010	DEC	0	0	0	0	0	191

Schedule F-7						FORECAS	STING MOD	Page 33 of 9				
	FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estimate	e test year projections	Type of Data Shown:	
					for custor	ners, deman	d, and energ	y, provide th	e historical and	d projected values for	Projected Test Year Ended 12/3	1/17
	COMPAN	Y: GULF	POWER	COMPANY	the input	variables an	d the output	variables use	ed in estimating	g and/or validating the	Prior Year Ended 12/31/16	
					model. A	lso, provide	a description	of each var	iable, specifyin	g the unit of	X Historical Years 1995 - 2015	
	DOCKET	NO.: 160	186-EI		measurer	nent and the	time span o	r cross secti	onal range of the	he data.	Witness: J. K. Park	
						FORECAST	ING MODEL:	RESIDENTIA	AL ENERGY			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)			
	LINE	(-/	(-)	HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04		HDHBD_12			
	NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)			
	1	2011	JAN	280	(0.)	0	0	0	0			
	2	2011	FEB	0	250	0	0	0	0			
	3	2011	MAR	0	0	84	0	0	0			
	4	2011	APR	0	0	0	23	0	0			
	5	2011	MAY	0	0	0	0	0	0			
	6	2011	JUN	0	0	0	0	0	0			
	7	2011	JUL	0	0	0	0	0	0			
	8	2011	AUG	0	0	0	0	0	0			
	9	2011	SEP	0	0	0	0	0	0			
	10	2011	OCT	0	0	0	0	0	0			
	11	2011	NOV	0	0	0	0	56	0			
	12	2011	DEC	0	0	0	0	0	114			
	13	2012	JAN	117	0	0	0	0	0			
	14	2012	FEB	0	91	0	0	0	0			
	15	2012	MAR	0	0	48	0	0	0			
	16	2012	APR	0	0	0	4	0	0			
	17	2012	MAY	0	0	0	0	0	0			
	18	2012	JUN	0	0	0	0	0	0			
	19	2012	JUL	0	0	0	0	0	0			
	20	2012	AUG	0	0	0	0	0	0			
	21	2012	SEP	0	0	0	0	0	0			
	22	2012	OCT	0	0	0	0	0	0			
	23	2012	NOV	0	0	0	0	52	0			
	24	2012	DEC	0	0	0	0	0	93			

Billing Cycle Residential Heating Degree Hours per Billing Day for Month XX (01=January, etc.)

Supporting Schedules:

DESCRIPTION

VARIABLE HDHBD_XX

Recap Schedules:

Schedule F-7	FORECASTING MODELS - HISTORICAL DATA	Page 34 of 96
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections	Type of Data Shown:
	for customers, demand, and energy, provide the historical and projected values for	Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY	the input variables and the output variables used in estimating and/or validating the	Prior Year Ended 12/31/16
	model. Also, provide a description of each variable, specifying the unit of	X Historical Years 1995 - 2015
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data.	Witness: J. K. Park

					FORECAST	ING MODEL:	RESIDENTIA	I ENERGY
4.1	4-1	4-1		4-1				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_11	HDHBD_12
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2013	JAN	153	0	0	0	0	0
2	2013	FEB	0	102	0	0	0	0
3	2013	MAR	0	0	131	0	0	0
4	2013	APR	0	0	0	59	0	0
5	2013	MAY	0	0	0	0	0	0
6	2013	JUN	0	0	0	0	0	0
7	2013	JUL	0	0	0	0	0	0
8	2013	AUG	0	0	0	0	0	0
9	2013	SEP	0	0	0	0	0	0
10	2013	OCT	0	0	0	0	0	0
11	2013	NOV	0	0	0	0	33	0
12	2013	DEC	0	0	0	0	0	132
13	2014	JAN	244	0	0	0	0	0
14	2014	FEB	0	249	0	0	0	0
15	2014	MAR	0	0	121	0	0	0
16	2014	APR	0	0	0	43	0	0
17	2014	MAY	0	0	0	0	0	0
18	2014	JUN	0	0	0	0	0	0
19	2014	JUL	0	0	0	0	0	0
20	2014	AUG	0	0	0	0	0	0
21	2014	SEP	0	0	0	0	0	0
22	2014	OCT	0	0	0	0	0	0
23	2014	NOV	0	0	0	0	86	0
24	2014	DEC	0	0	0	0	0	150

DESCRIPTION

FLORIDA PUBLIC SERVICE COMMISSION COMPANY: GULF POWER COMPANY

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the X Prior Year Ended 12/31/16 model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown: Projected Test Year Ended 12/31/17 X Historical Years 1995 - 2015

Witness: J. K. Park

DOCKET NO.: 160186-EI

JOOKLI	110 100	/100-L1		mododici	non ana mo	timo opan o	1 01000 00011	onar range or
					FORECAST	ING MODEL:	RESIDENTIA	AL ENERGY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_11	HDHBD_12
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2015	JAN	189	0	0	0	0	0
2	2015	FEB	0	221	0	0	0	0
3	2015	MAR	0	0	154	0	0	0
4	2015	APR	0	0	0	15	0	0
5	2015	MAY	0	0	0	0	0	0
6	2015	JUN	0	0	0	0	0	0
7	2015	JUL	0	0	0	0	0	0
8	2015	AUG	0	0	0	0	0	0
9	2015	SEP	0	0	0	0	0	0
10	2015	OCT	0	0	0	0	0	0
11	2015	NOV	0	0	0	0	47	0
12	2015	DEC	0	0	0	0	0	133
13	2016	JAN	208	0	0	0	0	0
14	2016	FEB	0	189	0	0	0	0
15	2016	MAR	0	0	111	0	0	0
16	2016	APR	0	0	0	38	0	0
17	2016	MAY	0	0	0	0	0	0
18	2016	JUN	0	0	0	0	0	0
19	2016	JUL	0	0	0	0	0	0
20	2016	AUG	0	0	0	0	0	0
21	2016	SEP	0	0	0	0	0	0
22	2016	OCT	0	0	0	0	0	0
23	2016	NOV	0	0	0	0	47	0
24	2016	DEC	0	0	0	0	0	133

VARIABLE

DESCRIPTION

HDHBD_XX

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:

_X Projected Test Year Ended 12/31/17

__ Prior Year Ended 12/31/16

__ Historical Years 1995 - 2015

Witness: J. K. Park

					FORECAST	ING MODEL:	RESIDENTIA	AL ENERGY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_11	HDHBD_12
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2017	JAN	208	0	0	0	0	0
2	2017	FEB	0	189	0	0	0	0
3	2017	MAR	0	0	111	0	0	0
4	2017	APR	0	0	0	38	0	0
5	2017	MAY	0	0	0	0	0	0
6	2017	JUN	0	0	0	0	0	0
7	2017	JUL	0	0	0	0	0	0
8	2017	AUG	0	0	0	0	0	0
9	2017	SEP	0	0	0	0	0	0
10	2017	OCT	0	0	0	0	0	0
11	2017	NOV	0	0	0	0	47	0
12	2017	DEC	0	0	0	0	0	133

VARIABLE

DESCRIPTION

HDHBD XX

COMPANY: GULF POWER COMPANY

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:
Projected Test Year Ended 12/31/17
Prior Year Ended 12/31/16
X Historical Years 1995 - 2015
Witness: J. K. Park

DOCKET NO.: 160186-EI

				FO	RECASTING	MODEL: SIMA	LL COMMERC	JAL ENERGY	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LINE			SmComSales	SmComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	Bin_0897	Bin_Com
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	1995	OCT		27.870	34.826	7.928	0	0	0
2	1995	NOV	21.734	21.342	34.914	7.919	0	0	0
3	1995	DEC	21.749	21.468	34.992	7.918	0	0	0
4	1996	JAN	26.488	27.021	35.065	7.920	0	0	0
5	1996	FEB	27.147	26.314	35.139	7.880	0	0	0
6	1996	MAR	23.274	23.303	35.222	7.874	0	0	0
7	1996	APR	21.722	21.232	35.304	7.873	0	0	0
8	1996	MAY	23.851	22.542	35.368	7.861	0	0	0
9	1996	JUN	30.035	30.096	35.402	7.845	0	0	0
10	1996	JUL	33.815	32.909	35.401	7.830	0	0	0
11	1996	AUG	33.386	32.280	35.366	7.806	0	0	0
12	1996	SEP	30.717	30.737	35.300	7.797	0	0	0
13	1996	OCT	26.524	26.567	35.217	7.774	0	0	0
14	1996	NOV	22.621	21.165	35.133	7.763	0	0	0
15	1996	DEC	20.663	21.044	35.061	7.761	0	0	0

VARIABLE

DESCRIPTION

SmComSales

Billing Cycle Small Commercial kWh per Customer per Billing Day

GDP

Gross Domestic Product per Capita (\$000s)

ComPrice

12-Month Average of Real Commercial Price (cents per kWh)

Ivan

Binary Variable for Hurricane Ivan September 2004

Bin_0897

Binary Variable for August 1997

Bin_Com

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:

Projected Test Year Ended 12/31/17

Prior Year Ended 12/31/16

X Historical Years 1995 - 2015 Witness: J. K. Park

FORECASTING MODEL:	SMALL	COMMERCIAL	ENERGY	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LINE			SmComSales	SmComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	Bin_0897	Bin_Com
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	1997	JAN	23.907	24.033	34.994	7.750	0	0	0
2	1997	FEB	24.674	21.713	34.928	7.755	0	0	0
3	1997	MAR	19.133	21.000	34.853	7.736	0	0	0
4	1997	APR	21.448	20.486	34.777	7.708	0	0	0
5	1997	MAY	22.466	20.467	34.717	7.668	0	0	0
6	1997	JUN	26.390	25.908	34.685	7.640	0	0	0
7	1997	JUL	31.497	34.174	34.685	7.623	0	0	0
8	1997	AUG	28.561	28.142	34.718	7.608	0	1	0
9	1997	SEP	33.000	32.332	34.780	7.582	0	0	0
10	1997	OCT	28.819	29.322	34.859	7.557	0	0	0
11	1997	NOV	21.591	21.764	34.942	7.517	0	0	0
12	1997	DEC	23.051	21.913	35.019	7.479	0	0	0
13	1998	JAN	23.978	23.275	35.093	7.422	0	0	0
14	1998	FEB	24.188	25.273	35.170	7.401	0	0	0
15	1998	MAR	23.514	21.159	35.255	7.371	0	0	0
16	1998	APR	20.681	22.546	35.347	7.329	0	0	0
17	1998	MAY	25.341	25.479	35.433	7.265	0	0	0
18	1998	JUN	33.454	34.561	35.505	7.188	0	0	0
19	1998	JUL	36.656	39.446	35.560	7.109	0	0	0
20	1998	AUG	36.564	35.367	35.599	7.050	0	0	0
21	1998	SEP	33.526	33.337	35.622	6.986	0	0	0
22	1998	OCT	29.743	34.010	35.635	6.907	0	0	0
23	1998	NOV	26.392	25.986	35.646	6.885	0	0	0
24	1998	DEC	22.476	24.426	35.662	6.782	0	0	0

VARIABLE DESCRIPTION

SmComSolos Billing Cycle Sm

SmComSales Billing Cycle Small Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Bin_0897 Binary Variable for August 1997

FORECASTING MODEL: SMALL COMMERCIAL ENERGY

FLORIDA PUBLIC SERVICE COMMISSION EXPLANATION for customers
COMPANY: GULF POWER COMPANY the input variations in the input variation.

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:
Projected Test Year Ended 12/31/17
Prior Year Ended 12/31/16
X Historical Years 1995 - 2015
Witness: J. K. Park

DOCKET NO.: 160186-EI

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LINE			SmComSales	SmComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	Bin_0897	Bin_Com
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	1999	JAN	27.944	27.466	35.681	6.724	0	0	0
2	1999	FEB	23.767	20.849	35.702	6.659	0	0	0
3	1999	MAR	21.767	24.260	35.722	6.590	0	0	0
4	1999	APR	23.448	25.246	35.740	6.541	0	0	0
5	1999	MAY	26.978	28.096	35.751	6.533	0	0	0
6	1999	JUN	31.180	32.626	35.751	6.529	0	0	0
7	1999	JUL	34.852	37.219	35.739	6.530	0	0	0
8	1999	AUG	38.175	38.619	35.713	6.521	0	0	0
9	1999	SEP	35.198	36.477	35.676	6.517	0	0	0
10	1999	OCT	29.787	29.889	35.631	6.541	0	0	0
11	1999	NOV	23.978	26.801	35.586	6.509	0	0	0
12	1999	DEC	24.963	24.373	35.545	6.520	O	0	0
13	2000	JAN	26.037	25.542	35.503	6.518	0	0	0
14	2000	FEB	26.871	28.745	35.457	6.532	0	0	0
15	2000	MAR	23.053	23.688	35.403	6.546	0	0	0
16	2000	APR	23.366	20.336	35.349	6.555	0	0	0
` 17	2000	MAY	23.720	26.558	35.308	6.571	0	0	0
18	2000	JUN	32.559	33.373	35.289	6.583	0	0	0
19	2000	JUL	36.370	33.614	35.295	6.598	0	0	0
20	2000	AUG	34.502	35.515	35.326	6.609	0	0	0
21	2000	SEP	33.062	34.628	35.377	6.616	0	0	0
22	2000	OCT	27.796	26.447	35.442	6.618	0	0	0
23	2000	NOV	23.366	23.445	35.509	6.632	0	0	0
24	2000	DEC	24.344	24.704	35.569	6.650	0	0	0

VARIABLE DESCRIPTION
SmComSales Billing Cycle Small

SmComSales Billing Cycle Small Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Bin_0897 Binary Variable for August 1997

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: GULF POWER COMPANY

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:
Projected Test Year Ended 12/31/17
Prior Year Ended 12/31/16
X Historical Years 1995 - 2015

Witness: J. K. Park

DOCKET NO.: 160186-EI

JOOKLI	110 100	/100-L1		mododiom	ont and the	anno opan or	01000 0001101	iai rango or t	no data.	
				FOI	RECASTING I	MODEL: SMA	LL COMMERC	CIAL ENERGY		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
LINE			SmComSales	SmComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	Bin_0897	Bin_Com	
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2001	JAN	29.908	31.306	35.622	6.673	0	0	0	
2	2001	FEB	26.630	24.978	35.669	6.647	0	0	0	
3	2001	MAR	21.784	21.917	35.712	6.628	0	0	0	
4	2001	APR	22.455	22.977	35.757	6.606	0	0	0	
5	2001	MAY	24.854	24.865	35.805	6.582	0	0	0	
6	2001	JUN	30.529	30.056	35.860	6.558	0	0	0	
7	2001	JUL	32.226	29.700	35.922	6.535	0	0	0	
8	2001	AUG	31.669	33.506	35.994	6.509	0	0	0	
9										
10	2001	OCT	25.482	24.596	36.161	6.467	0	0	0	
11	2001	NOV	21.917	21.161	36.249	6.443	0	0	0	
12	2001	DEC	20.391	20.755	36.335	6.419	0	0	0	
13	2002	JAN	26.701	25.608	36.422	6.389	0	0	0	
14	2002	FEB	24.034	23.551	36.504	6.405	0	0	0	
15	2002	MAR	24.325	23.146	36.588	6.416	0	0	0	
16	2002	APR	21.288	22.427	36.679	6.440	0	0	0	
17	2002	MAY	27.479	27.228	36.779	6.457	0	0	0	
18	2002	JUN	29.867	28.575	36.887	6.464	0	0	0	
19	2002	JUL	31.825	32.512	37.006	6.521	0	0	0	
20	2002	AUG	33.750	33.329	37.135	6.580	0	0	0	
21	2002	SEP	32.691	31.337	37.268	6.637	0	0	0	
22	2002	OCT	29.249	30.319	37.406	6.688	0	0	0	
23	2002	NOV	23.251	22.153	37.546	6.733	0	0	0	
24	2002	DEC	23.648	23.030	37.685	6.793	0	0	0	

VARIABLE DESCRIPTION

SmComSales Billing Cycle Small Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Bin_0897 Binary Variable for August 1997

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:
Projected Test Year Ended 12/31/17
Prior Year Ended 12/31/16
X Historical Years 1995 - 2015
Witness: J. K. Park

				FO	RECASTING I	MODEL: SIMA	LL COMMERC	JAL ENERGY	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LINE			SmComSales	SmComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	Bin_0897	Bin_Com
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2003	JAN	26.658	25.904	37.821	6.863	0	0	0
2	2003	FEB	26.647	26.441	37.943	6.911	0	0	0
3	2003	MAR	21.687	21.908	38.057	6.964	0	0	0
4	2003	APR	22.410	21.397	38.171	7.008	0	0	0
5	2003	MAY	26.011	25.887	38.289	7.057	0	0	0
6	2003	JUN	30.118	30.292	38.419	7.114	0	0	0
7	2003	JUL	31.737	31.313	38.564	7.123	0	0	0
8	2003	AUG	32.343	32.165	38.728	7.138	0	0	0
9	2003	SEP	31.957	31.947	38.907	7.146	0	0	0
10	2003	OCT	26.739	26.783	39.095	7.158	0	0	0
11	2003	NOV	24.051	23.180	39.281	7.178	0	0	0
12	2003	DEC	23.620	23.494	39.458	7.189	0	0	0
13	2004	JAN	26.782	25.511	39.632	7.194	0	0	0
14	2004	FEB	26.504	26.172	39.801	7.210	0	0	0
15	2004	MAR	23.115	22.927	39.975	7.214	0	0	0
16	2004	APR	22.476	21.037	40.156	7.225	0	0	0
17	2004	MAY	23.862	23.839	40.339	7.228	0	0	0
18	2004	JUN	30.600	30.679	40.521	7.243	0	0	0
19	2004	JUL	33.275	33.317	40.704	7.252	0	0	0
20	2004	AUG	34.093	33.977	40.892	7.254	0	0	0
21	2004	SEP	26.862	26.500	41.078	7.260	1	0	0
22	2004	OCT	30.180	29.602	41.265	7.275	0	0	0
23	2004	NOV	25.339	24.541	41.451	7.303	0	0	0
24	2004	DEC	22.634	22.771	41.637	7.292	0	0	0

VARIABLE DESCRIPTION

SmComSales Billing Cycle Small Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Bin_0897 Binary Variable for August 1997

FORECASTING MODEL: SMALL COMMERCIAL ENERGY

EXPLANATION: For each forecasting model used to estimate test year projections FLORIDA PUBLIC SERVICE COMMISSION for customers, demand, and energy, provide the historical and projected values for COMPANY: GULF POWER COMPANY

the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

X Historical Years 1995 - 2015 Witness: J. K. Park

Type of Data Shown:

Prior Year Ended 12/31/16

Projected Test Year Ended 12/31/17

DOCKET NO.: 160186-EI

				FU	RECASTING	MODEL: SIMA	LL COMMERC	JAL ENERGY	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LINE			SmComSales	SmComSales	<u>GDP</u>	<u>ComPrice</u>	<u>Ivan</u>	Bin_0897	Bin_Com
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2005	JAN	25.831	24.892	41.829	7.291	0	0	0
2	2005	FEB	25.409	25.200	42.020	7.313	0	0	0
3	2005	MAR	23.576	23.278	42.220	7.342	0	0	0
4	2005	APR	22.301	22.295	42.424	7.368	0	0	0
5	2005	MAY	24.327	23.603	42.608	7.414	0	0	0
6	2005	JUN	30.748	30.702	42.760	7.467	0	0	0
7	2005	JUL	34.388	33.331	42.876	7.517	0	0	0
8	2005	AUG	34.267	34.342	42.960	7.574	0	0	0
9	2005	SEP	34.825	34.604	43.014	7.626	0	0	0
10	2005	OCT	32.074	31.160	43.050	7.674	0	0	0
11	2005	NOV	23.527	23.933	43.082	7.690	0	0	0
12	2005	DEC	23.863	24.357	43.121	7.746	0	0	0
13	2006	JAN	25.592	25.098	43.172	7.796	0	0	0
14	2006	FEB	25.005	24.447	43.230	7.836	0	0	0
15	2006	MAR	23.077	22.899	43.297	7.877	0	0	0
16	2006	APR	23.865	23.928	43.367	7.914	0	0	0
17	2006	MAY	27.139	28.341	43.427	7.939	0	0	0
18	2006	JUN	33.755	33.958	43.466	7.945	0	0	0
19	2006	JUL	37.094	37.632	43.480	7.962	0	0	0
20	2006	AUG	36.404	38.437	43.467	7.974	0	0	0
21	2006	SEP	35.707	36.630	43.428	7.988	0	0	0
22	2006	OCT	31.233	30.462	43.371	8.005	0	0	0
23	2006	NOV	23.913	24.841	43.310	8.030	0	0	0
24	2006	DEC	25.561	25.657	43.255	8.056	0	0	0

DESCRIPTION VARIABLE

SmComSales Billing Cycle Small Commercial kWh per Customer per Billing Day

Gross Domestic Product per Capita (\$000s) **GDP**

12-Month Average of Real Commercial Price (cents per kWh) ComPrice

Ivan Binary Variable for Hurricane Ivan September 2004

Bin_0897 Binary Variable for August 1997

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

Type of Data Shown:
Projected Test Year Ended 12/31/17
Prior Year Ended 12/31/16
X Historical Years 1995 - 2015

Witness: J. K. Park

JOOKET	110 100	/100 L1		mododiom	one and the	unio opan oi	0.000 000.00	iai rango or t	no data.
				FOR	RECASTING I	MODEL: SMA	LL COMMERC	IAL ENERGY	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LINE			SmComSales	SmComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	Bin_0897	Bin_Com
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2007	JAN	25.423	26.150	43.207	8.081	0	0	0
2	2007	FEB	29.153	28.414	43.169	8.137	0	0	0
3	2007	MAR	24.253	24.795	43.134	8.194	0	0	0
4	2007	APR	24.036	24.239	43.091	8.255	0	0	0
5	2007	MAY	26.855	26.893	43.031	8.315	0	0	0
6	2007	JUN	31.031	31.175	42.942	8.385	0	0	0
7	2007	JUL	34.853	35.644	42.820	8.454	0	0	0
8	2007	AUG	37.001	38.069	42.664	8.520	0	0	0
9	2007	SEP	35.960	36.924	42.480	8.586	0	0	0
10	2007	OCT	32.144	31.776	42.277	8.648	0	0	0
11	2007	NOV	23.987	24.704	42.070	8.708	0	0	0
12	2007	DEC	23.436	22.801	41.869	8.770	0	0	0
13	2008	JAN	25.868	26.258	41.671	8.830	0	0	0
14	2008	FEB	26.444	27.560	41.483	8.824	0	0	0
15	2008	MAR	24.570	23.779	41.296	8.811	0	0	0
16	2008	APR	22.611	23.760	41.103	8.803	0	0	0
17	2008	MAY	26.051	25.469	40.905	8.790	0	0	0
18	2008	JUN	32.952	32.406	40.699	8.780	0	0	0
19	2008	JUL	34.632	34.376	40.481	8.765	0	0	0
20	2008	AUG	35.638	34.862	40.246	8.754	0	0	0
21	2008	SEP	32.980	33.533	40.000	8.742	0	0	0
22	2008	OCT	27.586	27.500	39.747	8.819	0	0	0
23	2008	NOV	21.727	23.665	39.499	8.903	0	0	0
24	2008	DEC	24.307	23.367	39.261	8.999	0	0	0

SmComSales
Billing Cycle Small Commercial kWh per Customer per Billing Day
GDP
Gross Domestic Product per Capita (\$000s)
ComPrice
12-Month Average of Real Commercial Price (cents per kWh)
Ivan
Binary Variable for Hurricane Ivan September 2004
Bin_0897
Bin_Com
Binary Variable to address residuals beginning in May 2012

DESCRIPTION

VARIABLE

FORECASTING MODEL: SMALL COMMERCIAL ENERGY

FLORIDA PUBLIC SERVICE COMMISSION EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the COMPANY: GULF POWER COMPANY model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown: Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16 X Historical Years 1995 - 2015

Witness: J. K. Park

DOCKET NO.	.: 1	601	86-E
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				1 01	120/10/11/40/1	VIODEL. OWN	LE COMMINE N	JIME ENTERIOR	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LINE			SmComSales	SmComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	Bin_0897	Bin_Com
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2009	JAN	23.842	23.122	39.018	9.092	0	0	0
2	2009	FEB	25.806	26.084	38.771	9.259	0	0	0
3	2009	MAR	22.607	23.170	38.505	9.433	0	0	0
4	2009	APR	21.319	21.628	38.233	9.606	0	0	0
5	2009	MAY	24.941	24.716	37.997	9.780	0	0	0
6	2009	JUN	29.903	31.013	37.826	9.951	0	0	0
7	2009	JUL	34.999	35.028	37.730	10.132	0	0	0
8	2009	AUG	32.753	33.193	37.713	10.292	0	0	0
9	2009	SEP	30.303	29.528	37.769	10.456	0	0	0
10	2009	OCT	28.679	29.079	37.868	10.535	0	0	0
11	2009	NOV	21.848	21.910	37.970	10.601	0	0	0
12	2009	DEC	22.250	22.607	38.050	10.666	0	0	0
13	2010	JAN	28.177	29.125	38.114	10.726	0	0	0
14	2010	FEB	28.010	28.366	38.179	10.740	0	0	0
15	2010	MAR	26.130	26.210	38.258	10.749	0	0	0
16	2010	APR	21.568	20.139	38.344	10.758	0	0	0
17	2010	MAY	23.332	23.963	38.415	10.768	0	0	0
18	2010	JUN	30.640	30.203	38.456	10.776	0	0	0
19	2010	JUL	33.404	33.312	38.463	10.776	0	0	0
20	2010	AUG	35.584	35.106	38.436	10.798	0	0	0
21	2010	SEP	32.083	32.311	38.377	10.812	0	0	0
22	2010	OCT	27.707	26.567	38.299	10.825	0	0	0
23	2010	NOV	21.791	22.116	38.217	10.848	0	0	0
24	2010	DEC	22.697	23.095	38.142	10.856	0	0	0

DESCRIPTION VARIABLE

Billing Cycle Small Commercial kWh per Customer per Billing Day SmComSales

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Binary Variable for Hurricane Ivan September 2004 Ivan

