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ORIGINAL 47  
FILE COPY

Susan D. Cranmer  
Assistant Secretary and  
Assistant Treasurer

*the southern electric system*

December 12, 1996

Ms. Blanca S. Bayo, Director  
Division of Records and Reporting  
Florida Public Service Commission  
2540 Shumard Oak Boulevard  
Tallahassee FL 32399-0870

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Dear Ms. Bayo:

RE: Docket No. ~~94403-EI~~

Enclosed are an original and fifteen copies of the Supplemental Petition for Authority to Enlarge the Limit on the Maximum Number of Customers Eligible to Participate in Gulf Power Company's Pilot/Experimental Real Time Pricing Program.

Also enclosed is a 3.5 inch double sided, high density diskette containing the Petition in WordPerfect for Windows 6.1 format as prepared on a MS-DOS based computer.

Sincerely,

*Susan D. Cranmer*

lw

Enclosure

cc: Beggs and Lane  
Jeffrey A. Stone, Esquire

- ACK \_\_\_\_\_
- AFA \_\_\_\_\_
- APP \_\_\_\_\_
- CAF \_\_\_\_\_
- CMU \_\_\_\_\_
- CTR \_\_\_\_\_
- EAG \_\_\_\_\_
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- OPC \_\_\_\_\_
- RCH \_\_\_\_\_
- SEC \_\_\_\_\_
- WAS \_\_\_\_\_
- OTH \_\_\_\_\_

*"Our business is customer satisfaction"*

DOCUMENT NUMBER-DATE

13278 DEC 13 96

FPSC-RECORDS/REPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

IN RE: Petition of Gulf Power Company for approval of its proposed pilot/experimental Real Time Pricing Program and the associated rate schedule. )  
) Docket No. 941102-EI  
) Filed: Dec. 13, 1996  
)  
)

**SUPPLEMENTAL PETITION FOR AUTHORITY TO ENLARGE THE LIMIT ON THE MAXIMUM NUMBER OF CUSTOMERS ELIGIBLE TO PARTICIPATE IN GULF POWER COMPANY'S PILOT/EXPERIMENTAL REAL TIME PRICING PROGRAM**

GULF POWER COMPANY ("Gulf Power," "Gulf," or "the Company"), by and through its undersigned counsel, hereby petitions the Florida Public Service Commission ("the Commission") for authority to enlarge the limit on the maximum number of customers eligible to participate in the Company's pilot/experimental real time pricing program from the current limit of twelve (12) to a total of twenty-four (24) for the remainder of the study period. The remaining terms of the pilot experimental program will remain unchanged. In support of this petition, the Company states:

1. Notices and communications with respect to this petition and docket should be addressed to:

Jeffrey A. Stone	Susan D. Cranmer
Russell A. Badders	Assistant Secretary/Assistant Treasurer
Beggs & Lane	Gulf Power Company
P. O. Box 12950	P. O. Box 13470
Pensacola, FL 32576-2950	Pensacola, FL 32591-3470

2. Gulf Power is an investor-owned electric utility providing retail electric service to customers within northwest Florida and, pursuant to the provisions of Chapter 366 of the Florida Statutes, is subject to economic regulation by the Commission. The Company's principal offices are located at 500 Bayfront Parkway, Pensacola, Florida 32501.

DOCUMENT NUMBER-DATE  
13278 DEC 12 1996  
FPSC-RECORDS/REPORTING

3. On October 13, 1994, Gulf filed its petition for approval of the Company's proposed "Real Time Pricing ("RTP") Pilot Conservation Program" and the associated experimental Rate Schedule RTP, Original Sheet Numbers 6.42 through 6.43.<sup>1</sup> There was no intervention in the resulting docket. The Commission considered and approved Gulf's petition as part of the Commission's agenda for the Commission Conference held February 7, 1995. Thereafter, Order No. PSC-95-0256-FOF-EI was issued by the Commission on February 23, 1995 approving Gulf's Real Time Pricing Program and Tariff with an effective date of February 7, 1995. No protest of the Commission's order was filed and it became final by its own terms on March 17, 1995.<sup>2</sup>

4. At the time Gulf proposed its Real Time Pricing ("RTP") Pilot Conservation Program, the Company identified five specific program objectives: a) conservation, b) economic efficiency, c) gain information about customer response, d) value based pricing, and e) customer satisfaction. The RTP pilot, as designed, approved and implemented, is on its way toward achieving all of the objectives identified by Gulf Power when the Company's RTP pilot was considered by the Commission.

5. Gulf Power, a summer peaking utility, has now gained experience with its RTP program through two summer seasons. As reflected by the data submitted by the Company in its regular quarterly reports to the Commission, the program has thus far shown that customer response to the pricing initiative represented by rate schedule RTP produces a cost-effective

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<sup>1</sup>For the convenience of the reader, a copy of the Company's original petition and exhibits is attached to this petition as Appendix A.

<sup>2</sup>For the convenience of the reader, a copy of Order No. PSC-95-0256-FOF-EI is attached to this petition as Appendix B.

reduction in the growth of peak demand on the Company's system. The peak demand reductions attributed to RTP pricing for 1995 were approximately twenty (20) percent for the pilot study participants. Although the Company is still in the process of analyzing the data from the Summer of 1996, similar results have occurred.

6. There are two years remaining in Gulf Power's pilot study as originally proposed and approved. The pilot program's initial limitation to twelve (12) participating customers has recently become fully subscribed.<sup>3</sup> By this petition, Gulf is requesting authority to increase the subscription limit set forth on Original Sheet No. 6.42 from twelve (12) to a total of twenty-four (24). Appendix C to this petition contains the Company's proposed First Revised Sheet No. 6.42 which incorporates this change.

7. The mission of Gulf's pilot program regarding data gathering and analysis would benefit from the proposed change. By expanding the number of customers eligible to take service under the experimental tariff, Gulf will have an opportunity to broaden the types of customers participating. In this manner, Gulf Power and its consultants will have an opportunity to evaluate whether the customers' responses and resulting peak demand reduction results have more general application across various customer types.

8. Gulf's RTP program is an integral part of the Company's plan to achieve the numeric conservation goals established for the Company in Docket No. 930550-EG pursuant to Order No. PSC-94-1313-FOF-EG. The goals themselves were significantly impacted by the expected cost effectiveness of the RTP program. Notwithstanding the changes with regard to the

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<sup>3</sup>The tenth, eleventh and twelfth customers participating in the pilot study have signed up for service under Rate Schedule RTP since the conclusion of the summer peak period of 1996.

relative economic picture that have occurred subsequent to the establishment of the numeric goals for Gulf Power, the Company's RTP pilot results thus far indicate that the program continues to have great potential as a cost effective means of achieving peak demand reductions on Gulf Power's system. In fact, Gulf expects that the RTP program will provide a viable alternative for making up at least a portion of any potential shortfall towards achieving the established conservation goals attributed to the elimination or modification of programs that are not cost effective under current conditions.<sup>4</sup> By expanding the subscription limit at this time in the pilot program, Gulf will be allowed an opportunity to obtain information from a broader spectrum of customer applications which will enable the Company to better tailor its program for full scale implementation with the aim of realizing the cost effective demand reduction potential of the program.<sup>5</sup>

9. By requesting approval of this proposed change now, Gulf seeks the opportunity to have the participation of additional customers through two summer peak periods before the conclusion of the original study period. This will maximize the value of the data from the additional participants.

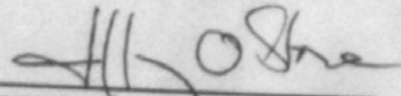
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<sup>4</sup>An updated cost-effectiveness analysis for the RTP program is attached to this petition as Appendix D. This analysis has been updated to include Gulf's current system planning assumptions as was recently done for all Conservation Cost Recovery programs pursuant to a Staff discovery request in Docket No. 960002-EG.

<sup>5</sup>Due to the nature of the pricing arrangement included in this program, there are some practical limitations to customers' ability to participate. These limitations include the ability to purchase energy under a pricing plan which includes price variation and unknown future prices; the transaction costs associated with receiving, evaluating, and acting on prices received on a daily basis; customer risk management policy; and other technical/economic factors.

WHEREFORE, Gulf Power Company respectfully requests that the Florida Public Service Commission approve First Revised Sheet No. 6.42 for inclusion in the Company's Tariff for Retail Electric Service with an effective date on or before February 1, 1997 and thereby authorize the Company to expand the maximum number of customers eligible to participate in the Company's pilot/experimental Real Time Pricing Conservation Program for the duration of the study period from twelve (12) to a total of twenty-four (24) or grant such other reasonable relief as the Commission deems appropriate.

Respectfully submitted the 12th day of December 1996.



**JEFFREY A. STONE**

Florida Bar No. 325953

**RUSSELL A. BADDERS**

Florida Bar No. 007455

**Beggs & Lane**

P. O. Box 12950

Pensacola, Florida 32576-2950

(904) 432-2451

**Attorneys for Gulf Power Company**

## Appendix A

BEGGS & LANE

ATTORNEYS AND COUNSELLORS AT LAW

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E. DIXIE BEGGS

*Reared*

BERT H. LANE

1917-1981

October 13, 1994

Ms. Blanca S. Bayo, Director  
Division of Records and Reporting  
Florida Public Service Commission  
101 East Gaines Street  
Tallahassee FL 32399-0870

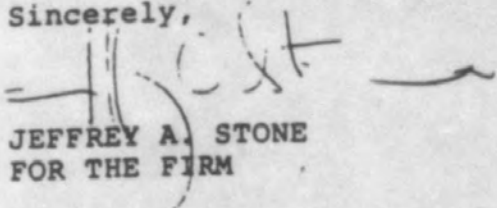
Dear Ms. Bayo:

Enclosed are an original and fifteen copies of the Petition of Gulf Power Company for Approval of its Proposed Pilot/Experimental Real Time Pricing Program and the Associated Rate Schedule.

Upon approval, please return two approved sets of the tariff sheets to Jack Haskins at Gulf Power Company.

Also enclosed is a 3.5 inch double sided, high density diskette containing the Petition in WordPerfect 5.1 format as prepared on a MS-DOS based computer.

