BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for approval of modifications to the real time pricing demonstration tariff, Rate Schedule RTP-1, by Florida Power Corporation.

DOCKET NO. 971172-EI ORDER NO. PSC-97-1486-FOF-EI ISSUED: November 24, 1997

The following Commissioners participated in the disposition of this matter:

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

ORDER APPROVING TARIFF MODIFICATION

BY THE COMMISSION:

In May 1996, this Commission approved Florida Power Corporation's (FPC) experimental Real Time Pricing (RTP) Rate Schedule in Docket No. 960316-EI. Under the RTP rate, customers are provided with 24 hourly energy prices by 4:00 p.m. of the day before they are applicable. On September 5, 1997, FPC filed a petition to modify the method by which these hourly energy prices are determined.

The existing RTP rate consists of a fixed customer charge, a fixed two-part demand charge that recovers transmission and distribution costs, and a variable energy charge. The energy charge varies hourly, and the customer is notified by 4:00 p.m. what the charge will be for each hour of the following day. The proposed change to the RTP rate affects only the manner in which the energy charge is determined. The remaining rates, terms, and conditions of the RTP experimental program are unchanged.

The existing hourly RTP energy charges are determined by summing the following four components:

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- A non-fuel energy charge that varies each hour based on FPC's system lambda;
- A fuel cost recovery factor charge that varies each hour based on FPC's system lambda;
- 3. The Energy Conservation Cost Recovery charge applicable to the GSD-1 rate class; and
- The Capacity Cost Recovery charge applicable to the GSD-1 rate class.

The proposed change to the RTP energy charge would modify components 1 and 2 of the rate, as discussed in the following paragraphs. Components 3 and 4, which are identical to the Energy Conservation and Capacity Cost charges that would have been paid had the customers remained on their current rate, will not change.

Non-Fuel Energy Charge

The existing non-fuel energy charge is designed to recover the embedded generation-related costs to serve RTP customers. It is determined by multiplying a fixed factor of 1.695 cents per kilowatt-hour (kWh) by a factor that varies each hour based on a projection of FPC's system lambda. System lambda represents the incremental cost of generating the next megawatt-hour, based on available generation and system load at any given point in time.

The fixed 1.695 cents per kWh component represents the base rate generation revenues (based on historical data) paid by those customers eligible for the RTP rate. The proposed changes do not alter the method used to set this factor; however, the factor is updated to reflect more recent historical data. The new factor, based on calendar year 1996 data, is 1.631 cents per kWh.

FPC proposes to change the method used to determine the hourly factors that are applied to the 1.631 cents per kWh factor. Instead of the current method, which uses system lambda to shape the hourly prices, the proposed change would use system megawatt (MW) load requirements.

Under the existing RTP rate, the variable factors are a function of the annually updated one-year projection of FPC's hourly system lambdas. The derivation of the factors is such that the resulting RTP hourly prices will recover, on a projected basis,

the total embedded production plant costs attributable to the RTP customers. The RTP rate is thus designed to be revenue neutral with respect to base rate generation costs.

Although FPC has signed RTP service agreements with three customers, it has never billed any customers under the existing RTP rate. In September 1996, before the first billing under the RTP rate, FPC's Crystal River Unit 3 nuclear plant was shut down. It is not expected to return to service until late this year. As a result, FPC's incremental costs increased significantly, the RTP hourly prices exceeded the original forecast, and FPC never commenced billing under the RTP rate.

FPC contends that the inherent difficulty in projecting system lambda makes it unsuitable to use as a determinant of energy prices under the RTP rate. FPC proposes instead to use FPC's system load to shape the hourly RTP prices. FPC believes that the one-year projection of system load is more accurate than the projection of system lambda required under the existing rate.

The proposed rate divides FPC's system MW load into six levels, and assigns a factor to each that is applied to the fixed factor of 1.631 cents per kWh:

Load		Factor
Less than 3,000 MW		.10
Between 3,000 and 4,500	MW	.50
Between 4,500 and 6,000	MW	1.75
Between 6,000 and 7,000	MW	3.00
Between 7,000 and 7,500	MW	5.00
7,500 MW and higher		10.00

Thus, for example, during those hours when system load is projected to be between 4,500 and 6,000 MW, the non-fuel energy component of the RTP hourly energy charge would be (1.631*.50) = .816 cents per kWh. The factors shown above will be updated annually, based on a projection of system load for the following year. The factors will be determined in a manner that insures that the non-fuel energy component, on a projected basis, will recover the same amount of generation related revenues as the existing GSDT-1 rate. The revised rate is thus designed to be revenue neutral, as is the existing rate.

