

State of Florida



# Public Service Commission

CAPITAL CIRCLE OFFICE CENTER • 2540 SHUMARD OAK BOULEVARD  
TALLAHASSEE, FLORIDA 32399-0850

**-M-E-M-O-R-A-N-D-U-M-**

**DATE:** August 16, 2007

**TO:** Office of Commission Clerk (Cole)

**FROM:** Division of Economic Regulation (Nickel, Draper) *ESD*  
Office of the General Counsel (Fleming) *SMC*

**RE:** Docket No. 070056-EG – Petition for approval of extension and permanent status of price responsive load management pilot program, by Tampa Electric Company.

**AGENDA:** 08/28/07 – Regular Agenda – Tariff Filing – Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Administrative

**CRITICAL DATES:** 08/31/07 (Currently authorized Pilot Program Expires)

**SPECIAL INSTRUCTIONS:** None

**FILE NAME AND LOCATION:** S:\PSC\ECR\WP\070056.RCM.DOC

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 COMMISSION CLERK

### Case Background

By Order No. PSC-05-0181-PAA-EG, issued on February 16, 2005, in Docket No. 040033-EG, In re: Petition for numeric conservation goals by Tampa Electric Company, the Commission approved the Price Responsive Load Management Pilot Program. The projections and estimates were based on a projected program period of 24 months from the effective date of the tariff, so that the program was set to expire on February 1, 2007.

On January 17, 2007, TECO filed a petition for extension of the pilot program in order to analyze data from the winter of 2006-2007. That petition opened this docket, and by Order No. PSC-07-0151-PAA-EG, issued February 21, 2007, the Commission granted an extension that would end no later than August 31, 2007. This recommendation addresses the petition filed by TECO on June 4, 2007, requesting that the pilot program be converted to permanent status.

DOCUMENT NUMBER-DATE

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FPSC-COMMISSION CLERK

Docket No. 070056-EG  
Date: August 16, 2007

The Commission has jurisdiction over this matter pursuant to sections 366.06, 366.80 through 366.82, Florida Statutes.

### Discussion of Issues

**Issue 1:** Should Tampa Electric Company's (TECO) petition to convert its Pilot Residential Price Response Load Management Program to a permanent program be approved?

**Recommendation:** Yes. The pilot program demonstrated that the Price Response Load Management Program is monitorable and cost effective. The energy savings and demand reductions of the permanent program will contribute toward meeting or exceeding the numeric conservation goals approved for TECO. Staff also recommends that TECO be allowed to request recovery of costs of the permanent program through the Energy Conservation Cost Recovery (ECCR) clause. (Sickel, Draper)

**Staff Analysis:** The conservation pilot program was approved by Order No. PSC-05-0181-PAA-EG as part of TECO's conservation planning for the period of 2005-2014. The pilot program was authorized based on projections and analysis indicating that it would meet the three criteria required:

- The program would be directly monitorable and yield measurable results;
- The program would be cost effective; and
- The program would advance the policy objectives of Rule 25-17.001, Florida Administrative Code, and sections 366.80 through 366.85, Florida Statutes, also known as the "Florida Energy Efficiency and Conservation Act" (FEECA).

The program had been anticipated to run for a period of 24 months, but the time required for start-up and an extraordinarily mild winter in 2005-2006 meant that TECO was unable to gather and analyze the needed winter season data. The company petitioned for an extension so that data from the winter 2006-2007 period could be included in the analysis of the pilot program results. In Order No. PSC 07-0151-PAA-EG, the Commission granted an extension until August 31, 2007. TECO filed a petition on June 4, 2007, with information in support of the request for conversion of the pilot program to permanent status.

Customers who choose to participate in the program take service under TECO's RSVP-1 tariff. The RSVP-1 tariff provides a multi-tiered rate structure that is designed to work as a price signal and alert participating customers to reduce load and energy consumption during high-cost periods. Under the program, TECO installs communication equipment and a "smart" thermostat in the residence of each participant. The customer is then able to control the operation of selected appliances such as space heating, air conditioning, water heating and pool pumps in response to price signals from the utility. The customer can turn on or turn off the equipment automatically or manually, or reset the thermostat in response to price signals received. Under TECO's current pilot program, participating customers pay a non-fuel energy charge that varies in the four pricing periods. The pricing periods were established in the pilot program, and TECO is not proposing to change them.