Sincerely,

  
JEFFREY A. STONE  
FOR THE FIRM

lw

Enclosures

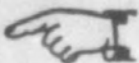
cc: Florida Public Service Commission  
Michael Palecki (w/o attachment)  
bc: R. W. Groesbeck  
R. G. Livingston  
M. D. Neyman  
J. A. Stone  
J. I. Thompson 



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Section II	Miscellaneous
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Section VI	Rate Schedules
	RS - Residential Service
	GS - General Service - Non-Demand
	GSD - General Service - Demand
	LP - Large Power Service
	PX - Large High Load Factor Power Service
	OS - Outdoor Service
	SE - Supplemental Energy Rider (Optional)
	LB - Levelized Billing (Optional Rider)
	CR - Cost Recovery Clause - Fossil Fuel & Purchased Power
	PPCC - Purchased Power Capacity Cost Recovery Clause
	ECR - Environmental Cost Recovery Clause
	-- - Billing Adjustments and Payment of Bills
	ECC - Cost Recovery Clause - Energy Conservation
	RST - Residential Service - Time-of-Use Conservation (Optional)
	GST - General Service - Non-Demand - Time-of-Use Conservation (Optional)
	GSDT - General Service - Demand - Time-of-Use Conservation (Optional)
	LPT - Large Power Service - Time-of-Use Conservation (Optional)
	PXT - Large High Load Factor Power Service - Time-of-Use Conservation (Optional)
	SBS - Standby and Supplementary Service
	ISS - Interruptible Standby Service
	RSVP - Residential Service Variable Pricing
	EPQ - Enhanced Power Quality
	<u>RTP - Real Time Pricing</u>

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Gulf Power Company for approval of its proposed pilot/experimental Real Time Pricing Program and the associated rate schedule. )  
)  
)  
)  
)  
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Docket No. 94  
Date filed: Oct. 14, 1994

PETITION OF GULF POWER COMPANY FOR APPROVAL OF ITS PROPOSED PILOT/EXPERIMENTAL REAL TIME PRICING PROGRAM AND THE ASSOCIATED RATE SCHEDULE

Gulf Power Company ("Gulf Power", "Gulf", or "the Company"), by and through its undersigned attorneys, hereby petitions the Florida Public Service Commission ("Commission") to authorize the Company to implement, for pilot study purposes, the Company's proposed "Real Time Pricing ("RTP") Pilot Conservation Program." This petition along with the information and rate schedule set forth in Attachments A and B hereto, is intended to meet the requirements of Rules 25-9.005(4)-(5); 25-17.0021; and 25-17.008 of the Florida Administrative Code. The rate schedule proposed herein is submitted as an experimental rate pursuant to §366.075 of the Florida Statutes (1993). In order to facilitate the data collection efforts of this pilot research program, Gulf further requests that the Commission consider and approve this request as soon as possible.

In support of this petition, the Company states:

1. Notices and communications with respect to this petition and docket should be addressed to:

G. Edison Holland, Jr.  
Jeffrey A. Stone  
Beggs and Lane  
P. O. Box 12950  
Pensacola, FL 32576-2950

Jack L. Haskins  
Mgr. Rates & Regulatory Mtrs.  
Gulf Power Company  
P. O. Box 13470  
Pensacola, FL 32591-3470

2. Gulf Power Company is an electric utility providing retail electric service to customers within Northwest Florida and, pursuant to the provisions of Chapter 366 of the Florida Statutes, is subject to regulation by the Florida Public Service Commission.

3. Attachment A to this petition is a detailed description of the proposed pilot program which includes a discussion of the program objectives, a description of how the program will operate, and a discussion of the cost effectiveness evaluation that has been performed. The results of the cost effectiveness evaluation are set forth on forms that are included as part of Attachment A. Attachment A also includes a general discussion of the type of data that the Company expects to collect and retain through operation of the pilot program.

4. Attachment B to this petition is Gulf's proposed new Rate Schedule RTP, Original Sheet Nos. 6.42 and 6.43. As discussed within Attachment A, Rate Schedule RTP is an integral part of the proposed pilot program.<sup>1</sup>

5. As noted in the Company's data filings, testimony and exhibits in the Commission's proceedings to establish the

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<sup>1</sup>Attachment B also includes two revised index pages to Gulf's Retail Tariff, Sixteenth Revised Sheet No. ii and Twenty Third Revised Sheet No. 6.1. The proposed revisions to the existing sheets merely reflect the addition of the new RTP rate schedule.

Company's conservation goals, Docket No. 930550-EI, Gulf Power expects to be able to achieve a significant portion of the Company's conservation goals via improved pricing mechanisms. Pricing is the most powerful Demand Side Management ("DSM") tool available. Pricing, as represented by the RTP concept embraced by Gulf's proposed pilot program and experimental rate schedule, is a conservation program that is easily understood by customers, prospective customers and employees. Pricing programs are generally easy to implement, can be flexible to changes in needs, and do not necessarily rely upon new equipment or unproven technology. Use of appropriate pricing allows the customer the opportunity to determine how to respond, therefore allowing consumers to be innovative and individual in their responses.

6. The approach to use pricing as a primary tool to achieve market results is driven by the need to solve both sides of the DSM equation simultaneously. There are two markets involved -- one for energy (both kilowatts and kilowatt hours, KW and KWH, respectively) and one for energy efficiency products and services. Changes in one market affect both. Market barriers in the energy market (KW and KWH) usually take the form of inefficient pricing. Market Barriers in the energy efficiency market have been discussed at length in various proceedings before the Commission and include lack of access to information, high consumer discount rates, etc. Market barriers in the energy efficiency market are typically addressed through technology

based DSM. These technology based programs, by affecting the value of energy efficiency products/services (which are substitutes for KW and KWH) also affect the value of energy itself (KW and KWH). Price changes in the energy market also affect the value and demand for energy efficiency products/services. In the opinion of many experts in the field, pricing represents the best, if not the only, opportunity to affect both markets simultaneously and with little cost to society.

7. Gulf's proposed RTP pilot conservation program is centered on a new pricing arrangement for electric service provided by the Company. This pricing arrangement is characterized by hourly energy prices that are quoted to the participating customers by 4:00 p.m. the day before the prices would be applicable. As discussed in greater detail within Attachment A, Gulf's hourly energy prices under its proposed pilot RTP program will reflect both marginal and embedded costs. The overall price level is tied to embedded costs, with marginal costs serving to shape the hourly prices throughout the year.

8. Under the terms of Gulf's proposed pilot, the optional RTP rate schedule will be restricted (at least initially) to a maximum of 12 customers, each of whom must have an actual demand of 2,000 KW or higher. The estimated annual

revenue to be derived under the proposed experimental rate schedule cannot be determined.

9. Gulf's proposed Rate Schedule RTP is intended to provide the Company and the Commission alike with the opportunity to evaluate whether customer response to the pricing initiative the rate schedule represents will produce a cost-effective reduction in the growth of peak demand on the Company's system. Approval of the proposed experimental rate schedule and pilot study program will encourage conservation and efficiency in the use of electricity.

10. Unless the results of the pilot study dictate otherwise, Gulf intends to propose a full scale permanent program after completion of the pilot study. It is anticipated that the pilot study will last four years and a final report will be filed within 120 days of completion of the study.

11. Gulf is not requesting that recovery of its costs associated with the proposed pilot program through the Energy Conservation Cost Recovery clause ("ECCR") be approved as part of this petition. In order to expedite the Commission's consideration of the proposed program to determine whether to approve implementation of the program, Gulf is specifically asking for approval of the proposed pilot program and associated rate schedule without regard to whether any costs associated with

the program may be recovered through the ECCR. The Company would like to leave open the possibility that it may seek recovery of appropriate costs through the ECCR at some future date, however Gulf does not wish this possibility to interfere with timely consideration of the present petition.<sup>2</sup>

#### CONCLUSION

12. In order to achieve prompt results and maximum value from the pilot study program proposed herein, it is important that the Company be authorized to proceed to implement the program as early as possible in 1995 in order to begin to achieve data regarding the value of the program in regard to peak demand reduction during the Summer season. Gulf hereby requests authority from the Commission to implement the RTP Pilot Conservation Program described in Attachment A, through the use of proposed Rate Schedule RTP set forth in Attachment B, effective February 1, 1995.

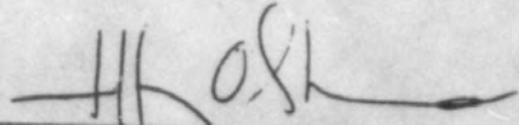
WHEREFORE, Gulf Power Company respectfully requests that the Florida Public Service Commission enter its order approving the Company's implementation of its proposed "Real Time Pricing (RTP) Pilot Conservation Program, for pilot study purposes, effective February 1, 1995. As an essential part of

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<sup>2</sup>Given the nature of its request, the Company acknowledges that approval of the pilot program proposed herein should not have any effect on the outcome of a petition for cost recovery that may (or may not) be filed in the future with regard to the costs of this program.

this request, Gulf Power specifically seeks approval of new Rate Schedule RTP for inclusion within the Company's Tariff for Retail Electric Service with an initial effective date of February 1, 1995.

Respectfully submitted this 14th day of October, 1994.



---

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JEFFREY A. STONE  
Florida Bar No. 325953  
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700 Blount Building  
3 West Garden Street  
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Pensacola, Florida 32576-2950  
(904) 432-2451  
Attorneys for Gulf Power Company



REGULATORY

GULF POWER COMPANY

REAL TIME PRICING (RTP) PILOT CONSERVATION PROGRAM

Following is a description of a pilot conservation program which centers on a new pricing arrangement for electric service. This pricing arrangement, commonly known as Real Time Pricing (RTP), is characterized by hourly energy prices transmitted to participating customers by 4:00 p.m. a day ahead of their applicability. Gulf Power's Real Time Price will reflect both marginal and embedded costs. The overall price level is tied to embedded costs, with marginal costs serving to shape the hourly prices throughout the year.

I. PROGRAM OBJECTIVES

a) Conservation

An objective of the pilot program is the enhancement of Gulf's ability to achieve specific conservation goals. Gulf Power expects that implementation of Real Time Pricing will ultimately result in reduced peak loads. Based on analyses performed recently in Docket Number 930550-EG - Numeric Conservation Goals, virtually all of the identifiable cost-effective peak demand reduction potential in Gulf Power's commercial/industrial markets is associated with Real Time Pricing.