Bin_0897 Binary Variable for August 1997

Binary Variable to address residuals beginning in May 2012 Bin_Com

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:
___ Projected Test Year Ended 12/31/17
__ Prior Year Ended 12/31/16
X Historical Years 1995 - 2015

Witness: J. K. Park

FORECASTING MODEL: SMALL COMMERCIAL ENERGY

				101	ilono ilita i	VIODEL. CIVIL	LE COMMITTE	DIVILE ENTERIOR	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LINE			SmComSales	<u>SmComSales</u>	<u>GDP</u>	<u>ComPrice</u>	<u>Ivan</u>	Bin_0897	Bin_Com
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2011	JAN	26.792	27.475	38.069	10.880	0	0	0
2	2011	FEB	27.061	28.076	37.996	10.834	0	0	0
3	2011	MAR	22.187	21.250	37.914	10.787	0	0	0
4	2011	APR	21.655	21.488	37.824	10.746	0	0	0
5	2011	MAY	24.540	24.390	37.733	10.701	0	0	0
6	2011	JUN	30.978	30.409	37.645	10.650	0	0	0
7	2011	JUL	33.882	32.881	37.563	10.604	0	0	0
8	2011	AUG	33.751	33.229	37.486	10.558	0	0	0
9	2011	SEP	30.998	30.420	37.414	10.515	0	0	0
10	2011	OCT	24.656	25.364	37.346	10.483	0	0	0
11	2011	NOV	20.755	20.535	37.277	10.467	0	0	0
12	2011	DEC	21.053	21.196	37.207	10.457	0	0	0
13	2012	JAN	22.051	20.465	37.132	10.435	0	0	0
14	2012	FEB	20.611	21.510	37.056	10.430	0	0	0
15	2012	MAR	20.057	20.620	36.978	10.450	0	0	0
16	2012	APR	21.766	22.328	36.903	10.422	0	0	0
17	2012	MAY	24.390	24.142	36.837	10.391	0	0	1
18	2012	JUN	29.622	29.006	36.787	10.380	0	0	1
19	2012	JUL	31.017	30.593	36.754	10.360	0	0	1
20	2012	AUG	31.666	30.707	36.737	10.268	0	0	1
21	2012	SEP	29.410	28.550	36.736	10.173	0	0	1
22	2012	OCT	24.760	25.767	36.744	10.068	0	0	1
23	2012	NOV	20.463	21.223	36.756	9.943	0	0	1
24	2012	DEC	20.366	20.294	36.766	9.822	0	0	1

VARIABLE DESCRIPTION

SmComSales Billing Cycle Small Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Bin_0897 Binary Variable for August 1997

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:

Projected Test Year Ended 12/31/17
Prior Year Ended 12/31/16

X Historical Years 1995 - 2015 Witness: J. K. Park

FORECASTING MODEL:	SMALL COMMERCIAL ENERGY	Ī

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LINE			SmComSales	SmComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	Bin_0897	Bin_Com
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2013	JAN	22.521	22.288	36.774	9.697	0	0	1
2	2013	FEB	21.181	21.227	36.782	9.606	0	0	1
3	2013	MAR	21.808	21.847	36.790	9.489	0	0	1
4	2013	APR	20.731	20.659	36.800	9.417	0	0	1
5	2013	MAY	21.917	21.445	36.812	9.356	0	0	1
6	2013	JUN	28.744	27.660	36.828	9.285	0	0	1
7	2013	JUL	30.390	30.000	36.847	9.212	0	0	1
8	2013	AUG	31.348	30.397	36.870	9.215	0	0	1
9	2013	SEP	29.933	29.705	36.896	9.217	0	0	1
10	2013	OCT	26.680	26.597	36.923	9.217	0	0	1
11	2013	NOV	20.399	20.815	36.949	9.209	0	0	1
12	2013	DEC	20.973	20.914	36.972	9.205	0	0	1
13	2014	JAN	24.989	25.285	36.993	9.209	0	0	1
14	2014	FEB	26.032	27.929	37.012	9.258	0	0	1
15	2014	MAR	22.904	21.834	37.029	9.312	0	0	1
16	2014	APR	20.332	20.174	37.045	9.364	0	0	1
17	2014	MAY	23.080	22.332	37.057	9.414	0	0	1
18	2014	JUN	28.010	28.096	37.066	9.456	0	0	1
19	2014	JUL	31.104	31.469	37.082	9.500	0	0	1
20	2014	AUG	30.843	32.062	37.119	9.543	0	0	1
21	2014	SEP	31.319	32.400	37.178	9.589	0	0	1
22	2014	OCT	26.534	25.991	37.226	9.632	0	0	1
23	2014	NOV	20.826	21.792	37.225	9.689	0	0	1
24	2014	DEC	22.126	21.783	37.154	9.747	0	0	1

VARIABLE DESCRIPTION

SmComSales Billing Cycle Small Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Bin_0897 Binary Variable for August 1997

Bin_Com Binary Variable to address residuals beginning in May 2012

Supporting Schedules:

FORECASTING MODEL: SMALL COMMERCIAL ENERGY

FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the X Prior Year Ended 12/31/16 model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:

Projected Test Year Ended 12/31/17

X Historical Years 1995 - 2015

Witness: J. K. Park

				FOI	TECASTING	VIODEL. SIVIA	LL COMMEN	JIAL ENERGI	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
LINE			SmComSales	SmComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	Bin_0897	Bin_Com
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2015	JAN	23.645	22.979	37.066	9.804	0	0	1
2	2015	FEB	24.609	25.039	37.038	9.837	0	0	1
3	2015	MAR	22.510	24.224	37.105	9.868	0	0	1
4	2015	APR	21.711	21.794	37.223	9.902	0	0	1
5	2015	MAY	24.650	24.516	37.310	9.921	0	0	1
6	2015	JUN	29.105	29.232	37.313	9.946	0	0	1
7	2015	JUL	32.600	32.537	37.267	9.976	0	0	1
8	2015	AUG	33.935	33.832	37.240	10.008	0	0	1
9	2015	SEP	30.335	30.799	37.275	10.073	0	0	1
10	2015	OCT	26.782		37.357	10.151	0	0	1
11	2015	NOV	21.071		37.448	10.189	0	0	1
12	2015	DEC	20.933		37.524	10.219	0	0	1
13	2016	JAN	23.888		37.588	10.253	0	0	1
14	2016	FEB	23.881		37.649	10.228	0	0	1
15	2016	MAR	21.192		37.718	10.207	0	0	1
16	2016	APR	20.400		37.795	10.179	0	0	1
17	2016	MAY	23.227		37.872	10.167	0	0	1
18	2016	JUN	28.986		37.945	10.149	0	0	1
19	2016	JUL	32.013		38.014	10.132	0	0	1
20	2016	AUG	32.566		38.082	10.106	0	0	1
21	2016	SEP	31.011		38.146	10.046	0	0	1
22	2016	OCT	26.738		38.212	9.978	0	0	1
23	2016	NOV	21.169		38.282	9.944	0	0	1
24	2016	DEC	21.130		38.356	9.909	0	0	1

DESCRIPTION VARIABLE

SmComSales

Billing Cycle Small Commercial kWh per Customer per Billing Day

Gross Domestic Product per Capita (\$000s) GDP

12-Month Average of Real Commercial Price (cents per kWh) ComPrice

Binary Variable for Hurricane Ivan September 2004 Ivan

Binary Variable for August 1997 Bin_0897

Binary Variable to address residuals beginning in May 2012 Bin_Com

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:

X Projected Test Year Ended 12/31/17

___ Prior Year Ended 12/31/16

___ Historical Years 1995 - 2015

Witness: J. K. Park

				FOF	RECASTING	MODEL: SMA	LL COMMERC	JIAL ENERGY		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
LINE			<u>SmComSales</u>	SmComSales	<u>GDP</u>	<u>ComPrice</u>	<u>lvan</u>	Bin_0897	Bin_Com	
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2017	JAN	24.163		38.432	9.872	0	0	1	
2	2017	FEB	24.174		38.504	9.879	0	0	1	
3	2017	MAR	21.491		38.571	9.886	0	0	1	
4	2017	APR	20.695		38.638	9.893	0	0	1	
5	2017	MAY	23.518		38.702	9.899	0	0	1	
6	2017	JUN	29.270		38.765	9.904	0	0	1	
7	2017	JUL	32.289		38.826	9.909	0	0	1	
8	2017	AUG	32.829		38.885	9.914	0	0	1	
9	2017	SEP	31.248		38.939	9.918	0	0	1	
10	2017	OCT	26.943		38.990	9.922	0	0	1	
11	2017	NOV	21.354		39.039	9.926	0	0	1	
12	2017	DEC	21.294		39.087	9.929	0	0	1	

VARIABLE DESCRIPTION

SmComSales Billing Cycle Small Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Bin 0897 Binary Variable for August 1997

Bin_Com Binary Variable to address residuals beginning in May 2012

Supporting Schedules:

Scriedule F-7	FORECASTING MODELS - HISTORICAL DATA	Page 49 of 96
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections	Type of Data Shown:
	for customers, demand, and energy, provide the historical and projected values for	Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY	the input variables and the output variables used in estimating and/or validating the	Prior Year Ended 12/31/16
	model. Also, provide a description of each variable, specifying the unit of	X Historical Years 1995 - 2015
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data.	Witness: J. K. Park
	FORECASTING MODEL: SMALL COMMERCIAL ENERGY	

				FC	DRECASTING	MODEL: SM	ALL COMMER	RCIAL ENERG	Υ	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	1995	OCT	0	0	0	0	0	0	232	0
2	1995	NOV	0	0	. 0	0	0	0	0	79
3	1995	DEC	0	0	0	0	0	0	0	0
4	1996	JAN	0	0	0	0	. 0	0	0	0
5	1996	FEB	0	0	0	0	0	0	0	0
6	1996	MAR	0	0	0	0	0	0	0	0
7	1996	APR	22	0	0	0	0	0	0	0
8	1996	MAY	0	133	0	0	0	0	0	0
9	1996	JUN	0	0	298	0	0	0	0	0
10	1996	JUL	0	0	0	379	0	0	0	0
11	1996	AUG	0	0	0	0	367	0	0	0
12	1996	SEP	0	0	0	0	0	316	0	0
13	1996	OCT	0	0	0	0	0	0	190	0
14	1996	NOV	0	0	0	0	0	0	0	94
15	1996	DEC	0	0	0	0	0	0	0	0

DESCRIPTION

VARIABLE CDHBD_XX

Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

FORECASTING MODEL: SMALL COMMERCIAL ENERGY

FLORIDA PUBLIC SERVICE COMMISSION	E
	fo
COMPANY: GHI E DOMED COMPANY	+ b

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:
Projected Test Year Ended 12/31/17
Prior Year Ended 12/31/16
X Historical Years 1995 - 2015
Witness: J. K. Park

DOCKET NO.: 160186-EI

				1 C	TILOAGIIIVA	WODEL. OW	IALL OCIVIIVILI	IOIAL LIVELIGI	1	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	1997	JAN	0	0	0	0	0	0	0	0
2	1997	FEB	0	0	0	0	0	0	0	0
3	1997	MAR	0	0	0	0	0	0	0	0
4	1997	APR	65	0	0	0	0	0	0	0
5	1997	MAY	0	102	0	0	0	0	0	0
6	1997	JUN	0	0	221	0	0	0	0	0
7	1997	JUL	0	0	0	340	0	0	0	0
8	1997	AUG	0	0	0	0	339	0	0	0
9	1997	SEP	0	0	0	0	0	335	0	0
10	1997	OCT	0	0	0	0	0	0	231	0
11	1997	NOV	0	0	0	0	0	0	0	50
12	1997	DEC	0	0	0	0	0	0	0	0
13	1998	JAN	0	0	0	0	0	0	0	0
14	1998	FEB	0	0	0	0	0	0	0	0
15	1998	MAR	0	0	0	0	0	0	0	0
16	1998	APR	44	0	0	0	0	0	0	0
17	1998	MAY	0	145	0	0	0	0	0	0
18	1998	JUN	0	0	341	0	0	0	0	0
19	1998	JUL	0	0	0	403	0	0	0	0
20	1998	AUG	0	0	0	0	355	0	0	0
21	1998	SEP	0	0	0	0	0	326	0	0
22	1998	OCT	0	0	0	0	0	0	229	0
23	1998	NOV	0	0	0	0	0	0	0	93
24	1998	DEC	0	0	0	0	0	0	0	0

VARIABLE

DESCRIPTION

CDHBD XX

Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

	Schedule	F-/				FORECAS	STING MOD	ELS - HISTC	PRICAL DATA	L		Page 51 of 96
	FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For e	each forecas	sting model u	ised to estima	ite test year	projections	Type of Data Shown:
					for custon	ners, deman	d, and energ	gy, provide th	ne historical ar	nd projected	l values for	Projected Test Year Ended 12/31/17
	COMPAN	Y: GULF	POWER	COMPANY	the input v	variables and	the output	variables use	ed in estimatir	ng and/or va	lidating the	Prior Year Ended 12/31/16
					model. A	lso, provide a	a description	n of each var	iable, specifyi	ng the unit o	of	X Historical Years 1995 - 2015
	DOCKET	NO.: 160	186-EI		measuren	nent and the	time span o	r cross secti	onal range of	the data.		Witness: J. K. Park
					FC	PRECASTING	MODEL: SM	IALL COMME	RCIAL ENERGY	Y		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
	NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
	1	1999	JAN	0	0	0	0	0	0	0	0	
	2	1999	FEB	0	0	0	0	0	0	0	0	
	3	1999	MAR	0	0	0	0	0	0	0	0	
	4	1999	APR	65	0	0	0	0	0	0	0	
	5	1999	MAY	0	143	0	0	0	0	0	0	
	6	1999	JUN	0	0	239	0	0	0	0	0	
	7	1999	JUL	0	0	0	323	0	0	0	0	
	8	1999	AUG	0	0	0	0	378	0	0	0	
	9	1999	SEP	0	0	0	0	0	331	0	0	
	10	1999	OCT	0	0	0	0	0	0	185	67	
;	11	1999 1999	NOV DEC	0	0	0	0	0	0	0	67	
l	12 13	2000	JAN	0	0	0	0	0	0	0	0	
	14	2000	FEB	0	0	0	0	0	0	0	0	
	15	2000	MAR	0	0	0	0	0	0	0	0	
	16	2000	APR	52	0	0	0	0	0	0	0	
	17	2000	MAY	0	131	0	0	0	0	0	0	
	18	2000	JUN	0	0	293	0	0	0	0	0	
	19	2000	JUL	0	0	0	384	0	0	0	0	

VARIABLE DESCRIPTION
CDHBD_XX Billing Cycle Sm

AUG

SEP

OCT

NOV

DEC

Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

Supporting Schedules:

Schedule F-7	FORECASTING MODELS - HISTORICAL DATA	Page 52 of 96
FLORIDA PUBLIC SERVICE COMMISSIO	N EXPLANATION: For each forecasting model used to estimate test year projections	Type of Data Shown:
	for customers, demand, and energy, provide the historical and projected values for	Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY	the input variables and the output variables used in estimating and/or validating the	Prior Year Ended 12/31/16
	model. Also, provide a description of each variable, specifying the unit of	X Historical Years 1995 - 2015
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data.	Witness: J. K. Park
	FORECASTING MODEL: SMALL COMMERCIAL ENERGY	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11
NO.	YEAR	MONTH	(INPUT)							
1	2001	JAN	0	0	0	0	0	0	0	0
2	2001	FEB	0	0	0	0	0	0	0	0
3	2001	MAR	0	0	0	0	0	0	0	0
4	2001	APR	53	0	0	0	0	0	0	0
5	2001	MAY	0	124	0	0	0	0	0	0
6	2001	JUN	0	0	262	0	0	0	0	0
7	2001	JUL	0	0	0	311	0	0	0	0
8	2001	AUG	0	0	0	0	326	0	0	0
9	2001	SEP	0	0	0	0	0	289	0	0
10	2001	OCT	0	0	0	0	0	0	147	0
11	2001	NOV	0	0	0	0	0	0	0	71
12	2001	DEC	0	0	0	0	0	0	0	0
13	2002	JAN	0	0	0	0	0	0	0	0
14	2002	FEB	0	0	0	0	0	0	0	0
15	2002	MAR	0	0	0	0	0	0	0	0
16	2002	APR	56	0	0	0	0	0	0	0
17	2002	MAY	0	197	0	0	0	0	0	0
18	2002	JUN	0	0	248	0	0	0	0	0
19	2002	JUL	0	0	0	313	0	0	0	0
20	2002	AUG	0	0	0	0	333	0	0	0
21	2002	SEP	0	0	0	0	0	319	0	0
22	2002	OCT	0	0	0	0	0	0	239	0
23	2002	NOV	0	0	0	0	0	0	0	73
24	2002	DEC	0	0	0	0	0	0	0	0

DESCRIPTION

Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

Recap Schedules: Supporting Schedules:

Schedule F-	7				FORECAST	TING MODE	LS - HISTOR	ICAL DATA			Page 53 of 96		
FLORIDA P	UBLIC S	SERVICE	COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections							Type of Data Shown:		
				for customers, demand, and energy, provide the historical and projected values for						Projected Test Year Ended 12/31/17			
COMPANY:	GULF I	POWER	COMPANY	the input variables and the output variables used in estimating and/or validating the							Prior Year Ended 12/31/16		
					o, provide a	description	X Historical Years 1995 - 2015						
DOCKET NO	DOCKET NO.: 160186-EI				ent and the t	ime span or	Witness: J. K. Park						
	FORECASTING MODEL: SMALL COMMERCIAL ENERGY												
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)			

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11
NO.	YEAR	MONTH	(INPUT)							
1	2003	JAN	0	0	0	0	0	0	0	0
2	2003	FEB	0	0	0	0	0	0	0	0
3	2003	MAR	0	0	0	0	0	0	0	0
4	2003	APR	57	0	0	0	0	0	0	0
5	2003	MAY	0	174	0	0	0	0	0	0
6	2003	JUN	0	0	261	0	0	0	0	0
7	2003	JUL	0	0	0	290	0	0	0	0
8	2003	AUG	0	0	0	0	301	0	0	0
9	2003	SEP	0	0	0	0	0	296	0	0
10	2003	OCT	0	0	0	0	0	0	153	0
11	2003	NOV	0	0	0	0	0	0	0	91
12	2003	DEC	0	0	0	0	0	0	0	0
13	2004	JAN	0	0	0	0	0	0	0	0
14	2004	FEB	0	0	0	0	0	0	0	0
15	2004	MAR	0	0	0	0	0	0	0	0
16	2004	APR	45	0	0	0	0	0	0	0
17	2004	MAY	0	117	0	0	0	0	0	0
18	2004	JUN	0	0	268	0	0	0	0	0
19	2004	JUL	0	0	0	323	0	0	0	0
20	2004	AUG	0	0	0	0	329	0	0	0
21	2004	SEP	0	0	0	0	0	290	0	0
22	2004	OCT	0	0	0	0	0	0	228	0
23	2004	NOV	0	0	0	0	0	0	0	124
24	2004	DEC	0	0	0	0	0	0	0	0

DESCRIPTION

Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

Schedule	F-7				FORECAS	STING MOD	ELS - HISTO	RICAL DATA	4		Page 54 of 96
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLAN	ATION: For	each forecas	sting model u	sed to estima	ate test year	projections	Type of Data Shown:
				for custor	ners, deman	d, and energ	gy, provide th	e historical a	nd projected	values for	Projected Test Year Ended 12/31/17
COMPAN	Y: GULF	POWER	COMPANY				variables use				Prior Year Ended 12/31/16
					-		n of each vari		•	of	X Historical Years 1995 - 2015
DOCKET	NO.: 160)186-EI					or cross secti				Witness: J. K. Park
						MODEL: SM	MALL COMMER	RCIAL ENERG	Υ		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
LINE			CDHBD_04	CDHBD_05	CDHBD_06		CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.		MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2005	JAN	0	0	0	0	0	0	0	0	
2	2005	FEB	0	0	0	0	0	0	0	0	
3	2005	MAR	0	0	0	0	0	0	0	0	
4	2005	APR	29	0	0	0	0	0	0	0	
5	2005	MAY	0	92	0	0	0	0	0	0	
6	2005	JUN	0	0	257	0	0	0	0	0	
/	2005	JUL	0	0	0	340	0	0	0	0	
8	2005	AUG	0	0	0	0	341	0	0	0	
9	2005	SEP	0	0	0	0	0	353	0	0	
10	2005	OCT	0	0	0	0	0	0	270	0	
11	2005	NOV	0	0	0	0	0	0	0	79	
12	2005 2006	DEC JAN	0	0	0	0	0	0	0	0	
13 14	2006	JAN FEB	0	0	0	0	0	0	0	0	
14	2000	LED	U	U	U	0	U	0	0	0	

VARIABLE

DESCRIPTION

MAR

APR

MAY

JUN

JUL

AUG

SEP

OCT

NOV

DEC

CDHBD_XX

Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

Schedule	F-7				FORECAS	STING MOD		Page 55 of 96			
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	TION: For	each forecas	ting model ι	ised to estima	ate test year	projections	Type of Data Shown:
				for custor	ners, deman	d, and energ	y, provide th	ne historical aı	nd projected	values for	Projected Test Year Ended 12/31/17
COMPAN'	Y: GULF	POWER	COMPANY	the input	variables an	d the output	variables us	ed in estimatir	ng and/or va	lidating the	Prior Year Ended 12/31/16
				model. A	lso, provide	a description	of each var	iable, specifyi	ing the unit o	of	X Historical Years 1995 - 2015
DOCKET	NO.: 160	186-EI		measurer	nent and the	time span o	r cross secti	onal range of	the data.		Witness: J. K. Park
				FC	RECASTING	MODEL: SM	ALL COMME	RCIAL ENERG	Υ		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07		CDHBD_09		CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2007	JAN	Ò	Ó	Ó	Ó	. 0	Ò	Ó	Ó	
2	2007	FEB	0	0	0	0	0	0	0	0	
3	2007	MAR	0	0	0	0	0	0	0	0	
4	2007	APR	63	0	0	0	0	0	0	0	
5	2007	MAY	0	147	0	0	0	0	0	0	
6	2007	JUN	0	0	248	0	0	0	0	0	
7	2007	JUL	0	0	0	344	0	0	0	0	
8	2007	AUG	0	0	0	0	380	0	0	0	
9	2007	SEP	0	0	0	0	0	353	0	0	
10	2007	OCT	0	0	0	0	0	0	243	0	
11	2007	NOV	0	0	0	0	0	0	0	70	
12	2007	DEC	0	0	0	0	0	0	0	0	
13	2008	JAN	0	, 0	0	0	0	0	0	0	
14	2008	FEB	0	0	0	0	0	0	0	0	
15	2008	MAR	0	0	0	0	0	0	0	0	
16	2008	APR	43	0	0	0	0	0	0	0	
17	2008	MAY	0	133	0	0	0	0	0	0	
18	2008 2008	JUN JUL	0	0	318 0	368	0	0	0	0	
19	2008	AUG	0	0	0	0	387	0	0	0	
20	2008	SEP	0	0	0	0	0	339	0	0	
21 22	2008	OCT	0	0	0	0	0	0	182	0	
22	2008	NOV	0	0	0	0	0	0	0	47	
23 24	2008	DEC	0	0	0	0	0	0	0	0	
24	2000	DLO	U	U	U	U	U	U	U	O	

VARIABLE DESCRIPTION

CDHBD_XX Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

Schedule	F-7				FORECAS	STING MOD		Page 56 of 96			
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	ised to estima	ite test year	projections	Type of Data Shown:
				for custon	ners, deman	d, and energ	gy, provide th	ne historical a	nd projected	l values for	Projected Test Year Ended 12/31/17
COMPAN'	Y: GULF	POWER	COMPANY	the input	variables and	d the output	lidating the	Prior Year Ended 12/31/16			
				model. A	lso, provide a	a descriptior	n of each var	iable, specifyi	ng the unit	of	X Historical Years 1995 - 2015
DOCKET	NO.: 160	186-EI		measurer	nent and the	time span o	or cross secti	onal range of	the data.		Witness: J. K. Park
				FC	PRECASTING	MODEL: SN	ALL COMME	RCIAL ENERG	Y		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2009	JAN	0	0	0	0	0	0	0	0	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11
NO.	YEAR	MONTH	(INPUT)							
1	2009	JAN	0	0	0	0	0	0	0	0
2	2009	FEB	0	0	0	0	0	0	0	0
3	2009	MAR	0	0	0	0	0	0	0	0
4	2009	APR	38	0	0	0	0	0	0	0
5	2009	MAY	0	142	0	0	0	0	0	0
6	2009	JUN	0	0	270	0	0	0	0	0
7	2009	JUL	0	0	0	382	0	0	0	0
8	2009	AUG	0	0	0	0	325	0	0	0
9	2009	SEP	0	0	0	0	0	270	0	0
10	2009	OCT	0	0	0	0	0	0	236	0
11	2009	NOV	0	0	0	0	0	0	0	69
12	2009	DEC	0	0	0	0	0	0	0	0
13	2010	JAN	0	0	0	0	0	0	0	0
14	2010	FEB	0	0	0	0	0	0	0	0
15	2010	MAR	0	0	0	0	0	0	0	0
16	2010	APR	33	0	0	0	0	0	0	0
17	2010	MAY	0	133	0	0	0	0	0	0
18	2010	JUN	0	0	295	0	0	0	0	0
19	2010	JUL	0	0	0	369	0	0	0	0
20	2010	AUG	0	0	0	0	413	0	0	0
21	2010	SEP	0	0	0	0	0	340	0	0
22	2010	OCT	0	0	0	0	0	0	213	0
23	2010	NOV	0	0	0	0	0	0	0	94
24	2010	DEC	0	0	0	0	0	0	0	0

