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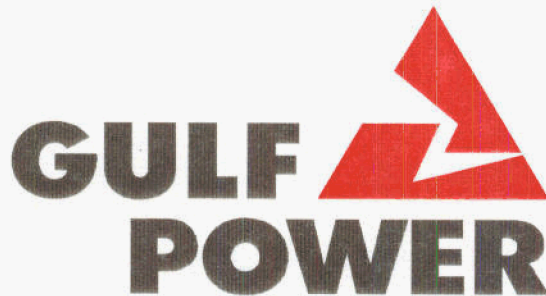
BEFORE THE  
FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 010949-EI

TESTIMONY AND EXHIBIT

OF

R. L. MCGEE



A SOUTHERN COMPANY

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**ORIGINAL**

**GULF POWER COMPANY**

**Before the Florida Public Service Commission  
Prepared Direct Testimony and Exhibit of  
Robert L. McGee  
Docket No. 010949-EI  
In Support of Rate Relief  
Date of Filing: September 10, 2001**

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**Q. Please state your name, business address, employer and position.**  
**A. My name is Robert L. McGee and my business address is One Energy Place, Pensacola, Florida, 32520. I am employed by Gulf Power Company as the Marketing Services Manager.**

**Q. Mr. McGee, please summarize your educational background and professional experience.**  
**A. I attended the University of Maryland and graduated with a B.S. degree in Electrical Engineering in 1984. In 1993, I earned a Masters degree in Business Administration from the University of West Florida. I was a United States Naval Flight Officer until 1994 when I began my career in the electric utility industry at Gulf Power Company. I have held various positions within the company in Marketing and Power Generation. In my present position, I am responsible for Energy Conservation Cost Recovery (ECCR) filings, pricing, economic evaluations, market research, load research, forecasting and marketing services activities.**

**Q. What is the purpose of your testimony in this proceeding?**  
**A. The purpose of my testimony is to present the approach, methods and results associated with Gulf's forecast of customers, energy sales, peak**

1 demands and base rate revenues. The forecast is provided to Corporate  
2 Planning for use in the budgeting and planning process as discussed by  
3 Mr. Saxon. I will also address the Company's cost of service load  
4 research results.

5  
6 Q. Have you prepared an exhibit that contains information to which you will  
7 refer in your testimony?

8 A. Yes. Exhibit (RLM-1) consisting of seven schedules was prepared under  
9 my supervision and direction.

10 Counsel: We ask that Mr. McGee's Exhibit (RLM-1) consisting of  
11 seven schedules be marked as Exhibit No. \_\_\_\_.

12  
13 Q. Are you the sponsor of certain Minimum Filing Requirements (MFR's)?

14 A. Yes. These are listed on Schedule 7 at the end of my exhibit. To the best  
15 of my knowledge, the information contained in these MFRs is true and  
16 correct.

17  
18 Q. Mr. McGee, you indicated you are responsible for the forecasts of Gulf's  
19 customers, energy sales, peak demands and base rate revenues. What  
20 tabulations have you provided detailing your retail projections for the test  
21 year?

22 A. I have provided four tabulations of test year forecast data: Schedule 1  
23 details retail customers by rate; Schedule 2 details retail energy sales by  
24 rate; Schedule 3 details territorial system peak demand by month; and  
25 Schedule 4 details retail base rate revenue by rate. Schedules 1, 2 and 4

1 also provide totals by customer classification.

2  
3 Q. Please summarize your Schedule 1.

4 A. Gulf projects that it will have a total of 389,181 retail customers by May  
5 2003, an increase of 7,737 customers over projections for May 2002.  
6 This represents an anticipated annual growth rate of 2.0 percent for the  
7 test year. By comparison, historical growth rates of 2.5 percent,  
8 2.7 percent and 1.8 percent were experienced in 1998, 1999 and 2000,  
9 respectively. Current projections for year-end 2001 and 12 months ended  
10 May 2002 indicate annual growth rates of 2.0 percent and 2.1 percent  
11 respectively.