Since the RSVP-1 program is a conservation program, TECO proposes to structure the pricing scheme for the permanent program to reflect the price variations in the Energy Conservation Cost Recovery (ECCR) factor. The non-fuel base rate will remain constant with the ECCR factor varying by pricing periods. Therefore, customers taking service under the

RSVP-1 rate will pay the otherwise applicable base rate energy charge (4.342 c/kWh) for all pricing periods. The table below shows the current energy charges and the proposed conservation charges for each pricing period.

<u>Pricing Periods</u>	<u>Current Energy Charge</u>	<u>Proposed Conservation Factors</u>
Low Cost Hours (P1)	2.217 c/kWh	(3.441) c/kWh
Medium Cost Hours (P2)	3.751 c/kWh	(0.844) c/kWh
High Cost Hours (P3)	9.436 c/kWh	7.559 c/kWh
Critical Cost Hours (P4)	35.395 c/kWh	41.782 c/kWh

The proposed conservation factors would be in effect from the approval date of this tariff until December 31, 2007. The conservation factors for the RSVP-1 tariff will change annually and will be established during the cost recovery hearings of each year prior to their effective date in the following January. TECO states that documentation supporting the proposed conservation factors for the next year will be a component of TECO's annual energy conservation cost recovery projection filing.

TECO states that the impact of the proposed RSVP-1 program on the total revenues collected in the conservation clause will be minimal. If customers who participate in the program do not change their consumption behavior, there will be no impact on revenues in the conservation clause. If customers reduce their energy consumption, there will be a minimal reduction in conservation revenues. That reduction will be captured in the true-up for the following years' conservation factors.

Customers who participated in the pilot program used an average of 1,469 kWh per month. Under TECO's proposed RSVP-1 rate, a customer having the average consumption would pay the same under the standard residential rate and under the RSVP-1 rate (\$151.57). In other words, a customer who does not reduce the energy consumption in response to the price signal does not benefit from being on the RSVP-1 rate. The proposed tariff sheets for the RSVP-1 rate are included as Attachment 1.

The price-responsive program differs from previous conservation programs in critical ways. In the case of previous load control programs, the utility would interrupt service to an appliance without the customer making a direct or specific decision. Under the pilot program, customers have been able to decide when and how to operate specific appliances in their homes. Based on an understanding that energy costs increase during periods of higher demand, customers can modify electric energy consumption to shift consumption from periods of higher demand and greater expense to periods of lower demand and less expense. Such a shift lowers the bill for that consumer and benefits TECO and other ratepayers as well.

TECO reports that the program was effective and well-received by consumers. Surveys indicate that more than 90% of the participants are pleased with the pilot program and will elect to continue participation if the program is made permanent. The survey work showed that 89% of participants liked having the ability to control home energy usage. They especially liked having the capability to pre-program the major energy consuming appliances in their home, and would recommend the program to friends and relatives.

TECO has compared the pilot group of customers with a control group to estimate summer and winter demand reductions and annual energy savings of 2.4 kW for summer, 3.1 kW for winter, and 1,071 kWh annual savings for individual participants. TECO proposes to begin marketing the program as soon as permanent infrastructure has been established. Projected annual addition of new participants is expected to level off at 1,500 by 2013 or soon thereafter, and, by year end 2014, TECO expects a total of 9,000 customers will be participating. Based on these predicted results, the program has an estimated benefit of \$5.7 million, net present value.

The pilot program has demonstrated that the Price Responsive Load Management Program will be monitorable and cost effective and will provide energy savings unique to the program. TECO used the Commission-approved methods for determination of cost-effectiveness, and reports the resulting benefit-cost ratios as 1.40 for the rate impact measure (RIM) test and 2.48 for the total resource cost (TRC) test. The participants have zero cost, and benefits accruing to them have estimated net present value of \$4.069 million. TECO anticipates that the permanent program will enable the company to capture energy savings and decrease peak demand, and thereby contribute to meeting or exceeding the conservation goals set for the company.

As part of the filing made in this docket, TECO included program standards, a projected analysis of participation and results, as well as tariff sheets. Staff recommends that the program should be approved, as it will benefit the general body of ratepayers, as well as participants. Staff also recommends that TECO be allowed to request recovery of costs of the permanent program through the Energy Conservation Cost Recovery (ECCR) clause.

Docket No. 070056-EG

Date: August 16, 2007

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

**Recommendation:** Yes, if Issue 1 is approved, this tariff should become effective on August 28, 2007. If a protest is filed within 21 days of the issuance of the order, the 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. (Fleming)

**Staff Analysis:** If Issue 1 is approved, this tariff should become effective on August 28, 2007. If a protest is filed within 21 days of the issuance of the order, the 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.