Gulf's expectation that such results are likely stems, in part, from the experiences of other utilities. Both Alabama Power and Georgia Power have Real Time Pricing programs in effect, and both companies have reported reduced peak demands for program participants. In addition, Gulf Power's own experience with customer price response leads the Company to conclude that such a result is likely, and worthwhile to pursue through a Real Time Pricing program. The proposed pilot program will allow Gulf to validate its hypotheses regarding the conservation potential of Real Time Pricing.

b) Economic Efficiency

Prices derived on the basis of marginal costs provide each purchaser a better indication of what it will cost to supply more, or what costs are saved if less were purchased. Such a pricing arrangement provides for a better alignment of the respective objectives of the participating customer, Gulf Power, and society at large.

c) Gain Information About Customer Response.

As with all pilot marketing programs, one of this program's objectives is to learn about the customer response. Research conducted throughout this pilot program should provide important information about customer response to alternative pricing (See II c below).

d) Value Based Pricing.

This pilot program is a step toward consideration of customer value in establishing electric service pricing. This is found in the overall average price level as well as the hourly energy

prices themselves. Value of service from the customer perspective has long been acknowledged as an appropriate consideration in pricing. Chapter 366 of the Florida Statutes lists value of service as one of the factors to be considered in developing utility rates. RTP moves Gulf's pricing further toward a value basis, which is important in the changing utility environment.

e) Customer Satisfaction

Results of recent surveys conducted among Gulf Power commercial and industrial customers indicate that there is room for improvement in customer satisfaction, especially in the areas of "providing energy efficiency options" and "pricing". Information gained through this research and other sources leads Gulf to believe that the RTP program described herein would be well received by Gulf's customers and could lead to improved customer satisfaction. Customer research at other companies supports this hypothesis. RTP rates are perceived to be fair, as well as an incentive to control usage.

II. PROGRAM DESCRIPTION

Gulf Power's Real Time Pricing conservation program is proposed, initially, as a four-year pilot (experimental) program. At the end of the pilot, the program will be evaluated for continuation.

a) Participation

Participation will be limited to a maximum of 12 customers for this pilot program. Participation will be limited to customers with actual demand of 2,000 KW or higher.

Customer participation will be voluntary. The company has presented an overview of the program to customer candidates in order to receive feedback and finalize this proposal. Due to the nature of the pricing arrangement included in this program, there are some practical limitations to customers' ability to participate. These limitations include the ability to purchase energy under a pricing plan which includes price variation and unknown future prices; the transaction costs associated with receiving, evaluating, and acting on prices received on a daily basis; customer risk management policy; and other technical/economic factors.

b) Price

The RTP overall price level is linked with Gulf Power's embedded costs. Marginal costs serve to shape the price for each hour throughout the year. The marginal cost indicator used is the Southern System lambda. Lambda represents the incremental cost of generating the next KWH based on system loading at any point in time.

RTP hourly prices are derived using the day ahead projection of Southern System lambdas, and adjusting these lambdas to recognize embedded costs. The resulting prices quoted to the participating customers for the following day consist of a single cents per kwh component for each hour. Prices quoted will be uniform to all participating customers. Also added to each customer's monthly bill is a customer charge, which is unrelated to the customer's

actual usage and does not vary from month to month. These two items, the RTP energy charge for each hour (price X usage) and the customer charge, constitute the customer's monthly bill. "Adjustment factor" add-ons are included in the price delivered to participating customers. Applicable taxes and franchise fees are added to customer bills, but are not included in hourly prices delivered to participating customers.

1. The customer charge - This monthly charge is \$1,000 per customer.
2. The hourly energy price - The hourly RTP energy prices are determined as follows:  
$$P = \lambda \times M + \text{adjustment factors} + D$$

Where,

"P" is the hourly price in cents per kilowatt-hour.

"λ" represents the Southern Company territorial system Lambda, projected a day ahead for each hour of the day;

"M" is a multiplier which is used to adjust λ to recognize embedded costs.

"M" is determined as follows:

Generation and transmission embedded cost revenue requirements for Gulf Power's industrial customers are assigned to each of three periods, into which the year is divided. The total revenue requirement for each period is then divided by the total relevant energy sales (kwh) for each respective period, to arrive at a total revenue requirement on a cents per kwh basis for each of the periods. For each period, this revenue requirement (¢/kwh) is divided by the average of the hourly Southern System Lambdas for that period; which lambdas are projected a year in advance. The result is a Multiplier, "M", for each of the three periods. It is expected that these multipliers will be modified annually during this pilot program, using updated year-ahead lambda forecasts.

"D" is a constant amount which is added to each hourly price. This amount is set at 0.25¢/kwh.

"D" is determined as follows:

Total embedded distribution revenue requirements for Gulf's industrial customers are divided by the total annual energy sales to derive this cents per kilowatt-hour constant for each hour of the year. These distribution costs were not included in the determination of the multiplier (M).

For customers participating in Gulf Power's RTP program, the RTP price would replace all prices/rates that were previously applicable to their service. All electric service purchased from Gulf Power would be priced under the program. Hourly prices will be provided to participating customers by 4:00 p.m. Central Time on the day before their applicability. Prices for weekends and holidays will be provided by 4:00 p.m. on the last work day before the weekend or holiday.

<sup>1</sup>Energy Conservation Cost Recovery, Purchased Power Capacity Cost Recovery, Fuel Cost Recovery, and Environmental Cost Recovery factors. Each of these factors will continue to be set periodically through the appropriate cost recovery docket.

<sup>2</sup>Revenue requirements would not include "adjustment factor" related costs.

c) Metering

Solid-state data recorders (SSDR'S) are used for billing and load research purposes. For RTP, these recorders will provide 15-minute pulse data that will be translated into the hourly usage data used to calculate an RTP bill.

d) Customer Bills

The first line on the monthly RTP bill will show the Customer Charge. The next line will indicate the total KWH for the billing period and the Energy Charge amount (less fuel); the third line will show the Fuel Cost Recovery factor, the total KWH for the billing period, and the Fuel Charge amount; the fourth line will show the Florida additional Gross Receipts Tax amount; and any applicable taxes and/or fees will be shown on the last line(s). Attached to the bill will be a report that shows the hourly KWH, applicable hourly price (including ECCR, PPCC, and ECR), and Energy Charge (less fuel) amount for each hour of the billing period.

e) Research

RTP program research and data gathering will focus on three areas:

(1) Price and billing data - Hourly prices will be stored in computer files. Customer billing data will be retained so that customer's average achieved cost per kwh (total bill divided by total KWH) can be compared with the average "offered" price, by customer and for all participants.

(2) Load Research - Fifteen minute demand (KW) will be recorded for each customer and retained in computer files. This data will be integrated into hourly load data, by customer. Pre-test load profiles for each customer will be used to compare with profiles obtained during the pilot program to assess load shifting and peak demand reduction. Energy (KWH) differences between pre-test and the pilot period will also be developed.

(3) Customer research - Customer reaction and acceptance of RTP will be researched. Surveys will focus on the relationship between the RTP program and overall customer satisfaction, as well as identifying customer energy decision processes under RTP.

### III. PROGRAM COST EFFECTIVENESS

As with most pilot programs, the cost-effectiveness of the RTP program is dependent on the results of the program, which are, by definition, unknown. A preliminary benefit/cost estimate has been made, using the best estimates of company costs and customer response. This pre-pilot cost-effectiveness estimate uses the same cost-effectiveness model as has been used by Gulf for other programs. The result is a Rate Impact Test benefit to cost ratio of 2.26, indicating that the net present value of the benefits exceeds the net present value of the costs by a ratio of 2.26 to 1.00. Also, the Total Resource Cost Test (TRC) result for this program is estimated at greater than 45.0. This very high TRC benefit to cost ratio reflects the relatively low utility program cost compared to the substantial demand savings. The result of the preliminary cost-effectiveness evaluation is shown in Attachment 1. No

Participant Test results are included. Gulf Power lacks sufficient information about the participating customers' costs of participating in this program to be able to perform such a test. These large industrial customers will inevitably evaluate, individually, their costs and potential benefits as part of their decision to participate in this optional program.

Additional cost-effectiveness evaluations will be performed as information on customer load response and overall satisfaction becomes available. If RTP proves to be a cost effective means of achieving peak demand reduction, Gulf will continue to include it as part of its conservative plan.

#### IV. SUMMARY

The RTP Pilot program is expected to play a major role in affording Gulf Power the opportunity to be successful in meeting its conservation objectives. "Pricing based" DSM programs such as RTP have several advantages over "technology based" DSM programs. These advantages include: low implementation costs; absence of reliance on new equipment or unproven technology; familiarity to prospective participants; and the opportunity for customer participants to determine individually how to respond. Gulf Power expects that the pilot program will result in a cost-effective reduction in the company's summer peak demand.

This program will also better position Gulf Power to provide value to customers in an important market segment. The changes which are occurring in this industry require that Gulf Power price its products and services to better reflect customer value.

Information gained through this program will be used to determine whether or not a permanent RTP program should be implemented, and to design such a permanent program.

