ORIGINAL

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 990325-EI

PETITION FOR NEED DETERMINATION

PREPARED DIRECT TESTIMONY

OF

MARGARET D. NEYMAN
AND
MICHAEL J. MARLER

APRIL 5, 1999

GULF POWER

A SOUTHERN COMPANY

GULF POWER COMPANY

Before the Florida Public Service Commission
Direct Testimony of
Margaret D. Neyman and Michael J. Marler
Docket No. 990325-EI
Date of Filing: April 5, 1999

Q. Mrs. Neyman, would you please state your name, business address and occupation?

A. My name is Margaret D. Neyman and my business address is One Energy Place, Pensacola, Florida, 32520. I am employed by Gulf Power Company as the Marketing Services Manager.

Q. Mrs. Neyman, please summarize your educational background and professional experience.

A. I attended Auburn University and graduated with a Bachelor of Science degree in Industrial Engineering in 1980. I began my career in the electric utility industry at Gulf Power Company in 1981 and have held various positions within the company in Corporate Planning, Customer Service, Appliance Sales and Marketing. In my present position, I am responsible for Energy Conservation Cost Recovery (ECCR) filings, pricing, economic evaluations, market research, forecasting and marketing services activities.

Q. Mrs. Neyman, have you previously testified before this Commission?

A. Yes, I have testified for Gulf Power Company in ECCR dockets.

Q. Mr. Marler, would you please state your name, business address and occupation?

A. My name is Michael J. Marler, and my business address is One Energy Place, Pensacola, Florida 32520. I am employed by Gulf Power Company as a Senior Engineer in Marketing Services. I am responsible for development of the customer, energy and peak demand projections.

Q. Please summarize your educational background and professional experience.

A. I graduated from the University of South Alabama in December, 1981 with a Bachelor of Science degree in Electrical Engineering. While attending school, I participated in the Cooperative Education program with Alabama Power Company in Mobile, Alabama. Upon graduation in 1981, I accepted a position with Gulf Power Company in Load Research. In this position, I was responsible for the Cost-to-Serve load research including the sampling plan development, data

collection, analysis and reporting. I was also involved in other load studies designed to evaluate customer energy usage patterns, end-use load studies, and energy efficiency measures. In 1987, I joined the forecasting section. In this position, I have been responsible for development of the Company's short-term customer, energy, base revenue and peak demand projections and coordination with Southern Company Services in development of the long-term projections. I am responsible for dissemination of the forecast to all of the planning areas of the Company as well as the various federal, state and local governmental and regulatory agencies.

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

A. Yes. We have an exhibit consisting of 3 schedules to which we will refer. This exhibit was prepared under our supervision and direction. We are also sponsoring Section 4 and Appendix B of the Need Study filed in this docket.

Counsel: We ask that Schedules 1, 2, and 3 be marked for identification as Exhibit_____(MDN/MJM-1).

Q. What is the purpose of your testimony?

A. Our testimony will describe the load forecasting methodology for Gulf Power Company, the role of conservation programs in the forecast and their effect on the projected growth in system peak demand. Finally, we will provide an overview of the historical forecast accuracy achieved by Gulf's forecasting methodology.

Q. Mrs. Neyman, in your position, what part do you play in the forecasting process?

A. I am responsible for the development of the demand side management (DSM) programs that comprise Gulf's portfolio of conservation initiatives offered to its customers. In this role, I am involved in the program analysis and cost-benefit evaluations that ultimately lead to the selection of DSM programs to be implemented. The programs in Gulf's portfolio offer a wide variety of demand side measures for implementation by its customers. The primary impact of these programs is a reduction in the overall peak demand and energy needs. These reductions are directly reflected in Gulf's load and energy forecast.

Q. Mr. Marler, in your position, what part do you play in the forecasting process?

A. My role is to oversee the development of the customer, energy, and peak demand projections for Gulf. I am specifically responsible for development of the short-term (0-2 year) projections and for interfacing these results with the long-term projections developed by Southern Company Services (SCS) personnel. I work closely with SCS to provide insight and guidance in the development of the long-term projections to ensure the best possible product for use in the Southern electric system (SES) resource planning process.