FIFTY-NINTH REVISED SHEET NO. 6.020  
 FIFTY-EIGHTH SHEET NO. 6.020

**ADDITIONAL BILLING CHARGES**

**TOTAL FUEL AND PURCHASED POWER COST RECOVERY CLAUSE:** The total fuel and purchased power cost recovery factor shall be applied to each kilowatt-hour delivered, and shall be computed in accordance with the formula prescribed by the Florida Public Service Commission. The following fuel recovery factors by rate schedule have been approved by the Commission:

**RECOVERY PERIOD**  
 (January 2007 through December 2007)

Rate Schedules	¢/KWH			¢/KWH	¢/KWH	¢/KWH
	Fuel	Energy	Conservation	Capacity	Environmental	
	Standard	Peak	Off-Peak			
RS	5.922	7.392	5.146	.073	.325	(.344)
RSVP-1 (P <sub>1</sub> )	5.922	-	-	(3.441)	.325	(.344)
(P <sub>2</sub> )	5.922	-	-	(0.844)	.325	(.344)
(P <sub>3</sub> )	5.922	-	-	7.559	.325	(.344)
(P <sub>4</sub> )	5.922	-	-	41.782	.325	(.344)
GS	5.922	7.392	5.146	.071	.311	(.340)
TS	5.922	7.392	5.146	.071	.311	(.340)
SL-2	5.483	-	-	.026	.042	(.340)
OL-1&3	5.483	-	-	.026	.042	(.340)
GSD Secondary	5.899	-	-	.063	.261	(.340)
GSD Primary	5.899	7.364	5.126	.062	.261	(.340)
GSLD Secondary	5.899	7.364	5.126	.056	.222	(.340)
GSLD-Primary	5.899	7.364	5.126	.056	.222	(.340)
GSLD Subtransmission	5.899	7.364	5.126	.055	.222	(.345)
SBF-Secondary	5.899	7.364	5.126	.056	.222	(.345)
SBF-Primary	5.899	7.364	5.126	.056	.222	(.345)
SBF-Subtransmission	5.899	7.364	5.126	.055	.222	(.345)
IS-1,IS-3	5.745	7.171	4.992	.061	.020	(.340)
SBI-1,SBI-3	5.745	7.171	4.992	.061	.020	(.340)

Continued to Sheet No. 6.021

ISSUED BY: C. R. Black, President

DATE EFFECTIVE:



FIRST REVISED SHEET NO. 6.560  
ORIGINAL SHEET NO. 6.560

**RESIDENTIAL SERVICE VARIABLE PRICING PROGRAM**

**SCHEDULE:** RSVP-1

**RATE CODE:** 113

**AVAILABLE:** Available to customers eligible for Rate Schedule RS (Residential Service). Availability is limited to single-family detached houses only that meet certain equipment requirements described below.

**APPLICABLE:** As an alternative to Rate Schedule RS for service used for domestic purposes at an individually-metered private residences. All energy must be for domestic purposes and should not be shared with others and resale is not permitted.

**EQUIPMENT REQUIREMENTS:**

1. Touch-tone phone service. (Land line)
2. Service entrance panel or house power panel rated at 200 amps or less.
3. Central heating and air conditioning that is compatible with Company installed energy management equipment. Residences must have central heating and cooling systems to be eligible for participation. Window units are not eligible
4. Electric water heaters, pool pumps, or other devices controlled by equipment provided through the program must be no larger than 30 amps and 240 volts each and compatible with Company installed energy management equipment.
5. Electric wiring must be conducive to power line carrier messaging.
6. Residence must be located in an area capable of meeting a paging strength standard.
7. Existing meter configuration must be capable of incorporating the energy management equipment.

**INSTALLATION AND REMOVAL:** Energy Management equipment will be installed at the Customer's residence upon the Customer's initial request for service under Rate Schedule RSVP at no charge to the Customer. If this same Customer requests service at the same residence under Rate Schedule RSVP-1 after returning to the Rate Schedule RS, the Customer will be billed \$234.00 for installation costs and, thereafter, billed under Rate Schedule RSVP-1.

If a Customer has taken service under Rate Schedule RSVP-1 two separate times at the same residence then request to be moved back to Rate Schedule RS, the Customer will be billed \$174.00 for removal costs and thereafter billed under Rate Schedule RS.

