



Public Service Commission  
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DATE: OCTOBER 24, 2002  
TO: DIRECTOR, DIVISION OF THE COMMISSION ADMINISTRATIVE SERVICES (BAYÓ)  
FROM: DIVISION OF ECONOMIC REGULATION (E. DRAPER, WHEELER) OFFICE OF THE GENERAL COUNSEL (VINING)  
RE: DOCKET NO. 020961-EI - PETITION FOR MODIFICATION AND EXTENSION OF EXPERIMENTAL REAL TIME PRICING RATE, RATE SCHEDULE RTP-GX, BY FLORIDA POWER & LIGHT COMPANY.  
AGENDA: 11/05/2002 - REGULAR AGENDA - TARIFF FILING - INTERESTED PERSONS MAY PARTICIPATE  
CRITICAL DATES: 60-DAY SUSPENSION DATE: 11/5/2002  
SPECIAL INSTRUCTIONS: NONE  
FILE NAME AND LOCATION: S:\PSC\ECR\WP\020961.RCM

CASE BACKGROUND

The Commission approved Florida Power & Light Company's (FPL) Real Time Pricing (RTP) rate schedule RTP-GX effective February 1, 1995, in Docket No. 940423-EG. See Order No. PSC-94-1232-FOF-EG. RTP is an optional experimental rate schedule that provides hourly marginal energy prices to commercial and industrial customers. The purpose of the pilot program was to determine customer response to marginal price signals. Initially, the rate was available to customers whose monthly demands exceeded 1,500 kW. Participation was limited to 50 customers, and the rate was scheduled to expire on December 31, 1998.

FPL had enrolled only four customers under the original RTP rate schedule when they proposed to lower the minimum monthly demand requirement from 1,500 kW to 1,000 kW. This change expanded the number of customers eligible for the rate from 150 to 425. The

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modified rate schedule was approved by Order No. PSC-96-0027-FOF-EI, issued on January 8, 1996.

By year-end 1996, FPL had 39 customers on the RTP rate. The number of customers was sufficient to conduct a meaningful experiment, but FPL did not experience sufficient extreme system load conditions to measure the customers' responses to the hourly price signals. Order No. PSC-99-0058-FOF-EG, issued January 6, 1999, granted FPL's request for an extension of the RTP-GX rate through December 31, 2000.

On July 20, 2000, FPL filed a petition to modify and extend the Real Time Pricing rate schedule effective for the period January 1, 2001, through December 31, 2002. (Docket No. 000902-EI) The modifications altered certain components of the RTP rate to increase price volatility and simplify the rate. FPL also reduced the program's demand eligibility level from 1,000 kW to 500 kW. The modifications became effective April 1, 2001. See Order No. PSC-01-0067-TRF-EI, issued January 9, 2001.

The current RTP rate schedule will expire on December 31, 2002. FPL is now seeking to (1) extend the RTP rate through December 31, 2003, (2) close the RTP rate to new customers as of December 31, 2002, and (3) withdraw the RTP rate after December 31, 2003, and transfer any existing RTP customers to their otherwise applicable rate schedule.

The Commission has jurisdiction over this matter pursuant to Sections 366.03, 366.04, and 366.06, Florida Statutes.

### DISCUSSION OF ISSUES

**ISSUE 1:** Should the Commission approve FPL's petition to (1) extend the RTP rate through December 31, 2003, (2) close the RTP rate to new customers as of December 31, 2002, and (3) withdraw the RTP rate after December 31, 2003, and transfer any existing RTP customers to their otherwise applicable rate?

**RECOMMENDATION:** Yes. (E. DRAPER, WHEELER)

**STAFF ANALYSIS:** Under the optional RTP rate, FPL transmits to customers by 4:00 p.m. a set of hourly prices based on marginal costs 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 the lower-priced hours. FPL's stated purpose for the RTP research program was to examine customer reaction to marginal price signals.

#### Hourly RTP Prices

The RTP energy charge consists of three components, which are discussed in more detail below. FPL has not proposed any changes to the calculation of the RTP energy charge.

#### Marginal Operating Costs (MOP)

The MOP is the short-run variable cost to produce the next unit of output, and consists of incremental fuel and variable operation and maintenance (O&M) expenses. This component is a marginal price, in contrast to the average fuel and O&M prices paid under standard rates.

#### Marginal Reliability Costs (MREL)

The MREL is designed to recognize that there may be reliability constraints during some hours that must be reflected in the price signal. In hours when it is projected that there will be ample system capacity, this component is zero. However, in those hours when there are system constraints, the MREL reflects this incremental cost.

