

FLORIDA PUBLIC SERVICE COMMISSION

Capital Circle Center - 2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

M E M O R A N D U M

April 25, 1996

TO : DIRECTOR, DIVISION OF RECORDS AND REPORTING

FROM : DIVISION OF ELECTRIC AND GAS [BERG, GOAD] ^{w63}
DIVISION OF CONSUMER AFFAIRS [WAGNER] ^{mon} JDJ

RE : DOCKET NO. 960316-EI - PETITION FOR APPROVAL OF REAL TIME
PRICING DEMONSTRATION TARIFF BY FLORIDA POWER CORPORATION

AGENDA: 05/07/96 - REGULAR AGENDA - TARIFF FILING- INTERESTED
PERSONS MAY PARTICIPATE

CRITICAL DATES: MAY 11, 1996 - 60 DAY SUSPENSION DATE

SPECIAL INSTRUCTIONS: I:\PSC\EAG\WP\960316.BCM

CASE BACKGROUND

On March 11, 1996, Florida Power Corporation (FPC) petitioned the Commission for approval of a real-time pricing demonstration tariff (RTP-1). The demonstration tariff provides hourly energy prices to a maximum of 10 customers each having a demand greater than one megawatt and participation is optional. FPC is interested in evaluating how customers respond to the hourly energy prices. The company feels that real-time pricing is a tool that customers can use to control their energy costs. As such, RTP-1 will increase customer choice and should therefore increase overall customer satisfaction with the service provided by FPC. From FPC's viewpoint, the customers' responses to price changes should improve the company's operating efficiencies. If customers respond to the price signals as FPC predicts, then load will be curtailed during the high priced system peak periods and increased during the hours when FPC's plants are operating at or below minimum load levels.

The demonstration is anticipated to last up to four years and the company will submit a final report detailing the results within 180 days of completion of the study. The company is not requesting recovery of any costs associated with this demonstration program at this time.

DOCUMENT NUMBER-DATE

04756 APR 25 96

FPSC-RECORDS/REPORTING

DISCUSSION OF ISSUES

ISSUE 1: Should the Commission approve the pricing demonstration tariff (RTP-1) proposed by Florida Power Corporation?

RECOMMENDATION: Yes.

STAFF ANALYSIS: The objective of FPC's real-time pricing demonstration is to evaluate customer responses to hourly energy prices. This objective is similar to the previous two RTP experimental rate schedules approved by the Commission. The basic premise underlying time-of-use pricing is to encourage customers to shift usage from the high cost on-peak hours to lower cost off-peak hours through varying energy prices. If customers do shift their load from the on-peak periods into the off-peak periods, then benefits will flow to both the RTP customer and the remaining body of customers. Towards that end, FPC will provide participating RTP customers with a set of hourly prices that will be in effect for the following 24 hour period beginning at midnight. FPC will transmit the hourly prices to the customers by 4:00 p.m. the preceding day. RTP customers will then have an opportunity to modify their consumption patterns to receive cost savings. Staff notes that the hourly RTP-1 rates transmitted to the customers do not reflect actual marginal costs. Rather, the hourly RTP rates are somewhere between average embedded rates and true marginal cost rates.

The RTP-1 demonstration tariff (Attachment A) is simple and straightforward and appears to be reasonable. The overall hourly energy charge that a customer will see includes four components: 1) embedded generation cost which will vary according to hourly system load; 2) the tariffed energy conservation cost recovery factor (ECCR); 3) the tariffed capacity cost recovery (CCR) factor; and 4) hourly system fuel costs. Also added to each customer's monthly bill will be a customer charge, a coincident demand charge to recover embedded transmission costs, and a noncoincident demand charge to recover embedded distribution costs. On a class basis, the proposed RTP-1 rate is revenue neutral. This is because the RTP-1 revenue level used to establish the RTP-1 rates is equal to the revenue the company would have collected through the company's general service demand time-of-use rate offering.

April 25, 1996
Docket No. 960316-EI

Consistent with the treatment the Commission afforded both Florida Power and Light (FPL) and Gulf Power Company, the company has not requested to recover any of the cost associated with this program through the ECCR clause. The company has reserved the right to collect these costs at a future date provided that it can successfully demonstrate to the Commission that its real-time pricing is truly a conservation program. As discussed in both the FPL and Gulf Power RTP staff recommendations, staff remains skeptical that RTP is a conservation program. Staff views the proposed rate as a method for utilities to reposition themselves for what they perceive as an increasingly competitive environment.