VARIABLE CDHBD_XX

DESCRIPTION

Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

	Schedule	F-7				FORECAS	STING MOD	ELS - HISTO	RICAL DATA			Page 57 of 96
	FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For e	each forecas	sting model u	ised to estima	ite test year	projections	Type of Data Shown:
					for custon	ners, deman	d, and energ	gy, provide th	ne historical a	nd projected	l values for	Projected Test Year Ended 12/31/17
	COMPAN	IY: GULF	POWER	COMPANY	the input	variables and	the output	variables use	ed in estimatir	ng and/or va	llidating the	Prior Year Ended 12/31/16
					model. A	lso, provide a	a descriptior	n of each var	iable, specifyi	ng the unit of	of	X Historical Years 1995 - 2015
	DOCKET	NO.: 160)186-EI		measurer	nent and the	time span o	r cross secti	onal range of	the data.		Witness: J. K. Park
					FC	PRECASTING	MODEL: SN	IALL COMME	RCIAL ENERG	Y		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
	NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
	1	2011	JAN	0	0	0	0	0	0	0	0	
	2	2011	FEB	0	0	0	0	0	0	0	0	
	3	2011	MAR	0	0	0	0	0	0	0	0	
	4	2011	APR	89	0	0	0	0	0	0	0	
	5	2011	MAY	0	157	0	0	0	0	0	0	
	6	2011	JUN	0	0	312	0	0	0	0	0	
	7	2011	JUL	0	0	0	390	0	0	0	0	
	8	2011	AUG	0	0	0	0	388	0	0	0	
	9	2011	SEP	0	0	0	0	0	328	0	0	
	10	2011	OCT	0	0	0	0	0	0	161	0	
!	11	2011	NOV	0	0	0	0	0	0	0	52	
	12	2011	DEC JAN	0	0	0	0	0	0	0	0	
	13 14	2012 2012	FEB	0	0	0	0	0	0	0	0	
	15	2012	MAR	0	0	0	0	0	0	0	0	
	16	2012	APR	104	0	0	0	0	0	0	0	
	17	2012	MAY	0	166	0	0	0	0	0	0	
	18	2012	JUN	0	0	298	0	0	0	0	0	
	19	2012	JUL	0	0	0	342	0	0	0	0	
	20	2012	AUG	0	0	0	0	353	0	0	0	
	21	2012	SEP	0	0	0	0	0	314	0	0	
				_	_	_				100	•	

VARIABLE CDHBD_XX

DESCRIPTION

OCT

NOV

2012 DEC

Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

Schedule	F-7				FORECAS	STING MOD		Page 58 of 96			
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	ting model u	sed to estima	ate test year	projections	Type of Data Shown:
				for custor	ners, deman	Projected Test Year Ended 12/31/17					
COMPAN	Y: GULF	POWER	COMPANY	the input	variables and	d the output	Prior Year Ended 12/31/16				
				model. A	lso, provide	a descriptior	X Historical Years 1995 - 2015				
DOCKET	NO.: 160	186-EI		measurer	nent and the	time span o	r cross secti	onal range of	the data.		Witness: J. K. Park
				FC	PRECASTING	MODEL: SM	ALL COMME	RCIAL ENERG	Υ		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT)						
	0010	1451	•	•	0	_	_	0	0	^	

(1)	(2)	(3)	(4)	(5)	(6)	(/)	(8)	(9)	(10)	(11)
LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11
NO.	YEAR	MONTH	(INPUT)							
1	2013	JAN	0	0	0	0	0	0	0	0
2	2013	FEB	0	0	0	0	0	0	0	0
3	2013	MAR	0	0	0	0	0	0	0	0
4	2013	APR	43	0	0	0	0	0	0	0
5	2013	MAY	0	103	0	0	0	0	0	0
6	2013	JUN	0	0	277	0	0	0	0	0
7	2013	JUL	0	0	0	329	0	0	0	0
8	2013	AUG	0	0	0	0	343	0	0	0
9	2013	SEP	0	0	0	0	0	322	0	0
10	2013	OCT	0	0	0	0	0	0	223	0
11	2013	NOV	0	0	0	0	0	0	0	70
12	2013	DEC	0	0	0	0	0	0	0	0
13	2014	JAN	0	0	0	0	0	0	0	0
14	2014	FEB	0	0	0	0	0	0	0	0
15	2014	MAR	0	0	0	0	0	0	0	0
16	2014	APR	38	0	0	0	0	0	0	0
17	2014	MAY	0	134	0	0	0	0	0	0
18	2014	JUN	0	0	263	0	0	0	0	0
19	2014	JUL	0	0	0	333	0	0	0	0
20	2014	AUG	0	0	0	0	311	0	0	0
21	2014	SEP	0	0	0	0	0	311	0	0
22	2014	OCT	0	0	0	0	0	0	174	0
23	2014	NOV	0	0	0	0	0	0	0	60
24	2014	DEC	0	0	0	0	0	0	0	0

VARIABLE CDHBD_XX

DESCRIPTION
Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

Schedule	F-7				FORECAS	STING MODE		Page 59 of 96			
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	ting model ι	sed to estima	te test year	projections	Type of Data Shown:
				for custon	ners, deman	d, and energ	y, provide th	e historical ar	nd projected	values for	Projected Test Year Ended 12/31/17
COMPAN	Y: GULF	POWER	COMPANY	the input v	variables and	d the output v	/ariables us	ed in estimatin	ng and/or va	lidating the	X Prior Year Ended 12/31/16
				model. A	lso, provide	a description	of each var	iable, specifyir	ng the unit o	of	X Historical Years 1995 - 2015
DOCKET	NO.: 160	186-EI		measuren	nent and the	time span o	r cross secti	onal range of	the data.		Witness: J. K. Park
				FC	PRECASTING	MODEL: SM	ALL COMME	RCIAL ENERGY	1		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2015	JAN	0	0	0	0	0	0	0	0	
2	2015	FEB	0	0	0	0	0	0	0	0	
3	2015	MAR	0	0	0	0	0	0	0	0	
4	2015	APR	87	0	0	0	0	0	0	0	
5	2015	MAY	0	159	0	0	0	0	0	0	
6	2015	JUN	0	0	272	0	0	0	0	0	
7	2015	JUL	0	0	0	360	0	0	0	0	
8	2015	AUG	0	0	0	0	388	0	0	0	
9	2015	SEP	0	0	0	0	0	310	0	0	
10	2015	OCT	0	0	0	0	0	0	205	0	
11	2015	NOV	0	0	0	0	0	0	0	75	
12	2015	DEC	0	0	0	0	0	0	0	0	
13	2016	JAN	0	0	0	0	0	0	0	0	
14	2016	FEB	0	0	0	0	0	0	0	0	
15	2016	MAR	0	0	0	0	0	0	0	0	
16	2016	APR	56	0	0	0	0	0	0	0	
17	2016	MAY	0	140	0	0	0	0	0	0	
18	2016	JUN	0	0	277	0	0	0	0	0	
19	2016	JUL	0	0	0	350	0	0	0	0	
20	2016	AUG	0	0	0	0	355	0	0	0	
21	2016	SEP	0	0	0	0	0	323	0	0	
22	2016	OCT	0	0	0	0	0	0	205	Ü	

VARIABLE CDHBD_XX DESCRIPTION

2016

2016 DEC

NOV

23

24

Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

Supporting Schedules: Recap Schedules:

75

Schedule	r-/				IONLOAD	STING WOD		1 age 00 01 30			
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estima	te test year	projections	Type of Data Shown:
				for custon	ners, deman	d, and energ	gy, provide th	e historical ar	nd projected	I values for	X Projected Test Year Ended 12/31/17
COMPAN	Y: GULF	POWER	COMPANY	the input	variables and	d the output	variables use	ed in estimatir	ng and/or va	lidating the	Prior Year Ended 12/31/16
				model. Also, provide a description of each variable, specifying the unit of							Historical Years 1995 - 2015
DOCKET	NO.: 160	186-EI		measurer	nent and the	time span o	or cross secti	onal range of	the data.		Witness: J. K. Park
				FC	PRECASTING	MODEL: SM	ALL COMME	RCIAL ENERGY	Y		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
LINE			CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2017	JAN	0	0	0	0	0	0	0	0	
2	2017	FEB	0	0	0	0	0	0	0	0	
3	2017	MAR	0	0	0	0	0	0	0	0	
4	2017	APR	56	0	0	0	0	0	0	0	
5	2017	MAY	0	140	0	0	0	0	0	0	
6	2017	JUN	0	0	277	0	0	0	0	0	
7	2017	JUL	0	0	0	350	. 0	. 0	0	0	
8	2017	AUG	0	0	0	0	355	0	0	0	
9	2017	SEP	0	0	0	0	0	323	0	0	
10	2017	OCT	0	0	0	0	0	0	205	0	
11	2017	NOV	0	0	0	0	0	0	0	75	

VARIABLE CDHBD_XX

DESCRIPTION

12

2017 DEC

Billing Cycle Small Commercial Cooling Degree Hours per Billing Day for Month XX (04=April, etc.)

Scriedule 1-7	TONEGASTING MODELS - HISTORICAL DATA	rage or or so
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections	Type of Data Shown:
	for customers, demand, and energy, provide the historical and projected values for	Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY	the input variables and the output variables used in estimating and/or validating the	Prior Year Ended 12/31/16
	model. Also, provide a description of each variable, specifying the unit of	X Historical Years 1995 - 2015
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data.	Witness: J. K. Park

J O O L		100						
				FC	DRECASTING	MODEL: SM	IALL COMMER	RCIAL ENERGY
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_12	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	1995	OCT	0	0	0	0	0	
2	1995	NOV	0	0	0	0	0	
3	1995	DEC	0	0	0	0	144	
4	1996	JAN	275	0	0	0	0	
5	1996	FEB	0	252	0	0	0	
6	1996	MAR	0	0	156	0	0	
7	1996	APR	0	0	0	81	0	
8	1996	MAY	0	0	0	0	0	
9	1996	JUN	0	0	0	0	0	
10	1996	JUL	0	0	0	0	0	
11	1996	AUG	0	0	0	0	0	
12	1996	SEP	0	0	0	0	0	
13	1996	OCT	0	0	0	0	0	
14	1996	NOV	0	0	0	0	0	
15	1996	DEC	0	0	0	0	115	

VARIABLE

DESCRIPTION

HDHBD_XX

Billing Cycle Small Commercial Heating Degree Hours per Billing Day for Month XX (04=April, etc.)

Schedule F						STING MOD	Page 62 of 96		
FLORIDA F	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model	used to estimate test year projections	Type of Data Shown:
								ne historical and projected values for	Projected Test Year Ended 12/31/17
COMPANY	: GULF	POWER	COMPANY	the input	variables an	d the output	variables us	ed in estimating and/or validating the	Prior Year Ended 12/31/16
				model. A	lso, provide	a description	of each val	riable, specifying the unit of	X Historical Years 1995 - 2015
DOCKET N	IO.: 160)186-EI		measurer	ment and the	e time span o	r cross sect	ional range of the data.	Witness: J. K. Park
				FC	DRECASTING	MODEL: SM	IALL COMME	RCIAL ENERGY	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04			
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
1	1997	JAN	` 179	Ó	0	0	0		
2	1997	FEB	0	179	0	0	0		
3	1997	MAR	0	0	63	0	0		
4	1997	APR	0	0	0	22	0		
5	1997	MAY	0	0	0	0	0		
6	1997	JUN	0	0	0	0	0		
7	1997	JUL	0	0	0	0	0		
8	1997	AUG	0	0	0	0	0		
9	1997	SEP	0	0	0	0	0		
10	1997	OCT	0	0	0	0	0		
11	1997	NOV	0	0	0	0	0		
12	1997	DEC	0	0	0	0	155		
13	1998	JAN	179	0	0	0	0		
14	1998	FEB	0	175	0	0	0		
15	1998	MAR	0	0	131	0	0		
16	1998	APR	0	0	0	51	0		
17	1998	MAY	0	0	0	0	0		
18	1998	JUN	0	0	0	0	0		
19	1998	JUL	0	0	0	0	0		
20	1998	AUG	0	0	0	0	0		
21	1998	SEP	0	0	0	0	0		
22	1998	OCT	0	0	0	0	0		
23	1998	NOV	0	0	0	0	0		
24	1998	DEC	0	0	0	0	46		
VARIABLE		DESCRIPT	ION						
HDHBD_XX	-		e Small Commerc	ial Heating De	aree Hours of	er Billing Day f	or Month XX	(04-April etc.)	
5.100_///		Ziming Cycle	S CITICII COITIITICIO	an ricating De	groe riours pe	or billing bay i	OI WOILLI AA	(07-April, 6to.)	

S	chedule f	F-7				FORECA	STING MOD	Pag	ge 63 of 96		
Fl	ORIDA	PUBLIC	SERVIC	E COMMISSION			each forecas	Type of Data Shown:			
						ners, demar	Projected Test Year Ended	12/31/17			
C	OMPAN	r: Gulf	POWER	R COMPANY	•		d the output	Prior Year Ended 12/31/16			
							a description	X Historical Years 1995 - 201	5		
D	DOCKET NO.: 160186-EI					nent and the	time span o	Witness: J. K. Park			
						DRECASTING	MODEL: SM				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)			
	LINE <u>HDHBD_01</u>					HDHBD_03	HDHBD_04				
	NO	VEAD	MONITH	(INIDITIE)	(INIDITIE)	(INIDITE)	(INIDITE)	(INIDITE)			

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_12	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	1999	JAN	206	0	0	0	0	
2	1999	FEB	0	87	0	0	0	
3	1999	MAR	0	0	102	0	0	
4	1999	APR	0	0	0	37	0	
5	1999	MAY	0	0	0	0	0	
6	1999	JUN	0	0	0	0	0	
7	1999	JUL	0	0	0	0	0	
8	1999	AUG	0	0	0	0	0	
9	1999	SEP	0	0	0	0	0	
10	1999	OCT	0	0	0	0	0	
11	1999	NOV	0	0	0	0	0	
12	1999	DEC	0	0	0	0	109	
13	2000	JAN	170	0	0	0	0	
14	2000	FEB	0	207	0	0	0	
15	2000	MAR	0	0	57	0	0	
16	2000	APR	0	0	0	31	0	
17	2000	MAY	0	0	0	0	0	
18	2000	JUN	0	0	0	0	0	
19	2000	JUL	0	0	0	0	0	
20	2000	AUG	0	0	0	0	0	
21	2000	SEP	0	0	0	0	0	
22	2000	OCT	0	0	0	0	0	
23	2000	NOV	0	0	0	0	0	
24	2000	DEC	0	0	0	0	208	

VARIABLE HDHBD_XX

DESCRIPTION
Billing Cycle Small Commercial Heating Degree Hours per Billing Day for Month XX (04=April, etc.)

	dule F-7					Page 64 of 96				
FLOR	IDA PU	BLIC	SERVICE	COMMISSION					sed to estimate test year projections	Type of Data Shown:
									e historical and projected values for	Projected Test Year Ended 12/31/17
COMF	PANY: (GULF	POWER	COMPANY					ed in estimating and/or validating the	Prior Year Ended 12/31/16
									able, specifying the unit of	X Historical Years 1995 - 2015
DOCK	KET NO.	: 160	186-EI		measurer	ment and the	time span o	r cross secti	onal range of the data.	Witness: J. K. Park
					FC		MODEL: SM	ALL COMME	RCIAL ENERGY	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
LIN	ΙE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_12		
NC). Y	EAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
	1	2001	JAN	348	0	0	0	0		
	2	2001	FEB	0	183	0	0	0		
	3	2001	MAR	0	0	77	0	0		
		2001	APR	0	0	0	51	0		
		2001	MAY	0	0	0	0	0		
		2001	JUN	0	0	. 0	0	0		
		2001	JUL	0	0	0	0	0		
		2001	AUG	0	0	0	0	0		
		2001	SEP	0	0	0	0	0		
		2001	OCT	0	0	0	0	0		
		2001	NOV	0	0	0	0	0		
		2001	DEC	0	0	0	0	61		
		2002	JAN	246	0	0	0	0		
		2002 2002	FEB MAR	0	153	0	0	0		
		2002	APR	0	0	174 0	0	0		
		2002	MAY	0	0	0	35 0	0		
		2002	JUN	0	0	0	0	0		
		2002	JUL	0	0	0	0	0		
		2002	AUG	0	0	0	0	0		
		2002	SEP	0	0	0	0	0		
		2002	OCT	0	0	0	0	0		
		2002	NOV	0	0	0	0	0		
		2002	DEC	0	0	0	0	183		
				•	•	•	•	. 50		

DESCRIPTION

VARIABLE HDHBD_XX Billing Cycle Small Commercial Heating Degree Hours per Billing Day for Month XX (04=April, etc.)

Schedule F	-7				FORECAS	STING MODE	Page 65 of 96				
FLORIDA P	UBLIC S	SERVIC	E COMMISSION	EXPLANA	ATION: For e	each forecas	ting model ι	ised to estimate test year projections	Type of Data Shown:		
				for custon	ners, deman	d, and energ	Projected Test Year Ended 12/31/17				
COMPANY:	: GULF	POWER	R COMPANY	the input	variables and	the output v	Prior Year Ended 12/31/16				
				model. A	lso, provide a	a description	X Historical Years 1995 - 2015				
DOCKET N	O.: 1601	86-EI		measurer	nent and the	time span of	Witness: J. K. Park				
				FC	PRECASTING	MODEL: SM					
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)				
LINE			LIDLIDD 04	LIDLIDD OO	LIDLIDD OO	LIDLIDD 04	LIDLIDD 40				

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_12
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2003	JAN	251	0	0	0	0
2	2003	FEB	0	233	0	0	0
3	2003	MAR	0	0	71	0	0
4	2003	APR	0	0	0	35	0
5	2003	MAY	0	0	0	0	0
6	2003	JUN	0	0	0	0	0
7	2003	JUL	0	0	0	0	0
8	2003	AUG	0	0	0	0	0
9	2003	SEP	0	0	0	0	0
10	2003	OCT	0	0	0	0	0
11	2003	NOV	0	0	0	0	0
12	2003	DEC	0	0	0	0	166
13	2004	JAN	233	0	0	0	0
14	2004	FEB	0	221	0	0	0
15	2004	MAR	0	0	113	0	0
16	2004	APR	0	0	0	47	0
17	2004	MAY	0	0	0	0	0
18	2004	JUN	0	0	0	0	0
19	2004	JUL	0	0	0	0	0
20	2004	AUG	0	0	0	0	0
21	2004	SEP	0	0	0	0	0
22	2004	OCT	0	0	0	0	0
23	2004	NOV	0	0	0	0	0
24	2004	DEC	0	0	0	0	110

VARIABLE HDHBD_XX

DESCRIPTION
Billing Cycle Small Commercial Heating Degree Hours per Billing Day for Month XX (04=April, etc.)

Schedul	e F-7				FORECAS	STING MOD	Page 66 of 96		
FLORID	A PUBLIC	SERVICE	COMMISSION	EXPLAN	ATION: For	each forecas	ting model u	sed to estimate test year projections	Type of Data Shown:
				for custor	ners, deman	d, and energ	jy, provide th	e historical and projected values for	Projected Test Year Ended 12/31/17
COMPA	NY: GULF	POWER	COMPANY	the input	variables an	d the output	Prior Year Ended 12/31/16		
								able, specifying the unit of	X Historical Years 1995 - 2015
DOCKE.	T NO.: 160	186-FI						onal range of the data.	Witness: J. K. Park
						·····		RCIAL ENERGY	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
LINE	, ,	` '	HDHBD_01	HDHBD_02		HDHBD_04			
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		•
1	2005	JAN	182	0	0	Ó	Ò		
2	2005	FEB	0	164	0	0	0		
3	2005	MAR	0	0	105	0	0		
4	2005	APR	0	0	0	35	0		
5	2005	MAY	0	0	0	0	0		
6	2005	JUN	0	0	0	0	0		
7	2005	JUL	0	0	0	0	0		
8	2005	AUG	0	0	0	0	0		
9	2005	SEP	0	0	0	0	0		
10	2005	OCT	0	0	0	0	0		
11	2005	NOV	0	0	0	0	0		
12	2005	DEC	0	0	0	0	132		
13	2006	JAN	148	0	0	0	0		
14	2006	FEB	0	127	0	0	0		
15	2006	MAR	0	0	80	0	0		
16	2006	APR	0	0	0	33	0		
17	2006	MAY	0	0	0	0	0		
18	2006	JUN	0	0	0	0	0		
19	2006	JUL	0	0	0	0	0		
20	2006	AUG	0	0	0	0	0		
21	2006	SEP	0	0	0	0	0		
22	2006	OCT	0	0	0	0	0		
23	2006	NOV	0	0	0	0	0		
24	2006	DEC	0	0	0	0	159		

VARIABLE HDHBD_XX

DESCRIPTION
Billing Cycle Small Commercial Heating Degree Hours per Billing Day for Month XX (04=April, etc.)

Schedule F-7

FLORIDA PUBLIC SERVICE COMMISSION				EXPLANA	ATION: For (each forecas	Type of Data Shown:		
				for custon	ners, deman	d, and energ	e historical and projected values for	Projected Test Year Ended 12/31/17	
COMPANY	Y: GULF	POWER	COMPANY	the input	variables and	d the output	ed in estimating and/or validating the	Prior Year Ended 12/31/16	
								able, specifying the unit of	X Historical Years 1995 - 2015
DOCKET I	NO.: 160	186-EI						onal range of the data.	Witness: J. K. Park
								RCIAL ENERGY	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
LINE	(-)	(-)	HDHBD 01	HDHBD 02	HDHBD_03	HDHBD 04			
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
1	2007	JAN	128	0	(0 //	0	0		
2	2007	FEB	0	230	0	0	0		
3	2007	MAR	0	0	107	0	0		
4	2007	APR	0	0	0	38	0		
5	2007	MAY	0	0	0	0	0		
6	2007	JUN	0	0	0	0	0		
7	2007	JUL	0	0	0	0	0		
8	2007	AUG	0	0	0	0	0		
9	2007	SEP	0	0	0	0	0		
10	2007	OCT	0	0	0	0	0	•	
11	2007	NOV	0	0	0	0	0		
12	2007	DEC	0	0	0	0	94		
13	2008	JAN	186	0	0	0	0		
14	2008	FEB	0	182	0	0	0		
15	2008	MAR	0	0	113	0	0		
16	2008	APR	0	0	0	41	0		
17	2008	MAY	0	0	0	0	0		
18	2008	JUN	0	0	0	0	0		
19	2008	JUL	0	0	0	0	0		
20	2008	AUG	0	0	0	0	0		
21	2008	SEP	0	0	0	0	0		

FORECASTING MODELS - HISTORICAL DATA

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DESCRIPTION

2008

2008

2008

OCT

NOV

DEC

22

23

24

VARIABLE HDHBD_XX Billing Cycle Small Commercial Heating Degree Hours per Billing Day for Month XX (04=April, etc.)