Marginal Recovery (MREC)

The MREC component is a fixed amount added to each hourly RTP price. The MREC is .75 cents per kWh for GSLD(T)-1 and GSLD(T)-2 customers, and .25 cents per kWh for GSLD(T)-3 customers.

Customer Baseline Load

FPL's RTP rate is designed to be revenue neutral, i.e., if customers use the same amounts of energy at the same times as they have historically, their bills will not differ from what they would pay under the existing otherwise applicable rate. The starting point for calculating the cost of a bill is determined by a contract-established Customer Baseline Load (CBL). The CBL is the customer's historic electricity usage that is used as a benchmark to compare with future electricity usage. FPL must establish a unique CBL for each customer based on historical data and the CBL is adjusted annually based on the previous year's usage. The customer pays the RTP rate for any actual usage above their CBL, and receives a credit at the RTP rate for any actual usage below their CBL. Actual usage that is the same as the CBL is priced at the otherwise applicable rate.

Regulatory Treatment of RTP Revenues and Costs

Revenues received from the MOP component, which represents the incremental fuel costs, are being credited to the Fuel and Purchased Power Cost Recovery Clause. Any credits or charges from the MREL and MREC components are reported below-the-line for surveillance purposes. In addition, the programming costs FPL has been incurring, such as marketing, development, and monitoring costs, have been reported below-the-line for surveillance purposes. See Order No. PSC-94-1332-FOF-EG. FPL has not proposed any changes to the treatment of the RTP revenues and costs.

Analysis

The experimental RTP rate was originally approved to determine whether customers would respond to high hourly energy prices by shifting their load, which would result in a lower peak demand. FPL has concluded that most RTP customers do not curtail their load in response to high hourly energy prices.

To support this finding, FPL provided an analysis showing each RTP customer's response to the hourly RTP prices for the period May 1, 2002, through May 7, 2002. FPL selected this time-frame due to the large number of high-priced hours that occurred. During the selected week, during the lower-cost hours, RTP prices ranged between 2 cents per kilowatt-hour (kwh) and 10 cents per kwh. During the five high-priced periods, the RTP price reached approximately 40 cents per kwh.

The analysis shows that 15 out of the 20 current RTP customers did not curtail their load during the high-priced periods. The remaining five customers did react by curtailing during the high-priced periods.

FPL further states that the number of customers opting to take service under the RTP rate has dropped from 42 customers in 1998 to 20 customers in July 2002. Customers have terminated service under the RTP rate for economic reasons.

FPL provided monthly bill amounts for the period April 2001 through August 2002 for the current 20 RTP customers showing the RTP bill amount, and what the bill amount would have been under the otherwise applicable rate. The analysis shows that three RTP customers enjoyed substantial savings under the RTP rate, indicating that they were able to shift load from the high-priced hours to the lower-priced hours. Five customers realized savings between 12 percent and 22 percent. For the remaining 12 customers the difference between the RTP bill and what the bill would have been under the otherwise applicable rate was minimal. This indicates that these 12 customers only slightly adjusted their usage in response to the marginal price signals.

### **Conclusion**

Staff recommends that FPL's petition be approved. The current RTP rate is scheduled to expire on December 31, 2002, however, staff believes it is appropriate to extend the rate until December 31, 2003, to allow ample time for customers to prepare to transfer to otherwise applicable rates.

The original RTP rate was scheduled to expire on December 31, 1998. FPL has extended and modified the RTP rate several times to review customer response to marginal price signals. In addition,

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FPL lowered the minimum required monthly demand from an initial 1,500 kW to 500 kW to increase customer participation. Despite these changes, only 20 customers are currently taking service under the RTP rate.

Because of the low level of participation in the RTP rate schedule, and the lack of demonstrable demand reduction, staff recommends that FPL's petition be approved.

**ISSUE 2:** Should this docket be closed?

**RECOMMENDATION:** Yes. If Issue 1 is approved, this tariff should become effective on November 5, 2002. If a protest is filed within 21 days of the issuance of the order, this tariff should remain in effect with any increase held subject to refund pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order. (VINING)

**STAFF ANALYSIS:** If Issue 1 is approved, this tariff should become effective on November 5, 2002. If a protest is filed within 21 days of the issuance of the order, this tariff should remain in effect with any increase held subject to refund pending resolution of the protest. If no timely protest is filed, this docket should be closed upon the issuance of a consummating order.