

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-**

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**DATE:** August 2, 2007

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

**FROM:** Division of Economic Regulation (Wilson, Kummer, Sickel)  
Office of the General Counsel (Fleming)

**RE:** Docket No. 070350-EG – Petition for approval of residential load control program by Florida Power & Light Company.

**AGENDA:** 08/14/07 – Regular Agenda – Proposed Agency Action – Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

**PREHEARING OFFICER:** Administrative

**CRITICAL DATES:** 8-Month Effective Date January 31, 2008

**SPECIAL INSTRUCTIONS:** None

**FILE NAME AND LOCATION:** S:\PSC\ECR\WP\070350.RCM.DOC

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## Case Background

As part of its Commission-approved Demand-Side Management (DSM) Plan, Florida Power & Light Company (FPL) offers a load management program known as the On-Call Program. Customers who choose to participate in the On-Call Program receive incentive payments in exchange for allowing FPL to interrupt electric service to specified appliances. The On-Call Program has been offered since 1986.

On March 6, 2003, Commission approved modifications to the On-Call Program.<sup>1</sup> The modifications included closing the On-Call Program to new participants and offering a new load management program known as the Residential Load Control Pilot Project (Pilot Program).

The Pilot Program was approved for a three year period beginning April 1, 2003. After that date, any new customers who signed up for residential load management will receive incentives based on Rate Schedule RLP. As part of the Pilot Program, customers received a reduction in incentives compared to the existing On-Call Program. In addition, any existing participants of the On-Call Program who move to a different location or make any change to the interruption schedule of their appliances would be paid incentives according to Rate Schedule RLP.

The three year approval for the Pilot Program originally expired April 1, 2006. FPL filed a petition on March 1, 2006, requesting continuation of the Pilot Program. On March 14, 2006, the Company filed a supplemental petition requesting the program be allowed to continue, without interruption, until a full analysis of the Pilot Program could be made. That request for continuation, without interruption, was granted on April 24, 2006.<sup>2</sup>

On May 31, 2007, FPL filed a petition to approve the new DSM Program on a permanent basis. This recommendation addresses FPL's request to (a) approve FPL's Residential Load Control Pilot Project as a DSM Program; (b) approve the revised tariff sheets for a permanent Residential Load Control Program contained in Appendix A; and (c) allow FPL the opportunity to recover expenditures for FPL's Residential Load Control Program through FPL's Energy Conservation Cost Recovery ("ECCR") Clause. The Commission has jurisdiction pursuant to Sections 366.81 and 366.82, Florida Statutes.

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<sup>1</sup> Order No. PSC-03-0322-TRF-EG, issued March 6, 2003, in Docket No. 030051-EG, In Re: Petition for modification of residential on-call and for approval of residential load control pilot project by Florida Power & Light Company.

<sup>2</sup> Order No. PSC-06-0334-PCO-EG, issued April 24, 2006, in Docket No. 060174-EG, In Re: Petition for extension of residential load control pilot project, by Florida Power & Light Company.

### **Discussion of Issues**

**Issue 1:** Should the Commission approve Florida Power & Light's (FPL) petition to offer the currently approved Pilot Program as a permanent demand side management (DSM) program?

**Recommendation:** Yes. The currently approved Pilot Program continues to meet the policy objectives of the Florida Energy Efficiency and Conservation Act and should, therefore, be approved as a permanent demand side management (DSM) program. The revised tariff sheets for a permanent Residential Load Control Program contained in Appendix A should be approved. FPL should be allowed to petition for recovery of expenditures for its Residential Load Control Program through FPL's Energy Conservation Cost Recovery (ECCR) Clause. (Wilson)

**Staff Analysis:** Under the established On-Call Program, a credit of \$3.50 per month was given if a customer allows the utility to interrupt electric energy to the customer's water heater. Under the Pilot Program, the credit amount for the same interruption is \$1.50. Similarly, the On-Call program provided a monthly credit amount of \$6.00 for cyclic interruption of air conditioning; the same cyclic interruption gets a credit of \$3.00 under the Pilot Program.