0

0

Supporting Schedules: Recap Schedules:

0

0

152

0

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for model. Also, provide a description of each variable, specifying the unit of measurement and the output variables used in estimating and/or validating the mit of measurement and the time span or cross sectional range of the data. Topic	Schedule I	F-7				FORECAS	STING MODI	Page 68 of 96		
Prior Year Ended 12/31/16 COMPANY: GULF POWER COMPANY the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data. Witness: J. K. Park	FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLAN	ATION: For	each forecas	ting model	used to estimate test year projections	Type of Data Shown:
Model Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data. Witness: J. K. Park					for custor	ners, deman	d, and energ	y, provide t	he historical and projected values for	Projected Test Year Ended 12/31/17
DOCKET NO.: 160186-E measures	COMPANY	Y: GULF	POWER	COMPANY	the input	variables an	d the output	variables us	ed in estimating and/or validating the	Prior Year Ended 12/31/16
Company Comp					model. A	lso, provide	a description	of each va	riable, specifying the unit of	X Historical Years 1995 - 2015
(1) (2) (3) (4) (5) (6) (7) (8) (1)	DOCKET I	NO.: 160	186-EI		measurer	ment and the	time span o	r cross sect	ional range of the data.	Witness: J. K. Park
LINE YEAR MONTH (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) 1 2009 JAN 139 0 0 0 2 2009 FEB 0 210 0 0 3 2009 MAR 0 0 0 0 4 2009 APR 0 0 0 0 5 2009 MAY 0 0 0 0 6 2009 JUL 0 0 0 0 7 2009 JUL 0 0 0 0 8 2009 AUG 0 0 0 0 9 2009 SEP 0 0 0 0 11 2009 DEC 0 0 0 0 12 2099 DEC 0 0 0 0 12 2019 FEB 0 <					F	DRECASTING	MODEL: SM	ALL COMME	RCIAL ENERGY	
NO. YEAR MONTH (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) 1 2009 JAN 139 0 0 0 0 2 2009 FEB 0 210 0 0 0 3 2009 MAR 0 0 110 0 0 4 2009 APR 0 0 0 0 0 5 2009 MAY 0 0 0 0 0 6 2009 JUL 0 0 0 0 0 7 2009 JUL 0 0 0 0 0 8 2009 AUG 0 0 0 0 0 10 2009 OCT 0 0 0 0 0 11 2009 DEC 0 0 0 0 0 12 2009 DEC	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
1 2009 JAN 139 0 0 0 0 2 2009 FEB 0 210 0 0 0 3 2009 MAR 0 0 110 0 0 4 2009 APR 0 0 0 0 0 5 2009 MAY 0 0 0 0 0 6 2009 JUL 0 0 0 0 0 7 2009 JUL 0 0 0 0 0 8 2009 AUG 0 0 0 0 0 9 2009 SEP 0 0 0 0 0 10 2009 DCT 0 0 0 0 0 11 2009 DCC 0 0 0 0 147 13 2010 JAN 317 0 0 0 0 14 2010 FEB 0 267	LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_12		
2 2009 FEB 0 210 0<	NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
3 2009 MAR 0 0 110 0 0 4 2009 APR 0 0 0 25 0 5 2009 MAY 0 0 0 0 0 6 2009 JUL 0 0 0 0 0 7 2009 JUL 0 0 0 0 0 8 2009 AUG 0 0 0 0 0 9 2009 SEP 0 0 0 0 0 11 2009 DEC 0 0 0 0 0 12 2009 DEC 0 0 0 0 0 14 2010 FEB 0 267 0 0 0 15 2010 MAR 0 0 0 0 0 17 2010 MAY 0	1	2009	JAN	139	0	0	0	0		
4 2009 APR 0 0 0 25 0 5 2009 MAY 0 0 0 0 0 6 2009 JUL 0 0 0 0 0 7 2009 JUL 0 0 0 0 0 8 2009 AUG 0 0 0 0 0 9 2009 SEP 0 0 0 0 0 10 2009 OCT 0 0 0 0 0 11 2009 DEC 0 0 0 0 147 13 2010 JAN 317 0 0 0 0 14 2010 FEB 0 267 0 0 0 15 2010 MAR 0 0 49 0 17 2010 MAY 0 0	2	2009	FEB	0	210	0	0	0		
5 2009 MAY 0 <td>3</td> <td>2009</td> <td>MAR</td> <td>0</td> <td>0</td> <td>110</td> <td>0</td> <td>0</td> <td></td> <td></td>	3	2009	MAR	0	0	110	0	0		
6 2009 JUN 0 0 0 0 7 2009 JUL 0 0 0 0 8 2009 AUG 0 0 0 0 9 2009 SEP 0 0 0 0 10 2009 OCT 0 0 0 0 11 2009 DEC 0 0 0 0 12 2009 DEC 0 0 0 147 13 2010 JAN 317 0 0 0 14 2010 FEB 0 267 0 0 15 2010 MAR 0 0 227 0 0 16 2010 APR 0 0 0 0 0 18 2010 JUL 0 0 0 0 0 2010 AUG 0 0 <td>4</td> <td>2009</td> <td>APR</td> <td>0</td> <td>0</td> <td>0</td> <td>25</td> <td>0</td> <td></td> <td></td>	4	2009	APR	0	0	0	25	0		
7 2009 JUL 0 0 0 0 8 2009 AUG 0 0 0 0 9 2009 SEP 0 0 0 0 10 2009 OCT 0 0 0 0 11 2009 NOV 0 0 0 0 12 2009 DEC 0 0 0 147 13 2010 JAN 317 0 0 0 14 2010 FEB 0 267 0 0 0 15 2010 MAR 0 0 227 0 0 16 2010 APR 0 0 0 0 0 17 2010 MAY 0 0 0 0 0 19 2010 JUL 0 0 0 0 0 20 2010 <td>5</td> <td>2009</td> <td>MAY</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td>0</td> <td></td> <td></td>	5	2009	MAY	0	0	0	0	0		
8 2009 AUG 0 0 0 0 0 9 2009 SEP 0 0 0 0 0 10 2009 OCT 0 0 0 0 0 11 2009 NOV 0 0 0 0 0 12 2009 DEC 0 0 0 0 147 13 2010 JAN 317 0 0 0 0 14 2010 FEB 0 267 0 0 0 15 2010 MAR 0 0 227 0 0 16 2010 APR 0 0 0 0 0 18 2010 JUN 0 0 0 0 0 19 2010 JUL 0 0 0 0 0 20 2010 AUG 0 0 0 0	6	2009	JUN	0	0	0	0	0		
9 2009 SEP 0 0 0 0 0 0 0 0 0 1 1 2009 OCT 0 0 0 0 0 0 0 0 1 1 2 2009 DEC 0 0 0 0 0 1 4 7 1 3 2010 JAN 317 0 0 0 0 0 0 1 4 7 1 3 2010 FEB 0 267 0 0 0 0 0 1 5 2010 MAR 0 0 0 227 0 0 0 1 6 2010 APR 0 0 0 49 0 1 7 2010 MAY 0 0 0 0 0 0 1 8 2010 JUN 0 0 0 0 0 0 0 1 8 2010 JUN 0 0 0 0 0 0 0 0 0 0 1 9 2010 JUL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	7	2009	JUL	0	0	0	0	0		
10 2009 OCT 0 0 0 0 11 2009 NOV 0 0 0 0 12 2009 DEC 0 0 0 147 13 2010 JAN 317 0 0 0 14 2010 FEB 0 267 0 0 0 15 2010 MAR 0 0 227 0 0 16 2010 APR 0 0 49 0 17 2010 MAY 0 0 0 0 18 2010 JUN 0 0 0 0 19 2010 JUL 0 0 0 0 20 2010 AUG 0 0 0 0	8	2009		0	0	0	0	0		
11 2009 NOV 0 0 0 0 0 12 2009 DEC 0 0 0 0 147 13 2010 JAN 317 0 0 0 0 14 2010 FEB 0 267 0 0 0 15 2010 MAR 0 0 227 0 0 16 2010 APR 0 0 0 49 0 17 2010 MAY 0 0 0 0 0 18 2010 JUN 0 0 0 0 0 20 2010 AUG 0 0 0 0 0	9			0	0		0	0		
12 2009 DEC 0 0 0 0 0 147 13 2010 JAN 317 0 0 0 0 14 2010 FEB 0 267 0 0 0 15 2010 MAR 0 0 227 0 0 16 2010 APR 0 0 0 49 0 17 2010 MAY 0 0 0 0 0 18 2010 JUN 0 0 0 0 0 19 2010 JUL 0 0 0 0 0 20 2010 AUG 0 0 0 0 0	10			0	_		_	0		
13 2010 JAN 317				•			_	Ü		
14 2010 FEB 0 267 0 0 0 15 2010 MAR 0 0 227 0 0 16 2010 APR 0 0 0 49 0 17 2010 MAY 0 0 0 0 0 18 2010 JUN 0 0 0 0 0 19 2010 JUL 0 0 0 0 0 20 2010 AUG 0 0 0 0	12					_	•			
15 2010 MAR				317			•	•		
16 2010 APR 0 0 0 49 0 17 2010 MAY 0 0 0 0 0 18 2010 JUN 0 0 0 0 0 19 2010 JUL 0 0 0 0 0 20 2010 AUG 0 0 0 0				_			•	0		
17 2010 MAY 0 0 0 0 0 0 0 1 18 2010 JUN 0 0 0 0 0 0 0 19 2010 JUL 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0							ū	0		
18								0		
19 2010 JUL 0 0 0 0 0 0 20 2010 AUG 0 0 0 0 0				•			_	0		
20 2010 AUG 0 0 0 0 0				-			_	0		
				J	_	_		0		
				ū	ū	_	_	0		
21 2010 SEP 0 0 0 0 0				J	_	_	_	•		
22 2010 OCT 0 0 0 0 0				-	_	_	_			
23 2010 NOV 0 0 0 0 0 0				_				_		
24 2010 DEC 0 0 0 0 191	24	2010	DEC	0	0	0	0	191		
VARIABLE DESCRIPTION	VARIABLE		DESCRIPT	TION						
	HDHBD XX				ial Heating De	earee Hours p	er Billing Day f	or Month XX	(04=April, etc.)	

Supporting Schedules: Recap Schedules:

	Schedule	F-7				FORECAS	Page 69 of 96			
	FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	ting model ι	sed to estimate test year projections	Type of Data Shown:
	COMPAN'			COMPANY	for custor the input model. A	ners, deman variables and Ilso, provide	d, and energ d the output a description	Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16 X Historical Years 1995 - 2015		
	DOCKET	NO., 160	7100-61						onal range of the data.	Witness: J. K. Park
	(4)	(0)	(0)	(4)					RCIAL ENERGY	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
	LINE	\/E45	140117711	HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04			
	NO.		MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
	1	2011	JAN	280	0	0	0	0		
	2	2011	FEB	0	250	0	0	0		
	3	2011	MAR	0	0	84	0	0		
	4	2011 2011	APR MAY	0	0	0	23	0		
	5 6	2011	JUN	0	0	0	0	0		
	7	2011	JUL	0	ŭ	0	0	0		
	8	2011	AUG	0	0	0	0	0		
	9	2011	SEP	0	0	0	0	0		
	10	2011	OCT	0	0	0	0	0		
1	11	2011	NOV	0	0	0	0	0		
,	12	2011	DEC	0	0	0	0	114		
	13	2012	JAN	117	0	0	0	0		
	14	2012	FEB	0	91	0	0	0		
	15	2012	MAR	0	0	48	0	0		
	16	2012	APR	0	0	0	4	0		
	17	2012	MAY	0	0	0	0	0		
	18	2012	JUN	0	0	0	0	0		
	19	2012	JUL	0	0	0	0	0		
	20	2012	AUG	0	0	0	0	0		
							_	_		

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DESCRIPTION

0

2012 SEP

2012 OCT 2012 NOV

2012 DEC

VARIABLE HDHBD_XX

Billing Cycle Small Commercial Heating Degree Hours per Billing Day for Month XX (04=April, etc.)

0

Schedule	F-7				FORECAS	STING MODE	Page 70 of 96		
FLORIDA	PUBLIC	SERVICE	COMMISSION	I EXPLANA	ATION: For	each forecas	ting model u	sed to estimate test year projections	Type of Data Shown:
				for custor	ners, deman	d, and energ	y, provide th	e historical and projected values for	Projected Test Year Ended 12/31/17
COMPAN	IY: GULF	POWER	COMPANY	the input	variables and	d the output v	Prior Year Ended 12/31/16		
				model. A	lso, provide	a description	of each vari	able, specifying the unit of	X Historical Years 1995 - 2015
DOCKET	NO.: 160	186-EI		measurer	ment and the	time span o	r cross secti	onal range of the data.	Witness: J. K. Park
				FC	DRECASTING	ALL COMMER	RCIAL ENERGY		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_12		
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
1	2013	JAN	153	0	0	0	0		
2	2013	FEB	0	102	0	0	0		
3	2013	MAR	0	0	131	0	0		
4	2013	APR	0	0	0	59	0		
5	2013	MAY	0	0	0	0	0		
6	2013	JUN	0	0	0	0	0		
/	2013	JUL	0	0	0	0	0		
8	2013 2013	AUG SEP	0	0	0	0	0		
9 10	2013	OCT	0	0	0	0	0		
11	2013	NOV	0	0	0	0	0		
12	2013	DEC	0	0	0	0	132		
13	2014	JAN	244	0	0	0	102		
14	2014	FEB	0	249	0	0	0		
15	2014	MAR	0	0	121	0	0		
16	2014	APR	0	0	0	43	0		
17	2014	MAY	0	0	0	0	0		
18	2014	JUN	0	0	0	0	0		
19	2014	JUL	0	0	0	0	0		
20	2014	AUG	0	0	0	0	0		
21	2014	SEP	0	0	0	0	0		

0

150

VARIABLE HDHBD_XX

DESCRIPTION

OCT

DEC

2014

2014

2014 NOV

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Billing Cycle Small Commercial Heating Degree Hours per Billing Day for Month XX (04=April, etc.)

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Schedule F-7	FORECASTING MODELS - HISTORICAL DATA	Page 71 of 96
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections	Type of Data Shown:
	for customers, demand, and energy, provide the historical and projected values for	Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY	the input variables and the output variables used in estimating and/or validating the	X Prior Year Ended 12/31/16
	model. Also, provide a description of each variable, specifying the unit of	X Historical Years 1995 - 2015
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data.	Witness: J. K. Park
	FORECASTING MODEL: SMALL COMMERCIAL ENERGY	

				FC	PRECASTING	MODEL: SM	ALL COMMERCIA
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_12
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2015	JAN	189	0	0	0	0
2	2015	FEB	0	221	0	0	0
3	2015	MAR	0	0	154	0	0
4	2015	APR	0	0	0	15	0
5	2015	MAY	0	0	0	0	0
6	2015	JUN	0	0	0	0	0
7	2015	JUL	0	0	0	0	0
8	2015	AUG	0	0	0	0	0
9	2015	SEP	0	0	0	0	0
10	2015	OCT	0	0	0	0	0
11	2015	NOV	0	0	0	* 0	0
12	2015	DEC	0	0	0	0	133
13	2016	JAN	208	0	0	0	0
14	2016	FEB	0	189	0	0	0
15	2016	MAR	0	0	111	0	0
16	2016	APR	0	0	0	38	0
17	2016	MAY	0	0	0	0	0
18	2016	JUN	0	0	0	0	0
19	2016	JUL	0	0	0	0	0
20	2016	AUG	0	0	0	0	0
21	2016	SEP	0	0	0	0	0
22	2016	OCT	0	0	0	0	0
23	2016	NOV	0	0	0	0	0
24	2016	DEC	0	0	0	0	133

VARIABLE HDHBD_XX

DESCRIPTION

Supporting Schedules:

Billing Cycle Small Commercial Heating Degree Hours per Billing Day for Month XX (04=April, etc.)

Recap Schedules:

Schedule	F-7						ELS - HISTOI		Page 72 of 96
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	Type of Data Shown:		
				for custon	ners, deman	d, and energ	X Projected Test Year Ended 12/31/17		
COMPAN'	Y: GULF	POWER	COMPANY	the input	variables and	d the output	Prior Year Ended 12/31/16		
				model. A	lso, provide	a descriptior	Historical Years 1995 - 2015		
DOCKET,	NO.: 160)186-EI		measurer	ment and the	time span o	r cross sectio	nal range of the data.	Witness: J. K. Park
				FC	DRECASTING	MODEL: SM	IALL COMMER	CIAL ENERGY	
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
LINE			HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_04	HDHBD_12		
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
1	2017	JAN	208	0	0	0	0		
2	2017	FEB	0	189	0	0	0		
3	2017	MAR	0	0	111	0	0		
4	2017	APR	0	0	0	38	0		
5	2017	MAY	0	0	0	0	0		
6	2017	JUN	0	0	0	0	0		
7	2017	JUL	0	0	0	0	0		
8	2017	AUG	0	0	0	0	0		
9	2017	SEP	0	0	0	0	0		
10	2017	OCT	0	0	0	0	0		
11	2017	NOV	0	0	0	0	0		
12	2017	DEC	0	0	0	0	133		

VARIABLE HDHBD_XX

DESCRIPTION

Billing Cycle Small Commercial Heating Degree Hours per Billing Day for Month XX (04=April, etc.)

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FORECASTING MODELS - HISTORICAL DATA Page 73 of 96 Schedule F-7 Type of Data Shown: FLORIDA PUBLIC SERVICE COMMISSION EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for Projected Test Year Ended 12/31/17 the input variables and the output variables used in estimating and/or validating the Prior Year Ended 12/31/16 COMPANY: GULF POWER COMPANY model. Also, provide a description of each variable, specifying the unit of X Historical Years 1995 - 2015 measurement and the time span or cross sectional range of the data. Witness: J. K. Park DOCKET NO.: 160186-EI FORECASTING MODEL: LARGE COMMERCIAL ENERGY (1)(2)(3)(4)(5) (6)(7)(8)(9)(10)(11)(12)(13)(14)LINE LgComSales LgComSales GDP ComPrice Ivan Jan Bin_Com HDHBD_01 HDHBD_02 HDHBD_03 HDHBD_12 (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) NO. YEAR MONTH (OUTPUT) (INPUT) 1995 OCT 606.464 34.826 7.928 0 1 NOV 497.287 34.914 7.919 0 0 0 0 0 0 0 2 1995 516.116 3 1995 DEC 477.919 462.105 34.992 7.918 0 0 0 0 0 0 89 0 7.920 0 0 196 0 1996 JAN 498.063 506.950 35.065 **FEB** 7.880 0 0 178 0 0 5 1996 512.030 499.576 35.139 0 6 1996 MAR 497.241 482.324 35.222 7.874 0 0 0 0 104 0 APR 484.782 486.491 35.304 7.873 0 0 0 0 0 0 0 7 1996 0 0 0 0 8 1996 MAY 559.152 538.887 35.368 7.861 0 0 0 JUN 643.094 7.845 0 0 0 0 9 1996 647.336 35.402 0 10 1996 JUL 693.850 694.852 35.401 7.830 0 0 0 0 0 0

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64

LgComSales Billing Cycle Large Commercial kWh per Customer per Billing Day

694.113

661.671

601.732

535.196

474.579

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Jan Monthly Binary Variable for January

AUG

SEP

OCT

NOV

DEC

1996

1996

1996

1996

1996

Bin_Com Binary Variable to address residuals beginning in May 2012

HDHBD XX Billing Cycle Large Commercial Heating Degree Hours per Billing Day for Month XX (01=January, etc.)

664.988

663.785

616.596

505.779

474.078

35.366

35.300

35.217

35.133

35.061

7.806

7.797

7.774

7.763

7.761

DOCKET NO.: 160186-EI

FLORIDA PUBLIC SERVICE COMMISSION EXPLANATION for customers
COMPANY: GULF POWER COMPANY the input variations are companied to the companied to

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:
Projected Test Year Ended 12/31/17
Prior Year Ended 12/31/16
X Historical Years 1995 - 2015
Witness: J. K. Park

				FOF	RECASTING I	MODEL: LARG	GE COMMERC	CIAL ENERGY	•				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
LINE			<u>LgComSales</u>	LgComSales	<u>GDP</u>	<u>ComPrice</u>	<u>lvan</u>	<u>Jan</u>	Bin_Com	HDHBD_01	HDHBD 02 H	IDHBD_03	HDHBD_12
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	1997	JAN	480.673	481.545	34.994	7.750	0	1	0	123	0	0	0
2	1997	FEB	495.571	435.402	34.928	7.755	0	0	0	0	111	0	0
3	1997	MAR	476.939	484.228	34.853	7.736	0	0	0	0	0	28	0
4	1997	APR	512.027	508.114	34.777	7.708	0	0	0	0	0	0	0
5	1997	MAY	539.836	509.069	34.717	7.668	0	0	0	0	0	0	0
6	1997	JUN	605.515	606.004	34.685	7.640	0	0	0	0	0	0	0
7	1997	JUL	674.611	663.270	34.685	7.623	0	0	0	0	0	0	0
8	1997	AUG	676.587	662,936	34.718	7.608	0	0	0	0	0	0	0
9	1997	SEP	674.381	689.237	34.780	7.582	0	0	0	0	0	0	0
10	1997	OCT	631.383	651.796	34.859	7.557	0	0	0	0	0	0	. 0
11	1997	NOV	512.587	494.081	34.942	7.517	0	0	0	0	0	0	0
12	1997	DEC	486.127	498.549	35.019	7.479	0	0	0	0	0	0	93
13	1998	JAN	484.757	448.054	35.093	7.422	0	1	0	110	0	0	0
14	1998	FEB	485.464	470.469	35.170	7.401	0	0	0	0	96	0	0
15	1998	MAR	484.959	483.467	35.255	7.371	0	0	0	0	0	74	0
16	1998	APR	506.310	510.252	35.347	7.329	0	0	0	0	0	0	0
17	1998	MAY	571.409	557.626	35.433	7.265	0	0	0	0	0	0	0
18	1998	JUN	675.119	701.781	35.505	7.188	0	0	0	0	0	0	0
19	1998	JUL	721.382	732.236	35.560	7.109	0	0	0	0	0	0	0
20	1998	AUG	700.947	705.922	35.599	7.050	0	0	0	0	0	0	0
21	1998	SEP	686.112	667.334	35.622	6.986	0	0	0	0	0	0	0
22	1998	OCT	631.978	686.852	35.635	6.907	0	0	0	0	0	0	0
23	1998	NOV	555.729	550.328	35.646	6.885	0	0	0	0	0	0	0
24	1998	DEC	486.171	493.551	35.662	6.782	0	0	0	0	0	0	19

VARIABLE DESCRIPTION

LgComSales Billing Cycle Large Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Jan Monthly Binary Variable for January

Bin_Com Binary Variable to address residuals beginning in May 2012

FLORIDA PUBLIC SERVICE COMMISSION

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:
____ Projected Test Year Ended 12/31/17
___ Prior Year Ended 12/31/16
___ Historical Years 1995 - 2015

Witness: J. K. Park

				FOI	RECASTING	MODEL: LAR	GE COMMER	CIAL ENERGY	,				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
LINE			LgComSales	LgComSales	<u>GDP</u>	ComPrice	<u>Ivan</u>	<u>Jan</u>	Bin_Com	HDHBD_01	HDHBD_02 H	IDHBD_03	HDHBD_12
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	1999	JAN	501.026	492.722	35.681	6.724	0	1	0	139	0	0	0
2	1999	FEB	490.879	507.196	35.702	6.659	0	0	0	0	51	0	0
3	1999	MAR	503.278	489.964	35.722	6.590	0	0	0	0	0	52	0
4	1999	APR	522.713	516.714	35.740	6.541	0	0	0	0	0	0	0
5	1999	MAY	573.551	588.821	35.751	6.533	0	0	0	0	0	0	0
6	1999	JUN	640.327	646.509	35.751	6.529	0	0	0	0	0	0	0
7	1999	JUL	683.951	703.658	35.739	6.530	0	0	0	0	0	0	0
8	1999	AUG	717.733	724.733	35.713	6.521	0	0	0	0	0	0	0
9	1999	SEP	692.190	708.330	35.676	6.517	0	0	0	0	0	0	0
10	1999	OCT	619.918	606.236	35.631	6.541	0	0	0	0	0	0	0
11	1999	NOV	524.789	531.302	35.586	6.509	0	0	0	0	0	0	0
12	1999	DEC	493.023	490.525	35.545	6.520	0	0	0	0	0	0	58
13	2000	JAN	487.266	475.922	35.503	6.518	0	1	0	103	0	0	0
14	2000	FEB	508.751	516.426	35.457	6.532	0	0	0	0	136	0	0
15	2000	MAR	501.689	500.651	35.403	6.546	0	0	0	0	0	26	0
16	2000	APR	518.096	525.333	35.349	6.555	0	0	0	0	0	0	0
17	2000	MAY	569.761	559.407	35.308	6.571	0	0	0	0	0	0	0
18	2000	JUN	657.700	677.809	35.289	6.583	0	0	0	0	0	0	0
19	2000	JUL	713.506	713.252	35.295	6.598	0	0	0	0	0	0	0
20	2000	AUG	712.282	725.762	35.326	6.609	0	0	0	0	0	0	0
21	2000	SEP	690.156	704.794	35.377	6.616	0	0	0	0	0	0	0
22	2000	OCT	603.953	593.807	35.442	6.618	0	0	0	0	0	0	0
23	2000	NOV	539.099	543.272	35.509	6.632	0	0	0	0	0	0	0
24	2000	DEC	504.568	498.910	35.569	6.650	0	0	0	0	0	0	128

VARIABLE DESCRIPTION

LgComSales Billing Cycle Large Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Jan Monthly Binary Variable for January

Bin_Com Binary Variable to address residuals beginning in May 2012

Schedule F	/				FORECAS	TING MODE	LS - HISTOR	ICAL DATA				P	Page 76 of 96
LORIDA F	PUBLIC	SERVICE	COMMISSION	N EXPLANAT	ΓΙΟΝ: For e	ach forecasti	ng model use	ed to estimat	e test year	projections	Type of Data	Shown:	
				for custome	ers, demand	d, and energy	, provide the	historical an	d projected	values for	Projected Tes	st Year Ende	ed 12/31/17
COMPANY	: GULF	POWER	COMPANY	the input va	ariables and	the output v	ariables used	in estimating	g and/or va	lidating the	Prior Year Er	nded 12/31/1	16
				model. Als	so, provide a	description	of each varial	ble, specifyin	g the unit o	of	X Historical Yea	ars 1995 - 2	015
DOCKET N	NO.: 160	186-EI		measureme	ent and the	time span or	cross section	nal range of t	he data.		Witness: J. I	K. Park	
				FOF	RECASTING	MODEL: LAR	GE COMMERC	CIAL ENERGY	,				WI
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
LINE			LgComSales	LgComSales	GDP	ComPrice	Ivan	Jan	Bin Com	HDHBD_01	HDHBD_02 I	HDHBD 03	HDHBD_12
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2001	JAN	531.773	532.082	35.622	6.673	Ó	ì í	Ó	252	, ,	0	0
2	2001	FEB	507.054	507.558	35.669	6.647	0	0	0	0	115	0	0
3	2001	MAR	499.011	500.678	35.712	6.628	0	0	0	0	0	38	0
4	2001	APR	518.487	519.254	35.757	6.606	0	0	0	0	0	0	0
5	2001	MAY	565.697	564.915	35.805	6.582	0	0	0	0	0	0	0
6	2001	JUN	646.714	650.221	35.860	6.558	0	0	0	0	0	0	0
7	2001	JUL	676.865	683.424	35.922	6.535	0	0	0	0	0	0	0
8	2001	AUG	688.782	707.648	35.994	6.509	0	0	0	0	0	0	0
9	2001	SEP	675.696	656.750	36.075	6.487	0	0	0	0	0	0	0
10	2001	OCT	588.313	580.486	36.161	6.467	0	0	0	0	0	0	0
11	2001	NOV	528.614	516.405	36.249	6.443	0	0	0	0	0	0	0
12	2001	DEC	484.604	491.620	36.335	6.419	0	0	0	0	0	0	27
13	2002	JAN	512.070	507.764	36.422	6.389	0	1	0	167	0	0	0
14	2002	FEB	504.523	504.289	36.504	6.405	0	0	0	0	88	0	0
15	2002	MAR	512.881	504.685	36.588	6.416	0	0	0	0	0	112	0
16	2002	APR	525.147	528.218	36.679	6.440	0	0	0	0	0	0	0
17	2002	MAY	606.259	637.842	36.779	6.457	0	0	0	0	0	0	0
18	2002	JUN	652.133	624.943	36.887	6.464	0	0	0	0	0	0	0
19	2002	JUL	675.092	687.615	37.006	6.521	0	0	0	0	0	0	0
20	2002	AUG	695.346	704.823	37.135	6.580	0	0	0	0	0	0	0
21	2002	SEP	690.622	688.601	37.268	6.637	0	0	0	0	0	0	0
22	2002	OCT	650.055	672.983	37.406	6.688	0	0	0	0	0	0	0
23	2002	NOV	544.909	547.251	37.546	6.733	0	0	0	0	0	0	0
24	2002	DEC	508.694	499.954	37.685	6.793	0	0	0	0	0	0	107

VARIABLE DESCRIPTION

LgComSales Billing Cycle Large Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Jan Monthly Binary Variable for January

Bin_Com Binary Variable to address residuals beginning in May 2012

Schedule F-7	FORECASTING MODELS - HISTORICAL DATA	Page 77 of 96
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections	Type of Data Shown:
	for customers, demand, and energy, provide the historical and projected values for	Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY	the input variables and the output variables used in estimating and/or validating the	Prior Year Ended 12/31/16
	model. Also, provide a description of each variable, specifying the unit of	X Historical Years 1995 - 2015

measurement and the time span or cross sectional range of the data.