At staff's request, the company has agreed to several reporting requirements. First, the company has agreed to file the pre-test load profiles with the Commission as customers begin taking service on the RTP-1 rate schedule. Staff believes that the pre-test load profiles are necessary for staff to verify any conclusions reached by the company at the end of the demonstration. Second, the company will submit a letter each quarter to the Commission's Division of Electric and Gas that details the amount of total costs the company has incurred under this rate schedule. The report should divide 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-1 rate schedule irrespective of the first year of service revenue cap; and 2) all other RTP-1 program costs. Finally, on a calendar year basis, the company has agreed to file a brief report explaining the accuracy of the previous years forecast of system lambda. At a minimum, the report should identify the variables which have the greatest impact on the overall accuracy of FPC's system lambda forecast.

April 25, 1996
Docket No. 960316-EI

ISSUE 2: What is the appropriate effective date for the RTP-1 tariff?

STAFF RECOMMENDATION: May 8, 1996.

STAFF ANALYSIS: If the Commission votes to approve the proposed tariff, the staff recommends that it become effective May 8, 1996.

ISSUE 3: Should this docket be closed?

STAFF RECOMMENDATION: Yes.

STAFF ANALYSIS: If no substantially affected person files a protest within 21 days of the issuance of the order, the docket should be closed. If a protest is filed within 21 days from the issuance date of the order, the tariff should remain in effect with any increase held subject to refund, pending resolution of the protest.



Rate Code

- 301 (Secondary)
- 302 (Primary)
- 303 (Transmission)

**RATE SCHEDULE RTP-1
 LIMITED AVAILABILITY EXPERIMENTAL RATE
 REAL TIME PRICING**

AVAILABILITY:

Availability is limited to ten (10) customers. This rate is experimental and available through the execution of a Real Time Pricing Service Agreement with FPC. Customer participation requires the mutual agreement of both the Company and the Customer.

Service under this experimental schedule must commence before December 31, 1998, unless extended by order of the Florida Public Service Commission.

APPLICABLE:

Applicable to customers who are otherwise eligible for service under rate schedules GS-1, GSD-1, GST-1, or GSDT-1, with a measured monthly demand of 1 MW or greater and who meet all requirements and provisions set forth in this rate.

CHARACTER OF SERVICE:

Continuous service, alternating current, 60 cycle, single-phase or three-phase, at the Company's standard voltage available.

LIMITATION OF SERVICE:

Standby or resale service not permitted hereunder. Service under this rate is subject to the Company's currently effective and filed "General Rules and Regulations for Electric Service."

RATE PER MONTH:

Customer charge:

| | |
|--------------------------------|----------|
| Secondary Metering Voltage: | \$ 19.20 |
| Primary Metering Voltage: | \$155.50 |
| Transmission Metering Voltage: | \$737.50 |

Demand Charges:

| | |
|-------------------------------|------------------------------------|
| Coincident Demand Charge: | \$1.25 per KW of Coincident Demand |
| Non-coincident Demand Charge: | \$1.50 per KW of Maximum Demand |

ISSUED BY: W. C. Slusser, Jr., Director, Pricing Department
 EFFECTIVE:



SE NO. VI
Tenth Revised Sheet No. 6.291
Cancels Ninth Revised Sheet No. 6.291

Rate Code
301 (Secondary)
302 (Primary)
303 (Transmission)

Page 2 of 5

Energy Charges:

The following charges shall apply to kWh usage each hour and shall be summed for all hours of the billing period:

| | | |
|------|---|--------------------------------------|
| | Non-fuel Energy Charge: | 1.695 cents per kWh * f(λ) |
| plus | Energy Conservation Cost Recovery Charge: | GSD-1 factor per BA-1 |
| plus | Capacity Cost Recovery Charge: | GSD-1 factor per BA-1 |
| | Fuel Cost Recovery Factor Charge: | Ratio * λ |

where,

- λ = Florida Power Corporation's system incremental fuel cost, expressed in cents/kWh.
- f(λ) = A factor computed for each hour pursuant to a formula based on the value λ projected for that hour. The formula shall be revised annually and submitted to the FPSC to be treated as confidential information. The Company shall satisfy the FPSC staff that the application of this factor to the hourly load characteristics of firm general service customers over 1,000 KW results in the average load-weighted value of this factor to be equal to one.
- Ratio = This ratio shall be revised with each change in the system average fuel factor and shall be calculated as the ratio of the levelized system average factor to the average system load-weighted value of λ during the period used as the basis for determining the fuel factor.

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Rate Codes
301 (Secondary)
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Page 3 of 5

Notification Of Hourly Prices: The Company will notify the Customer by 4:00 p.m. prevailing clock time of each work day the sum of the energy of charges that are applicable on an hourly basis, for the next twenty-four (24) hours beginning at 12:00 a.m. (midnight). Except during unusual times of high risk, the Company will make available prices for Saturday through Monday on the previous Friday. More than day-ahead pricing may also be used for holidays as defined in the Company's conventional tariffs.

The Company is not responsible for a customer's failure to receive and act upon the hourly RTP-1 prices. If a customer does not receive these prices, it is the customer's responsibility to inform the Company so the prices may be supplied.

DETERMINATION OF DEMAND:

Coincident demand shall be defined as the customer's hourly demand at the time of the system's monthly maximum demand. Non-coincident demand shall be defined as the customer's maximum hourly demand during the billing period.

DELIVERY VOLTAGE CREDIT:

When a customer takes a service under this rate at a delivered voltage above standard distribution secondary voltage, the maximum demand shall be subject to the following credits:

| | |
|--|--|
| For Distribution Primary Delivery Voltage: | \$0.30 per kW of non-coincident demand |
| For Transmission Delivery Voltage: | \$0.69 per kW of non-coincident demand |

METER VOLTAGE ADJUSTMENT:

Metering voltage will be at the option of the Company. When the company meters at a

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EFFECTIVE:



Rate Code
301 (Secondary)
302 (Primary)
303 (Transmission)

Page 4 of 5

voltage above distribution secondary, the applicable following reduction factor shall apply to the monthly energy charge, demand charges and delivery voltage credit hereunder:

| <u>Metering Voltage</u> | <u>Reduction Factor</u> |
|-------------------------|-------------------------|
| Distribution Primary | 1.0% |
| Transmission | 2.0% |

POWER FACTOR:

Bills computed under the above rate per month charges will be increased 22 cents for each KVAR by which the reactive demand exceeds numerically .62 times the maximum kW demand, and will be decreased 22 cents for each KVAR by which the reactive demand is less than, numerically, .62 times the maximum kW demand.

ADDITIONAL CHARGES:

| | |
|-------------------------------|---------------------|
| Gross Receipts Tax Factor: | See Sheet No. 6.105 |
| Right of Way Utilization Fee: | See Sheet No. 6.106 |
| Municipal Tax: | See Sheet No. 6.106 |
| Sales Tax: | See Sheet No. 6.106 |

MINIMUM BILL:

The minimum monthly bill shall be the Customer Charge. Where special equipment to serve the Customer is required, the Company may require a specified minimum charge.

TERMS OF PAYMENT:

Bills rendered hereunder are payable within the time limit specified on the bill at Company designated locations.

TERMS OF CONTRACT:

Service under this experimental rate schedule shall be for a minimum period of one (1) year. Service under this rate schedule may be terminated, upon 60 days written notice by either the Company or the Customer. All termination notices will become effective

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| Rate Code | |
|-----------|----------------|
| 301 | (Secondary) |
| 302 | (Primary) |
| 303 | (Transmission) |

on the annual anniversary date of the contract. After terminating service under this rate, the Customer may not return to this rate during the experimental period.

SPECIAL PROVISIONS:

1. Customers will be required to execute a Service Agreement which will include standard terms and conditions including the confidentiality of prices.
2. The Company may, under this experimental rate, provide additional tariff features which the customer may elect.
3. The Company will furnish service under this rate at a single voltage. Equipment to supply additional voltages or additional facilities for the use of the Customer shall be furnished and maintained by the Customer. The Customer may request the Company to furnish such additional equipment, and the Company, at its sole option, may furnish, install and maintain such additional equipment, charging the Customer for the use thereof at the rate of 1.67% per month of the installed cost of such additional equipment.
4. The Company shall not be required to accept customers on this experimental rate if the customer's participation in the experiment would: a) not be economically justified for the Company, or b) create undue redundancy within the experiment. Customers will be evaluated on a first-come, first-served basis. Customer participation is at the mutual agreement of the customer and the Company.
5. Service under this rate schedule shall commence with the first full billing period following the installation date of metering and all other required equipment. Billing shall be based on a calendar month.

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