ATTACHMENT 1

F\_11

REAL TIME PRICING

PSC FORM CE 1.1  
PAGE 1 OF 1  
Run date: 10-Oct 94  
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----- DSM\_RULE PROGRAM -----

I. PROGRAM DEMAND SAVINGS AND LINE LOSSES

(1) CUSTOMER KW REDUCTION AT THE METER .....	1,602.00 KW /CUST
(2) GENERATOR KW REDUCTION PER CUSTOMER .....	2,152.12 KW GEN/CUST
(3) KW LINE LOSS PERCENTAGE .....	12.5 %
(4) GENERATION KWH REDUCTION PER CUSTOMER .....	(1,540,110.0)KWH/CUST/YR
(5) KWH LINE LOSS PERCENTAGE .....	7.7 %
(6) GROUP LINE LOSS MULTIPLIER .....	1.0034
(7) CUSTOMER KWH PROGRAM INCREASE AT METER .....	0.0 KWH/CUST/YR
(8)* CUSTOMER KWH REDUCTION AT METER .....	(1,430,000.0)KWH/CUST/YR
 CUSTOMER KW REDUCTION AT METER (Writer).....	 0.00

II. ECONOMIC LIFE AND K FACTORS

(1) STUDY PERIOD FOR CONSERVATION PROGRAM .....	21 YEARS
(2) GENERATOR ECONOMIC LIFE .....	40 YEARS
(3) T & D ECONOMIC LIFE .....	30 YEARS
(4) K FACTOR FOR GENERATION .....	1.4851
(5) K FACTOR FOR T & D .....	1.4851
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1) .....	1

III. UTILITY AND CUSTOMER COSTS

(1) UTILITY NONRECURRING COST PER CUSTOMER .....	14,000.00 \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER .....	1.00 \$/CUST/YR
(3) UTILITY COST ESCALATION RATE .....	3.25 %
(4) CUSTOMER EQUIPMENT COST .....	1.00 \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE .....	3.25 %
(6) CUSTOMER O & M COST .....	0.00 \$/CUST/YR
(7) CUSTOMER O & M ESCALATION RATE .....	3.25 %
(8)* CUSTOMER TAX CREDIT PER INSTALLATION .....	0.00 \$/CUST
(9)* CUSTOMER TAX CREDIT ESCALATION RATE .....	0.00 %
(10)* INCREASED SUPPLY COSTS .....	0.00 \$/CUST/YR
(11)* SUPPLY COSTS ESCALATION RATE .....	0.00 %
(12)* UTILITY DISCOUNT RATE .....	8.62%
(13)* UTILITY AFUDC RATE .....	10.08%
(14)* UTILITY NON RECURRING REBATE/INCENTIVE .....	0.00 \$/CUST
(15)* UTILITY RECURRING REBATE/INCENTIVE .....	57,000.00 \$/CUST/YR
(16)* UTILITY REBATE/INCENTIVE ESCAL RATE .....	3.25 %

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

STOP REV LOSS: NO

IV. AVOIDED GENERATOR, TRANS AND DIST. COSTS

(1) BASE YEAR .....	1994
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT .....	1999
(3) IN-SERVICE YEAR FOR AVOIDED T & D .....	1999
(4) BASE YEAR AVOIDED GENERATING UNIT COST .....	349.00 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST .....	100.00 \$/KW
(6) BASE YEAR DISTRIBUTION COST .....	57.00 \$/KW
(7) GEN, TRAN, & DIST COST ESCALATION RATE .....	3.25 %
(8) GENERATOR FIXED O & M COST .....	2.50 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE .....	2.80 %
(10) TRANSMISSION FIXED O & M COST .....	0.32 \$/KW/YR
(11) DISTRIBUTION FIXED O & M COST .....	0.00 \$/KW/YR
(12) T&D FIXED O&M ESCALATION RATE .....	3.25 %
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS .....	0.624 CENTS/KWH
(14) GENERATOR VARIABLE O&M COST ESCALATION RAT .....	3.10 %
(15) GENERATOR CAPACITY FACTOR .....	3.40 %
(16) AVOIDED GENERATING UNIT FUEL COST .....	2.780 CENTS/KWH
(17) AVOIDED GEN UNIT FUEL ESCALATION RATE .....	7.61 %
(18)* AVOIDED PURCHASE CAPACITY COST PER KW .....	0.00 \$/KW/YR
(19)* CAPACITY COST ESCALATION RATE .....	3.25 %

V. NON-FUEL ENERGY AND DEMAND CHARGES

(1) NON-FUEL COST IN CUSTOMER BILL .....	1.000 CENTS/KWH
(2) NON-FUEL ESCALATION RATE .....	1.15 %
(3) CUSTOMER DEMAND CHARGE PER KW .....	0.00 \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE .....	5.00 %
(5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT FACTOR FOR CUSTOMER BILL .....	1.00

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RTP\_JIM

TOTAL RESOURCE TES 45.62

RATE IMPACT TEST: 2.26

SI-V

TOTAL RESOURCE COST TESTS  
 RTP\_JIM  
 ----- DSM\_RULE PROGRAM -----

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT PROGRAM COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T & D BENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE NET BENEFITS \$(000)
1994	0	98	0	0	98	0	0	(79)	0	(79)	(79)	(177)
1995	0	0	0	0	0	0	0	(169)	0	(169)	(248)	(333)
1996	0	0	0	0	0	0	0	(184)	0	(184)	(433)	(489)
1997	0	0	0	0	0	0	0	(192)	0	(192)	(625)	(639)
1998	0	0	0	0	0	0	0	(202)	0	(202)	(826)	(784)
1999	0	0	0	0	0	743	245	(219)	0	768	(58)	768
2000	0	0	0	0	0	775	253	(224)	0	803	745	803
2001	0	0	0	0	0	798	261	(256)	0	803	1,548	803
2002	0	0	0	0	0	830	269	(270)	0	829	2,377	829
2003	0	0	0	0	0	857	278	(300)	0	835	3,212	835
2004	0	0	0	0	0	889	287	(325)	0	851	4,063	851
2005	0	0	0	0	0	921	297	(355)	0	863	4,926	863
2006	0	0	0	0	0	956	306	(383)	0	879	5,805	879
2007	0	0	0	0	0	986	316	(428)	0	874	6,679	874
2008	0	0	0	0	0	1,021	326	(469)	0	879	7,558	879
2009	0	0	0	0	0	1,056	337	(516)	0	877	8,435	877
2010	0	0	0	0	0	1,077	348	(604)	0	821	9,256	821
2011	0	0	0	0	0	1,127	359	(630)	0	856	10,113	856
2012	0	0	0	0	0	1,181	371	(653)	0	899	11,012	899
2013	0	0	0	0	0	1,237	383	(680)	0	940	11,952	940
2014	0	0	0	0	0	1,297	396	(707)	0	985	12,937	985
NOMINAL	0	98	0	0	98	15,750	5,034	(7,846)	0	12,937		12,839
NPV:	0	98	0	0	98	5,658	1,820	(3,002)	0	4,475		4,377
Discount Rate		8.62%										
Benefit/Coast Ratio: col (11) / col (6)				45.6								

91-V

RATE IMPACT TEST  
RTP\_JIM  
----- DSM\_RULE PROGRAM -----

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	OTHER COSTS \$(000)	TOTAL ACCUM. COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T & D BENEFITS \$(000)	PROGRAM FUEL BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL ACCUM. BENEF. CUSTOMERS \$(000)	NET BENEFITS TO ALL \$(000)	CUMULATIVE DISCOUNTED NET BENEFIT \$(000)
1994	0	98	200	(154)	0	144	0	0	(79)	0	0	(79)	(79)	(223)
1995	0	0	412	(322)	0	90	0	0	(169)	0	0	(169)	(248)	(259)
1996	0	0	425	(314)	0	111	0	0	(184)	0	0	(184)	(433)	(259)
1997	0	0	439	(313)	0	127	0	0	(192)	0	0	(192)	(625)	(319)
1998	0	0	453	(301)	0	152	0	0	(202)	0	0	(202)	(826)	(319)
1999	0	0	488	(292)	0	177	743	245	(219)	0	0	788	(58)	(354)
2000	0	0	483	(294)	0	189	775	253	(224)	0	0	803	745	592
2001	0	0	499	(302)	0	197	796	261	(256)	0	0	803	1,548	814
2002	0	0	515	(310)	0	205	830	269	(270)	0	0	829	2,377	(450)
2003	0	0	532	(321)	0	211	857	278	(300)	0	0	835	3,212	212
2004	0	0	549	(332)	0	217	889	287	(325)	0	0	851	4,063	509
2005	0	0	567	(341)	0	228	921	297	(355)	0	0	863	4,928	786
2006	0	0	586	(351)	0	235	956	306	(383)	0	0	879	5,805	1,042
2007	0	0	605	(362)	0	243	986	316	(428)	0	0	874	6,679	1,281
2008	0	0	624	(351)	0	273	1,021	326	(469)	0	0	879	7,558	1,497
2009	0	0	645	(361)	0	283	1,056	337	(516)	0	0	877	8,435	1,687
2010	0	0	666	(360)	0	306	1,077	348	(604)	0	0	821	9,256	1,859
2011	0	0	687	(364)	0	323	1,127	359	(630)	0	0	856	10,113	1,996
2012	0	0	710	(376)	0	333	1,181	371	(653)	0	0	899	11,012	2,127
2013	0	0	733	(388)	0	344	1,237	383	(680)	0	0	940	11,952	2,255
2014	0	0	758	(400)	0	357	1,297	398	(707)	0	0	985	12,937	2,379
NOMINAL	0	98	11,555	(6,911)	0	4,743	15,750	5,034	(7,846)	0	0	12,937	8,194	2,499
NPV:	0	98	5,088	(3,210)	0	1,977	5,658	1,820	(3,002)	0	0	4,475	2,499	
Discount rate:				8.62%										
Benefit / Cost Ratio - Col (12)/Col (7)				2.26										

A-17



**ATTACHMENT B  
FOLLOWS**

# GULF POWER COMPANY

## RATE SCHEDULE RTP Limited Availability Experimental Rate (Real Time Pricing)

AVAILABILITY - Availability is limited to 12 customers eligible for Rate Schedules LP, LPT, PX, PXT, or SBS with loads not less than 2,000 kilowatts (KW). Availability is further limited to those customers selected by the Company and volunteering to participate in the Company's Real Time Pricing pilot study.

Service under this experimental schedule shall terminate on December 31, 1998, unless extended by order of the Florida Public Service Commission.

APPLICABILITY - Applicable for three phase service on an annual basis covering the entire electrical requirements of any customer whose actual measured demand is not less than 2,000 kilowatts (KW). Service to two or more premises shall not be combined nor shall service furnished hereunder be shared with or resold to others. All service shall be taken at the same voltage, from a single delivery point, and shall be measured by a single meter.

CHARACTER OF SERVICE - The delivery voltage to the Customer shall be the standard secondary voltage of the Company's transformers supplied from the transmission lines of the Company or the voltage of the available secondary distribution lines of the Company for the locality in which service is to be rendered.