FORECASTING MODEL: LARGE COMMERCIAL ENERGY (1) (2)(3)(4) (5)(6)(7)(8)(9)(10)(11)(12)(13)(14)LINE LgComSales LgComSales **GDP** ComPrice Ivan <u>Jan</u> Bin_Com HDHBD_01 HDHBD_02 HDHBD_03 HDHBD 12 (INPUT) NO. YEAR MONTH (OUTPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) (INPUT) 167 0 1 2003 JAN 510.890 508.062 37.821 6.863 0 0 0 0 0 0 2 2003 FEB 519.522 521.619 37.943 6.911 0 0 150 0 32 MAR 6.964 0 0 0 0 0 0 3 2003 501.727 510.495 38.057 4 APR 529.872 530.410 7.008 0 0 0 0 0 0 0 2003 38.171 0 0 0 0 0 0 5 2003 MAY 597.311 615.877 38.289 7.057 0 6 JUN 7.114 0 0 0 0 0 0 0 2003 657.802 678.608 38.419 0 0 7 2003 JUL 678.741 689.025 38.564 7.123 0 0 0 0 0 8 AUG 684.729 708.621 38.728 7.138 0 0 0 0 0 0 0 2003 SEP 0 0 0 0 0 0 0 9 2003 686.655 702.135 38.907 7.146 0 0 0 0 0 0 OCT 7.158 0 10 2003 612.223 616.515 39.095 NOV 553.909 0 0 O 0 0 0 0 11 2003 556.472 39.281 7.178 0 101 12 2003 DEC 509.409 519.796 39.458 7.189 0 0 0 0 0 JAN 498.563 39.632 7.194 0 1 0 152 0 0 0 13 2004 515.244 0 0 0 132 0 0 14 2004 **FEB** 516.792 524.575 39.801 7.210 0 MAR 511.902 39.975 7.214 0 0 0 0 0 61 0 15 2004 511.051 2004 0 0 16 APR 523.967 522.610 40.156 7.225 0 0 0 0 0 0 0 0 0 0 0 0 17 MAY 40.339 7.228 2004 573.374 570.686 0 JUN 40.521 7.243 0 0 0 0 0 0 18 2004 660.584 671.175 708.656 0 0 0 0 19 2004 JUL 696.140 40.704 7.252 0 0 0 20 2004 **AUG** 703.108 705.369 40.892 7.254 0 0 0 0 0 0 0 SEP 7.260 0 0 0 0 0 0 21 2004 584.830 576.317 41.078 0 22 OCT 41.265 7.275 0 0 0 0 0 0 2004 651.831 624.166 0 0 0 0 0 0 0 23 2004 NOV 564.180 573.734 41.451 7.303 DEC 7.292 0 0 0 0 0 62 24 2004 507.035 524.115 41.637

VARIABLE	DESCRIPTION

DOCKET NO.: 160186-EI

LgComSales Billing Cycle Large Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Jan Monthly Binary Variable for January

Bin_Com Binary Variable to address residuals beginning in May 2012

HDHBD_XX Billing Cycle Large Commercial Heating Degree Hours per Billing Day for Month XX (01=January, etc.)

Supporting Schedules:

Witness: J. K. Park

Schedule F-7

DOCKET NO.: 160186-EI

FLORIDA PUBLIC SERVICE COMMISSION COMPANY: GULF POWER COMPANY

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown: Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16 X Historical Years 1995 - 2015 Witness: J. K. Park

FORECASTING MODEL: LARGE COMMERCIAL ENERGY													
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
LINE			LgComSales	LgComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	<u>Jan</u>	Bin_Com	HDHBD_01	HDHBD_02 F	IDHBD_03	HDHBD_12
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2005	JAN	513.383	506.069	41.829	7.291	0	1	0	120	0	0	0
2	2005	FEB	517.771	514.762	42.020	7.313	0	0	0	0	94	0	0
3	2005	MAR	511.433	506.885	42.220	7.342	0	0	0	0	0	48	0
4	2005	APR	522.640	518.148	42.424	7.368	0	0	0	0	0	0	0
5	2005	MAY	562.605	552.892	42.608	7.414	0	0	0	0	0	0	0
6	2005	JUN	657.583	652.712	42.760	7.467	0	0	0	0	0	0	0
7	2005	JUL.	702.954	686.762	42.876	7.517	0	0	0	0	0	0	0
8	2005	AUG	703.159	689.058	42.960	7.574	0	0	0	0	0	0	0
9	2005	SEP	709.096	696.782	43.014	7.626	0	0	0	0	0	0	0
10	2005	OCT	668.990	662.593	43.050	7.674	0	0	0	0	0	0	0
11	2005	NOV	545.631	550.257	43.082	7.690	0	0	0	0	0	0	0
12	2005	DEC	510.876	517.952	43.121	7.746	0	0	0	0	0	0	74
13	2006	JAN	500.873	496.140	43.172	7.796	0	1	0	87	0	0	0
14	2006	FEB	512.592	499.367	43.230	7.836	0	0	0	0	71	0	0
15	2006	MAR	514.081	510.465	43.297	7.877	0	0	0	0	0	39	0
16	2006	APR	548.062	529.741	43.367	7.914	0	0	0	0	0	0	0
17	2006	MAY	596.989	603.740	43.427	7.939	0	0	0	0	0	0	0
18	2006	JUN	680.140	672.802	43.466	7.945	0	0	0	0	0	0	0
19	2006	JUL	723.240	711.349	43.480	7.962	0	0	0	0	0	0	0
20	2006	AUG	710.074	727.370	43.467	7.974	0	0	0	0	0	0	0
21	2006	SEP	701.665	707.687	43.428	7.988	0	0	0	0	0	0	0
22	2006	OCT	639.015	618.651	43.371	8.005	0	0	0	0	0	0	0
23	2006	NOV	529.091	545.450	43.310	8.030	0	0	0	0	0	0	0
24	2006	DEC	516.359	511.869	43.255	8.056	0	0	0	0	0	0	96

VARIABLE	DESCRIPTION
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Billing Cycle Large Commercial kWh per Customer per Billing Day LgComSales

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Jan Monthly Binary Variable for January

Binary Variable to address residuals beginning in May 2012 Bin Com

Schedule		055)//01				TING MODE				 			age 79 of 96
FLORIDA	PUBLIC	SERVICE	COMMISSIO			ach forecast					Type of Data		1.10/0.1/17
						d, and energy					Projected Te		
COMPAN	DMPANY: GULF POWER COMPANY the input variables and the output variables used in estimating and/or validating model. Also, provide a description of each variable, specifying the unit of										Prior Year E		
										o†	X Historical Ye		015
DOCKET	NO.: 160	186-EI				time span or					Witness: J.	K. Park	
						MODEL: LAR							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
LINE			<u>LgComSales</u>	<u>LgComSales</u>	<u>GDP</u>	<u>ComPrice</u>	<u>lvan</u>	<u>Jan</u>	Bin_Com	HDHBD_01	HDHBD_02	HDHBD_03	HDHBD_12
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2007	JAN	491.228	508.589	43.207	8.081	0	1	0	71	0	0	0
2	2007	FEB	533.126	516.950	43.169	8.137	0	0	0	0	144	0	0
3	2007	MAR	512.425	511.285	43.134	8.194	0	0	0	0	0	62	0
4	2007	APR	534.130	526.950	43.091	8.255	0	0	0	0	0	0	0
5	2007	MAY	584.929	585.633	43.031	8.315	0	0	0	0	0	0	0
6	2007	JUN	650.001	638.917	42.942	8.385	0	0	0	0	0	0	0
7	2007	JUL	696.704	704.852	42.820	8.454	0	0	0	0	0	0	0
8	2007	AUG	721.282	721.664	42.664	8.520	0	0	0	0	0	0	0
9	2007	SEP	707.315	724.726	42.480	8.586	0	0	0	0	0	0	0
10	2007	OCT	658.418	653.176	42.277	8.648	0	0	0	0	0	0	0
11	2007	NOV	533.701	542.103	42.070	8.708	0	0	0	0	0	0	0
12	2007	DEC	497.256	496.390	41.869	8.770	0	0	0	0	0	0	49
13	2008	JAN	495.573	513.018	41.671	8.830	0	1	0	115	0	0	0
14	2008	FEB	514.767	526.423	41.483	8.824	0	0	0	0	108	0	0
15	2008	MAR	508.201	502.078	41.296	8.811	0	0	0	0	0	62	0
16	2008	APR	517.567	533.127	41.103	8.803	0	0	0	0	0	0	0
17	2008	MAY	576.721	569.245	40.905	8.790	0	0	0	0	0	0	0
18	2008	JUN	672.752	660.033	40.699	8.780	0	0	0	0	0	0	0
19	2008	JUL	697.972	688.597	40.481	8.765	0	0	0	0	0	0	0
20	2008	AUG	709.513	685.393	40.246	8.754	0	0	0	0	0	0	0
21	2008	SEP	681.739	682.731	40.000	8.742	0.	0	0	0	0	0	0
22	2008	OCT	606.935	598.943	39.747	8.819	0	0	0	0	0	0	0
23	2008	NOV	508.414	523.733	39.499	8.903	0	0	0	0	0	0	0
24	2008	DEC	496.009	485.099	39.261	8.999	0	0	0	0	0	0	92
VARIABLE		DESCRIP [*]											
LgComSale	es	Billing Cyc	le Large Comme	rcial kWh per Cu	stomer per Bi	lling Day							
GDP		Gross Don	nestic Product pe	er Capita (\$000s)									

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Jan Monthly Binary Variable for January

Bin_Com Binary Variable to address residuals beginning in May 2012

Schedule F-7	FORECASTING MODELS - HISTORICAL DATA
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections
	for customers, demand, and energy, provide the historical and projected values for _
COMPANY: GULF POWER COMPANY	the input variables and the output variables used in estimating and/or validating the
	model. Also, provide a description of each variable, specifying the unit of
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data.

X Historical Years 1995 - 2015 Witness: J. K. Park

Prior Year Ended 12/31/16

Type of Data Shown:

Projected Test Year Ended 12/31/17

	model. Also, provide a description of each variable, specifying the un
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data
	FORECASTING MODEL: LARGE COMMERCIAL ENERGY

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
LINE			LgComSales	LgComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	<u>Jan</u>	Bin_Com	HDHBD_01	HDHBD_02 H	DHBD_03	HDHBD_12
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2009	JAN	473.799	479.376	39.018	9.092	0	1	0	88	0	0	0
2	2009	FEB	504.910	496.593	38.771	9.259	0	0	0	0	137	0	0
3	2009	MAR	490.561	501.218	38.505	9.433	0	0	0	0	0	64	0
4	2009	APR	504.829	504.807	38.233	9.606	0	0	0	0	0	0	0
5	2009	MAY	561.500	555.296	37.997	9.780	0	0	0	0	0	0	0
6	2009	JUN	632.633	636.408	37.826	9.951	0	0	0	0	0	0	0
7	2009	JUL	690.438	690.965	37.730	10.132	0	0	0	0	0	0	0
8	2009	AUG	665.085	659.904	37.713	10.292	0	0	0	0	0	0	0
9	2009	SEP	636.149	631.432	37.769	10.456	0	0	0	0	0	0	0
10	2009	OCT	617.557	624.820	37.868	10.535	0	0	0	0	0	0	0
11	2009	NOV	507.863	510.467	37.970	10.601	0	0	0	0	0	0	0
12	2009	DEC	475.660	473.569	38.050	10.666	0	0	0	0	0	0	80
13	2010	JAN	502.834	508.382	38.114	10.726	0	1	0	222	0	0	0
14	2010	FEB	502.320	514.447	38.179	10.740	0	0	0	0	177	0	0
15	2010	MAR	492.442	505.455	38.258	10.749	0	0	0	0	0	143	0
16	2010	APR	490.338	485.071	38.344	10.758	0	0	0	0	0	0	0
17	2010	MAY	550.250	567.849	38.415	10.768	0	0	0	0	0	0	0
18	2010	JUN	647.260	644.134	38.456	10.776	0	0	0	0	0	0	0
19	2010	JUL	682.303	681.273	38.463	10.776	0	0	0	0	0	0	0
20	2010	AUG	705.825	705.268	38.436	10.798	0	0	0	0	0	0	0
21	2010	SEP	671.002	678.391	38.377	10.812	0	0	0	0	0	0	0
22	2010	OCT	606.802	593.701	38.299	10.825	0	0	0	0	0	0	0
23	2010	NOV	515.489	520.081	38.217	10.848	0	0	0	0	0	0	0
24	2010	DEC	482.272	484.840	38.142	10.856	0	0	0	0	0	0	127

VARIABLE DESCRIPTION

Billing Cycle Large Commercial kWh per Customer per Billing Day LgComSales

Gross Domestic Product per Capita (\$000s) GDP

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Binary Variable for Hurricane Ivan September 2004 Ivan

Monthly Binary Variable for January Jan

Binary Variable to address residuals beginning in May 2012 Bin_Com

Schedule F-7	FORECASTING MODELS - HISTORICAL DATA		Page 81 of 96
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections	Type of Data Shown:	

for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of

el. Also, provide a description of each variable, specifying the unit of ______X Historical Years 1995 - 2015

DOCKET NO.: 160186-EI measurement and the time span or cross sectional range of the data. Witness: J. K. Park

FORECASTING MODEL: LARGE COMMERCIAL ENERGY													
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
LINE			LgComSales	LgComSales	<u>GDP</u>	ComPrice	<u>lvan</u>	<u>Jan</u>	Bin_Com	HDHBD_01	HDHBD_02 H	IDHBD_03	HDHBD_12
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2011	JAN	492.803	507.226	38.069	10.880	0	1	0	190	0	0	0
2	2011	FEB	500.905	527.006	37.996	10.834	0	0	0	0	163	0	0
3	2011	MAR	490.063	479.249	37.914	10.787	0	0	0	0	0	46	0
4	2011	APR	514.969	522.458	37.824	10.746	0	0	0	0	0	0	0
5	2011	MAY	561.501	563.336	37.733	10.701	0	0	0	0	0	0	0
6	2011	JUN	647.239	653.400	37.645	10.650	0	0	0	0	0	0	0
7	2011	JUL	692.048	674.642	37.563	10.604	0	0	0	0	0	0	0
8	2011	AUG	687.924	681.984	37.486	10.558	0	0	0	0	0	0	0
9	2011	SEP	659.430	651.958	37.414	10.515	0	0	0	0	0	0	0
10	2011	OCT	574.108	572.784	37.346	10.483	0	0	0	0	0	0	0
11	2011	NOV	495.419	485.918	37.277	10.467	0	0	0	0	0	0	0
12	2011	DEC	466.696	481.127	37.207	10.457	0	0	0	0	0	0	64
13	2012	JAN	456.273	450.641	37.132	10.435	0	1	0	64	0	0	0
14	2012	FEB	469.010	483.187	37.056	10.430	0	0	0	0	50	0	0
15	2012	MAR	483.289	488.416	36.978	10.450	0	0	0	0	0	20	0
16	2012	APR	527.031	530.616	36.903	10.422	0	0	0	0	0	0	0
17	2012	MAY	552.285	554.503	36.837	10.391	0	0	1	0	0	0	0
18	2012	JUN	627.959	617.944	36.787	10.380	0	0	1	0	0	0	0
19	2012	JUL	649.461	645.507	36.754	10.360	0	0	1	0	0	0	0
20	2012	AUG	659.083	654.599	36.737	10.268	0	0	1	0	0	0	0
21	2012	SEP	641.569	623.902	36.736	10.173	0	0	1	0	0	0	0
22	2012	OCT	577.343	572.693	36.744	10.068	0	0	1	0	0	0	0
23	2012	NOV	489.216	497.406	36.756	9.943	0	0	1	0	0	0	0
24	2012	DEC	457.593	463.403	36.766	9.822	0	0	1	0	0	0	46

VARIABLE DESCRIPTION

LgComSales Billing Cycle Large Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Ivan Binary Variable for Hurricane Ivan September 2004

Jan Monthly Binary Variable for January

Bin_Com Binary Variable to address residuals beginning in May 2012

HDHBD_XX Billing Cycle Large Commercial Heating Degree Hours per Billing Day for Month XX (01=January, etc.)

Supporting Schedules:

Projected Test Year Ended 12/31/17

Prior Year Ended 12/31/16

Schedule F	- -7				FORECAS	TING MODE	Page 82 of 96						
FLORIDA F	PUBLIC	SERVICE	COMMISSIO	N EXPLANA	TION: For e	ach forecast	ing model us	ed to estimat	te test year	projections	Type of Data	Shown:	
				for custom	ers, demand	d, and energy	, provide the	historical an	d projected	values for	Projected Tes	st Year End	ed 12/31/17
COMPANY	': GULF	POWER	COMPANY	the input v	ariables and	I the output v	ariables usec	l in estimatin	g and/or va	lidating the	Prior Year En	ided 12/31/1	16
						a description					X Historical Yea	ars 1995 - 2	015
DOCKET N	NO.: 160	186-EI				time span or			_		Witness: J. h	C. Park	
						MODEL: LAR							
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
LINE	(-)	(0)	<u>LgComSales</u>	<u>LgComSales</u>	GDP	ComPrice	<u>lvan</u>	<u>Jan</u>	Bin_Com	HDHBD_01	HDHBD_02 F		HDHBD_12
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2013	JAN	453.962	466.675	36.774	9.697	0	1	1	92	0	0	(01)
2	2013	FEB	466.368	479.088	36.782	9.606	0	0	1	0	54	0	0
3	2013	MAR	475.285	477.462	36.790	9.489	0	0	1	0	0	74	0
4	2013	APR	485.151	486.898	36.800	9.417	0	0	1	0	0	0	0
5	2013	MAY	527.758	521.184	36.812	9.356	0	0	1	0	0	0	0
6	2013	JUN	622.055	607.748	36.828	9.285	0	0	1	0	0	0	0
7	2013	JUL	649.715	640.637	36.847	9.212	0	0	1	0	0	0	0
8	2013	AUG	659.878	647.768	36.870	9.215	0	0	1	0	0	0	0
9	2013	SEP	650.092	632.228	36.896	9.217	0	0	1	0	0	0	0
10	2013	OCT	600.750	593.582	36.923	9.217	0	0	1	0	0	0	0
11	2013	NOV	498.272	509.194	36.949	9.209	0	0	1	0	0	0	0
12	2013	DEC	468.860	467.013	36.972	9.205	0	0	1	0	0	0	77
13	2014	JAN	476.846	485.994	36.993	9.209	0	1	1	159	0	0	0
14	2014	FEB	494.226	512.490	37.012	9.258	0	0	1	0	168	0	0
15	2014	MAR	477.507	475.539	37.029	9.312	0	0	1	0	0	65	0
16	2014	APR	482.693	483.652	37.045	9.364	0	0	1	0	0	0	0
17	2014	MAY	541.377	526.534	37.057	9.414	0	0	1	0	0	0	0
18	2014	JUN	612.737	605.840	37.066	9.456	0	0	1	0	0	0	0
19	2014	JUL	651.639	657.577	37.082	9.500	О	0	1	0	0	0	0
20	2014	AUG	647.806	658.666	37.119	9.543	0	0	1	0	0	0	0
21	2014	SEP	651.408	663.697	37.178	9.589	0	0	1	0	0	0	0
22	2014	OCT	582.181	578.105	37.226	9.632	0	0	1	0	0	0	0
23	2014	NOV	490.830	503.991	37.225	9.689	0	0	1	0	0	0	0
24	2014	DEC	469.173	463.811	37.154	9.747	0	0	1	0	0	0	85
VARIABLE		DESCRIP	TION										
LgComSales				ercial kWh per Cu	stomer ner B	illing Day							
GDP			-	er Capita (\$000s)	storrer per b	g Day							
ComPrice				Commercial Price	a (cente ner k	Wh)							
			-	ne Ivan Septembe		*****							
Ivan		-		-	51 2004								
Jan		IVIONTINIY BI	nary Variable for	January									

Binary Variable to address residuals beginning in May 2012

Billing Cycle Large Commercial Heating Degree Hours per Billing Day for Month XX (01=January, etc.)

Bin_Com

HDHBD_XX

Type of Data Shown:

___ Projected Test Year Ended 12/31/17

Schedule F-7	FORECASTING MODELS - HISTORICAL DATA
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For each forecasting model used to estimate test year projections
	for customers, demand, and energy, provide the historical and projected values for
COMPANY: GULF POWER COMPANY	the input variables and the output variables used in estimating and/or validating the
	model. Also, provide a description of each variable, specifying the unit of
DOCKET NO.: 160186-EI	measurement and the time span or cross sectional range of the data.

put variables and the output variables used in estimating and/or validating the	X Prior Year Ended 12/31/16
I. Also, provide a description of each variable, specifying the unit of	X Historical Years 1995 - 2015
urement and the time span or cross sectional range of the data.	Witness: J. K. Park
FORECASTING MODEL: LARGE COMMERCIAL ENERGY	

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
LINE			<u>LgComSales</u>	<u>LgComSales</u>	<u>GDP</u>	<u>ComPrice</u>	<u>lvan</u>	<u>Jan</u>	Bin_Com	HDHBD_01	HDHBD_02 H	DHBD_03	HDHBD_12
NO.	YEAR	MONTH	(OUTPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2015	JAN	457.565	462.817	37.066	9.804	0	1	1	111	0	0	0
2	2015	FEB	481.766	479.924	37.038	9.837	0	0	1	0	137	0	0
3	2015	MAR	479.448	493.193	37.105	9.868	0	0	1	0	0	102	0
4	2015	APR	513.154	513.172	37.223	9.902	0	0	1	0	0	0	0
5	2015	MAY	553.399	552.764	37.310	9.921	0	0	1	0	0	0	0
6	2015	JUN	619.519	618.129	37.313	9.946	0	0	1	0	0	0	0
7	2015	JUL	664.666	662.453	37.267	9.976	0	0	1	0	0	0	0
8	2015	AUG	680.940	686.514	37.240	10.008	0	0	1	0	0	0	0
9	2015	SEP	645.278	641.530	37.275	10.073	0	0	1	0	0	0	0
10	2015	OCT	589.548		37.357	10.151	0	0	1	0	0	0	0
11	2015	NOV	497.393		37.448	10.189	0	0	1	0	0	0	0
12	2015	DEC	461.286		37.524	10.219	0	0	1	0	0	0	77
13	2016	JAN	464.226		37.588	10.253	0	1	1	136	0	0	0
14	2016	FEB	475.030		37.649	10.228	0	0	1	0	118	0	0
15	2016	MAR	469.837		37.718	10.207	0	0	1	0	0	63	0
16	2016	APR	488.281		37.795	10.179	0	0	1	0	0	0	0
17	2016	MAY	541.464		37.872	10.167	0	0	1	0	0	0	0
18	2016	JUN	621.674		37.945	10.149	0	0	1	0	0	0	0
19	2016	JUL	661.928		38.014	10.132	0	0	1	0	0	0	0
20	2016	AUG	667.594		38.082	10.106	0	0	1	0	0	0	0
21	2016	SEP	653.268		38.146	10.046	0	0	1	0	0	0	0
22	2016	OCT	594.288		38.212	9.978	0	0	1	0	0	0	0
23	2016	NOV	502.084		38.282	9.944	0	0	1	0	0	0	0
24	2016	DEC	466.292		38.356	9.909	0	0	1	0	0	0	77

VARIABLE **DESCRIPTION**

LgComSales Billing Cycle Large Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

Binary Variable for Hurricane Ivan September 2004 Ivan

Jan Monthly Binary Variable for January

Binary Variable to address residuals beginning in May 2012 Bin_Com

11

12

0

0

0

0

1

1

0

0

0

0

0

0

0

77

9.926

9.929

39.039

39.087

VARIABLE	DESCRIPTION

LgComSales Billing Cycle Large Commercial kWh per Customer per Billing Day

GDP Gross Domestic Product per Capita (\$000s)

ComPrice 12-Month Average of Real Commercial Price (cents per kWh)

504.693

468.537

Ivan Binary Variable for Hurricane Ivan September 2004

Jan Monthly Binary Variable for January

NOV

DEC

2017

2017

Bin_Com Binary Variable to address residuals beginning in May 2012

Schedule	F-7				FORECAS	STING MOD	Page 85 of 96					
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For e	each forecas	sting model u	sed to estima	te test year	projections	Type of Data Sho	wn:
				for custon	ners, deman	d, and energ	gy, provide th	e historical an	nd projected	values for	Projected Test Ye	ear Ended 12/31/17
COMPAN	Y: GULF	POWER	COMPANY	the input	variables and	the output	lidating the	Prior Year Ended 12/31/16				
					lso, provide a		X Historical Years 1	995 - 2015				
DOCKET	NO.: 160	186-EI		measurer	nent and the	time span c	Witness: J. K. Pa	ırk				
				FC	PRECASTING	MODEL: LA	RGE COMMEI	RCIAL ENERGY	1			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			CDHBD_03	CDHBD_04	CDHBD 05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	1995	OCT	0	0	0	0	0	0	0	319	0	
2	1995	NOV	0	0	0	0	0	0	0	0	133	
3	1995	DEC	0	0	0	0	0	0	0	0	0	
4	1996	JAN	0	0	0	0	0	0	0	0	0	
5	1996	FEB	0	0	0	0	0	0	0	0	0	
6	1996	MAR	50	0	0	0	0	0	0	0	0	
7	1996	APR	0	53	0	0	0	0	0	0	0	
8	1996	MAY	0	0	209	0	0	0	0	0	0	
9	1996	JUN	0	0	0	393	475	0	0	0	0	
10	1996	JUL	0	0	0	0	475 0	463	0	0	0	
11	1996 1996	AUG SEP	0	0	0	0	0	463	412	0	0	
12 13	1996	OCT	0	0	0	0	0	0	0	268	0	
14	1996	NOV	0	0	0	0	0	0	0	200	150	
15	1996	DEC	0	0	0	0	0	0	0	0	0	
13	1330	DLO	O	U	U	O	U	O	U	U	J	