Fuel Cost Recovery Charge

The existing RTP energy rate contains a factor that represents the fuel costs associated with serving the customers. Like the non-fuel energy charge, this factor is also designed to vary hourly based on FPC's system lambda.

Under the proposed change, the fuel charge paid by RTP customers would no longer vary hourly, but would be the same tariffed fuel charge paid by FPC's General Service Demand Time-of-Use (GSDT-1) customers. As discussed above, FPC believes that system lambda is subject to excessive volatility, and should not be used to set the RTP energy prices.

Conclusion

We are concerned that the proposed modifications may result in a rate which provides weaker price signals to customers. The purpose of the RTP experiment, as stated in our order approving it, is to "...evaluate customer responses to hourly energy prices." By diluting the hourly price signals, the revised RTP rate may not produce the desired shift in usage from high cost hours to lower cost hours.

We believe, however, that the advantages of the proposed changes outweigh this concern. The existing design of the RTP rate may make it unattractive to potential customers. The projection of system lambda requires the utility to estimate for each hour of the year unit availability, heat rates, system load, fuel prices, and variable O&M costs. Because of the uncertainty in projecting system lambda for a year in advance, and the resulting potential volatility in RTP energy prices, customers may be less willing to commit to the RTP experimental rate.

The proposed change to the RTP rate requires only an annual projection of system load. In addition, the fuel component of RTP customers' bills will no longer change hourly, but will be set at the otherwise applicable GSDT-1 rate. Thus under the newly designed rate only the non-fuel energy component will vary hourly, instead of both the fuel and non-fuel energy components. We agree that this projection is subject to less volatility than the estimate of system lambda. These changes should make the rate more attractive to potential customers, and we find that they should be approved.

FPC is not currently recovering the costs of the RTP experiment through the Energy Conservation Cost Recovery Clause, although they may at some future date seek such recovery if it can be demonstrated that the program provides peak demand reductions or other savings.

Based on the foregoing, it is

ORDERED by the Florida Public Service Commission that Florida Power Corporation's proposed modifications to its Real Time Pricing Demonstration Tariff, as described in the body of this Order, are approved. It is further

ORDERED that the effective date of Florida Power Corporation's proposed modifications to its Real Time Pricing Demonstration Tariff, as described in the body of this Order, is November 7, 1997. 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 requirements set forth below, this docket shall be closed.

By ORDER of the Florida Public Service Commission this $\underline{24th}$ day of November, $\underline{1997}$.

BLANCA S. BAYÓ, Director

Division of Records and Reporting

(SEAL)

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NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing or judicial review of Commission orders that is available under Sections 120.57 or 120.68, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing or judicial review will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The Commission's decision on this tariff is interim in nature and will become final, unless a person whose substantial interests are affected by the action proposed files a petition for a formal 25-22.036(4), Florida proceeding, Rule as provided by provided by Rule Administrative Code, in the form 22.036(7)(a)(d) and (e), Florida Administrative Code. petition must be received by the Director, Division of Records and Reporting, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on December 15, 1997.

In the absence of such a petition, this Order shall become final on the day subsequent to the above date.

Any objection or protest filed in this docket before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.

If this Order becomes final on the date described above, any party adversely affected may request judicial review by the Florida Supreme Court in the case of an electric, gas or telephone utility or by the First District Court of Appeal in the case of a water or wastewater utility by filing a notice of appeal with the Director, Division of Records and Reporting and filing a copy of the notice of appeal and the filing fee with the appropriate court. This filing must be completed within thirty (30) days of the date this Order becomes final, pursuant to Rule 9.110, Florida Rules of Appellate Procedure. The notice of appeal must be in the form specified in Rule 9.900(a), Florida Rules of Appellate Procedure.