12  
13 Q. Please summarize your Schedule 2.

14 A. Retail energy sales are expected to total 10,282,958 megawatthours in  
15 the test year, representing an increase of 1.4 percent over projections for  
16 the twelve months ended May 2002. The retail megawatthour sales  
17 forecast by class consists of the following: Residential: 4,778,953 MWH,  
18 comprising 46.5 percent of retail; Commercial: 3,309,615 MWH,  
19 comprising 32.2 percent; Industrial: 2,173,005 MWH, comprising  
20 21.1 percent; and Street Lighting: 21,315 MWH, comprising 0.2 percent.

21  
22 Q. Please summarize your Schedule 3.

23 A. Gulf's territorial system peak demand is projected to be 2,224 MW in the  
24 test year, representing an increase of 57 MW or 2.6 percent over  
25 projections for the twelve months ended May 2002. This peak is expected

1 to occur in the summer month of July 2002.

2  
3 Q. Please summarize your Schedule 4.

4 A. Retail base rate revenues are expected to total \$343,750,000 in the test  
5 year. Using current rates, the base rate revenue forecast by class  
6 consists of the following: Residential: \$196,535,000; Commercial:  
7 \$104,114,000; Industrial: \$41,097,000; and Street Lighting: \$2,002,000.

8  
9 Q. What are the objectives of your forecasting efforts?

10 A. Gulf has adopted two primary objectives in preparing forecasts:  
11 (1) comprehensive coverage of major issues and trends that may impact  
12 Gulf and its customers, and (2) effective communication to management  
13 and planning functions of the underlying causes and potential  
14 implications.

15 Since the primary focus in this proceeding is on the test year, the  
16 short-term forecast will serve as the basis for discussion of forecast  
17 results.

18  
19 Q. What level of accuracy has been achieved in your recent short-term  
20 forecasts of retail customers, energy sales and base rate revenues?

21 A. Employing the same basic methods and approach used for this  
22 proceeding, our forecast accuracy has consistently exceeded the  
23 standards which we consider appropriate for planning purposes.  
24 Schedule 5 provides a summary of our short-term forecast accuracy for  
25 the last four budget forecasts issued prior to the test year forecast.

- 1 Q. What rate schedules are included in the residential class forecast of  
2 customers and energy sales?
- 3 A. Gulf's residential class is currently comprised of four rate schedules: RS  
4 (residential service) which represents the majority of class energy sales,  
5 rate schedule RST (residential service, time-of-use conservation), rate  
6 schedule RSVP (residential service variable pricing), and finally rate  
7 schedule OS (outdoor service – lighting).  
8
- 9 Q. Please describe the methods used to prepare the forecast of residential  
10 customers.
- 11 A. The short-term forecast (0-2 years) of customers is based primarily on  
12 projections prepared by Gulf's district Marketing personnel based upon  
13 recent historical trends in customer gains and their knowledge of locally  
14 planned construction projects from which they are able to estimate the  
15 near-term anticipated customer gains. These projections are then  
16 analyzed for consistency and the incorporation of major construction  
17 projects and business developments, and reviewed for completeness and  
18 accuracy. The end result is a near-term forecast of residential customers.  
19
- 20 Q. Please describe the methods used to prepare the residential class energy  
21 sales forecast.
- 22 A. The short-term (0-2 years) residential energy sales forecast is statistically  
23 modeled utilizing multiple regression analyses. Monthly class energy  
24 purchases per customer per billing day, the dependent variable, is  
25 estimated based upon the following independent variables: recent

1 historical energy sales, expected normal weather (heating and cooling  
2 degree hours), seasonal variations and projected price of electricity. The  
3 model output is then multiplied by the projected number of customers and  
4 billing days by month to expand to the total residential class. The  
5 residential class energy projections are then adjusted to reflect the  
6 anticipated incremental impacts of Gulf's Demand Side Management  
7 (DSM) plan.

8  
9 Q. What rate schedules are included in the commercial class forecast of  
10 customers and energy sales?

11 A. Gulf's commercial class represents the most heterogeneous market  
12 served by Gulf. Included in this class are customers from the following  
13 current rate schedules: GS (general service), GST (general service, time-  
14 of-use conservation), GSD (general service demand), GSDT (general  
15 service demand, time-of-use conservation), LP (large power service), LPT  
16 (large power service, time-of-use conservation), RTP (real time pricing)  
17 and OS (outdoor service).

18  
19 Q. Please describe the method used to prepare the commercial class  
20 customer forecast.

21 A. As in the residential sector, the short-term forecast (0-2 years) of  
22 commercial customers is prepared by Gulf's district Marketing personnel  
23 utilizing recent historical information concerning increases in the number  
24 of customers, knowledge of the local area economies and upcoming  
25 construction projects. A review for completeness and accuracy of the

1 assumptions, techniques and results for each district is undertaken with  
2 special attention given to the incorporation of major commercial  
3 development projects. The end result is a near-term forecast of  
4 commercial customers.

5  
6 Q. Please describe the methods used to prepare the commercial class  
7 energy sales forecast.

8 A. The short-term (0-2 years) commercial energy sales forecast is also  
9 developed utilizing multiple regression analyses. Monthly class energy  
10 purchases per customer per billing day are estimated based upon recent  
11 historical data, expected normal weather (heating and cooling degree  
12 hours), seasonal variations and projected price of electricity. The model  
13 output is then multiplied by the projected number of customers and billing  
14 days by month to expand to the total commercial class. The commercial  
15 class energy projections are then adjusted to reflect the anticipated  
16 incremental impacts of Gulf's DSM plan.

17  
18 Q. What rate schedules are included in the industrial class forecast of  
19 customers and energy sales?

20 A. Gulf's industrial customer class consists of customers billed under the  
21 following current rate schedules: GS (general service), GSD (general  
22 service demand), GSDDT (general service demand, time-of-use  
23 conservation), LP (large power service), LPT (large power service, time-  
24 of-use conservation), PX (large high load factor power service), SBS  
25 (standby and supplementary service), RTP (real time pricing), CIS



1 (commercial/industrial service optional rider) and OS (outdoor service).

2  
3 Q. Describe the methods used to prepare the industrial class energy sales  
4 forecast.

5 A. The short-term industrial energy sales forecast is developed using a  
6 combination of on-site surveys of major industrial customers, trending  
7 techniques, and multiple regression analyses.

8 Fifty-one of Gulf's largest industrial customers, representing over  
9 91 percent of the industrial class sales, are interviewed to identify load  
10 changes due to equipment additions and replacements, or changes in  
11 operating characteristics. The short-term forecast of monthly sales to  
12 these major industrial customers is a synthesis of this detailed survey  
13 information and historical monthly load factor trends.

14 The forecast of short-term sales to the remaining smaller industrial  
15 customers is developed using a combination of trending techniques and  
16 multiple regression analysis by rate, as appropriate. The resulting  
17 estimates of energy purchases per customer per day are multiplied by the  
18 expected number of customers and billing days by month to expand to the  
19 rate level totals. These projections are then added to the results for the  
20 major industrial customers to sum to the industrial class totals.

21  
22 Q. How is Gulf's forecast of territorial wholesale energy prepared?

23 A. The forecast of energy sales to wholesale customers is developed utilizing  
24 multiple regression analyses. Monthly energy purchases per day for each  
25 of Gulf's wholesale customers are estimated based upon recent historical

1 data, expected normal weather (heating and cooling degree hours) and  
2 seasonal variations. The model output is then multiplied by the projected  
3 number of days by month to expand to the customer totals, which are then  
4 summed to develop the class totals.

5  
6 Q. Please describe the methods used to prepare your peak demand  
7 forecast.

8 A. The short-term (0-2 years) peak demand forecast is prepared using  
9 average historical monthly territorial load factors and projected monthly  
10 territorial supply.