DESCRIPTION

VARIABLE CDHBD_XX

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Schedule	F-7				FORECAS	STING MOD	Page 86 of 96						
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estima	ite test year	projections	Type of Data Shown:		
				for custor	ners, deman	d, and energ	gy, provide th	e historical a	nd projected	l values for	Projected Test Year End	ed 12/31/17	
COMPAN	Y: GULF	POWER	COMPANY	the input	variables an	d the output	variables use	ed in estimatir	ng and/or va	lidating the	Prior Year Ended 12/31/	16	
				model. A	lso, provide	a description	of each var	iable, specifyi	ng the unit of	of	X Historical Years 1995 - 2	015	
DOCKET	NO.: 160	186-EI		measurer	ment and the	time span c	r cross secti	onal range of	the data.		Witness: J. K. Park		
				FC	DRECASTING	MODEL: LA	RGE COMMEI	RCIAL ENERG	Y				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
LINE			CDHBD 03	CDHBD_04	CDHBD_05	CDHBD_06		CDHBD_08		CDHBD_10	CDHBD_11		
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
1	1994	JAN	Ó	Ò	Ò	Ò	Ò	Ó	Ò	Ó	Ó		
2	1994	FEB	0	0	0	0	0	0	0	. 0	0		
3	1994	MAR	92	0	0	0	0	0	0	0	0		
4	1994	APR	0	122	0	0	0	0	0	0	0		
5	1994	MAY	0	0	168	0	0	0	0	0	0		
6	1994	JUN	0	0	0	312	0	0	0	0	0		
7	1994	JUL	0	0	0	0	435	0	0	0	0		
8	1994	AUG	0	0	0	0	0	435	0	0	0		
9	1994	SEP	0	0	0	0	0	0	431	0	0		
10	1994	OCT	0	0	0	0	0	0	0	316	0		
11	1994	NOV	0	0	0	0	0	0	0	0	83		
12	1994	DEC	0	0	0	0	0	0	0	0	0		
13	1995	JAN	0	0	0	0	0	0	0	0	0		
14	1995	FEB	0	0	0	0	0	0	0	0	0		
15	1995	MAR	22	0	0	0	0	0	0	0	0		
16	1995	APR	0	93	0	0	0	0	0	0	0		
17	1995	MAY	0	0	224	0	0	0	0	0	0		
18	1995	JUN	0	0	0	436	0	0	0	0	0		
19	1995	JUL	0	0	0	0	499	0	0	0	0		
20	1995	AUG	0	0	0	0	0	451	0	0	0		
21	1995	SEP	0	0	0	0	0	0	422	0	0		
22	1995	OCT	0	0	0	0	0	0	0	319	0		
23	1995	NOV	0	0	0	0	0	0	0	0	153		
24	1995	DEC	0	0	0	0	0	0	0	0	0		

VARIABLE CDHBD_XX

DESCRIPTION

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Supporting Schedules:

Recap Schedules:

VARIABLE CDHBD_XX

DESCRIPTION

Schedule	F-7				FORECAS	STING MOD	ELS - HISTO	RICAL DATA	1			Page 87 of 96
FLORIDA	N PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estima	ate test year	projections	Type of Data Show	า:
				for custor	ners, deman	d, and energ	gy, provide th	e historical a	nd projected	values for	Projected Test Year	Ended 12/31/17
COMPAN	NY: GULF	POWER	COMPANY	the input	variables and	d the output	variables us	ed in estimatii	ng and/or va	lidating the	Prior Year Ended 12	2/31/16
				model. A	lso, provide	a description	n of each var	iable, specifyi	ng the unit of	of	X Historical Years 199	95 - 2015
DOCKET	NO.: 160	186-EI		measurer	ment and the	time span o	r cross secti	onal range of	the data.		Witness: J. K. Park	(
								RCIAL ENERG				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	1999	JAN	Ò	Ò	Ó	Ó	Ó	0	Ó	0	0	
2	1999	FEB	0	0	0	0	0	0	0	0	0	
3	1999	MAR	35	0	0	0	0	0	0	0	0	
4	1999	APR	0	118	0	0	0	0	0	0	0	
5	1999	MAY	0	0	221	0	0	0	0	0	0	
6	1999	JUN	0	0	0	333	0	0	0	0	0	
7	1999	JUL	0	0	0	0	419	0	0	0	0	
8	1999	AUG	0	0	0	0	0	474	0	0	0	
9	1999	SEP	0	0	0	0	0	0	425	0	0	
10	1999	OCT	0	0	0	0	0	0	0	267	0	
11	1999	NOV	0	0	0	0	0	0	0	0	114	
12	1999	DEC	0	0	0	0	0	0	0	0	0	
13	2000	JAN	0	0	0	0	0	0	0	0	0	
14	2000	FEB	0	0	0	0	0	0	0	0	0	
15	2000	MAR	69	0	0	0	0	0	0	0	0	
16	2000	APR	0	102	0	0	0	0	0	0	0	
17	2000	MAY	0	0	205	0	0	0	0	0	0	
18	2000	JUN	0	0	0	388	0	0	0	0	0	
19	2000	JUL	0	0	0	0	480	0	0	0	0	
20	2000	AUG	0	0	0	0	0	478	0	0	0	
21	2000	SEP	0	0	0	0	0	0	424	0	0	
22	2000	OCT	0	0	0	0	0	0	0	238	0	
23	2000	NOV	0	0	0	0	0	0	0	0	150	
24	2000	DEC	0	0	0	0	0	0	0	0	0	

Supporting Schedules:

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Schedule	F-7				FORECAS	STING MOD	Page 88 of 96				
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	ting model u	sed to estima	ate test year	projections	Type of Data Shown:
				for custon	ners, deman	d, and energ	y, provide th	e historical a	nd projected	values for	Projected Test Year Ended 12/31/17
COMPAN'	Y: GULF	POWER	COMPANY	the input	variables and	d the output	variables us	ed in estimati	ng and/or va	lidating the	Prior Year Ended 12/31/16
								iable, specifyi			X Historical Years 1995 - 2015
DOCKET	NO.: 160	186-EI			nent and the		Witness: J. K. Park				
					RECASTING						
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
LINE	. ,	()	CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06		CDHBD_08		CDHBD 10	CDHBD 11
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2001	JAN	0	0	0	0	0	0	0	0	0
2	2001	FEB	0	0	0	0	0	0	0	0	0
3	2001	MAR	50	0	0	0	0	0	0	0	0
4	2001	APR	0	99	0	0	0	0	0	0	0
5	2001	MAY	0	0	196	0	0	0	0	0	0
6	2001	JUN	0	0	0	355	0	0	0	0	0
7	2001	JUL	0	0	0	0	407	0	0	0	0
8	2001	AUG	0	0	0	0	0	422	0	0	0
9	2001	SEP	0	0	0	0	0	0	384	0	0
10	2001	OCT	0	0	0	0	0	0	0	219	0
11	2001	NOV	0	0	0	0	0	0	0	0	120
12	2001	DEC	0	0	0	0	0	0	0	0	0
13	2002	JAN	0	0	0	0	0	0	0	0	0
14	2002	FEB	0	0	0	0	0	0	0	0	0
15	2002	MAR	32	0	0	0	0	0	0	0	0
16	2002	APR	0	114	0	0	0	0	0	0	0
17	2002	MAY	0	0	282	0	0	0	0	0	0
18	2002	JUN	0	0	0	336	0	0	0	0	0
19	2002	JUL	0	0	0	0	409	0	0	0	0
20	2002	AUG	0	0	0	0	0	429	0	0	0
21	2002	SEP	0	0	0	0	0	0	415	0	0
22	2002	OCT	0	0	0	0	0	0	0	329	0
23	2002	NOV	0	0	0	0	0	0	0	0	128
24	2002	DEC	0	0	0	0	0	0	0	0	0

VARIABLE DESCRIPTION
CDHBD_XX Billing Cycle Lar

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Schedule	F-7				FORECAS	STING MOD	Page 89 of 96						
FLORIDA	PUBLIC	SERVICE	COMMISSION		EXPLANATION: For each forecasting model used to estimate test year projections							Type of Data Shown:	
				for custor	for customers, demand, and energy, provide the historical and projected values for							Projected Test Year Ended 12/31/17	
COMPAN	NY: GULF	POWER	COMPANY	the input	the input variables and the output variables used in estimating and/or validating the							31/16	
				model. A	model. Also, provide a description of each variable, specifying the unit of							X Historical Years 1995 - 2015	
DOCKET NO.: 160186-EI				measurer	measurement and the time span or cross sectional range of the data.								
				FC	DRECASTING	MODEL: LA	RGE COMME	RCIAL ENERG	Υ		· · · · · · · · · · · · · · · · · · ·		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)		
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11		
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)		
1	2003	JAN	Ó	0	0	0	0	0	0	0	0		
2	2003	FEB	0	0	0	0	0	0	0	0	0		
3	2003	MAR	43	0	0	0	0	0	0	0	0		
4	2003	APR	0	110	0	0	0	0	0	0	0		
5	2003	MAY	0	0	258	0	0	0	0	0	0		
6	2003	JUN	0	0	0	356	0	0	0	0	0		
7	2003	JUL	0	0	0	0	386	0	0	0	0		
8	2003	AUG	0	0	0	0	0	397	0	0	0		
9	2003	SEP	0	0	0	0	0	0	392	0	0		
10	2003	OCT	0	0	0	0	0	0	0	235	0		
11	2003	NOV	0	0	0	0	0	0	0	0	153		
12	2003	DEC	0	0	0	0	0	0	0	0	0		
13	2004	JAN	0	0	0	0	0	0	0	0	0		
14	2004	FEB	0	0	0	0	0	0	0	0	0		
15	2004	MAR	39	0	0	0	0	0	0	0	0		
16	2004	APR	0	88	0	0	0	0	0	0	0		
17	2004	MAY	0	0	192	0	0	0	0	0	0		
18	2004	JUN	0	0	0	364	0	0	0	0	0		
19	2004	JUL	0	0	0	0	421	0	0	0	0		
20	2004	AUG	0	0	0	0	0	424	0	0	0		
21	2004	SEP	0	0	0	0	0	0	385	0	0		
22	2004	OCT	0	0	0	0	0	0	0	321	0		
23	2004	NOV	0	0	0	0	0	0	0	0	195		
24	2004	DEC	0	0	0	0	0	0	0	0	0		

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

DESCRIPTION

VARIABLE CDHBD_XX

Schedule F-7 FORECASTING MODELS - HISTORICAL DATA							90 of 96					
FLORIDA	PUBLIC	SERVICE	COMMISSION					sed to estima			Type of Data Shown:	
				for custor	ners, deman	d, and energ	gy, provide th	e historical a	nd projected	l values for	Projected Test Year Ended	12/31/17
COMPAN	NY: GULF	POWER	COMPANY	the input	variables and	d the output	variables use	ed in estimati	ng and/or va	lidating the	Prior Year Ended 12/31/16	
				model. A	lso, provide	a descriptior	X Historical Years 1995 - 2015					
DOCKET	NO.: 160	186-EI		measurer	ment and the	time span o	r cross secti	onal range of	the data.		Witness: J. K. Park	
				FC	DRECASTING	MODEL: LA	RGE COMME	RCIAL ENERG	Υ			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2005	JAN	0	0	0	0	0	0	0	0	0	
2	2005	FEB	. 0	0	0	0	0	0	0	0	0	
3	2005	MAR	29	0	0	0	0	0	0	0	0	
4	2005	APR	0	72	0	0	0	0	0	0	0	
5	2005	MAY	0	0	156	0	0	. 0	0	0	0	
6	2005	JUN	0	0	0	351	0	0	0	0	0	
7	2005	JUL	0	0	0	0	436	0	0	0	0	
8	2005	AUG	0	0	0	0	0	437	0	0	0	
9	2005	SEP	0	0	0	0	0	0	449	0	0	
10	2005	OCT	0	0	0	0	0	0	0	357	0	
11	2005	NOV	0	0	0	0	0	0	0	0	129	
12	2005	DEC	0	0	0	0	0	0	0	0	0	
13	2006	JAN	0	0	0	0	0	0	0	0	0	
14	2006	FEB	0	0	0	0	0	0	0	0	0	
15	2006	MAR	65	0	0	0	0	0	0	0	0	
16	2006	APR	0	145	0	0	0	0	0	0	0	
17	2006	MAY	0	0	250	0	0	0	0	0	0	
18	2006	JUN	0	0	0	394	0	0	0	0	0	
19	2006	JUL	0	0	0	0	481	0	0	0	0	
20	2006	AUG	0	0	0	0	0	451	0	0	0	
21	2006	SEP	0	0	0	0	0	0	415	0	0	
22	2006	OCT	0	0	0	0	0	0	0	282	0	
23	2006	NOV	0	0	0	0	0	0	0	0	96	
24	2006	DEC	0	0	0	0	0	0	0	0	0	

VARIABLE CDHBD_XX

DESCRIPTION

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Recap Schedules: Supporting Schedules:

Schedule	F-7				FORECAS	STING MOD	Page 91 of	96				
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	Type of Data Shown:					
				for custon	ners, deman	d, and energ	y, provide th	e historical ar	nd projected	values for	Projected Test Year Ended 12/31/1	7
COMPAN'	Y: GULF	POWER	COMPANY	the input	variables an	d the output	variables us	ed in estimatir	ng and/or va	lidating the	Prior Year Ended 12/31/16	
								iable, specifyi			X Historical Years 1995 - 2015	
DOCKET	NO.: 160	186-EI				•		onal range of	•		Witness: J. K. Park	
				FC	RECASTING	MODEL: LAF	RGE COMME	RCIAL ENERG	Y			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINÉ	()	()	CDHBD 03					CDHBD_08		CDHBD 10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2007	JAN	0	0	0	0	0	0	0	0	0	
2	2007	FEB	0	0	0	0	0	0	0	0	0	
3	2007	MAR	47	0	0	0	0	0	0	0	0	
4	2007	APR	0	113	0	0	0	0	0	0	0	
5	2007	MAY	0	0	222	0	0	0	0	0	0	
6	2007	JUN	0	0	0	341	0	0	0	0	0	
7	2007	JUL	0	0	0	0	440	0	0	0	0	
8	2007	AUG	0	0	0	0	0	476	0	0	0	
9	2007	SEP	0	0	0	0	0	0	449	0	0	
10	2007	OCT	0	0	0	0	0	0	0	332	0	
11	2007	NOV	0	0	0	0	0	0	0	0	116	
12	2007	DEC	0	0	0	0	0	0	0	0	0	
13	2008	JAN	0	0	0	0	0	0	0	0	0	
14	2008	FEB	0	0	0	0	0	0	0	0	0	
15	2008	MAR	35	0	0	0	0	0	0	0	0	
16	2008	APR	0	94	0	0	0	0	0	0	0	
17	2008	MAY	0	0	210	0	0	0	0	0	0	
18	2008	JUN	0	0	0	412	0	0	0	0	0	
19	2008	JUL	0	0	0	0	464	0	0	0	0	
20	2008	AUG	0	0	0	0	0	483	0	0	0	
21	2008	SEP	0	0	0	0	0	0	434	0	0	
22	2008	OCT	0	0	0	0	0	0	0	264	0	
23	2008	NOV	0	0	0	0	0	0	0	0	86	
24	2008	DEC	0	0	0	0	0	0	0	0	0	

VARIABLE CDHBD_XX

DESCRIPTION

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Supporting Schedules:

Schedule					FORECAS	STING MOD	ELS - HISTC	RICAL DATA	١			Page 92 of 96
FLORIDA	PUBLIC	SERVICE	COMMISSION				_	sed to estima	•		Type of Data Shown:	
								e historical a			Projected Test Year E	Ended 12/31/17
COMPAN	Y: GULF	POWER	COMPANY	the input	variables an	d the output	variables use	ed in estimati	ng and/or va	lidating the	Prior Year Ended 12/3	31/16
								iable, specifyi		of	X Historical Years 1995	- 2015
DOCKET	NO.: 160	186-EI		measurer	ment and the	time span c	r cross secti	onal range of	the data.		Witness: J. K. Park	
				FC	DRECASTING	MODEL: LA	RGE COMMER	RCIAL ENERG	Υ			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2009	JAN	0	0	0	0	0	0	0	0	0	
2	2009	FEB	0	0	0	0	. 0	0	0	0	0	
3	2009	MAR	49	0	0	0	0	0	0	0	0	
4	2009	APR	0	93	0	0	0	0	0	0	0	
5	2009	MAY	0	0	222	0	0	0	0	0	0	
6	2009	JUN	0	0	0	366	0	0	0	0	0	
7	2009	JUL	0	0	0	0	478	0	0	0	0	
8	2009	AUG	0	0	0	0	0	421	0	0	0	
9	2009	SEP	0	0	0	0	0	0	366	0	0	
10	2009	OCT	0	0	0	0	0	0	0	321	0	
11	2009	NOV	0	0	0	0	0	0	0	0	115	
12	2009	DEC	0	0	0	0	0	0	0	0	0	
13	2010	JAN	0	0	0	0	0	0	0	0	0	
14	2010	FEB	0	0	0	0	0	0	0	0	0	
15	2010	MAR APR	6	0	0	0	0	0	0	0	0	
16 17	2010 2010	MAY	0	67 0	211	0	0	0	0	0	0	
17	2010	JUN	0	0	0	390	0	0	0	0	0	
19	2010	JUL	0	0	0	0.0	465	0	0	0	0	
20	2010	AUG	0	0	0	0	0	509	0	0	0	
21	2010	SEP	. 0	0	0	0	0	0	436	0	0	
22	2010	OCT	0	0	0	0	0	0	0	293	0	
23	2010	NOV	0	0	0	0	0	0	0	0	149	
24	2010	DEC	0	0	0	0	0	0	0	0	0	

VARIABLE CDHBD_XX DESCRIPTION

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Supporting Schedules: Recap Schedules:

Schedule F-7 FORECASTING MODELS - HISTORICAL DATA								Page 93 of 96				
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estima	ate test year	projections	Type of Data Shown:	
				for custor	ners, deman	d, and energ	yy, provide th	e historical a	nd projected	l values for	Projected Test Year Er	nded 12/31/17
COMPAN	IY: GULF	POWER	COMPANY		variables and		Prior Year Ended 12/3	1/16				
				model. A	Ilso, provide	a descriptior	X Historical Years 1995 -	2015				
DOCKET	NO.: 160	186-EI		measurer	ment and the	time span c	r cross secti	onal range of	the data.		Witness: J. K. Park	
				FC	DRECASTING	MODEL: LA	RGE COMME	RCIAL ENERG	Υ			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2011	JAN	0	0	0	0	0	0	0	0	0	
2	2011	FEB	0	0	0	0	. 0	0	0	0	0	
3	2011	MAR	62	0	0	0	0	0	0	0	0	
4	2011	APR	0	154	0	0	0	0	0	0	0	
5	2011	MAY	0	0	236	0	0	0	0	0	0	
6	2011	JUN	0	0	0	403	0	0	0	0	0	
7	2011	JUL	0	0	0	0	486	0	0	0	0	
8	2011	AUG	0	0	0	0	0	484	0	0	0	
9	2011	SEP	0	0	0	0	0	0	421	0	0	
10	2011	OCT	0	0	0	0	0	0	0	239	0	
11	2011	NOV	0	0	0	0	0	0	0	0	95	
12	2011	DEC	0	0	0	0	0	0	0	0	0	
13	2012	JAN	0	0	0	0	0	0	0	0	0	
14	2012	FEB	0	0	0	0	0	0	0	0	0	
15	2012	MAR	81	0	0	0	0	0	0	0	0	
16	2012	APR	0	179	0	0	0	0	0	0	0	
17	2012	MAY	0	0	249	0	0	0	0	0	0	
18	2012	JUN	0	0	0	393	0	0	0	0	0	
19	2012	JUL	0	0	0	0	438	0	0	0	0	
20	2012	AUG	0	0	0	0	0	449	0	0	0	
21	2012	SEP	0	0	0	0	0	0	409	0	0	
22	2012	OCT	0	0	0	0	0	0	0	277	0	
23	2012	NOV	0	0	0	0	0	0	0	0	114	
24	2012	DEC	0	0	0	0	0	0	0	0	0	

VARIABLE CDHBD_XX

DESCRIPTION

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

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Schedule F-	

FORECASTING MODELS - HISTORICAL DATA

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FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: GULF POWER COMPANY

DOCKET NO.: 160186-EI

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:
Projected Test Year Ended 12/31/17
Prior Year Ended 12/31/16

X Historical Years 1995 - 2015 Witness: J. K. Park

				FC	PRECASTING	MODEL: LAF	RGE COMME	RCIAL ENERG	Υ		
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)
1	2013	JAN	0	0	0	0	0	0	0	0	0
2	2013	FEB	0	0	0	0	0	0	0	0	0
3	2013	MAR	27	0	0	0	0	0	0	0	0
4	2013	APR	0	87	0	0	0	0	0	0	0
5	2013	MAY	0	0	177	0	0	0	0	0	0
6	2013	JUN	0	0	0	370	0	0	0	0	0
7	2013	JUL	0	0	0	0	425	0	0	0	0
8	2013	AUG	0	0	0	0	0	439	0	0	0
9	2013	SEP	0	0	0	0	0	0	418	0	0
10	2013	OCT	0	0	0	0	0	0	0	313	0
11	2013	NOV	0	0	0	0	0	0	0	0	124
12	2013	DEC	0	0	0	0	0	0	0	0	0
13	2014	JAN	0	0	0	0	0	0	0	0	0
14	2014	FEB	0	0	0	0	0	0	0	0	0
15	2014	MAR	30	0	0	0	0	0	0	0	0
16	2014	APR	0	79	0	0	0	0	0	0	0
17	2014	MAY	0	0	209	0	0	0	0	0	0
18	2014	JUN	0	0	0	356	0	0	0	0	0
19	2014	JUL	0	0	0	0	429	0	0	0	0
20	2014	AUG	0	0	0	0	0	406	0	0	0
21	2014	SEP	0	0	0	0	0	0	407	0	0
22	2014	OCT	0	0	0	0	0	0	0	255	0
23	2014	NOV	0	0	0	0	0	0	0	0	101
24	2014	DEC	0	0	0	0	0	0	0	0	0

VARIABLE

DESCRIPTION

CDHBD_XX

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Supporting Schedules:

Recap Schedules:

0-14		$\Gamma \rightarrow$
Sched	HIL	H-/

FORECASTING MODELS - HISTORICAL DATA

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FLORIDA PUBLIC SERVICE COMMISSION

COMPANY: GULF POWER COMPANY

EXPLANATION: For each forecasting model used to estimate test year projections for customers, demand, and energy, provide the historical and projected values for the input variables and the output variables used in estimating and/or validating the X Prior Year Ended 12/31/16 model. Also, provide a description of each variable, specifying the unit of measurement and the time span or cross sectional range of the data.

Type of Data Shown:

Projected Test Year Ended 12/31/17

X Historical Years 1995 - 2015

DOCKET NO.: 160186-EI				measurer	ment and the	time span c	r cross secti	onal range of	the data.	_	Witness: J. K. Park	_
								RCIAL ENERG				
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2015	JAN	0	0	0	0	0	0	0	0	0	
2	2015	FEB	0	0	0	0	0	0	0	0	0	
3	2015	MAR	54	0	0	0	0	0	0	0	0	
4	2015	APR	0	163	0	. 0	0	0	0	0	0	
5	2015	MAY	0	0	242	0	0	0	0	. 0	0	
6	2015	JUN	0	0	0	367	0	0	0	0	0	
7	2015	JUL	0	0	0	0	456	0	0	0	0	
8	2015	AUG	0	0	0	0	0	484	0	0	0	
9	2015	SEP	0	0	0	0	0	0	405	0	0	
10	2015	OCT	0	0	0	0	0	0	0	288	0	
11	2015	NOV	0	0	0	0	0	0	0	0	125	
12	2015	DEC	0	0	0	0	0	0	0	0	0	
13	2016	JAN	0	0	0	0	0	0	0	0	0	
14	2016	FEB	0	0	0	0	0	0	0	0	0	
15	2016	MAR	46	0	0	0	0	0	0	0	0	
16	2016	APR	0	107	0	0	0	0	0	0	0	
17	2016	MAY	0	0	217	0	0	0	0	0	0	
18	2016	JUN	0	0	0	371	0	0	0	0	0	
19	2016	JUL	0	0	0	0	447	0	0	0	0	
20	2016	AUG	0	0	0	0	0	451	0	0	0	
21	2016	SEP	0	0	0	0	0	0	418	0	0	
22	2016	OCT	0	0	0	0	0	0	0	288	0	
23	2016	NOV	0	0	0	0	0	0	0	0	125	
24	2016	DEC	0	0	0	0	0	0	0	0	0	

VARIABLE

DESCRIPTION

CDHBD XX

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Supporting Schedules:

Recap Schedules:

Schedule	F-7				FORECAS	STING MOD		Page 96 of 96				
FLORIDA	PUBLIC	SERVICE	COMMISSION	EXPLANA	ATION: For	each forecas	sting model u	sed to estima	ite test year	projections	Type of Data Shown	
								e historical ar			X Projected Test Year	
COMPANY: GULF POWER COMPANY			the input variables and the output variables used in estimating and/or validating the							Prior Year Ended 12	/31/16	
			model. Also, provide a description of each variable, specifying the unit of							Historical Years 199	5 - 2015	
DOCKET NO.: 160186-EI			measurer	measurement and the time span or cross sectional range of the data.								
				FC	PRECASTING	MODEL: LA	RGE COMME	RCIAL ENERG	Υ			
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
LINE			CDHBD_03	CDHBD_04	CDHBD_05	CDHBD_06	CDHBD_07	CDHBD_08	CDHBD_09	CDHBD_10	CDHBD_11	
NO.	YEAR	MONTH	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	(INPUT)	
1	2017	JAN	0	0	0	0	0	0	0	0	0	
2	2017	FEB	0	0	0	0	0	0	0	0	0	
3	2017	MAR	46	0	0	0	0	0	0	0	0	
4	2017	APR	0	107	0	0	0	0	0	0	0	
5	2017	MAY	0	0	217	0	0	0	0	0	0	
6	2017	JUN	0	0	0	371	0	0	0	0	0	
7	2017	JUL	0	0	0	0	447	0	0	0	0	
8	2017	AUG	0	0	0	0	0	451	418	0	0	
9	2017	SEP	0	0	0	0	0	0	410	288	0	
10	2017	OCT NOV	0	0	0	0	0	0	0	200	125	
12	2017 2017	DEC	0	0	0	0	0	0	0	0	0	
12	2017	DLO	0	U	U	U	U	U	U	U	J	

DESCRIPTION

VARIABLE CDHBD_XX

Billing Cycle Large Commercial Cooling Degree Hours per Billing Day for Month XX (03=March, etc.)