### MONTHLY RATES -

Customer Charge:

\$1,000.00

Energy Charge:

The RTP hourly energy prices are derived using the day ahead projection of Southern System Lambdas adjusted to recognize embedded costs. This price is determined as follows:

$$P = \lambda \times M + D$$

Where,

"P" = hourly price in ¢/KWH

"λ" = Southern Company territorial system Lambda, projected a day ahead for each hour of the day

"M" = multiplier which is used to adjust λ to recognize embedded costs

"D" = constant amount of 0.25¢/KWH added to each hourly price

ISSUED BY:

EFFECTIVE:

# GULF POWER COMPANY

"M" is determined as follows:

Generation and transmission embedded cost revenue requirements for Gulf Power's industrial customers are assigned to each of three periods, into which the year is divided<sup>1</sup>. The total revenue requirement for each period is then divided by the total relevant energy sales (KWH) for each respective period, to arrive at a total revenue requirement on a cents per KWH basis for each of the periods. For each period, this revenue requirement (cents/KWH) is divided by the average of the hourly Southern System Lambdas for that period; which lambdas are projected a year in advance. The result is a Multiplier, "M", for each of the three periods. These multipliers will be modified annually during this pilot program, using updated year-ahead lambda forecasts.

"D" is determined as follows:

Total embedded distribution revenue requirements for Gulf Power's industrial customers are divided by the total annual energy sales (KWH) to derive this cents per kilowatt-hour (KWH) constant for each hour of the year. These distribution costs were not included in the determination of the multiplier (M).

MINIMUM BILL - In consideration of the readiness of the Company to furnish such service, no monthly bill will be rendered for less than \$1,000.00.

NOTIFICATION OF HOURLY PRICES - The Company will notify the Customer by 4:00 p.m. Central Time each work day the hourly prices for the next twenty-four (24) hours beginning at 12:00 a.m. (midnight). On Fridays and the last work day before a holiday, the Company will provide hourly prices through the next work day.

TERM OF CONTRACT - Service under this experimental rate schedule shall be for a period of four (4) years - the length of the pilot study. Since participation in this program is voluntary, selection of this rate may be terminated at any time by written notice from the Customer. After such termination, the Customer will not be allowed to select this rate again for the duration of the experimental period.

TAX ADJUSTMENT - See Sheet No. 6.16

FRANCHISE FEE BILLING - See Sheet No. 6.16

FUEL CHARGE - See Sheet No. 6.15

PURCHASED POWER CAPACITY COST - See Sheet No. 6.15.1

ENVIRONMENTAL COST - See Sheet No. 6.15.2

ENERGY CONSERVATION - See Sheet No. 6.16.1

GROSS RECEIPTS TAX ADJUSTMENT - See Sheet No. 6.16

PAYMENT OF BILLS - See Sheet No. 6.16

SERVICE UNDER THIS RATE SCHEDULE IS SUBJECT TO RULES AND REGULATIONS OF THE COMPANY AND THE FLORIDA PUBLIC SERVICE COMMISSION.

<sup>1</sup> Revenue requirements here would not include fuel costs, energy conservation costs, purchased power capacity costs, or environmental costs.

ISSUED BY:

EFFECTIVE:

# GULF POWER COMPANY

## TABLE OF CONTENTS

<u>Section</u>	<u>Description</u>
Section I	Description of Territory Served
Section II	Miscellaneous
Section III	Technical Terms and Abbreviations
Section IV	Rules and Regulations
Section V	List of Communities Served
Section VI	Rate Schedules
RS	- Residential Service
GS	- General Service - Non-Demand
GSD	- General Service - Demand
LP	- Large Power Service
PX	- Large High Load Factor Power Service
OS	- Outdoor Service
SE	- Supplemental Energy Rider (Optional)
LB	- Levelized Billing (Optional Rider)
CR	- Cost Recovery Clause - Fossil Fuel & Purchased Power
PPCC	- Purchased Power Capacity Cost Recovery Clause
ECR	- Environmental Cost Recovery Clause
--	- Billing Adjustments and Payment of Bills
ECC	- Cost Recovery Clause - Energy Conservation
RST	- Residential Service - Time-of-Use Conservation (Optional)
GST	- General Service - Non-Demand - Time-of-Use Conservation (Optional)
GSDT	- General Service - Demand - Time-of-Use Conservation (Optional)
LPT	- Large Power Service - Time-of-Use Conservation (Optional)
PXT	- Large High Load Factor Power Service - Time-of-Use Conservation (Optional)
SBS	- Standby and Supplementary Service
ISS	- Interruptible Standby Service
RSVP	- Residential Service Variable Pricing
EPQ	- Enhanced Power Quality
RTP	- Real Time Pricing

ISSUED BY:

EFFECTIVE:

# GULF POWER COMPANY

Section VI  
 Twenty-Third Revised Sheet No. 6.1  
 Canceling Twenty-Second Revised Sheet No. 6.1

<u>Designation</u>	<u>URSC</u>	<u>Classification</u>	<u>Sheet No.</u>
RS	RS	Residential Service	6.2
GS	GS	General Service - Non-Demand	6.3
GSD	GSD	General Service - Demand	6.4
LP	GSLD	Large Power Service	6.6
PX	GSLD1	Large High Load Factor Power Service	6.8
OS	SL, OL, OL1, OL2	Outdoor Service	6.10
SE		Supplemental Energy (Optional Rider)	6.13
LB		Levelized Billing (Optional Rider)	6.14
CR		Cost Recovery Clause - Fossil Fuel and Purchased Power	6.15
PPCC		Purchased Power Capacity Cost Recovery Clause	6.15.1
ECR		Environmental Cost Recovery Clause	6.15.2
ECC		Billing Adjustments and Payment of Bills	6.16
RST	RST	Cost Recovery Clause - Energy Conservation	6.16.1
GST	GST	Residential Service - Time-of-Use Conservation (Optional)	6.17
GSDT	GSDT	General Service - Non-Demand Time-of-Use Conservation (Optional)	6.19
LPT	GSLDT	General Service - Demand Time-of-Use Conservation (Optional)	6.21
PXT	GSLDT1	Large Power Service - Time-of-Use Conservation (Optional)	6.24
SBS		Large High Load Factor Power Service - Time-of-Use Conservation (Optional)	6.27
ISS		Standby and Supplementary Service	6.29
RSVP	RS1	Interruptible Standby Service	6.33
EPQ		Residential Service Variable Pricing	6.39
RTP		Enhanced Power Quality	6.41
		Real Time Pricing	6.42

ISSUED BY:

EFFECTIVE:

## **Appendix B**

## BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In Re: Petition for approval of proposed pilot/experimental Real Time Pricing Program and the associated rate schedule by GULF POWER COMPANY.

DOCKET NO. 941102-EI  
ORDER NO. PSC-95-0256-FOF-EI  
ISSUED: February 23, 1995

The following Commissioners participated in the disposition of this matter:

SUSAN F. CLARK, Chairman  
J. TERRY DEASON  
JOE GARCIA  
JULIA L. JOHNSON  
DIANE K. KIESLING

ORDER APPROVING REAL TIME  
PRICING PILOT PROGRAM AND TARIFF

BY THE COMMISSION:

On October 13, 1994, Gulf Power Company (Gulf or company) petitioned the Commission for approval of its proposed Real Time Pricing (RTP) Pilot Conservation Program and the associated RTP tariff rate schedule. On November 8, 1994, we voted to suspend Gulf's RTP tariff so that our staff could further investigate the proposed program.

Gulf's RTP pilot program provides large industrial/commercial customers with hourly kilowatt-hour energy prices. To be eligible for the RTP rate schedule, customers must have a maximum monthly demand of at least 2,000 kilowatts. Participation in the program is voluntary and will be limited to a maximum of 12 customers. Service under the experimental rate schedule shall terminate on December 31, 1998, unless extended by order of the Commission. Unless a permanent RTP rate schedule is approved by the Commission, customers will be returned to the otherwise applicable rate schedule at the end of the experiment. Customers, however, have the option to terminate service at any time during the pilot study by providing the company with written notice. After voluntary termination, the customer is not allowed to select the RTP rate schedule again for the duration of the experimental period.

Real time pricing is a refinement of time-of-use (TOU) pricing, which has been in existence for many years. The purpose of TOU pricing is to encourage customers to shift usage from high cost on-peak hours to lower cost off-peak hours by setting prices that better reflect system costs during those periods. Under the RTP proposal, Gulf will transmit to customers by 4:00 p.m. a set of hourly prices that will be in effect for the following 24-hour period beginning at midnight. Customers then have an opportunity to adjust their usage to take advantage of lower priced hours.

Gulf's RTP program is not designed to be revenue neutral. Revenue neutrality means if customers use the same amounts of energy at the same times as they have historically, their electric bills will not differ from what they pay under existing embedded cost rates. Because Gulf's RTP program is not revenue neutral, participating customers may see an increase or a decrease in their monthly electric bills simply by being billed under the RTP rate schedule.

The monthly electric bill for participating RTP customers will consist of an energy charge and a customer charge. The customer charge is a fixed charge of \$1000 per month. The monthly energy charge is the sum of the kilowatt-hours consumed in a given hour multiplied by the stated price of electricity for that same hour for all hours in the billing month.

Using historical data, Gulf estimates that hourly energy prices will range from a high of 23.9 cents per Kwh to a low of 3.0 cents per Kwh. The average price for all hours in 1994 was estimated to be 3.65 cents per Kwh. The hourly energy charge will always include, at a minimum, the currently effective Energy Conservation, Purchased Power Capacity, Fuel, and Environmental cost recovery adjustment factors, a component to reflect marginal costs, and a small factor that contributes to fixed costs.

Gulf asserts that the primary purpose of the study is to measure customer response to hourly price signals and to collect data and conduct research in three areas. First, price and billing data will be collected so that the customers' average achieved cost per Kwh can be compared with the average RTP offered price. This information will also be used to determine the amount of revenue shortfall/gain the utility experiences by providing service under this rate schedule. Second, the pre-test customer load profiles will be compared to the load profiles obtained during the pilot to determine if there is any load shifting or load expansion, and to determine if there is any peak demand reduction. Although Gulf believes the RTP program will result in system peak load reductions that are sufficient to qualify RTP as a cost-effective conservation program, it has not sought recovery of any costs associated with the program. Finally, the company will conduct research to determine the participating customers' reaction to and acceptance of the RTP program.

Within 120 days of completion of the RTP program, Gulf will submit a final report to this Commission describing the program results. In addition, we find that Gulf should submit the pre-test customer load profiles to us as each customer begins to take service under the RTP rate schedule. This information will allow us to verify the conclusions reached by the company at the end of the program. The company should also submit a letter each quarter to the Commission's Division of Electric and Gas, detailing the amount of total costs the company has incurred for the current quarter to provide service under this rate schedule. The report should divide the total costs into two categories: 1) The revenue shortfall/gain the utility experiences. This is defined as the difference between what the customer would have paid on the otherwise applicable rate schedule and what the customer actually paid on the RTP rate schedule; and 2) All other RTP program costs. In addition, the letter should provide the impact of the total costs on earnings in terms of basis points as reflected in the monthly surveillance report filed with the Commission. This requirement is consistent with the treatment the Commission has accorded Florida Power and Light Company's RTP rate schedule.