**CHARACTER OF SERVICE:** Available for single-phase service from local distribution lines of the Company's system at nominal secondary voltage of 120/240 volts. Service shall be metered through one metering device capable of measuring electrical energy consumption during the various times each energy demand charge is in effect.

Continued to Sheet No. 6.565

ISSUED BY: C. R. Black, President

DATE EFFECTIVE:



FIRST REVISED SHEET NO. 6.565  
 ORIGINAL SHEET NO. 6.565

Continued from Sheet No. 6.560

**MONTHLY RATES:**

Customer Facilities Charge: \$8.50  
 Energy and Demand Charges: \$4.342 ¢ per KWH (for all pricing periods)

**MINIMUM CHARGE:** The customer facilities charge.

**FUEL CHARGE:** See Sheet Nos. 6.020 and 6.021.

**ENERGY CONSERVATION CHARGE:** See Sheet Nos. 6.020 and 6.021.

**CAPACITY CHARGE:** See Sheet Nos. 6.020 and 6.021.

**ENVIRONMENTAL COST RECOVERY CHARGE:** See Sheet Nos. 6.020 and 6.021.

**FLORIDA GROSS RECEIPTS TAX:** See Sheet No. 6.021.

**FRANCHISE FEE CHARGE:** See Sheet No. 6.021.

**PAYMENT OF BILLS:** See Sheet No. 6.022.

**DETERMINATION OF PRICING PERIODS:** Pricing periods are established by season for weekdays and weekends. The pricing periods for price levels P<sub>1</sub> (Low Cost Hours), P<sub>2</sub> (Moderate Cost Hours) and P<sub>3</sub> (High Cost Hours) are as follows:

<u>May through October</u>	<u>P<sub>1</sub></u>	<u>P<sub>2</sub></u>	<u>P<sub>3</sub></u>
Weekdays	11 P.M. to 6 A.M.	6 A.M. to 1 P.M. 6 P.M. to 11 P.M.	1 P.M. to 6 P.M.
Weekends	11 P.M. to 6 A.M.	6 A.M. to 11 P.M.	-----
<u>November through April</u>	<u>P<sub>1</sub></u>	<u>P<sub>2</sub></u>	<u>P<sub>3</sub></u>
Weekdays	11 P.M. to 5 A.M.	5 A.M. to 6 A.M. 10 A.M. to 11 P.M.	6 A.M. to 10 A.M.
Weekends	11 P.M. to 6 A.M.	6 A.M. to 11 P.M.	-----

The pricing periods for price level P<sub>4</sub> (Critical Cost Hours) shall be determined at the sole discretion of the Company. Level P<sub>4</sub> hours shall not exceed 134 hours per year.

Continued to Sheet No. 6.570

ISSUED BY: C. R. Black, President

DATE EFFECTIVE:



ORIGINAL SHEET NO. 6.570

Continued from Sheet No. 6.565

The pricing period for the following observed holidays will be the same as the weekend hour price levels for the month in which the holiday occurs: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.

**TERMS OF SERVICE:** The initial term of service under this rate shall be for a period of one year to be continued thereafter unless terminated by the customer with thirty days written notice.

ISSUED BY: C. R. Black, President

DATE EFFECTIVE:



FIRST REVISED SHEET NO. 7.785  
ORIGINAL SHEET NO. 7.785

Continued From Sheet No. 7.780

Schedule RSVP-1. Customer understands and acknowledges that this rate schedule as well as the rates, terms, and conditions therein are subject to periodic change by the Florida Public Service Commission and such changes will be applicable to the Customer.

6. This agreement supersedes all previous agreements and representations, either written or oral, heretofore made between the Company and the Customer with respect to matters herein contained. Any modification(s) to this Agreement must be approved, in writing, by the Company and the Customer.
7. The programmable thermostat will be removed by the Company if the Customer returns to service under Rate Schedule RS. The Customer is responsible for providing a replacement thermostat.

**IN WITNESS THEREOF**, the Customer and the Company have caused this Agreement to be executed by their duly authorized representatives as of the day and year first above written.

Customer: _____	Tampa Electric Company Representative
By/Title: _____	By/Title: _____
Signature: _____	Signature: _____
Street Address: _____	
City, Street, Zip: _____	
Property Owner: _____	
By/Title: _____	
Signature: _____	
Date: _____	

ISSUED BY: C. R. Black, President

DATE EFFECTIVE: