BEGGS & LANE

ATTORNEYS AND COUNSELLORS AT LAW

POST OFFICE BOX 12950

PENSACOLA, FLORIDA 32576-2950

UMIGINAL FUE COPY SEVENTH FLOOR BLOUNT BUILDING 3 WEST GARDEN STREET PENSACOLA, FLORIDA 32501 TELEPHONE (904) 432-2451 TELECOPIER (904) 469-3330

> E. DIXIE BEGGS Retired BERT H. LANE 1917-1981

October 13, 1994

ROBERT P. GAINES
WILLIAM GUY DAVIS, JR.
W. SPENCER MITCHEM
JAMES M. WEBER
ROBERT L. CRONGEYER
JOHN F. WINDHAM
J. NIXON DANIEL, III
G. EDISON HOLLAND IR

G. EDISON HOLLAND, JR.

G. EDISON HOLLAND,
RALPH A. PETERSON
RONALD L. NELSON
GARY B. LEUCHTMAN
JOHN P. DANIEL
JEFFREY A. STONE
JAMES S. CAMPBELL
TERESA E. LILES
CRYSTAL COLLINS

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

941102-EI

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

1w

Enclosures

Florida Public Service Commission cc: Michael Palecki

DOCUMENT NUMBER-DATE

10503 OCT 14 at

FPSC-RECORDS/REPORTING

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

URIGINAL FILE COPY

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. 94 1102-EI
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, FLD0032591-3460R-DATE

10503 OCT 14 &

- 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.¹
- 5. As noted in the Company's data filings, testimony and exhibits in the Commission's proceedings to establish the

¹Attachment 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.
- 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.
- 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.²

CONCLUSION

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

²Given 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.

G. EDISON HOLLAND, JR. Florida Bar No. 261599

JEFFREY A. STONE

Florida Bar No. 325953

Beggs and Lane

700 Blount Building

3 West Garden Street

P. O. Box 12950

Pensacola, Florida 32576-2950

(904) 432-2451

Attorneys for 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-ons¹ 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.

- 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:
- $P = \lambda \times M + adjustment factors + D$

Where,

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

"\lambda" 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 divided². 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.

¹Energy 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.

²Revenue 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.

REAL TIME PRICING

F_11	REAL TIME PRICE	ING			PSC FORM C PAGE 1 OF Run date:	
	DSM_RULE PROGRAM					02:30 PM
I. PROGRAM DEMAND SAVINGS AND LINE LOSSES		IV.	AVOIDED GENERATOR, TRAN	NS. AND DIST. COSTS		
(1) CUSTOMER KW REDUCTION AT THE METER	1,662.00 KW /CUST 2,152.12 KW GEN/CUST 12.6 % (1,540,110.0) KWH/CUST/YR 7.7 % 1.0034 0.0 KWH/CUST/YR (1,430,000.0) KWH/CUST/YR 0.00 21 YEARS 40 YEARS 30 YEARS 1.4851 1.4851		(15) GENERATOR CAPACITY (16) AVOIDED GENERATING (17) AVOIDED GEN UNIT FUE	VOIDED GENERATING UNIT VOIDED T & D INERATING UNIT COST ANSMISSION COST IN COST .	2.80 % 0.32 \$ 0.00 \$ 3.25 9 0.624 C 3.10 % 3.40 % 2.780 C 7.61 9	IKW IKW IKW/YR IKW/YR IKW/YR IKW/YR IENTS/KWH IENTS/KWH IKW/YR IKW/YR
III. UTILITY AND CUSTOMER COSTS						
(1) UTILITY NONRECURRING COST PER CUSTOMER (2) UTILITY RECURRING COST PER CUSTOMER (3) UTILITY COST ESCALATION RATE (4) CUSTOMER EQUIPMENT COST (5) CUSTOMER EQUIPMENT ESCALATION RATE (6) CUSTOMER O & M COST (7) CUSTOMER TAX CREDIT PER INSTALLATION (9)* CUSTOMER TAX CREDIT PER INSTALLATION RATE (10)* INCREASED SUPPLY COSTS (11)* SUPPLY COSTS ESCALATION RATE (12)* UTILITY DISCOUNT RATE (13)* UTILITY AFUDC RATE (14)* UTILITY AFUDC RATE (15)* UTILITY RECURRING REBATE/INCENTIVE (16)* UTILITY REBATE/INCENTIVE ESCAL RATE (16)* UTILITY REBATE/INCENTIVE ESCAL RATE	14,000.00 \$/CUST 1.00 \$/CUST/YR 3.25 % 1.00 \$/CUST 3.25 % 0.00 \$/CUST/YR 3.25 % 0.00 \$/CUST 0.00 \$/CUST 0.00 \$/CUST/YR 0.00 \$/CUST/YR 0.00 \$/CUST 57,000.00 \$/CUST/YR 3.25 %	то	NON-FUEL ENERGY AND DE (1) NON-FUEL COST IN CUST (2) NON-FUEL ESCALATION I (3) CUSTOMER DEMAND CH. (4) DEMAND CHARGE ESCAI (5)* DIVERSITY and ANNUAL FACTOR FOR CUSTOME C:\CE_RULE\ACOM.WK4	FOMER BILL	1.15 9 0.00 \$ 5.00 9	KW/MO
* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WOR	KBOOK	F	RATE IMPACT TEST:	2.26		

STOP REV LOSS: NO

Discount Rate 8.62% Benefit/Cost Ratio: col (11) / col (6)

8.62%

TOTAL RESOURCE COST TESTS RTP_JIM ----- DSM_RULE PROGRAM -----

45.6

PSC FORM CE 2.3 Page 1 of 1 10-Oct-94

(1)	(2)	(3)	(4)	(5)	(6)		(7)	(8)	(9)	(10)	(11)		(12)	(13)	
														UMULATIVE	
	INCREASED		PARTICIPANT	·					PROGRAM					ISCOUNTE	
	SUPPLY		PROGRAM	OTHER	TOTAL		AVOIDED	AVOIDED	FUEL	OTHER	TOTAL		NET	NET	
	COSTS	COSTS	COSTS	COSTS	COSTS		GEN UNIT	T&D	SAVINGS	BENEFITS	BENEFITS		BENEFITS	BENEFITS	
							BENEFITS	BENEFITS							
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)		\$ (000)	\$(000)	\$(000)	\$(000)	\$(000)		\$(000)	\$ (000)	•
1994	0	98	0	0	98	98	0	0	(79)	0	(79)	(79)	(177)	(177)	
1995	0	0	0	0	0	98	0	0	(169)	0	(169)	(248)	(169)	(333)	`
1996	0	0	0	0	0	98	0	0	(184)	0	(184)	(433)	(184)	(48:)
1997	0	0	0	0	0	98	0	0	(192)	0	(192)	(625)	(192)	(639)	/
1998	0	0	0	0	0	98	0	0	(202)	0	(202)	(826)	(202)	(784)	
1999	0	0	0	0	0	98	743	245	(219)	0	768	(58)	768	(276)	
2000	0	0	0	0	0	98	775	253	(224)	0	803	745	803	213	
2001	0	0	0	0	0	98	798	261	(256)	0	803	1,548	803	663	
2002	0	0	0	0	0	98	830	269	(270)	0	829	2,377	829	1,091	
2003	0	0	0	0	0	98	857	278	(300)	0	835	3,212	835	1,488	
2004	0	0	0	0	0	98	889	287	(325)	0	851	4,063	851	1,860	
2005	0	0	0	0	0	98	921	297	(355)	0	863	4,926	863	2,208	
2006	0	0	0	0	0	98	956	306	(383)	0	879	5,805	879	2,534	
2007	0	0	0	0	0	98	986	316	(428)	0	874	6,679	874	2,832	
2008	0	0	0	0	0	98	1,021	326	(469)	0	879	7,558	879	3,108	
2009	0	0	0	0	0	98	1,056	337	(516)	0	877	8,435	877	3,362	
2010	0	0	0	0	0	98	1,077	348	(604)	0	821	9,256	821	3,581	
2011	0	0	0	0	0	98	1,127	359	(630)	0	856	10,113	856	3,791	
2012	0	0	0	0	0	98	1,181	371	(653)	0	899	11,012	899	3,994	
2013	0	0	0	0	0	98	1,237	383	(680)	0	940	11,952	940	4,189	
2014	0	0	0	0	0	98	1,297	396	(707)	0	985	12,937	985	4,377	
					*****			******			******		******	******	
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:

Benefit / Cost Ratio - Col (12)/Col (7)

RATE IMPACT TEST
RTP_JIM
----- DSM_RULE PROGRAM ------

8.62%

2.26

PSC FORM CE 2.5 Page 1 of 1 10-Oct-94

(1)	(2)	(3)	(4)	(5)	(6)	(7)		(8)	(9)		(10)	(11)	(12)		(13)	(14)
										**						
								AVOIDED							NET	CUMULATIVE
	INCREASED	UTILITY						GEN UNIT	AVOIDED	PROGRAM						DISCOUNTED
	SUPPLY	PROGRAM		REVENUE	OTHER	TOTAL A	ACCUM:	UNIT	T&D	FUEL	REVENUE	OTHER	TOTAL	ACCUM:	TO ALL	NET
	COSTS	COSTS	INCENTIVES	LOSSES	COSTS	COSTS	COSTS:	BENEFITS E	BENEFITS	BENEFITS	GAINS	BENEFITS	BENEFITS	BENEF:	CUSTOMERS	BENEFIT
YEAR	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)		\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)		\$(000)	\$(000)
1994	0	98	200	(154)	0	144	144	0	0	(79)	0	0	(79)	(79)	(223)	(223)
1995	Ö	0	412	(322)	Ŏ	90	234	Ö	Ŏ	(169)	ō	Ö	(169)	(248)	(259)	(462)
1996	Ō	Ó	425	(314)	0	111	345	0	0	(184)	0	Ō	(184)	(433)	(295)	(712)
1997	0	0	439	(313)	0	127	471	0	0	(192)	0	0	(192)	(625)	(319)	(961)
1998	0	0	453	(301)	0	152	624	0	0	(202)	0	0	(202)	(826)	(354)	(1,215)
1999	0	0	468	(292)	0	177	800	743	245	(219)	0	0	768	(58)	`592	(823
2000	0	0	483	(294)	0	189	989	775	253	(224)	0	0	803	745	614	(450)
2001	0	0	499	(302)	0	197	1,186	798	261	(256)		0	803	1,548	606	(110)
2002	0	0	515	(310)	0	205	1,391	830	269	(270)		0	829	2,377	624	212
2003	0	0	532	(321)	0	211	1,602	857	278	(300)		0	835	3,212	624	509
2004	0	0	549	(332)	0	217	1,819	889	287	(325)		0	851	4,063	634	786
2005	0	0	567	(341)	0	226	2,045	921	297	(355)		0	863	4,926	637	1,042
2006	0	0	586	(351)	0	235	2,280	956	306	(383)		0	879	5,805	645	1,281
2007	0	0	605	(362)	0	243	2,522	986	316	(428)		0	874	6,679	631	1,497
2008	0	0	624	(351)	0	273	2,796	1,021	326	(469)	0	0	879	7,558	606	1,687
2009	0	0	645	(361)	0	283	3,079	1,056	337	(516)	0	0	877	8,435	593	1,859
2010	0	0	666	(360)	0	306	3,385	1,077	348	(604)	0	0	821	9,256	515	1,996
2011	0	0	687	(364)	0	323	3,708	1,127	359	(630)		0	856	10,113	533	2,127
2012	0	0	710	(376)	0	333	4,041	1,181	371	(653)		0	899	11,012	566	2,255
2013	0	0	733	(388)	0	344	4,386	1,237	383	(680)		0	940	11,952	595	2,379
2014	0	0 	756 	(400)	0	357	4,743	1,297	396	(707)			985	12,937	628	2,499
NOMINAL	0	98	11,555	(6,911)	0	4,743		15,750	5,034	(7,846)	0	0	12,937		8,194	
NPV:	0	98	5,088	(3,210)	0	1,977		5,658	1,820	(3,002)	0	0	4,475		2,499	

ATTACHMENT B FOLLOWS

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

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

"M" = $\frac{1}{2}$ multiplier which is used to adjust λ to recognize embedded costs

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

EFFECTIVE:

ISSUED BY:

"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 divided¹. 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 $4:00~\rm p.m.$ 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.

ISSUED BY:

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

TABLE OF CONTENTS

Section	Description
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

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

Designation	<u>URSC</u>	Classification	Sheet No.
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
РХ	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
		Billing Adjustments and Payment of Bill:	6.16
ECC		Cost Recovery Clause - Energy Conservation	6.16.1
RST	RST	Residential Service - Time-of-Use Conservation (Optional)	6.17
GST	GST	General Service - Non-Demand Time-of-Us Conservation (Optional)	se 6.19
GSDT	GSDT	General Service - Demand Time-of-Use Conservation (Optional)	6.21
LPT	GSLDT	Large Power Service - Time-of-Use Conservation (Optional)	6.24
РХТ	GSLDT1	Large High Load Factor Power Service - Time-of-Use Conservation (Optional)	6.27
SBS		Standby and Supplementary Service	6.29
ISS		Interruptible Standby Service	6.33
RSVP	RS1	Residential Service Variable Pricing	6.39
EPQ		Enhanced Power Quality	6.41
RTP		Real Time Pricing	6.42

ISSUED BY:

TABLE OF CONTENTS

Section	Description
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) PXT - 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

Section VI TWENTY/BECOND Tw. y-Third Revised Sheet No. 6.1 Canceling TWENTY/FIYST Twenty-Second Revised Sheet No. 6.1

<u>Desi</u>	gnation	URSC	<u>Classification</u>	heet No.
R	S	RS	Residential Service	6.2
G	S	GS	General Service - Non-Demand	6.3
G	SD	GSD	General Service - Demand	6.4
L	Р	GSLD	Large Power Service	6.6
Р	X	GSLD1	Large High Load Factor Power Service	6.8
0	S SL, OL	, OL1, OL2	Outdoor Service	6.10
S	Ε		Supplemental Energy (Optional Rider)	6.13
L	В		Levelized Billing (Optional Rider)	6.14
С	R		Cost Recovery Clause - Fossil Fuel and Purchased Power	6.15
P	PCC		Purchased Power Capacity Cost Recovery Clause	6.15.1
Ε	CR		Environmental Cost Recovery Clause	6.15.2
			Billing Adjustments and Payment of Bills	6.16
Ε	СС		Cost Recovery Clause - Energy Conservation	6.16.1
R	ST	RST	Residential Service - Time-of-Use Conservation (Optional)	6.17
G	ST	GST	General Service - Non-Demand Time-of-Us Conservation (Optional)	e 6.19
G	SDT	GSDT	General Service - Demand Time-of-Use Conservation (Optional)	6.21
L	PT	GSLDT	Large Power Service - Time-of-Use Conservation (Optional)	6.24
Р	XT	GSLDT1	Large High Load Factor Power Service - Time-of-Use Conservation (Optional)	6.27
S	BS		Standby and Supplementary Service	6.29
I	SS		Interruptible Standby Service	6.33
R	SVP	RS1	Residential Service Variable Pricing	6.39
Ε	PQ		Enhanced Power Quality	6.41
<u>R</u>	TP		Real Time Pricing	<u>6.42</u>