For the above reasons, we find that Gulf's proposed RTP program should be approved. The effective date of Gulf's RTP tariff rate schedule shall be February 7, 1995, as the company requested. We note, however, that approval of Gulf's petition does not imply that we agree with the company's characterization of RTP as a conservation program. Further, our approval of this petition will not result in automatic recovery of RTP program costs through the Energy Conservation Cost Recovery clause, should the company seek recovery of such costs at a later date.

In consideration of the foregoing, it is

ORDERED by the Florida Public Service Commission that Gulf Power Company's Real Time Pricing Pilot Conservation Program and the associated tariff rate schedule are approved, subject to the reporting requirements described in the body of this Order. It is further

ORDERED that the effective date for the Real Time Pricing tariff rate schedule shall be February 7, 1995. It is further

ORDERED that if a protest is filed in accordance with the requirement set forth below, the tariff shall remain in effect with any increase in revenues held subject to refund pending resolution of the protest. It is further

ORDERED that if no protest is filed in accordance with the requirement set forth below, this docket shall be closed.

By ORDER of the Florida Public Service Commission, this 23rd day of February, 1995.

BLANCA S. BAYÓ, Director  
Division of Records and Reporting

## Appendix C

# GULF POWER COMPANY

## RATE SCHEDULE RTP Limited Availability Experimental Rate (Real Time Pricing)

**AVAILABILITY** - Availability is limited to 24 customers eligible for Rate Schedules LP, LPT, PX, PXT, or SBS with loads not less than 2,000 kilowatts (KW). Availability is further limited to those customers selected by the Company and volunteering to participate in the Company's Real Time Pricing pilot study.

Service under this experimental schedule shall terminate on December 31, 1998, unless extended by order of the Florida Public Service Commission.

**APPLICABILITY** - Applicable for three phase service on an annual basis covering the entire electrical requirements of any customer whose actual measured demand is not less than 2,000 kilowatts (KW). Service to two or more premises shall not be combined nor shall service furnished hereunder be shared with or resold to others. All service shall be taken at the same voltage, from a single delivery point, and shall be measured by a single meter.

**CHARACTER OF SERVICE** - The delivery voltage to the Customer shall be the standard secondary voltage of the Company's transformers supplied from the transmission lines of the Company or the voltage of the available secondary distribution lines of the Company for the locality in which service is to be rendered.

### MONTHLY RATES -

Customer Charge: \$1,000.00

Energy Charge: The RTP hourly energy prices are derived using the day ahead projection of Southern System Lambdas adjusted to recognize embedded costs. This price is determined as follows:

$$P = \lambda \times M + D$$

Where,

"P" = hourly price in ¢/KWH

"λ" = Southern Company territorial system Lambda, projected a day ahead for each hour of the day

"M" = multiplier which is used to adjust λ to recognize embedded costs

"D" = constant amount of 0.25¢/KWH added to each hourly price

# GULF POWER COMPANY

Section VI  
First Revised Original Sheet No. 6.42  
Canceling Original Sheet No. 6.42

## RATE SCHEDULE RTP Limited Availability Experimental Rate (Real Time Pricing)

**AVAILABILITY** - Availability is limited to 2442 customers eligible for Rate Schedules LP, LPT, PX, PXT, or SBS with loads not less than 2,000 kilowatts (KW). Availability is further limited to those customers selected by the Company and volunteering to participate in the Company's Real Time Pricing pilot study.

Service under this experimental schedule shall terminate on December 31, 1998, unless extended by order of the Florida Public Service Commission.

**APPLICABILITY** - Applicable for three phase service on an annual basis covering the entire electrical requirements of any customer whose actual measured demand is not less than 2,000 kilowatts (KW). Service to two or more premises shall not be combined nor shall service furnished hereunder be shared with or resold to others. All service shall be taken at the same voltage, from a single delivery point, and shall be measured by a single meter.

**CHARACTER OF SERVICE** - The delivery voltage to the Customer shall be the standard secondary voltage of the Company's transformers supplied from the transmission lines of the Company or the voltage of the available secondary distribution lines of the Company for the locality in which service is to be rendered.

### MONTHLY RATES -

Customer Charge: \$1,000.00

Energy Charge: The RTP hourly energy prices are derived using the day ahead projection of Southern System Lambdas adjusted to recognize embedded costs. This price is determined as follows:

$$P = \lambda \times M + D$$

Where,

"P" = hourly price in ¢/KWH

"λ" = Southern Company territorial system Lambda, projected a day ahead for each hour of the day

"M" = multiplier which is used to adjust λ to recognize embedded costs

"D" = constant amount of 0.25¢/KWH added to each hourly price

ISSUED BY: Travis T. J. Bowden

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EFFECTIVE: February 7, 1995

## **Appendix D**

INPUT DATA -- PART 1  
 RTPPI#  
 ----- DSM\_RULE PROGRAM -----

I. PROGRAM DEMAND SAVINGS AND LINE LOSSES

(1) CUSTOMER KW REDUCTION AT THE METER	1,662.00 KW /CUST
(2) GENERATOR KW REDUCTION PER CUSTOMER	2,152.12 KW GEN/CUST
(3) KW LINE LOSS PERCENTAGE	12.6 %
(4) GENERATION KWH REDUCTION PER CUSTOMER	(1,540,110.0) KWH/CUST/YR
(5) KWH LINE LOSS PERCENTAGE	7.7 %
(6) GROUP LINE LOSS MULTIPLIER	1.0034
(7) CUSTOMER KWH PROGRAM INCREASE AT-METER	0.0 KWH/CUST/YR
(8)* CUSTOMER KWH REDUCTION AT METER	(1,430,000.0) KWH/CUST/YR

CUSTOMER KW REDUCTION AT METER (Winter)	1000.00
AVG MONTHLY BILLING DEMAND REDUCT PE CUST	4.00

II. ECONOMIC LIFE AND K FACTORS

(1) STUDY PERIOD FOR CONSERVATION PROGRAM	21 YEARS
(2) GENERATOR ECONOMIC LIFE	40 YEARS
(3) T & D ECONOMIC LIFE	30 YEARS
(4) K FACTOR FOR GENERATION	1.4851
(5) K FACTOR FOR T & D	1.4851
(6)* SWITCH REV REQ(0) OR VAL-OF-DEF (1)	1

III. UTILITY AND CUSTOMER COSTS

(1) UTILITY NONRECURRING COST PER CUSTOMER	14,000.00 \$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER	1.00 \$/CUST/YR
(3) UTILITY COST ESCALATION RATE	2.64 %
(4) CUSTOMER EQUIPMENT COST	1.00 \$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE	2.64 %
(6) CUSTOMER O & M COST	0.00 \$/CUST/YR
(7) CUSTOMER O & M ESCALATION RATE	2.64 %
(8)* CUSTOMER TAX CREDIT PER INSTALLATION	0.00 %
(9)* CUSTOMER TAX CREDIT ESCALATION RATE	0.00 \$/CUST/YR
(10)* INCREASED SUPPLY COSTS	0.00 %
(11)* SUPPLY COSTS ESCALATION RATE	8.77 %
(12)* UTILITY DISCOUNT RATE	7.27 %
(13)* UTILITY AFUDC RATE	0.00 \$/CUST
(14)* UTILITY NON RECURRING REBATE/INCENTIVE	57,000.00 \$/CUST/YR
(15)* UTILITY RECURRING REBATE/INCENTIVE	2.64 %
(16)* UTILITY REBATE/INCENTIVE ESCAL RATE	

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

STOP REV LOSS NO

IV. AVOIDED GENERATOR, TRANS. AND DIST. COSTS

(1) BASE YEAR	1996
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	1999
(3) IN-SERVICE YEAR FOR AVOIDED T & D	1999
(4) BASE YEAR AVOIDED GENERATING UNIT COST	0.00 \$/KW
(5) BASE YEAR AVOIDED TRANSMISSION COST	54.00 \$/KW
(6) BASE YEAR DISTRIBUTION COST	39.00 \$/KW
(7) GEN, TRAN, & DIST COST ESCALATION RATE	2.141 %
(8) GENERATOR FIXED O & M COST	0.00 \$/KW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE	2.14 %
(10) TRANSMISSION FIXED O & M COST	0.68 \$/KW/YR
(11) DISTRIBUTION FIXED O & M COST	0.49 \$/KW/YR
(12) T&D FIXED O&M ESCALATION RATE	2.14 %
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.000 CENTS/KWH
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE	4.28 %
(15) GENERATOR CAPACITY FACTOR	3.40 %
(16) AVOIDED GENERATING UNIT FUEL COST	3.473 CENTS/KWH
(17) AVOIDED GEN UNIT FUEL ESCALATION RATE	3.99 %
(18)* AVOIDED PURCHASE CAPACITY COST PER KW	24.61 \$/KW/YR
(19)* CAPACITY COST ESCALATION RATE	2.20 %

V. NON-FUEL ENERGY AND DEMAND CHARGES

(1) NON-FUEL COST IN CUSTOMER BILL	1.000 CENTS/KWH
(2) NON-FUEL ESCALATION RATE	1.15 %
(3) CUSTOMER DEMAND CHARGE PER KW	0.00 \$/KW/MO
(4) DEMAND CHARGE ESCALATION RATE	1.15 %
(5)* DIVERSITY and ANNUAL DEMAND ADJUSTMENT FACTOR FOR CUSTOMER BILL	1.00