11 The summer peak month demand projections are based upon the  
12 average of the historical summer peak month territorial load factors for the  
13 period from 1980 through the summer peak of 2000, excluding the  
14 extreme high load factor and extreme low load factor experienced during  
15 that period. Gulf's summer peak demand typically occurs in the month of  
16 July.

17 Similarly, the winter peak month demand projections are based  
18 upon the average of the historical winter peak month territorial load factors  
19 for the period from 1980 through the winter peak of 2000/2001, excluding  
20 the extreme high load factor and extreme low load factor experienced  
21 during that period. Gulf's winter peak demand typically occurs in the  
22 month of January.

23 The remaining monthly demand projections are developed in  
24 similar fashion utilizing the respective historical average monthly load  
25 factors, excluding the monthly extreme high and extreme low load factors.

1           The resulting monthly demand projections are then further refined  
2 by taking into account the impact of Gulf's DSM programs.

3  
4 Q.    Please describe the procedure used to develop the test year retail base  
5 rate revenue forecast.

6 A.    Appropriate rate schedules are applied to monthly projections of  
7 customers, energy sales and billing demands for each customer rate  
8 classification. The revenue forecast is based upon rates currently  
9 reflected in Gulf's tariff.

10  
11 Q.   You indicated earlier that you were responsible for Gulf's load research  
12 activities. What load research data is being used in these proceedings?

13 A.    Gulf's 1999 Cost of Service Load Research Study, filed with the  
14 Commission in May 2000 pursuant to Order No. 13026 in Docket No.  
15 820491-EU, is the basis of the cost of service study in this proceeding.

16  
17 Q.    Does Gulf's 1999 Cost of Service Load Research sample design meet the  
18 requirements of the Cost of Service Load Research Rule, Docket No.  
19 820491-EU, Order No. 13026?

20 A.    Yes. The sample design does meet the requirements of the referenced  
21 rule.

22  
23 Q.    What tabulation have you provided detailing the results of Gulf's 1999  
24 Load Research Study?

25 A.    Schedule 6 provides a summary tabulation of Gulf's 1999 Load Research

1 Study results.

2

3 Q. Does this conclude your testimony?

4 A. Yes, it does.

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AFFIDAVIT

STATE OF FLORIDA     )  
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COUNTY OF ESCAMBIA )

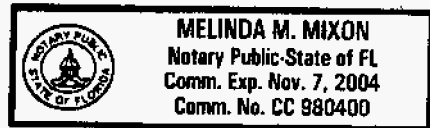
Docket No. 010949-EI

Before the undersigned authority, personally appeared  
Robert L. McGee who being first duly sworn, deposes, and says that he is the  
Marketing Services Manager, Marketing Department of Gulf Power Company, a  
Maine corporation, and that the foregoing is true and correct to the best of his  
knowledge, information, and belief.

Robert L. McGee  
Robert L. McGee  
Marketing Services Manager

Sworn to and subscribed before me by Robert L. McGee who is  
personally known to me this 7<sup>th</sup> day of September, 2001.

Melinda M. Mixon  
Notary Public, State of Florida at Large



Florida Public Service Commission  
Docket No. 010949-EI  
GULF POWER COMPANY  
Witness: R. L. McGee  
Exhibit No. \_\_\_\_ (RLM-1)  
Schedule 1

Projected Test Year Retail Customer Forecast

<u>Class</u>	<u>Test Year-End (May 2003)</u>	<u>Test Year (Jun 2002-May 2003)</u>
	<u>Customers</u>	<u>Average No. of Customers</u>
<u>Residential</u>		
RS	329,310	327,228
RST	15	15
RSVP	6,681	5,548
OSII	1,954	1,947
Total Residential	<u>337,960</u>	<u>334,738</u>
<u>Commercial</u>		
GS	27,369	27,156
GSD	14,888	14,704
GST	3	3
GSDT	133	133
LP	128	127
LPT	80	79
OSII	3,476	3,430
OSIII	4,088	4,035
OSIV	249	242
RTP	2	2
Total Commercial	<u>50,416</u>	<u>49,910</u>
<u>Industrial</u>		
GS	36	34
GSD	204	201
GSDT	2	2
LP	39	39
LPT	34	34
SBS TRAN	1	1
PX	1	1
PXT	0	0
SBS PE	1	1
OSII	12	12
OSIII	4	4
RTP	5	5
CSA	2	2
Total Industrial	<u>341</u>	<u>335</u>
<u>Street Lighting</u>		
OS-I	<u>464</u>	<u>465</u>
<b>TOTAL RETAIL</b>	<b><u>389,181</u></b>	<b><u>385,448 *</u></b>

\* Note: Detail may not sum to total due to rounding.

Florida Public Service Commission  
Docket No. 010949-EI  
GULF POWER COMPANY  
Witness: R. L. McGee  
Exhibit No. \_\_\_\_ (RLM-1)  
Schedule 2

Projected Test Year (Jun 2002-May 2003) Retail Energy Sales Forecast

<u>Class</u>	<u>MWH Sales</u>
<u>Residential</u>	
RS	4,616,526
RST	283
RSVP	119,306
OSII	21,532
Unbilled	21,306
Total Residential	<u>4,778,953</u>
<u>Commercial</u>	
GS	283,281
GSD	2,126,540
GST	42
GSDT	27,869
LP	372,629
LPT	343,315
OSII	51,732
OSIII	29,234
OSIV	4,071
RTP	51,336
Unbilled	19,566
Total Commercial	<u>3,309,615</u>
<u>Industrial</u>	
GS	315
GSD	88,886
GSDT	2,269
LP	176,429
LPT	1,008,607
SBS TRAN	256
PX	108,405
PXT	0
SBS PE	43,974
OSII	414
OSIII	4
RTP	374,977
CSA	364,420
Unbilled	4,050
Total Industrial	<u>2,173,005</u>
<u>Street Lighting</u>	
OS-I	<u>21,315</u>
Interdepartmental	<u>70</u>
TOTAL RETAIL	<u>10,282,958 *</u>

\* Note: Detail may not sum to total due to rounding.

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Docket No. 010949-EI  
GULF POWER COMPANY  
Witness: R. L. McGee  
Exhibit No. \_\_\_\_ (RLM-1)  
Schedule 3

Projected Test Year (Jun 2002-May 2003) Peak Demand Forecast

<u>Month</u>	<u>Peak Demand (MW)</u>
June	2,147
July	2,224
August	2,206
September	2,082
October	1,663
November	1,525
December	1,905
January	2,174
February	1,845
March	1,675
April	1,495
May	1,987
Annual	2,224



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Exhibit No. \_\_\_\_ (RLM-1)  
Schedule 4

Projected Test Year (Jun 2002-May 2003) Retail Base Revenue Forecast

Class	Base Revenue (000s)
<u>Residential</u>	
RS	\$ 189,251
RST	10
RSVP	4,191
OSII	2,205
Unbilled	879
Total Residential	\$ 196,535
<u>Commercial</u>	
GS	\$ 17,526
GSD	63,130
GST	2
GSDT	920
LP	9,398
LPT	6,470
OSII	3,833
OSIII	1,082
OSIV	177
RTP	971
Unbilled	605
Total Commercial	\$ 104,114
<u>Industrial</u>	
GS	\$ 20
GSD	2,700
GSDT	51
LP	4,917
LPT	20,276
SBS TRAN	43
PX	2,014
PXT	0
SBS PE	1,350
OSII	31
OSIII	0
RTP	6,165
CSA	3,433
Unbilled	96
Total Industrial	\$ 41,097
<u>Street Lighting</u>	
OS-I	\$ 2,002
Interdepartmental	\$ 2
TOTAL RETAIL	\$ 343,750 *

\* Note: Detail may not sum to total due to rounding.