When the Commission approved the Pilot Program to begin April 1, 2003, the Company expected to offer this program for a maximum period of three years. The Company planned new promotions and marketing positions to be tested as part of the Pilot Program, and expected to gain information by monitoring customer response. Based on customer response, permanent approval of the Pilot Program or reverting all customers to the previous On-Call Program were thought to be possibilities.

The primary purpose of the Pilot Program was to measure customer response to the reduced incentives. It was expected that a reduced amount of credit would have some chilling effect on the willingness of customers to sign up for the program, and would result in some drop off among original customers when they moved or made other changes. Notwithstanding those reductions, FPL has continued to add load management customers under the Pilot Program and thereby increase peak demand savings in a cost effective manner.

The approved Pilot Program was successful at determining if FPL could lower its On-Call Program incentives and still achieve its targeted levels of program participation without suffering significant customer attrition and a concurrent drop in system reliability. By year end 2007, Pilot Program participants will represent approximately 45% (338,000 of the 750,000 total participants) of the total population receiving load management credits, which is at the upper end of FPL's previous projections. The expectation had been that between 36% and 47% of the total load control participants would have been on the Pilot Program, so the Pilot Program can be characterized as having achieved its objective and is expected to continue increasing the total number of load management customers.

FPL is not proposing to shift all participants to lower incentives. Rather, FPL would allow the normal customer attrition process to reduce the number of customers participating under the closed incentive rate schedule.

In its filing, FPL portrayed the Pilot Program as successful in general terms because it is cost effective and continuously growing. However, the rate of growth in the number of customers participating has been impacted by the storms that did major damage throughout the Company's service area during 2004 and 2005.

The Pilot Program reflects an effort by FPL to reduce program costs. The cost of load management programs primarily consists of the monthly credits paid to participating customers. The program costs are passed on to all of FPL's ratepayers through the Energy Conservation Cost Recovery (ECCR) clause. A reduction in monthly credits paid will result in a corresponding reduction in overall expenses recovered through the ECCR clause.

Staff believes that FPL's new and revised DSM program is cost-effective. In response to a staff data request, the total program has a benefit/cost ratio greater than 1.0 under the Participants and RIM tests. A cost-effective DSM program under the RIM test means that program participants, as well as those customers who do not participate, will benefit from the program.

Staff recommends that the Commission approve FPL's Petition. The new Residential Load Control Program is expected to increase FPL's system demand and energy savings, continue to meet the policy objectives of the Florida Energy Efficiency and Conservation Act (FEECA), and is expected to continue to be monitorable and cost-effective. In addition, FPL should be allowed to petition for recovery of expenditures through the ECCR clause.

Docket No. 070350-EG

Date: August 2, 2007

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

**Recommendation:** Yes, if Issue 1 is approved, this tariff should become effective on August 14, 2007. 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.

**Staff Analysis:** If Issue 1 is approved, this tariff should become effective on August 14, 2007. 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.

Appendix A

FLORIDA POWER & LIGHT COMPANY

First Revised Sheet No. 8.217  
 Cancels Original Sheet No. 8.217

RESIDENTIAL LOAD CONTROL PILOT-PROJECT PROGRAM

RATE SCHEDULE: RLP

AVAILABLE:

Available only within the geographic areas served by the Company's Load Management System.

APPLICATION:

To Customers receiving service under Rate Schedule RS-1 who elect to participate in this Residential Load Control Pilot-Project Program ("Pilot-Project Program") on or after April 1, 2003 and who utilize at least one of the following installed electrical appliances at the Customer's premise:

1. Conventional electric water heater
2. Central electric air conditioning
3. Swimming pool pump (including pool sweeps as appropriate)
4. Central electric space heating\*

\*Central electric space heating systems alone are ineligible for Program/Pilot-Project participation. These systems are eligible for Pilot-Project/Program participation only when one (or more) of the other 3 appliances listed above is (are) signed up for participation.

This Rate Schedule is not applicable for service to commonly-owned facilities of condominium, cooperative, or homeowners' associations.

SERVICE:

The same as specified in Rate Schedule RS-1.

LIMITATION OF SERVICE:

The same as specified in Rate Schedule RS-1. The specified electrical appliances shall be interrupted at the option of the Company by means of load management equipment installed at the Customer's premise.