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RTPPI#

TOTAL RESOURCE TEST	33.53
RATE IMPACT TEST	1.83

CALCULATION OF AFUDC AND IN-SERVICE COST OF PLANT  
 PLANT: 1999 AVOIDED UNIT

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
YEAR	NO. YEARS BEFORE INSERVICE	PLANT ESCALATION RATE (%)	CUMULATIVE ESCALATION FACTOR	YEARLY EXPENDITURE (%)	ANNUAL SPENDING (\$/KW)	CUMULATIVE AVERAGE SPENDING (\$/KW)	CUMULATIVE SPENDING WITH AFUDC (\$/KW)	YEARLY INCREMENTAL TOTAL AFUDC (\$/KW)	YEAR-END BOOK VALUE (\$/KW)	CUMULATIVE YEAR-END BOOK VALUE (\$/KW)
1990	-9	0.0%	1.0000	0.0%	0.00	0.00	0.00	0.00	0.00	0.00
1991	-8	0.0%	1.0000	0.0%	0.00	0.00	0.00	0.00	0.00	0.00
1992	-7	0.0%	1.0000	0.0%	0.00	0.00	0.00	0.00	0.00	0.00
1993	-6	0.0%	1.0000	0.0%	0.00	0.00	0.00	0.00	0.00	0.00
1994	-5	0.0%	1.0000	0.0%	0.00	0.00	0.00	0.00	0.00	0.00
1995	-4	2.7%	1.0270	0.0%	0.00	0.00	0.00	0.00	0.00	0.00
1996	-3	3.0%	1.0578	3.0%	0.00	0.00	0.00	0.00	0.00	0.00
1997	-2	3.2%	1.0917	2.5%	0.00	0.00	0.00	0.00	0.00	0.00
1998	-1	3.1%	1.1255	87.0%	0.00	0.00	0.00	0.00	0.00	0.00
1999	0	3.3%	1.1626	7.5%	0.00	0.00	0.00	0.00	0.00	0.00
				1.00	0.00			0.00	0.00	

IN-SERVICE YEAR = 1999

PLANT COSTS (1996 \$) \$0.0

AFUDC RATE: 7.27%

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
YEAR	CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	UTILITY AVERAGE SYSTEM FUEL COSTS (C/KWH)	AVOIDED MARGINAL FUEL COST (C/KWH)	INCREASED MARGINAL FUEL COST (C/KWH)	REPLACEMENT FUEL COST (C/KWH)	PROGRAM KW EFFECTIVENESS FACTOR	PROGRAM KWH EFFECTIVENESS FACTOR	OTHER COSTS (\$000)	OTHER BENEFITS (\$000)
1996	7	7	2.15	1.72	1.72	1.72	1.00	1.00	0	0
1997	7	7	2.17	1.82	1.82	1.82	1.00	1.00	0	0
1998	7	7	1.95	1.87	1.87	1.87	1.00	1.00	0	0
1999	7	7	1.85	2.00	2.00	2.00	1.00	1.00	0	0
2000	7	7	1.90	2.08	2.08	2.08	1.00	1.00	0	0
2001	7	7	1.96	2.13	2.13	2.13	1.00	1.00	0	0
2002	7	7	2.00	2.18	2.18	2.18	1.00	1.00	0	0
2003	7	7	2.02	2.21	2.21	2.21	1.00	1.00	0	0
2004	7	7	2.06	2.21	2.21	2.21	1.00	1.00	0	0
2005	7	7	2.04	2.36	2.36	2.36	1.00	1.00	0	0
2006	7	7	2.07	2.43	2.43	2.43	1.00	1.00	0	0
2007	7	7	2.07	2.47	2.47	2.47	1.00	1.00	0	0
2008	7	7	2.11	2.48	2.48	2.48	1.00	1.00	0	0
2009	7	7	2.09	2.59	2.59	2.59	1.00	1.00	0	0
2010	7	7	2.09	2.63	2.63	2.63	1.00	1.00	0	0
2011	7	7	2.08	2.75	2.75	2.75	1.00	1.00	0	0
2012	7	7	2.09	2.87	2.87	2.87	1.00	1.00	0	0
2013	7	7	2.14	2.96	2.96	2.96	1.00	1.00	0	0
2014	7	7	2.19	2.98	2.98	2.98	1.00	1.00	0	0
2015	7	7	2.24	3.11	3.11	3.11	1.00	1.00	0	0
2016	7	7	2.31	3.24	3.24	3.24	1.00	1.00	0	0
	7	7	2.50	3.34	3.34	3.34	1.00	1.00	0	0

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AVOIDED GENERATION UNIT BENEFITS  
RTPPFI#  
----- DSM\_RULE PROGRAM -----

\* UNIT SIZE OF AVOIDED GENERATION UNIT = 15,065 G KW  
\* INSERVICE COSTS OF AVOIDED GEN. UNIT (000) = \$0.0

(1) YEAR	(1A)* VALUE OF DEFERRAL FACTOR	(2) AVOIDED GEN UNIT CAPACITY COST \$(000)	(2A)* AVOIDED ANNUAL UNIT KWH GEN (000)	(3) AVOIDED UNIT FIXED O&M COST \$(000)	(4) AVOIDED GEN UNIT VARIABLE O&M COST \$(000)	(5) AVOIDED GEN UNIT FUELREPLACEMEN COST \$(000)	(6) FUEL COST \$(000)	(6A)* AVOIDED PURCHASED CAPACITY COSTS \$(000)	(7) AVOIDED GEN UNIT BENEFITS \$(000)
1996	0.000	0	0	0	0	0	0	0	0
1997	0.000	0	0	0	0	0	0	0	0
1998	0.000	0	0	0	0	0	0	0	0
1999	0.098	0	4,487	0	0	175	90	396	481
2000	0.101	0	4,487	0	0	182	93	404	493
2001	0.103	0	4,487	0	0	190	96	413	507
2002	0.105	0	4,487	0	0	197	98	422	522
2003	0.107	0	4,487	0	0	205	99	432	538
2004	0.109	0	4,487	0	0	213	106	441	548
2005	0.112	0	4,487	0	0	222	109	451	564
2006	0.114	0	4,487	0	0	230	111	461	580
2007	0.117	0	4,487	0	0	240	111	471	599
2008	0.119	0	4,487	0	0	249	116	481	615
2009	0.122	0	4,487	0	0	259	118	492	633
2010	0.124	0	4,487	0	0	270	123	503	649
2011	0.127	0	4,487	0	0	280	129	514	665
2012	0.130	0	4,487	0	0	291	133	525	684
2013	0.132	0	4,487	0	0	303	134	537	706
2014	0.135	0	4,487	0	0	315	139	549	724
2015	0.138	0	4,487	0	0	328	145	561	743
2016	0.141	0	4,487	0	0	341	150	573	764
NOMINAL		0	80,765	0	0	4,490	2,101	8,626	11,015
NPV		0		0	0	1,719	822	3,433	4,330

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

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AVOIDED T & D AND PROGRAM FUEL SAVINGS  
RTPPIF#

----- DSM\_RULE PROGRAM -----

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11-Dec-96

\* INSERVICE COSTS OF AVOIDED TRANS. (000) =

\$866.9

\* INSERVICE COSTS OF AVOIDED DIST. (000) =

\$483.5

(1) YEAR	(2) AVOIDED TRANSMISSION CAPACITY COST \$(000)	(3) AVOIDED TRANSMISSION O&M COST \$(000)	(4) TOTAL AVOIDED TRANSMISSION COST \$(000)	(5) AVOIDED DISTRIBUTION CAPACITY COST \$(000)	(6) AVOIDED DISTRIBUTION O&M COST \$(000)	(7) TOTAL AVOIDED DISTRIBUTION COST \$(000)	(8) PROGRAM FUEL SAVINGS \$(000)
1996	0	0	0	0	0	0	
1997	0	0	0	0	0	0	(93)
1998	0	0	0	0	0	0	(197)
1999	92	11	103	0	0	0	(202)
2000	94	11	106	52	6	58	(216)
2001	96	11	108	53	6	59	(226)
2002	99	12	110	54	6	60	(231)
2003	101	12	113	55	6	61	(237)
2004	103	12	115	56	7	63	(240)
2005	105	12	117	57	7	64	(256)
2006	107	13	120	59	7	65	(263)
2007	110	13	122	60	7	67	(268)
2008	112	13	125	61	7	68	(269)
2009	114	13	128	62	7	70	(281)
2010	117	14	131	64	8	71	(286)
2011	119	14	133	65	8	73	(298)
2012	122	14	136	67	8	74	(312)
2013	124	15	139	68	8	76	(321)
2014	127	15	142	69	8	78	(324)
2015	130	15	145	71	8	79	(337)
2016	133	16	148	72	9	81	(351)
	-----	-----	-----	-----	-----	-----	(362)
NOMINAL	2,005	237	2,242	1,118	132	1,250	(5,571)
NPV:	799	94	893	446	52	498	(2,432)

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

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\* WORKSHEET : DSM PROGRAM FUEL SAVINGS  
RTPPIF#

----- DSM\_RULE PROGRAM -----

(1)	(2)	(3)	(4)	(5)	(6)	(7)
YEAR	REDUCTION IN KWH GENERATION NET NEW CUST KWH (000)	AVOIDED MARGINAL FUEL COST - REDUCED KWH \$(000)	INCREASE IN KWH GENERATION NET NEW CUST KWH (000)	INCREASED MARGINAL FUEL COST - INCREASE KWH \$(000)	NET AVOIDED PROGRAM FUEL SAVINGS \$(000)	EFFECTIVE PROGRAM FUEL SAVINGS \$(000)
1996	(5,423)	(93)	0	0	(93)	(93)
1997	(10,845)	(197)	0	0	(197)	(197)
1998	(10,845)	(202)	0	0	(202)	(202)
1999	(10,845)	(216)	0	0	(216)	(216)
2000	(10,845)	(226)	0	0	(226)	(226)
2001	(10,845)	(231)	0	0	(231)	(231)
2002	(10,845)	(237)	0	0	(237)	(237)
2003	(10,845)	(240)	0	0	(240)	(240)
2004	(10,845)	(256)	0	0	(256)	(256)
2005	(10,845)	(263)	0	0	(263)	(263)
2006	(10,845)	(268)	0	0	(268)	(268)
2007	(10,845)	(269)	0	0	(269)	(269)
2008	(10,845)	(281)	0	0	(281)	(281)
2009	(10,845)	(286)	0	0	(286)	(286)
2010	(10,845)	(298)	0	0	(298)	(298)
2011	(10,845)	(312)	0	0	(312)	(312)
2012	(10,845)	(321)	0	0	(321)	(321)
2013	(10,845)	(324)	0	0	(324)	(324)
2014	(10,845)	(337)	0	0	(337)	(337)
2015	(10,845)	(351)	0	0	(351)	(351)
2016	(10,845)	(362)	0	0	(362)	(362)
NOMINAL	(222,324)	(5,571)	0	0	(5,571)	(5,571)
NPV:		(2,432)		0	(2,432)	(2,432)