Q. Could you briefly describe the SES forecasting process in which Gulf Power Company is involved?

A. Gulf Power Company is one of five operating companies of Southern Company, along with Alabama Power, Georgia Power, Mississippi Power and Savannah Electric & Power. Each of the operating companies is responsible for development of customer, energy and peak demand projections for its own system. These projections take into account the latest economic outlook for each of the operating companies as well as the expected impacts of conservation measures

unique to each service area, including programs mandated by state and federal regulatory agencies. The individual operating company forecasts are aggregated to a total SES level to provide the projections necessary to coordinate our planning for the growth of the entire SES.

Q. What approach does Gulf use in preparing its forecasts?

A. Gulf uses a variety of different techniques and methodologies depending on the task at hand. These range from short-term forecasts of customer growth, based primarily on input from Gulf's district marketing personnel, to long-range forecasts of energy sales using sophisticated, state of the art computer models such as REEPS and COMMEND.

Our peak demand forecast is prepared using the Hourly Electric Load Model (HELM). This model uses load data on individual end uses to produce hourly load curves for the entire Gulf system. This approach enables us to analyze the impact of factors such as alternative weather conditions, customer mix changes, fuel share changes, and demand side programs. A more detailed explanation of Gulf's

forecasting process is contained in Chapter 4 and Appendix B of the Need Study.

Q. Please describe the key results of Gulf's most recent forecast.

A. The forecast shows that Gulf expects continued growth in number of customers, though at a slightly slower pace than over the last decade. Average usage per customer remains almost constant between now and the in-service date of Smith Unit 3.

Summer peak demand, which is the primary factor that drives Gulf's capacity planning process, is projected to grow by 126 MW, from 2,154 MW to 2,280 MW, between 1998 and 2003.

Schedule 1 of our exhibit (MDN/MJM-1) contains a summary of the key forecast results. More detail is provided in Appendix B to the Need Study.

Q. Please identify Gulf's conservation programs.

A. Gulf has in place several conservation programs designed to achieve demand and energy reductions in the Residential, Commercial and Industrial classes of customers. These include programs that have been in place for several years as well as the new programs submitted in Gulf's Demand Side Management Plan filed

in 1995. These programs are listed on Schedule 2 of our exhibit (MDN/MJM-1) and are described in detail in Section 4.3.4 of the Need Study and Section B.1.4.4 of Appendix B to that study. These programs are designed to provide the maximum amount of cost-effective conservation reasonably available to the Company.

Q. How does Gulf take into account the anticipated impacts of conservation programs on the peak demand and energy projections?

A. Each of Gulf's conservation programs is evaluated individually to determine the historical customer participation trends. Program participation rates are then projected based upon these trends and anticipated changes in participation rates obtained from Gulf's Residential and Commercial marketing program managers. The expected number of participants per year is then multiplied by the demand and energy reductions per participant for each of Gulf's conservation programs. The reductions are then accumulated to determine the total anticipated conservation impacts on summer peak demand, winter peak demand, and annual energy.

Q. What does this analysis show about the impact of Gulf's conservation programs?

A. As indicated in Schedule 3 of our exhibit (MDN/MJM-1), Gulf expects to achieve a total cumulative annual reduction of 365 megawatts (MW) in summer peak demand, 423 MW in winter peak demand, and an annual energy savings of nearly 650 million kilowatt-hours by the year 2002 from what the figures would have been without such programs. More detail on these results is contained in Tables B-1 through B-11 of Appendix B of the Need Study.

Q. What is Gulf's track record on forecast accuracy?

A. Gulf's forecasts have been very accurate. The FPSC's Review of Electric Utility 1998 Ten-Year Site Plans indicated that, of the nine reporting utilities in the state with sufficient available historical data, Gulf's average absolute percent error in retail sales forecast accuracy for the period from 1993 through 1997 was 2.5% and ranked third best in the state. Gulf's average forecast error for the same period was estimated to be an under-forecast of 1.19%, which also ranked third in the state. We believe that this is evidence of the high quality of Gulf's forecast.