MONTHLY CREDIT:

Customers receiving service under this Rate Schedule will receive a credit on the monthly bill as follows:

<u>DEVICE (OPTION)</u>	<u>APPLICABILITY</u>	<u>CREDIT</u>
1. Conventional electric water heater	Year-round	\$ 1.50
2. Central electric air conditioning (Option C)	April-October	\$ 3.00
3. Central electric air conditioning (Option S)	April-October	\$ 9.00
4. Swimming pool pump	Year-round	\$ 3.00
5. Central electric space heating (Option C)	November-March	\$ 2.00
6. Central electric space heating (Option S)	November-March	\$ 4.00

Total monthly credit shall not exceed 40 percent of the Rate Schedule RS-1 "Base Energy Charge" actually incurred for the month (if the Budget Billing Plan is selected, actual energy charges will be utilized in the calculations, not the levelized charges) and no credit will be applied to reduce the Minimum bill specified on Rate Schedule RS-1.

Note: Option C or Option S (listed below) may be selected for either central air conditioning or heating systems. If both appliance types are participating in the Pilot-Project/Program, the same option must be selected.

(Continued on Sheet No. 8.218)

Issued by: S. E. Romig, Director, Rates and Tariffs  
 Effective: April 1, 2003

FLORIDA POWER & LIGHT COMPANY

First Revised Sheet No. 8.217  
Cancels Original Sheet No. 8.217

RESIDENTIAL LOAD CONTROL PROGRAM

RATE SCHEDULE: RLP

AVAILABLE:

Available only within the geographic areas served by the Company's Load Management System.

APPLICATION:

To Customers receiving service under Rate Schedule RS-1 who elect to participate in this Residential Load Control Program ("Program") on or after April 1, 2003 and who utilize at least one of the following installed electrical appliances at the Customer's premise:

1. Conventional electric water heater
2. Central electric air conditioning
3. Swimming pool pump (including pool sweeps as appropriate)
4. Central electric space heating\*

\*Central electric space heating systems alone are ineligible for Program participation. These systems are eligible for Program participation only when one (or more) of the other 3 appliances listed above is (are) signed up for participation.

This Rate Schedule is not applicable for service to commonly-owned facilities of condominium, cooperative, or homeowners' associations.

SERVICE:

The same as specified in Rate Schedule RS-1.

LIMITATION OF SERVICE:

The same as specified in Rate Schedule RS-1. The specified electrical appliances shall be interrupted at the option of the Company by means of load management equipment installed at the Customer's premise.

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Customers receiving service under this Rate Schedule will receive a credit on the monthly bill as follows:

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3. Central electric air conditioning (Option S)	April-October	\$ 9.00
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Total monthly credit shall not exceed 40 percent of the Rate Schedule RS-1 "Base Energy Charge" actually incurred for the month (if the Budget Billing Plan is selected, actual energy charges will be utilized in the calculations, not the levelized charges) and no credit will be applied to reduce the Minimum bill specified on Rate Schedule RS-1.

Note: Option C or Option S (listed below) may be selected for either central air conditioning or heating systems. If both appliance types are participating in the Program, the same option must be selected.

(Continued on Sheet No. 8.218)

Issued by: S. E. Romig, Director, Rates and Tariffs  
Effective:

FLORIDA POWER & LIGHT COMPANY

First ~~Second~~ Revised Sheet No. 8.218  
Cancels Original ~~First Revised~~ Sheet No. 8.218

(Continued from Sheet No. 8.217)

INTERRUPTION SCHEDULES FOR ELECTRICAL APPLIANCES

The Customer's participating electrical appliances will be interrupted only during the following periods except as noted below:

April 1 through October 31: 2 p.m. to 10 p.m.  
November 1 through March 31: 5 a.m. to 11 a.m.  
4 p.m. to 10 p.m.

The interruption schedules available for each appliance are as follows:

1. Conventional electric water heating equipment may be interrupted up to, but not to exceed, 240 minutes per day.
2. Central electric air conditioning equipment may be interrupted under one of the following options selected by the Customer:  
Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day. If normal operation of the Program is not able to provide sufficient demand reduction to divert an emergency situation, central electric air conditioners may be interrupted for 17.5 minutes during any 30 minute period with a cumulative interruption time of up to 210 minutes per day.  
Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.
3. Swimming pool pump equipment may be interrupted up to, but not to exceed, 240 minutes per day.
4. Central electric space heating equipment may be interrupted under one of the following options selected by the Customer:  
Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day.  
Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.