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

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\* WORKSHEET: UTILITY COSTS AND PARTICIPANT COSTS AND REV LOSS/GAIN  
 RTPPIFI  
 DSM\_RULE PROGRAM

(1) YEAR	(2) UTILITY PROGRAM COSTS & REBATES			(5) TOTAL REBATE/ INCENT. COSTS			(8) PARTICIPATING CUSTOMER COSTS & BENEFITS							(15) INC. IN CUST. KWH (000)	(16) INC. REV. - FUEL PORTION \$ (000)	(17) INC. NONFUEL PORTION	(18) INC. EFFECT. REV. IN BILL \$ (000)
	(2) UTIL. NONREC. COSTS \$ (000)	(3) UTIL. RECUR. COSTS \$ (000)	(4) TOTAL UTIL. PGM COSTS \$ (000)	(5) UTIL. NONREC. REBATES \$ (000)	(6) UTIL. RECUR. REBATES \$ (000)	(7) TOTAL REBATE/ INCENT. COSTS \$ (000)	(8) PARTIC. CUST. EQUIP COSTS \$ (000)	(9) PARTIC. CUST. O & M COSTS \$ (000)	(10) TOTAL COSTS PARTIC. CUST \$ (000)	(11) REDUCT. IN CUST. KWH (000)	(12) RED. REV. - FUEL PORTION \$ (000)	(13) RED. REV. NONFUEL PORTION \$ (000)	(14) EFFECT. REV. IN BILL \$ (000)				
1996	98	0	98	0	200	200	0	0	0	(5,005)	(108)	(50)	(158)	0	0	0	
1997	0	0	0	0	410	410	0	0	0	(10,010)	(218)	(101)	(319)	0	0	0	
1998	0	0	0	0	420	420	0	0	0	(10,010)	(196)	(102)	(298)	0	0	0	
1999	0	0	0	0	431	431	0	0	0	(10,010)	(186)	(104)	(289)	0	0	0	
2000	0	0	0	0	443	443	0	0	0	(10,010)	(191)	(105)	(296)	0	0	0	
2001	0	0	0	0	455	455	0	0	0	(10,010)	(197)	(106)	(303)	0	0	0	
2002	0	0	0	0	467	467	0	0	0	(10,010)	(201)	(107)	(308)	0	0	0	
2003	0	0	0	0	479	479	0	0	0	(10,010)	(203)	(108)	(311)	0	0	0	
2004	0	0	0	0	491	491	0	0	0	(10,010)	(207)	(110)	(317)	0	0	0	
2005	0	0	0	0	504	504	0	0	0	(10,010)	(205)	(111)	(316)	0	0	0	
2006	0	0	0	0	518	518	0	0	0	(10,010)	(208)	(112)	(320)	0	0	0	
2007	0	0	0	0	531	531	0	0	0	(10,010)	(212)	(114)	(325)	0	0	0	
2008	0	0	0	0	545	545	0	0	0	(10,010)	(210)	(115)	(325)	0	0	0	
2009	0	0	0	0	560	560	0	0	0	(10,010)	(210)	(116)	(326)	0	0	0	
2010	0	0	0	0	575	575	0	0	0	(10,010)	(209)	(117)	(326)	0	0	0	
2011	0	0	0	0	590	590	0	0	0	(10,010)	(210)	(119)	(329)	0	0	0	
2012	0	0	0	0	605	605	0	0	0	(10,010)	(215)	(120)	(335)	0	0	0	
2013	0	0	0	0	621	621	0	0	0	(10,010)	(220)	(122)	(342)	0	0	0	
2014	0	0	0	0	638	638	0	0	0	(10,010)	(225)	(123)	(348)	0	0	0	
2015	0	0	0	0	655	655	0	0	0	(10,010)	(232)	(124)	(356)	0	0	0	
2016	0	0	0	0	672	672	0	0	0	(10,010)	(251)	(126)	(377)	0	0	0	
	98	0	98	0	10,810	10,810	0	0	0	(205,205)	(4,312)	(2,312)	(6,625)	0	0	0	
	98	0	98	0	4,786	4,786	0	0	0	(2,016)	(1,068)	(3,084)		0	0	0	

\* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK

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TOTAL RESOURCE COST TESTS  
 RTPPIFI  
 DSM\_RULE PROGRAM

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(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT PROGRAM COSTS \$(000)	OTHER COSTS \$(000)	TOTAL COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T & D BENEFITS \$(000)	PROGRAM FUEL SAVINGS \$(000)	OTHER BENEFITS \$(000)	TOTAL BENEFITS \$(000)	NET BENEFITS \$(000)	CUMULATIVE DISCOUNTED NET BENEFITS \$(000)
1996	0	98	0	0	98	0	0	(93)	0	(93)	(93)	(93)
1997	0	0	0	0	0	0	0	(197)	0	(197)	(197)	(191)
1998	0	0	0	0	0	0	0	(202)	0	(202)	(197)	(372)
1999	0	0	0	0	0	481	161	(216)	0	426	(202)	(544)
2000	0	0	0	0	0	493	165	(226)	0	432	426	(212)
2001	0	0	0	0	0	507	168	(231)	0	444	432	96
2002	0	0	0	0	0	522	172	(237)	0	456	444	388
2003	0	0	0	0	0	538	175	(240)	0	473	456	663
2004	0	0	0	0	0	548	179	(256)	0	471	473	926
2005	0	0	0	0	0	564	183	(263)	0	484	471	1,167
2006	0	0	0	0	0	580	187	(268)	0	499	484	1,394
2007	0	0	0	0	0	599	191	(269)	0	521	499	1,609
2008	0	0	0	0	0	615	195	(281)	0	529	521	1,815
2009	0	0	0	0	0	633	199	(286)	0	546	529	2,008
2010	0	0	0	0	0	649	203	(298)	0	554	546	2,191
2011	0	0	0	0	0	665	208	(312)	0	561	554	2,362
2012	0	0	0	0	0	684	212	(321)	0	575	561	2,521
2013	0	0	0	0	0	706	217	(324)	0	599	575	2,671
2014	0	0	0	0	0	724	221	(337)	0	608	599	2,814
2015	0	0	0	0	0	743	226	(351)	0	618	608	2,948
2016	0	0	0	0	0	764	231	(362)	0	633	618	3,073
NOMINAL	0	98	0	0	98	11,015	3,492	(5,571)	0	8,936	633	3,191
NPV:	0	98	0	0	98	4,330	1,391	(2,432)	0	3,289	8,837	3,191
Discount Rate	8.77%											
Benefit/Cost Ratio: col (11) / col (6)	33.5											

RATE IMPACT TEST  
RTPPF#  
----- DSM\_RULE PROGRAM -----

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	
YEAR	INCREASED SUPPLY COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVES \$(000)	REVENUE LOSSES \$(000)	OTHER COSTS \$(000)	TOTAL ACCUM COSTS \$(000)	AVOIDED GEN UNIT BENEFITS \$(000)	AVOIDED T & D BENEFITS \$(000)	PROGRAM FUEL BENEFITS \$(000)	REVENUE GAINS \$(000)	OTHER BENEFITS \$(000)	TOTAL ACCUM BENEFITS \$(000)	NET BENEFITS TO ALL CUSTOMERS \$(000)	CUMULATIVE DISCOUNTED NET BENEFIT \$(000)
1996	0	98	200	(158)	0	139	139	0	0	(93)	0	(93)	(93)	(233)
1997	0	0	410	(319)	0	90	230	0	0	(197)	0	(197)	(290)	(497)
1998	0	0	420	(298)	0	122	352	0	0	(202)	0	(202)	(493)	(771)
1999	0	0	431	(289)	0	142	494	481	161	(216)	0	426	(67)	(551)
2000	0	0	442	(296)	0	147	641	493	165	(226)	0	432	366	(347)
2001	0	0	455	(303)	0	152	793	507	168	(231)	0	444	809	(155)
2002	0	0	467	(308)	0	156	951	522	172	(237)	0	456	1,266	25
2003	0	0	479	(311)	0	168	1,119	538	175	(240)	0	473	1,739	194
2004	0	0	491	(317)	0	175	1,294	548	179	(256)	0	471	2,210	346
2005	0	0	504	(316)	0	189	1,482	564	183	(263)	0	484	2,694	484
2006	0	0	518	(320)	0	196	1,680	580	187	(268)	0	499	3,193	614
2007	0	0	531	(325)	0	206	1,886	599	191	(269)	0	521	3,713	739
2008	0	0	545	(325)	0	221	2,107	615	195	(281)	0	529	4,242	851
2009	0	0	560	(326)	0	234	2,341	633	199	(286)	0	554	4,789	956
2010	0	0	575	(326)	0	248	2,589	649	203	(298)	0	554	5,342	1,050
2011	0	0	590	(329)	0	261	2,850	665	208	(312)	0	561	5,903	1,135
2012	0	0	605	(335)	0	270	3,120	684	212	(321)	0	575	6,478	1,215
2013	0	0	621	(342)	0	280	3,400	706	217	(324)	0	599	7,077	1,291
2014	0	0	638	(348)	0	290	3,690	724	221	(337)	0	608	7,685	1,361
2015	0	0	655	(356)	0	298	3,988	743	226	(351)	0	618	8,303	1,426
2016	0	0	672	(377)	0	295	4,283	764	231	(362)	0	633	8,936	1,489
NOMINAL	0	98	10,810	(6,625)	0	4,283		11,015	3,492	(5,571)	0	8,936	4,653	
NPV	0	98	4,786	(3,084)	0	1,800		4,330	1,391	(2,432)	0	3,289	1,489	
Discount rate				8.77%										
Benefit / Cost Ratio - Col (12)/Col (7)				1.83										

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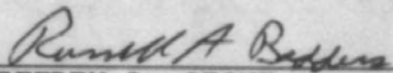
BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for approval of )  
proposed pilot/experimental Real Time ) Docket No. 941102-EI  
Pricing Program and the associated )  
rate schedule by Gulf Power Company )  
\_\_\_\_\_ )

Certificate of Service

I HEREBY CERTIFY that the original of Gulf's response has been furnished this 12<sup>th</sup> day of December 1996 by U.S. Mail or hand delivery to the following:

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