Sche			ASSUMPTIONS		Page 1 of 25			
FLOF	RIDA	PUBLIC SERVICE COMMISSION	EXPLANATION: For a projected test year	r, provide a schedule of	Type of Data Shown: X Projected Test Year Ended 12/31/17			
COM	PANY	: GULF POWER COMPANY		assumptions used in developing projected or estimated data. As a minimum, state assumptions used for balance sheet, income statement and sales forecast.				
DOC	KET I	IO.: 160186-EI		Witness: See Below				
			Index to Assumptions	;				
(1) Line	(2)	(3)		(4)	(5)			
<u>No.</u>	<u>Item</u>	Forecast/Budget		<u>Witness</u>	<u>Page</u>			
1								
2	١.	General Assumptions	Name and Davison	Dodo				
3 4		A. Forecast of Customer, Energy, Peak D	emand, and Revenue	Park	3			
5		B. Test Year Operations and Maintenanc	e Budget Excluding Fuel and	Park	4			
6		Purchased Power		Mason	5			
7				Burroughs	-			
8				Smith				
9				Terry				
10				Hodnett				
11		C. Test Year Financial Assumptions		Mason	6			
12				Liu				
13	11.	Operating Assumptions		Mason	7			
14		A. Income Statement		Park				
15				Burroughs				
16 17				Smith				
18				Terry Hodnett				
19		B. Average Annual Net Unit Heat Rates for	or Projected Test Year	Burroughs	10			
20		C. Outage Rates for Projected Test Year		Burroughs	11			
21		D. Planned Maintenance for Projected Te	st Year	Burroughs	12			
22		E. Net Unit Capacity Ratings for Projecte	d Test Year	Burroughs	13			

Sche	dule F	:-8 '	ASSUMPTIO	NS	Page 2 of 25				
COM	PANY	PUBLIC SERVICE COMMISSION : GULF POWER COMPANY	EXPLANATION: For a projected test ye assumptions used in developing projected As a minimum, state assumptions used statement and sales forecast.	Type of Data Shown: X_Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16 Historical Year Ended 12/31/15					
DOC	KET N	IO.: 160186-EI		Witness: See Below					
	4-1	4-2	Index to Assump						
(1) Line	(2)	(3)		(4)	(5)				
<u>No.</u>	<u>Item</u>	Forecast/Budget		Witness	<u>Page</u>				
2		F. Other Fuel Budget Assumptions for	January 2017 - December 2017	Burroughs Park	14				
4 5 6 7 8	III.	Capital Additions Assumptions A. Construction Expenditures		Mason Burroughs Smith Ritenour Terry	16				
9 10 11 12 13		B. Electric Plant-in-Service and Accum	ulated Depreciation	Mason Burroughs Smith Hodnett	17				
14 15 16	IV.	Balance Sheet Assumptions A. 13 - Month Average Assets		Mason Burroughs Hodnett	18				
17 18		B. 13 - Month Average Capitalization a	nd Liabilities	Mason Hodnett	22				

Schedule 1-6	AGGOWI TIONS	1 age 3 01 23						
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For a projected test year, provide a schedule	Type of Data Shown:						
	of assumptions used in developing projected or estimated data.	X Projected Test Year Ended 12/31/17						
COMPANY: GULF POWER COMPANY	As a minimum, state assumptions used for balance sheet, income	Prior Year Ended 12/31/16						
	statement and sales forecast.	Historical Year Ended 12/31/15						
DOCKET NO.: 160186-EI		Witness: J. K. Park						
L OFNERAL ACCUMENTAGE								

ASSLIMPTIONS

I. GENERAL ASSUMPTIONS

A. FORECAST OF CUSTOMER, ENERGY, PEAK DEMAND, AND REVENUE

(1) Line

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No.

- Normal weather conditions were assumed in the development of energy sales and peak demand forecasts. Monthly normal weather is the average, over 1
- the past 20 years, of cooling and heating degree hours based on temperatures measured at the National Oceanic and Atmospheric Administration (NOAA)
- weather station located in Pensacola, Florida.
- Gulf projects that the economy in our service area has returned to pre-recession levels and normal growth should be expected in the following years.
- Economic projections were provided by Moody's Analytics, a well respected economic forecasting firm.
- Gulf utilized its most recent DSM plan, which was approved by the Commission in Order No. PSC-15-0330-PAA-EG on August 19, 2015, 6
- to adjust forecasted sales and annual system peak demands for projected conservation impacts.
- Base rate revenues were calculated using the FPSC approved rate schedules in effect at the time of the forecast.

YEAR ENDED DECEMBER, 2017 TEST YEAR GROWTH RATES

10 CUSTOMERS 1.5% RETAIL KWH SALES 1.1% Dago 2 of 25

Schedule F-8	ASSUMPTIONS	Page 4 01 2:
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For a projected test year, provide a schedule of	Type of Data Shown:
	assumptions used in developing projected or estimated data.	X Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY	As a minimum, state assumptions used for balance sheet, income	Prior Year Ended 12/31/16
	statement and sales forecast.	Historical Year Ended 12/31/15
DOCKET NO.: 160186-EI		Witness: See Below

I. GENERAL ASSUMPTIONS B. TEST YEAR OPERATIONS AND MAINTENANCE BUDGET EXCLUDING FUEL AND PURCHASED POWER

(1)		(2)	(3)	(4)	(5)
Line <u>No.</u>		<u>ltem</u>	<u>Amount</u>	Witness	<u>Assumption</u>
1 2 3	1.	Inflation Factor - 2016 2017	3.2% 3.7%	Mason	Bureau of Labor Statistics: Consumer Price Index (Urban Consumer); Moody's Analytics.
4 5 6	2.	Retail Customers - Dec-2017 Growth rate	460,850 1.5%	Park	Based on assumptions outlined in Section I.A. of this schedule and as described in direct testimony.
7 8 9	3.	Retail Energy - MWH Growth rate	11,022,525 1.1%	Park	Derived using assumptions outlined in Section I.A. of this schedule and as described in direct testimony.
10 11	4.	Peak Demand - MW Growth rate	2,491 1.7%	Park	Projected using assumptions outlined in Section I.A. of this schedule and described in direct testimony
12 13 14 15 16 17	5.	Forecasted Composite Wage and Salary Increase Guidelines - Exempt - Non-exempt - Covered	3.00% 3.00% 3.00%	Mason	Assumptions were based on inflation and current salary trends of other companies and utilities.

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Schedul		ASSUMPTIONS		Page 5 of 25
FLORIDA PUBLIC SERVICE COMMISSION COMPANY: GULF POWER COMPANY		EXPLANATION: For a projected assumptions used in developing As a minimum, state assumption statement and sales forecast.	Type of Data Shown: X_Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16 Historical Year Ended 12/31/15	
DOCKE.	ET NO.: 160186-EI	ciatement and caree reresact.		Witness: See Below
		I. GENERAL AS: B. TEST YEAR OPERATIONS AN EXCLUDING FUEL AND P	ND MAINTENANCE BUDGET	
(1) Line	(2)	(3) (4) Amount	(5)	
<u>No.</u>	<u>ltem</u>	(000s) Witness	<u>Assumption</u>	
1 2	January - December 2017 Operations Expense (net of fuel and pur	chased power): Mason		
3 4 5 6 7 8 9	Production Transmission Distribution Customer Accounting Customer Service and Informatior Sales Expense Administrative and General	\$ 20,994 Smith a \$ 25,006 Smith M \$ 28,670 Terry	Based on Planning Units' budgets which assumptions and were developed using MFR F-5 and direct testimony of each v	the process described in
10	Total Operations	<u>\$ 276,366</u>		
11 12 13 14 15 16	7. January - December 2017 Maintenance Expense: Production Transmission Distribution Administrative and General Total Maintenance	\$ 7,635 Smith a	Based on Planning Units' budgets whicl assumptions and were developed using MFR F-5 and direct testimony of each v	the process described in

Sche	Schedule F-8 ASSUMPTIONS				TIONS	Page 6 of 25	
FLORIDA PUBLIC SERVICE COMMISSION COMPANY: GULF POWER COMPANY		assı	umptions u	ised in devel	ojected test year, provide a schedule of loping projected or estimated data. mptions used for balance sheet, income	Type of Data Shown: X Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16	
					sales foreca		Historical Year Ended 12/31/15
DOC	KET	NO.: 160186-EI				EDAL ACCUMENTIONS	Witness: See Below
						ERAL ASSUMPTIONS ST YEAR FINANCIAL	
(1) Line		(2)		(3)	(4)	(5)	
No.		<u>Item</u>	<u>A</u>	mount	Witness	<u>Assumption</u>	
1 2 3 4 5	1	. Interest Rates on Commercial Paper 1st Quarter, 2017 2nd Quarter, 2017 3rd Quarter, 2017 4th Quarter, 2017		2.75% 3.05% 3.25% 3.50%	Mason	Interest rate assumptions are provided by SCS upon a market forecast by Moody's Analytics. Tdebt is reflected on Exhibit JJM-1, Schedule 7, p	he monthly amount of short term
6 7 8 9	2	. Interest Rates on Long-Term Debt; Issuances and Retirements of Long-Term Debt June 2017 (\$85M Retirement)		5.90%	Mason	The new issues of long-term debt are based on while maintaining the Company's financial integ projected in 2017. There is one projected retire	rity. No issuances are
10 11 12 13	3	. Dividends to Southern Company	\$	120,600	Mason Liu	Based on projections of Southern Company's cannet operating expenses. Southern's total cash operating companies such that dividends paid to Southern's common equity investment in the op	requirement is then apportioned to the o Southern are proportionate to
14 15 16	4	. Dividends on Preference Stock	\$	9,003	Mason	The projected amount is calculated by multiplyir rate and dividing by 12. The calculation is adjust retirements.	
17 18	5	. Issuance of common equity to Southern Company	\$	0	Mason Liu	Based on Southern Company's ability to market the operating company's need for external funds	
19	6	. Retirement of First Mortgage Bond	\$	0	Mason	There are none projected in the test year.	
20	7	Patiroment of Pallution Control Rand	Ф	0	Mason	There are none projected in the test year	

0

0

Mason

Mason

Based on Gulf's projected needs of cash. There are no preference stock

There are no Pollution Control Bond issues forecasted in the test year.

issues forecasted in the test year.

8. Preference Stock Issues

9. Pollution Control Bond Issue

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Schedule F-8 ASSUMPTIONS						Page 7 of 25
FLORIDA PUBLIC SERVICE COMMISSION EXF of a: COMPANY: GULF POWER COMPANY As a			(of assumptions us	For a projected test year, provide a schedule sed in developing projected or estimated data. ate assumptions used for balance sheet, income les forecast.	Type of Data Shown: X Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16 Historical Year Ended 12/31/15
DOCKET	NO.: 160186-EI					Witness: See Below
					II. OPERATING ASSUMPTIONS A. INCOME STATEMENT	
(1) Line	(2)	A	(3) Amount	(4)	(5)	
No.	<u>Item</u>	1	(000s)	Witness	Assumption	
1 1. 2 3 4 5 6 7 8 9	Total Electric Revenue	\$	1,503,134	Mason Park	Base rate revenues (billed and unbilled) are input to the Financial Model. (billed and unbilled) are based on forecasted monthly recoverable fuel expenergy Conservation Cost Recovery clause revenues (billed and unbilled monthly recoverable expenses and MWH sales. Purchased Power Capa are calculated based on monthly net pool capacity and non-associated pure Environmental Cost Recovery Clause revenues (billed and unbilled) are convironmental costs. Sales for Resale are derived from the Energy Budg the exception of Municipal Franchise Fees and County Franchise Fees, Conput based on an analysis of the accounts. Municipal Franchise Fees and calculated using an input factor based on historical data.	pense, interchange costs and MWH sales.) are calculated based on forecasted city Clause revenues (billed and unbilled) urchase power agreements. calculated based on qualified monthly et described in MFR F-5. With Other Operating Revenues are
11 2. 12	Fuel & Emission Allowance Expense (without Fuel Handling)	\$	481,818	Mason Burroughs	The projected amount is derived from the Fuel Budget as described in MF expense is entered into the Financial Model by direct interface with the FU	
13 3. 14	Purchased Power	\$	101,155	Mason Burroughs	The projected amount is derived from the Interchange Budget as described This expense is entered into the Financial Model by direct interface with the Finan	
15 4. 16 17 18 19	Operations Expense (including Fuel Handling)	\$	276,366	Mason Burroughs Smith Terry Hodnett	The projected amount is derived from the O&M Budget as described in Schedule. These expenses are summarized and input into the Financial I	
20 5. 21 22 23	Maintenance Expense	\$	112,926	Mason Burroughs Smith Hodnett	The projected amount is derived from the O&M Budget as described in S schedule. These expenses are summarized and input into the Financial I	
24 6. 25 26	Depreciation Expense	\$	169,661	Mason Hodnett	The projected amount is calculated by Corporate Planning utilizing the Plainputs as described in Section III.A. of this MFR. This amount is the electionly; it excludes depreciation associated with transportation.	
27 7. 28	Amortization Expense	\$	8,268	Mason Hodnett	The projected amount is input into the Financial Model based on projecte balances as described in Section III.A. of this MFR. It is electric only.	d Plant
29 8.	Amortization Expense	\$	(394)	Mason	The projected amount is the amortization of the Investment Tax Credits w	hich are
30	Investment Tax Credit			Hodnett	amortized over the life of related assets, pursuant to IRS regulations.	

Schedule F-8 **ASSUMPTIONS** Page 8 of 25 EXPLANATION: For a projected test year, provide a schedule of assumptions used in developing projected or estimated data. FLORIDA PUBLIC SERVICE COMMISSION Type of Data Shown: X Projected Test Year Ended 12/31/17 As a minimum, state assumptions used for balance sheet, income Prior Year Ended 12/31/16 COMPANY: GULF POWER COMPANY statement and sales forecast. ___Historical Year Ended 12/31/15 DOCKET NO.: 160186-EI Witness: See Below II. OPERATING ASSUMPTIONS

A. INCOME STATEMENT

(1) Line		(2)	Α	(3) mount	(4)	(5)
<u>No.</u>		<u>ltem</u>	(000s)	Witness	<u>Assumption</u>
1 2 3 4 5 6	9.	Taxes Other than Income Taxes	\$	115,277	Mason Hodnett	All taxes other than income taxes are forecasted by applying actual, statutory, or average rates to the applicable tax base. These taxes include Florida Public Service Commission assessment fees, real and personal property taxes, gross receipts tax, franchise fees, state and federal unemployment tax, FICA, state motor vehicle licenses, federal highway use tax, and miscellaneous state and local taxes. The total amount is then reduced for taxes capitalized and taxes applicable to motor vehicles.
7 8 9 10 11 12 13	10.	Federal and State Income Taxes	\$	69,769	Mason Hodnett	Currently applicable federal and state income tax regulations are followed. The lowest possible tax payments are made currently. Assumptions include: - Federal tax rate = 35% - Full normalization of book and tax timing and basis differences - Current IRS rules are followed - State tax rate = 5.5% - State of Florida tax regulations utilized
14 15 16 17 18	11.	AFUDC - Debt and Equity	\$	0	Mason	AFUDC Rate: 5.73% The AFUDC rate is calculated based on a 13-month average jurisdictional capital structure and is input into a compounding formula to arrive at the monthly AFUDC rate. The monthly rate is applied to the projected average monthly eligible CWIP balance. No CWIP eligible projects are projected in 2017.
19 20	12.	Earnings on Temporary Cash	\$	0	Mason	The projected amount is calculated by applying the applicable forecasted interest rate to the projected average monthly balance of temporary cash investments.
21 22 23	13.	Other Income	\$	883	Mason	The projected amount includes the earnings on the funded portion of the property insurance reserve, as well as the projected earnings on the company's surge product activity.
24 25	14.	Other Income Deductions	\$	5,044	Mason	The projected amount includes donations, civic membership, governmental expenses, and the amortization of Non-electric Investment Tax Credits.
26 27	15.	Income Taxes on Other Income	\$	(1,190)	Mason Hodnett	Currently applicable federal and state income tax regulations are followed. The lowest possible tax payments are made currently. See item 10 of this section for assumptions.

Sched	ule F-8	8	ASSUMPTIONS			Page 9 of 25	
FLORIDA PUBLIC SERVICE COMMISSION EXPLANATION: For a projected test year, provide a schedule or assumptions used in developing projected or estimated data. COMPANY: GULF POWER COMPANY As a minimum, state assumptions used for balance sheet, incompatible statement and sales forecast.				projected or estimated data.	Type of Data Shown: X Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16 Historical Year Ended 12/31/15		
DOCK	ET NO	D.: 160186-EI	State	mem and sai	es forecast.		Witness: See Below
						TING ASSUMPTIONS DME STATEMENT	
(1) Line		(2)	,	(3) Amount	(4)	(5)	
<u>No.</u>		<u>ltem</u>		(a000)	Witness	<u>Assumption</u>	
1 2 3	16.	Interest on Long-Term Debt	\$	47,895	Mason	The projected amount is calculated by bond principal and dividing by 12. The issues and scheduled retirements.	applying the coupon interest rate to the calculation is adjusted for any new
4 5 6	17.	Interest on Pollution Control Debt	\$	8,690	Mason	The projected amount is calculated by bond principal and dividing by 12. The issues and scheduled retirements.	
7 8 9	18.	Interest on Short-term Debt	\$	1,430	Mason	The projected amount is calculated by interest rates, as described in Section of short-term debt projected to be outst	I.C. of this schedule, to the face amount
10 11 12		Amortization of Debt Discount, Premium and Expense	\$	1,995	Mason	No adjustments are made for new debt	sed on the embedded amortization amounts. issues. The interest rate on new debt issues t-related costs over the life of the debt issued.
13 14	20.	Other Interest Expense	\$	841	Mason	The projected amount is calculated bas projected average monthly balance of 0	sed on applying the budgeted rate to the Customer Deposits.
15 16 17	21.	Preference Dividends	\$	9,003	Mason	The projected amount is calculated by principal by its dividend rate and dividing any new issues and scheduled retirements.	ng by 12. The calculation is adjusted for
18	22.	Net Income After Dividends on	\$	95,464			

Preference Stock

20 Totals may not add due to rounding.

Schedule F-8	ASSUMPTIONS	Page 10 of 25
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For a projected test year, provide a schedule of	Type of Data Shown:
	assumptions used in developing projected or estimated data.	X Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY	As a minimum, state assumptions used for balance sheet, income	Prior Year Ended 12/31/16
	statement and sales forecast.	Historical Year Ended 12/31/15
DOCKET NO.: 160186-EI		Witness: M. L. Burroughs

II. OPERATING ASSUMPTIONS B. AVERAGE ANNUAL NET UNIT

(1) Line	(2)	(3) Average Net Heat Rates
No.	<u>Unit</u>	(BTU/KWH)
1	CRIST 4	11,150
2	CRIST 5	11,036
3	CRIST 6	10,766
4	CRIST 7	10,243
5	SMITH 3	7,132
6	SMITH A	14,066
7	DANIEL 1	10,633
8	DANIEL 2	10,496
9	SCHERER 3	10,200
10	PEA RIDGE 1	15,000
11	PEA RIDGE 2	15,000
12	PEA RIDGE 3	15,000
13	PERDIDO 1	9,900
14	PERDIDO 2	9,900

Schedule F-8

FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA PUBLIC SERVICE COMMISSION

EXPLANATION: For a projected test year, provide a schedule of assumptions used in developing projected or estimated data.

COMPANY: GULF POWER COMPANY

As a minimum, state assumptions used for balance sheet, income statement and sales forecast.

DOCKET NO.: 160186-EI

Type of Data Shown:

X Projected Test Year Ended 12/31/17

— Prior Year Ended 12/31/16

— Historical Year Ended 12/31/15

Witness: M. L. Burroughs

II. OPERATING ASSUMPTIONS C. OUTAGE RATES FOR PROJECTED TEST YEAR

(1)	(2)	(3)
Line <u>No.</u>	<u>Unit</u>	Equivalent Forced Outage Rate %
1	CRIST 4	6.3%
2	CRIST 5	6.3%
3	CRIST 6	6.1%
4	CRIST 7	5.5%
5	SMITH 3	3.7%
6	SMITH A	2.2%
7	DANIEL 1	3.4%
8	DANIEL 2	3.4%
9	SCHERER 3	3.2%
10	PEA RIDGE 1	3.9%
11	PEA RIDGE 2	3.9%
12	PEA RIDGE 3	3.9%
13	PERDIDO 1	5.9%
14	PERDIDO 2	5.9%

Schedule F-8	ASSUMPTIONS	Page 12 of 25
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For a projected test year, provide a schedule of	Type of Data Shown:
	assumptions used in developing projected or estimated data.	X_Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY	As a minimum, state assumptions used for balance sheet, income	Prior Year Ended 12/31/16
	statement and sales forecast.	Historical Year Ended 12/31/15
DOCKET NO.: 160186-EI		Witness: M. L. Burroughs

II. OPERATING ASSUMPTIONS D. PLANNED MAINTENANCE FOR PROJECTED TEST

(1)	(2)	(3)	(4)	(5) Outage	(6)
Line <u>No.</u>	<u>Unit</u>	Start Date	End Date	Duration (Days)	<u>Total</u> <u>Days</u>
1	CRIST 4	09/23/17	10/22/17	30	30
2	CRIST 5	09/23/17	10/22/17	30	30
3	CRIST 6	04/07/17	05/27/17	51	51
4	CRIST 7	04/26/17	05/26/17	31	31
5	SMITH 3	04/22/17	04/30/17	9	9
6		11/09/17	11/17/17	9	9
7	SMITH A No	Outage Plann	ed		
8	DANIEL 1	05/01/17	05/14/17	14	14
9	DANIEL 2	03/14/17	05/28/17	76	76
10	SCHERER 3	03/18/17	05/12/17	56	56
11	PEA RIDGE 1 (a)	N/A	N/A	N/A	N/A
12	PEA RIDGE 2 (a)	N/A	N/A	N/A	N/A
13	PEA RIDGE 3 (a)	N/A	N/A	N/A	N/A
14	PERDIDO 1 (a)	N/A	N/A	N/A	N/A
15	PERDIDO 2 (a)	N/A	N/A	N/A	N/A

^{16 (}a) Quarterly preventative maintenance performed on variable dates and durations.

Schedule F-8	ASSUMPTIONS	Page 13 of 25
FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For a projected test year, provide a schedule of assumptions used in developing projected or estimated data.	Type of Data Shown: X Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY	As a minimum, state assumptions used for balance sheet, income statement and sales forecast.	Prior Year Ended 12/31/16 Historical Year Ended 12/31/15
DOCKET NO.: 160186-EI		Witness: M. L. Burroughs

II. OPERATING ASSUMPTIONS E. NET UNIT CAPACITY RATINGS FOR PROJECTED TEST

(1)	(2)	(3)
		Net
Line		(Summer &
<u>No.</u>	<u>Unit</u>	Winter)
1	CRIST 4	75
2	CRIST 5	75
3	CRIST 6	299
4	CRIST 7	475
5	SMITH 3	577/605
6	SMITH A	32/40
7	DANIEL 1	255
8	DANIEL 2	255
9	SCHERER 3	214
10	PEA RIDGE 1	4/5
11	PEA RIDGE 2	4/5
12	PEA RIDGE 3	4/5
13	PERDIDO 1	1.5
14	PERDIDO 2	1.5

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Schedule F-8 **ASSUMPTIONS** Page 14 of 25 EXPLANATION: For a projected test year, provide a schedule of FLORIDA PUBLIC SERVICE COMMISSION Type of Data Shown: assumptions used in developing projected or estimated data. X Projected Test Year Ended 12/31/17 COMPANY: GULF POWER COMPANY As a minimum, state assumptions used for balance sheet, income Prior Year Ended 12/31/16 statement and sales forecast. Historical Year Ended 12/31/15 DOCKET NO.: 160186-EI Witness: See Below II. OPERATING ASSUMPTIONS F. OTHER FUEL BUDGET ASSUMPTIONS FOR PROJECTED TEST YEAR (1) (2)(3)(4)Line <u>No.</u> Item Witness Assumption a. Generation Expansion Plan as provided by System Planning. 1 1. System Generation Expansion Plan Burroughs 2 b. Preliminary and commercial operation dates as provided by SCS. 3 c. Unit retirement dates as provided by the operating companies. 4 2. Load and KWH Energy Estimates Park a. Based on assumptions outlined in Section I.A. of this schedule and as described in direct testimony. 5 Burroughs b. Sales to nonassociated companies as estimated by SCS. 6 Maintenance Schedules Burroughs Official maintenance schedules as provided to SCS by the operating 7 companies as shown in Section II.D. of this schedule. Heat rates provided by SCS. 8 Heat Rates Burroughs 9 Coal Burroughs a. Beginning Inventory Values as provided by the operating companies. 10 b. Desired plant inventory values as recommended by SCS Fuel Services and approved by the operating companies. 11 12 c. Coal quality as provided by SCS Fuel Services. 13 d. Beginning prices (See MFR B-18) (1) F.O.B. mine or loaded cost as recommended by SCS Fuel Services and 14 approved by the operating company involved. The actual billing cost 15 and recommended accruals per SCS Contract Administration records 16 17 for non cost-based contracts and committed spot. These values were 18 adjusted for typical Btu variance from contract values and appropriate state use taxes were added, if applicable. 19 (2) Coal transportation cost on contract and spot as recommended by SCS 20

e. Price escalation rates.

Fuel Services and approved by the operating company involved.

(1) The escalation rates for contract, uncommitted spot, unknown contract

coal, and coal transportation and the timing thereof are reflected as agreed to by the System Planning Coordination Team. These rates

include a background inflation forecast as well as a market forecast.