Florida Public Service Commission  
Docket No. 010949-EI  
**GULF POWER COMPANY**  
Witness: R. L. McGee  
Exhibit No. \_\_\_\_ (RLM-1)  
Schedule 5

Gulf Power Company  
Short-Term  
Retail Forecast Accuracy

	1998	1999	2000	Jan-Mar 2001
<u>Customers - Average Number</u>				
Actual	350,445	360,111	367,738	371,805
Forecast	351,578	359,697	369,431	374,064
Deviation	(1,133)	414	(1,693)	(2,259)
% Deviation	(0.3)	0.1	(0.5)	(0.6)
 <u>Annual mWh Sales</u>				
Actual	9,401,130	9,558,307	10,112,337	2,381,188
Forecast	9,264,431	9,661,693	9,874,488	2,292,715
Deviation	136,699	(103,386)	237,849	88,473
% Deviation	1.5	(1.1)	2.4	3.9
Weather Adjusted	9,259,859	9,648,276	9,984,008	2,358,101
Deviation	(4,572)	(13,418)	109,520	65,386
% Deviation	(0.0)	(0.1)	1.1	2.9
 <u>Base Rate Revenues (Thousands of Dollars)</u>				
Actual	324,673	327,105	337,254	77,757
Forecast	312,132	333,547	331,260	76,408
Deviation	12,541	(6,442)	5,995	1,349
% Deviation	4.0	(1.9)	1.8	1.8

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Exhibit No. \_\_\_\_ (RLM-1)  
Schedule 6

1999 Load Research Data Summary by Rate

<u>Rate</u>	<u>Year End Customers</u>	<u>Annual MWh</u>	<u>System CP kW (1999)</u>	<u>Relative Accuracy (%)</u>	<u>Sample Points</u>
RS/RST	313,259	4,423,016	1,020,301	5.27	225
GS/GST	27,274	291,815	77,618	6.00	380
GSD/GSDT	13,540	2,164,644	425,368	4.47	160
LP	140	480,386	78,644	5.07	58
LPT	111	1,011,686	223,760	0.85	49
RTP	6	602,624	19,567	0.00	21
SBS	2	42,162	0	0.00	2
CISR/CSA	2	348,655	40,221	0.00	2
Others (1)	<u>9,217</u>	<u>1,087,658</u>	<u>283,521</u>	N/A	<u>3</u>
TOTAL	<u>363,551</u>	<u>10,452,646</u>	<u>2,169,000</u>	N/A	<u>900</u>

(1) Sales for Resale, Rates OS and PXT, unbilled, Interdepartmental, company use, losses and SEPA allocation.

Responsibility for Minimum Filing Requirements

<u>Schedule</u>	<u>Title</u>
A – 7	Statistical information
C – 11	Unbilled Revenues
E – 12	COS - load data
E – 14	Development of coincident and noncoincident demands for cost study
E – 18a	Billing determinants – number of bills
E – 18b	Billing determinants – KW demand
E – 18c	Billing determinants – MWH sales
E – 18d	Projected billing determinants – derivation
E – 19	Customers by voltage level
E – 20	Load research data
E – 21a	Correlations between contributions to the 12 monthly system peaks and billing kW, kWh, maximum on-peak demand, and on-peak kWh for all demand classes
E – 21b	Correlations between contributions to the class noncoincident peak and billing kW, kWh, maximum on-peak demand, and on-peak kWh for all demand classes
E – 22	Load duration curves
E – 23	System load shapes

<u>Schedule</u>	<u>Title</u>
E – 25a	Days within 10% of monthly peaks
E – 25b	Hours within 10% of monthly peaks
E – 26	Monthly peaks
F – 9	Forecasting models
F – 10	Forecasting models – sensitivity of outputs to changes in input data
F – 11	Forecasting models – historical data
F – 12	Heating degree days
F – 13	Cooling degree days
F – 14	Temperature at time of monthly peaks
F – 17	Assumptions

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