Q. Does this conclude your testimony?

A. Yes it does.

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Docket No. 990325-EI
Gulf Power Company
Witnesses: Margaret D. Neyman
Michael J. Marler
Exhibit No._____(MDN/MJM-1)
Schedule 1

History and Forecast Summary							
	1989 History	1998 History	2003 Forecast	2008 Forecast	[1] CAAG 1989-1998	[1] CAAG 1998-2003	[1] CAAG 1998-2008
Population	662,784	810,649	891,566	960,867	2.3%	1.9%	1.7%
Residential Customers	250,038	304,413	337,784	367,016	2.2%	2.1%	1.9%
Customer Gains					54,375	33,371	62,603
Kwh / Customer	13,173	14,577	14,677	14,995	1.1%	0.1%	0.3%
Energy (GWh)	3,294	4,438	4,958	5,503	3.4%	2.2%	2.2%
Commercial Customers	33,500	45,510	51,208	55,836	3.5%	2.4%	2.1%
Kwh / Customer	64,761	68,379	68,275	69,507	0.6%	0.0%	0.2%
Energy (GWh)	2,169	3,112	3,496	3,881	4.1%	2.4%	2.2%
Net Energy for Load (GWh)	8,378	10,402	11,658	12,661	2.4%	2.3%	2.0%
Summer Peak Demand (MW)	1,698	2,154	2,280	2,466	2.7%	1.1%	1.4%
Winter Peak Demand (MW)	1,554	1,692	2,139	2,258	0.9%	4.8%	2.9%
Load Factor (%)	56.3%	55.1%	58.4%	58.6%			

NOTES: [1] CAAG stands for Compound Average Annual Growth

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Schedule 2

Demand Side Management Programs

Residential Programs:

1. GoodCents New Home
2. Heat Pump Upgrade
3. Resistance Heat to Heat Pump Upgrade
4. Air Conditioning Upgrade
5. Residential Energy Audit
6. Residential Mail-In Audit
7. *In Concert With The Environment*
8. Geothermal Heat Pump
9. Advanced Energy Management
10. Outdoor Lighting Conversion

Commercial Programs:

1. Commercial GoodCents Building
2. Commercial Energy Audit
3. Technical Assistance Audit
4. Commercial Mail-In Audit
5. Real Time Pricing Pilot
6. Outdoor Lighting Conversion

Street Lighting Conversion

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Schedule 3

CONSERVATION PROGRAMS
CUMULATIVE ANNUAL REDUCTIONS AT GENERATOR

	Summer Peak (MW)			Winter Peak (MW)			Net Energy for Load (GWH)		
	Existing	New	Total	Existing	New	Total	Existing	New	Total
1997	214	30	244	263	6	269	514	9	523
2002	252	112	365	295	128	423	573	77	650
2008	290	199	489	335	256	590	625	146	770

AFFIDAVIT

STATE OF FLORIDA)
)
COUNTY OF ESCAMBIA)

Docket No. 990325-EI

Before me the undersigned authority, personally appeared Margaret D. Neyman, who being first duly sworn, deposes and says that she is the Marketing Services Manager of Gulf Power Company, a Maine Corporation, that the foregoing is true and correct to the best of her knowledge, information and belief. She is personally known to me.

Margaret D. Neyman
Marketing Services Manager

Sworn to and subscribed before me this 24th day of March, 1999.

Notary Public, State of Florida at Large

CAROLYN W. WORKMAN
MY COMMISSION # CC 692290
EXPIRES: February 24, 2002
Bonded Thru Notary Public Underwriters

AFFIDAVIT

STATE OF FLORIDA)
)
COUNTY OF ESCAMBIA)

Docket No. 990325-EI

Before me the undersigned authority, personally appeared Michael J. Marler, who being first duly sworn, deposes and says that he is a Senior Engineer of Gulf Power Company, a Maine Corporation, that the foregoing is true and correct to the best of his knowledge, information and belief. He is personally known to me.

Michael J. Marler
Senior Engineer

Sworn to and subscribed before me this 24th day of March, 1999.

Notary Public, State of Florida at Large

CAROLYN W. WORKMAN
MY COMMISSION # CC 692290
EXPIRES: February 24, 2002
Bonded Thru Notary Public Underwriters