FLORIDA PUBLIC SERVICE COMMISSION				EXPLANATION: For a projected test year, provide a schedule of assumptions used in developing projected or estimated data. Type of Data Shown: X Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY				As a minimum, state assumptions used for balance sheet, incomePrior Year Ended 12/31/16 statement and sales forecastHistorical Year Ended 12/31/15
DOCKET N	VO.: 10	60186-EI		Witness: See Below
			F.	II. OPERATING ASSUMPTIONS OTHER FUEL BUDGET ASSUMPTIONS FOR PROJECTED TEST YEAR
(1) Line		(2)	(3)	(4)
No.		<u>Item</u>	Witness	<u>Assumption</u>
1 2 3 4 5 6 7 8 9 10 11	6.	Oil	Burroughs	 a. Beginning inventory values as provided by Gulf Power Company (GPC). b. Desired plant inventory levels for boiler lighter oil as provided by GPC. c. Desired plant inventory levels of fuel oil for generation as established in the System Gas and Oil Policy. d. Boiler lighter oil burn: Quantity projected to be burned as recommended by SCS and approved by GPC. e. Oil qualityBtu/gallon and % sulfur content as recommended by SCS and approved by GPC. f. Beginning prices. (See MFR B-18): Delivered prices in cents/MMBtu as recommended by SCS and approved by the company involved. g. Price escalation rates - The escalation rates for oil and the timing thereof are as agreed to by the System Planning Coordination Team. These rates include a background inflation forecast as well as a market forecast.
13 14 15 16 17 18 19 20 21 22 23	7.	Natural Gas	Burroughs	 a. Beginning gas storage (inventory) values as provided by GPC. b. Desired gas storage levels as established in the System Gas and Oil Policy. c. Natural gas availability - It is assumed that all natural gas required can be obtained for the budget/forecast period. d. Boiler lighter gas burn - Quantity projected to be burned as recommended by SCS and approved by GPC. e. CC & CT gas burn - For all dual fired units, only natural gas is shown to be burned in the budget/forecast. f. Natural gas quality - Btu/mcf as recommended by SCS and approved by GPC. g. Beginning prices: Delivered prices as recommended by SCS and approved by GPC. h. Price escalation rates - The escalation rates for gas and the timing thereof are as

inflation forecast as well as a market forecast.

agreed to by the System Planning Coordination Team. These rates include a background

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Schedul	e F-8				А	SSUMPTIONS	Page 16 of 25
FLORIDA PUBLIC SERVICE COMMISSION					N: For a projecte used in developing	Type of Data Shown: X Projected Test Year Ended 12/31/17	
COMPA	NY: GI	JLF POWER COMPANY	As	a minimun		ns used for balance sheet, income	Prior Year Ended 12/31/16 Historical Year Ended 12/31/15
DOCKE	T NO.:	160186-EI					Witness: See Blelow
						DDITIONS ASSUMPTIONS ICTION EXPENDITURES	
(1) Line		(2)	ļ	(3) Amount	(4)	(5)	
No.	<u> </u>	<u>tem</u>		(000s)	Witness	<u>Assumption</u>	
1	Cons	struction Expenditures			Mason		
2 3 4	1.	Production Plant	\$	77,108	Burroughs	Proposed additions and retirements of product service life, forced outage rates, performance, regulations, technological improvements, obso	operating experience, environmental
5 6 7 8 9	2.	Transmission	\$	27,198	Smith	Transmission project plans are cyclical in natural planning and maintaining a reliable and operate projects in 2017 reflects that cycle and the currinfrastructure to support current and future load planned generation changes.	ole system. The increase in capital rent need to maintain the
10 11 12	3.	Distribution	\$	69,301	Smith	Proposed additions include new business, dist management. Continue to fund programs relate in Smart Grid technologies and storm hardening	ed to system reliability such as investments
13 14 15 16 17	4.	General Plant	\$	23,125	Ritenour Smith Terry	Projected based on the need to replace general test equipment, tools, office equipment, and coare no longer serviceable, and to insure an adeare available so that the appropriate personnel requirements in an effective and efficient manning.	ommunication equipment that equate number of such items can fulfill their job
18	5.	Total Construction Expenditu	res \$	196,732			

FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For a projected test year, provide a schedule of	Type of Data Shown:
COMPANY: GULF POWER COMPANY	assumptions used in developing projected or estimated data. As a minimum, state assumptions used for balance sheet, income	X Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16
DOCKET NO.: 160186-EI	statement and sales forecast.	Historical Year Ended 12/31/15 Witness: See Below

III. CAPITAL ADDITIONS ASSUMPTIONS . ELECTRIC PLANT-IN-SERVICE AND ACCUMULATED DEPRECIATIO

(1) Line	(2)	(3) Amount	(4)	(5)
No.	<u>ltem</u>	(000s)	Witness	<u>Assumption</u>
1 2 3 4 5	Gross Additions to Plant: Production Transmission Distribution General Plant Total Gross Additions to Plant	\$ 57,260 \$ 20,780 \$ 68,721 \$ 34,895 \$ 181,655	Mason Burroughs Smith Smith Mason/Smith	The amounts are based on the 2016 Official Capital Additions Budget as approved by Gulf's management. Plant-In-Service amounts, in-service year, and plant classification were provided by the functional Planning Units.
7 8 9	2. Retirements	\$ 20,859	Mason	The amount was based on the 2016 Official Capital Additions Budget as approved by Gulf's management. Amounts, dates and function were provided by the functional Planning Units.
10 11 12	3. Net Salvage	\$ 7,527	Mason	The amount was based on the 2016 Official Capital Additions Budget as approved by Gulf's management. Amounts, dates and function were provided by the functional Planning Units.
13 14	4. Depreciation and Amortization Rates	Various	Mason Hodnett	With the exception of the AMI meter depreciation life of 15 years and non-AMI meter amortization of 8 years, as ordered in Docket No. 110138-EI, and the Perdido Landfill Facility depreciation rate of 5.0% approved by the Commission in Order No. PSC-10-0674-PAA-EI, issued on November 9, 2010 in Docket No. 100368-EI, depreciation and dismantlement expense is based on rates effective January 1, 2010, which were approved by the FPSC through Docket 090319-EI, FPSC Order No. PSC-10-0458-PAA-EI dated July 19, 2010.
15 16 17	Provision for Depreciation and Amortization Expenses	\$ 179,521	Mason Hodnett	The amount was projected by applying the FPSC approved rates and amortization amounts to the average monthly balance of depreciable plant by function. This amount is calculated by the Financial Model.

¹⁸ Totals may not add due to rounding.

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Schedul	e F-8		Page 18 of 25					
FLORIDA PUBLIC SERVICE COMMISSION COMPANY: GULF POWER COMPANY			assur As a i	mptions use minimum, s	For a project in develop tate assumpales forecast	Type of Data Shown: X Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16 Historical Year Ended 12/31/15		
DOCKET NO.: 160186-EI				IV.	BALANCE S 13-MONTI	SHEET ASSUMPTIONS H AVERAGE ASSETS	Witness: See Below	
(1) Line		(2)		(3) Imount	(4)	(5)		
<u>No.</u> 1		<u>Item</u> <u>Utility Plant</u>	1	(000s)	Witness	<u>Assumption</u>		
2 3 4	1.	Electric Plant-in-Service	\$ 5	5,265,235	Mason	The projected balances were derived by adding to the balance the projected additions and deducting the projected retirement in Section III.B. of this schedule.		
5 6	2.	Electric Plant for Future Use	\$	14,757	Mason	The projected balances were derived by adding to the balance the projected additions.	ee at December 31, 2015	
7 8 9	3.	Construction Work in Progress	\$	70,587	Mason	Mason The projected balances were calculated by adding to the balance at December 31, 201 2016 budgeted construction expenditures through December 2017 and deducting the p closings to Plant-In-Service as described in Section III.B. of this schedule.		
10 11 12	4.	Plant Acquisition Adjustment	\$	1,137	Mason	The projected balances were calculated by reducing each moamount of amortization related to the Plant Acquisition Adjust is \$21,276 per month.		
13 14 15 16 17	5.	Accumulated Provision for Depreciation and Amortization	(\$1,	695,765)	Mason	The projected balances were calculated by adding to the bala projected provision for depreciation and net salvage values a retirements budgeted. The provision for depreciation was ca described in Section III.B. of this schedule. Retirements and 2016 Construction Budget.	nd deducting the projected lculated using the methodology	
18	6.	Net Utility Plant	\$ 3	3,655,951				
19 20 21 22 23 24	7.	Other Special Funds	\$	124,815	Mason Hodnett	The projected balance includes the funded portion of the propuls interest accrued. The annual funding of the reserve occ funded balance is calculated by applying the effective after tayear-end balance of the property insurance reserve account amount necessary to achieve this balance is funded in Janua the projected balance of the prepaid pension. The projected adding the projected annual accrual to the balance at December 1.	urs each January. The required ix rate of 61.425% to the projected each December. An additional ary. The balance also includes pension balance was derived by	
25 26	8.	Non-Utility Property	\$	12,374	Mason	The projected balance was based on the actual balance at D adjustments made for additions through December 31, 2017.		

Schedu	le F-8	3	Page 19 of 25				
FLORIDA PUBLIC SERVICE COMMISSION COMPANY: GULF POWER COMPANY			assump As a m	otions used i	or a projecte n developing e assumption s forecast.	Type of Data Shown: X_Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16 Historical Year Ended 12/31/15	
DOCKE	TNC).: 160186-El		IV D	AL ANCE SH	EET ASSUMPTIONS	Witness: See Below
						AVERAGE ASSETS	
(1) Line		(2)		(3) Amount	(4)	(5)	
No.		<u>ltem</u>		(000s)	Witness	<u>Assumption</u>	
1		Utility Plant cont.					
2 3	9.	Other Property and Investments-Other	\$	2,593	Mason	The projected balance was based on the actual adjusted for projections for the Deferred Comp	
4	10.	Total Other Property and Investments	\$	139,782			
5		Current Assets					
6 7	11.	Cash	\$	6,367	Mason	The projected balance is maintained as a stati as an estimate that approximates operating ca	
8 9	12.	Special Deposits	\$	20	Mason	The projected balance was based on the actual changes were projected for the test year.	al balance at December 31, 2015. No
10 11	13.	Working Funds	\$	372	Mason	The projected balance was based on the actual changes were projected for the test year.	al balance at December 31, 2015. No
12 13 14	14.	Temporary Cash Investments	\$	0	Mason	The projected balance is calculated by the Fin projected sources and uses of funds. No bala test year.	
15 16 17	15.	Customer Accounts Receivable	\$	82,339	Mason	The projected balance was derived based on with changes forecasted based on a percentaguring the period.	
18 19	16.	Accrued Unbilled Revenue	\$	55,137	Mason	The projected balance was derived based on balance adjusted for monthly net increase or contact the second	
20 21	17.	Other Accounts and Notes Receivable	\$	9,609	Mason	The projected balance was derived based on adjusted for the monthly increase or decrease	

Schedule F-8

EXPLANATION: For a projected test year, provide a schedule of FLORIDA PUBLIC SERVICE COMMISSION Type of Data Shown: assumptions used in developing projected or estimated data. X Projected Test Year Ended 12/31/17 As a minimum, state assumptions used for balance sheet, income Prior Year Ended 12/31/16 COMPANY: GULF POWER COMPANY statement and sales forecast. Historical Year Ended 12/31/15 Witness: See Below DOCKET NO.: 160186-EI IV. BALANCE SHEET ASSUMPTIONS A. 13-MONTH AVERAGE ASSETS (3)(4) (5)(1) (2)Line Amount (000s)<u>No.</u> Item Witness Assumption 18. Accumulated Provisions for \$ (1,422) Mason The projected balance was calculated by applying a historical ratio for uncollectibles to the monthly customer accounts receivable balance. 2 Uncollectible Accounts 3 The projected balance includes the Interchange transactions when Gulf is a 19. Receivables from Associated Companies \$ 11,610 Mason 4 net seller to the Southern Company pool, and an estimate of other miscellaneous receivables from associated companies. 5 6 20. Interest and Dividends Receivable 50 Mason Interest and Dividends Receivable is forecasted based on the projected temporary 7 cash investment rate, based upon a market forecast by Moody's Analytics, 8 multiplied by the funded portion of the forecasted property insurance reserve balance. 9 21. Fuel Stock \$ 48,144 Mason 10 Burroughs

ASSUMPTIONS

10			Burrougno	
11 12 13 14 15 16 17 18 19 20 21 22	22. In-Transit Coal	\$ 21,00	068 Mason Burroughs	The monthly projected tons of in transit coal inventory for Plant Crist is comprised of projected train shipments in route (not received at the transloading/blending facilities), operational coal inventory located at the transloading/blending facilities, loaded barges in route to the plants, and loaded barges waiting to be unloaded by the plants. The value of this in transit inventory is calculated by multiplying the projected tons in transit by the weighted average price of coal F.O.B. the barge for all coal shipments projected to occur during the year. The monthly projected tons of in transit coal inventory for Plants Daniel and Scherer is comprised of the prior 12 month actual average quantity (tons) of train shipments in route, not received at plant. The value of this in transit inventory for each plant is calculated by multiplying the projected tons in transit by the weighted average delivered price of coal for all coal shipments projected to occur to the respective plant during the year.
23 24 25 26	23. Plant Materials and Supplies	\$ 63,79	799 Mason	The projected materials and supplies balance was derived based on historical and projected balances developed by the Procurement and Purchasing Department and the Power Delivery Department. The allowance inventory balances are based on generation.
27 28	24. Prepayments	\$ 6,6	Mason	The projected balance was based on estimated insurance premiums and related amortization, long term service agreement, and other miscellaneous prepayments.

Page 20 of 25

Schedule F-8 **ASSUMPTIONS** Page 21 of 25 FLORIDA PUBLIC SERVICE COMMISSION EXPLANATION: For a projected test year, provide a schedule of Type of Data Shown: assumptions used in developing projected or estimated data. X Projected Test Year Ended 12/31/17 COMPANY: GULF POWER COMPANY As a minimum, state assumptions used for balance sheet, income Prior Year Ended 12/31/16 statement and sales forecast. Historical Year Ended 12/31/15 DOCKET NO.: 160186-EI Witness: See Below IV. BALANCE SHEET ASSUMPTIONS A. 13-MONTH AVERAGE ASSETS (1) (2)(3)(4) (5)Line Amount (000s)No. <u>Item</u> Witness Assumption Miscellaneous Current & Accrued 1 67 Mason The projected balance was based on the actual balance at December 31, 2015. No 2 changes were projected for the test year. 3 26. Total Current Assets 303,859 4 Deferred Debits 5 27. Unamortized Debt Expense 7.958 Mason The projected balance was derived based on the actual balance at December 31, 2015 6 reduced by monthly net amortization based on the embedded expenses. 7 28. Accumulated Deferred Income Taxes 122,450 Mason The projected balance was derived based on the actual balance at December 31, 2015 8 Hodnett adjusted for the projected provisions and pay backs related to the property 9 damage reserve, injuries and damages reserve, bad debt reserve. 10 emission allowances, deferred revenues, and certain employee benefits. 29. Regulatory Tax Asset 11 54,789 Mason This amount is based on the actual balance at December 31, 2015 adjusted 12 Hodnett for estimated changes. This account appears on the balance sheet in 13 compliance with ASC 740. 30. Unamortized Loss on Reacquired Debt 14 13,548 Mason The projected balance was derived based on the actual balance at December 31, 2015 15 reduced by monthly amortization. 16 31. Other Deferred Debits \$ 551,887 Mason The projected balance was based on the actual balance at December 31, 2015 17 adjusted for the projected changes. This account includes preliminary survey 18 investigation charges and miscellaneous other deferred debit items. Total Deferred Debits 19 750,632

\$ 4,850,224

33. Total Assets

Schedule F-8

FLORIDA PUBLIC SERVICE COMMISSION	EXPLANATION: For a projected test year, provide a schedule of	Type of Data Shown:
	assumptions used in developing projected or estimated data.	X Projected Test Year Ended 12/31/17
COMPANY: GULF POWER COMPANY	As a minimum, state assumptions used for balance sheet, income	Prior Year Ended 12/31/16
	statement and sales forecast.	Historical Year Ended 12/31/15
DOCKET NO.: 160186-EI		Witness: See Below

IV. BALANCE SHEET ASSUMPTIONS B. 13-MONTH AVERAGE CAPITALIZATION AND LIABILITIES

(1)	(2)	(3)	(4)	(5)
Line <u>No.</u> 1	<u>Item</u> <u>Capitalization</u>	Amount (000s)	Witness	<u>Assumption</u>
2	1. Common Stock	\$ 503,060	Mason	The projected balance was based on the December 31, 2015 actual balance.
3 4 5	2. Other Paid-In Capital	\$ 588,572	Mason	The projected balance was derived based on the actual balance at December 31, 2015 adjusted for the projected capital contribution from, or equity issuances to, Southern Company.
6 7	3. Premium on Preference Stock	\$ 0	Mason	The projected balance was based on the December 31, 2015 actual balance. No changes were projected for the test year.
8 9 10	4. Retained Earnings	\$ 242,115	Mason	The projected balance was derived based on the December 31, 2015 actual balance increase by the projected net income before preference less common and preference stock dividends declared.
11 12 13 14	5. Preference Stock	\$ 146,504	Mason	The projected balance was derived based on the actual balance at December 31, 2015 adjusted for any projected retirements or issues of preference stock as outlined in Section I.C. of this schedule. There are no new issues of Preference Stock projected for the test year.
15	6. First Mortgage Bonds	\$ 0	Mason	There is no projected balance for this item in the test year.
16 17 18	7. Pollution Control Liability	\$ 308,955	Mason	The projected balance was derived based on the actual balance at December 31, 2015 adjusted for scheduled retirements as described in Section I.C. of this schedule. There are no new Pollution Control Liability Issues projected for the test year.
19 20	8. Other Long Term Debt	\$1,004,231	Mason	The projected balance was derived based on the actual balance at December 31, 2015 adjusted for projected issues and retirements as described in Section I. C. of this schedule.
21 22	9. Unamortized Debt Discount and Premium _	\$ (7,790)	Mason	The projected balance was derived based on the December 31, 2015 actual balance reduced by the monthly net amortization of discounts and premiums.
23	10. Total Capitalization	\$2,785,647		

17

18

19

Schedule F-8 Page 23 of 25 FLORIDA PUBLIC SERVICE COMMISSION EXPLANATION: For a projected test year, provide a schedule of Type of Data Shown: assumptions used in developing projected or estimated data. X Projected Test Year Ended 12/31/17 As a minimum, state assumptions used for balance sheet, income COMPANY: GULF POWER COMPANY Prior Year Ended 12/31/16 statement and sales forecast. Historical Year Ended 12/31/15 DOCKET NO.: 160186-EI Witness: See Below IV. BALANCE SHEET ASSUMPTIONS B. 13-MONTH AVERAGE CAPITALIZATION AND LIABILITIES (1) (3)(4) (2)(5)Line Amount (000s)No. Witness Assumption Item 1 **Current Liabilities** 2 11. Notes Payable \$ 44,139 Mason The projected balance was calculated by the Financial Model 3 based on the projected sources and uses of funds. 4 12. Construction Related Accounts Payable \$ 4.016 Mason The projected balance was derived by applying a historical five year average ratio to monthly construction expenditures (less 5 6 Plant Scherer expenditures). This account includes accounts 7 payable - construction and contract retentions. 8 13. Other Accounts Payable \$ 58,850 Mason The projected balance was derived using historical accounts payable ratios to fuel and other operations and maintenance expense applied to 9 projected expenses for those accounts. Also included in this account 10 is the monthly unaudited accounts payable invoices dealing with 11 12 plant accounts. 13 14. Payables to Associated Companies \$ 32,528 The projected balance was derived by applying historical accounts Mason payable ratios to fuel and other operations and maintenance expenses 14 associated with co-owned plants plus monthly interchange transactions 15

Mason

Hodnett

\$ 36.595

ASSUMPTIONS

Totals may not add due to rounding.

15. Customer Deposits

when Gulf is a net purchaser from the Southern Company pool.

The projected balance was derived by calculating a customer change rate

based upon projected customer counts and applying that rate to the prior balance in Customer Deposits to derive a monthly change in balance.

Schedule F-8

ASSUMPTIONS

Page 24 of 25

FLORIDA PUBLIC SERVICE COMMISSION

EXPLANATION: For a projected test year, provide a schedule of assumptions used in developing projected or estimated data.

COMPANY: GULF POWER COMPANY

As a minimum, state assumptions used for balance sheet, income statement and sales forecast.

DOCKET NO.: 160186-EI

EXPLANATION: For a projected test year, provide a schedule of assumptions used aschedule of assumptions used in developing projected or estimated data.

X Projected Test Year Ended 12/31/16

— Prior Year Ended 12/31/16

— Historical Year Ended 12/31/15

Witness: See Below

IV. BALANCE SHEET ASSUMPTIONS B. 13-MONTH AVERAGE CAPITALIZATION AND LIABILITIES

(1) Line <u>No.</u>	(2) <u>Item</u>	(3) Amount <u>(000s)</u>	(4) Witness	(5) Assumption
1 2 3	16. Taxes Accrued	\$ 38,526	Mason Hodnett	The projected balance was derived based on the December 31, 2015 actual balance plus projected monthly accruals from the income statement reduced by the estimated tax payments.
4 5 6 7	17. Interest Accrued	\$ 25,118	Mason	The projected balance was calculated based on the interest rate and payment dates of embedded debt issues as of December 31, 2015 plus any issues or retirements. This account also includes amounts related to the interest on customer deposits.
8 9	18. Miscellaneous Accounts Payable	\$ 0	Mason	There is no projected balance for this item in the test year.
10 11	19. Tax Collections Payable	\$ 799	Mason	The projected balance was based on the historical relationship of taxes to their applicable base and a historical average for payroll taxes.
12 13 14	20. Accrued Vacations	\$ 10,586	Mason	The projected balance was based on an analysis by the payroll department taking into account the number of employees, years of service and hourly rates.
15 16	21. Other Current Liabilities	\$ 134,897	Mason	The projected balance was based on a 12-month historical average and adjusted for projected changes, combined with the projected dividends declared.
17	22. Total Current Liabilities	\$ 386,054		

17

18 19

20

ASSUMPTIONS Schedule F-8 Page 25 of 25 FLORIDA PUBLIC SERVICE COMMISSION EXPLANATION: For a projected test year, provide a schedule of Type of Data Shown: assumptions used in developing projected or estimated data. X Projected Test Year Ended 12/31/17 As a minimum, state assumptions used for balance sheet, income COMPANY: GULF POWER COMPANY Prior Year Ended 12/31/16 statement and sales forecast. Historical Year Ended 12/31/15 DOCKET NO.: 160186-EI Witness: See Below IV. BALANCE SHEET ASSUMPTIONS B. 13-MONTH AVERAGE CAPITALIZATION AND LIABILITIES (3)(1) (2)(4)(5) Line Amount (000s)Witness Assumption No. Item 1 **Deferred Credits** 2 24. Unamortized Investment Tax Credits 1.373 Mason The projected balance was derived using the actual balance at December 31, 2015 reduced by the amortization of ITC based on the Hodnett 3 useful life of the asset giving rise to the tax credit. 4 5 25. Other Deferred Credits 234,635 Mason The projected balance was derived based on the actual balance at December 31, 2015 and the estimated monthly changes. This account includes 6 deferred revenue on pole attachment rentals and miscellaneous other deferred credit items. 26. Total Deferred Credits 9 236,008 27. Operating Reserves 385,587 The projected balance was based on an estimate of the amounts needed to 10 Mason cover future contingencies. 11 28. Other Deferred Income Taxes \$ 1,054,647 The projected balance was derived based on the actual balance at 12 Mason 13 Hodnett December 31, 2015 adjusted for the projected provisions and paybacks 14 related to loss on reacquired debt, certain employee benefits and the property related depreciation timing differences. 15

Mason

Hodnett

2,281

\$ 1,056,928

\$ 4,850,224

29. Regulatory Tax Liability

30. Total Other Deferred

31. Total Capitalization and Liabilities

This amount is based on the actual balance at December 31, 2015 adjusted for

estimated changes. This account appears on the balance sheet in

compliance with ASC 740.

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Sche	dule F-9	PUBLIC NOTICE	Page 1 of 1				
FLORIDA PUBLIC SERVICE COMMISSION		EXPLANATION: Supply a proposed public notice of the company's request for a rate increase suitable for publication.	Type of Data Shown: X Projected Test Year Ended 12/31/17 Prior Year Ended 12/31/16				
	PANY: GULF POWER COMPANY		Prior Year Ended 12/31/16Historical Year Ended 12/31/15 Witness: X. Liu				
DOCKET NO.: 160186-EI Line Witness: X. Liu							
<u>No.</u>	Out on the condition of the state of the sta	Outside the second seco	10. O. W.D.				
1 2							
3	would take effect in the summer of 2017.						
4	Securing your energy future requires a balanced energy mix that includes renewable energy and 24/7 sources like natural gas and low-						
5 6	cost coal that's cleaner than ever. Energy security also includes reliability — since 2010, Gulf Power has improved its reliability by 40 percent, a trend of improvement that means customers like you are having fewer and less frequent power outages. Continuous						
7	percent, a trend of improvement that means customers like you are naving fewer and less frequent power outages. Continuous improvement in this area is critical.						
8	Gulf Power's current total residential price (base rate plus clause rates) is lower than it was in 2015, and we expect it to be even lower in						
9	January 2017 mainly because of decreased fuel prices. Taking this into account, if this new base rate request is approved by the Florida Public Service						
10 11	Public Service Commission, the average residential customer's total monthly bill will increase by \$10.22 per month or 6.9 percent — from \$148.64 to \$158.86.						
12							
13 14							
15							
16							
17 18							
19							
20							
21 22	Fax number: 1-800-511-0809 Email address: contact@psc.state.fl.us						
23 24		ntervened in this docket. The duty of the OPC is to provide legal represents on. OPC representatives may be contacted prior to the hearing at 111 We					
25	812 Tallahassee FL 32399-1400, or by ph						