The limitations on interruptions of electrical equipment shall not apply during emergencies on the Company's system or to interruptions caused by force majeure or other causes beyond the control of the Company.

TERM OF SERVICE:

During service under this Rate Schedule, a Customer may change interruption options or the selection of electrical appliances connected to the load management equipment or discontinue service under this Rate Schedule by giving the Company 7 days advance notice. If the Customer requests to have one or more appliances removed from participation in the Pilot-Project(Program), the Customer will be ineligible to participate with such appliance(s) again in the Pilot-Project(Program) for one year (12 months) from the time participation ended.

SPECIAL PROVISIONS

1. The Company shall not be required to install load management equipment if the installation cannot be economically justified for reasons such as: excessive installation costs, oversized/undersized heating or cooling equipment or abnormal utilization of equipment, including vacation or other limited occupancy residences.
2. Billing under this Rate Schedule will commence upon the installation and completion of required inspections of the load management equipment.
3. Multiple units of any particular appliance type must all be connected with load management equipment to qualify for the credit attributable to that appliance type. In such circumstances, only a single credit for that appliance type will be applied. Pool sweeps, when coupled with pool pumps, are included in this category.

(Continued on Sheet No. 8.219)

Issued by: S. E. Romig, Director, Rates and Tariffs  
Effective: August 15, 2006



FLORIDA POWER & LIGHT COMPANY

Second Revised Sheet No. 8.218  
Cancels First Revised Sheet No. 8.218

(Continued from Sheet No. 8.217)

INTERRUPTION SCHEDULES FOR ELECTRICAL APPLIANCES

The Customer's participating electrical appliances will be interrupted only during the following periods except as noted below:

<u>April 1 through October 31:</u>	2 p.m. to 10 p.m.
<u>November 1 through March 31:</u>	5 a.m. to 11 a.m. 4 p.m. to 10 p.m.

The interruption schedules available for each appliance are as follows:

1. Conventional electric water heating equipment may be interrupted up to, but not to exceed, 240 minutes per day.
2. Central electric air conditioning equipment may be interrupted under one of the following options selected by the Customer:  
Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day. If normal operation of the Program is not able to provide sufficient demand reduction to divert an emergency situation, central electric air conditioners may be interrupted for 17.5 minutes during any 30 minute period with a cumulative interruption time of up to 210 minutes per day.  
Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.
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4. Central electric space heating equipment may be interrupted under one of the following options selected by the Customer:  
Option C equipment may be interrupted an accumulated total of 15 minutes during any 30 minute period with a cumulative interruption time of up to 180 minutes per day.  
Option S equipment may be interrupted up to, but not to exceed, 180 minutes per day.

The limitations on interruptions of electrical equipment shall not apply during emergencies on the Company's system or to interruptions caused by force majeure or other causes beyond the control of the Company.

TERM OF SERVICE:

During service under this Rate Schedule, a Customer may change interruption options or the selection of electrical appliances connected to the load management equipment or discontinue service under this Rate Schedule by giving the Company 7 days advance notice. If the Customer requests to have one or more appliances removed from participation in the Program, the Customer will be ineligible to participate with such appliance(s) again in the Program for one year (12 months) from the time participation ended.

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1. The Company shall not be required to install load management equipment if the installation cannot be economically justified for reasons such as: excessive installation costs, oversized/undersized heating or cooling equipment or abnormal utilization of equipment, including vacation or other limited occupancy residences.
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(Continued on Sheet No. 8.219)

Issued by: S. E. Romig, Director, Rates and Tariffs  
Effective:

FLORIDA POWER & LIGHT COMPANY

First Revised Sheet No. 8.219  
Cancel Original Sheet No. 8.219

(Continued from Sheet No. 8.218)

4. Installation of the load management equipment at the Customer's premise is to be the sole responsibility of a licensed, independent contractor. The Customer agrees that the Company shall not be liable for any damages or injuries that may occur as a result of the interruption or restoration of electric service pursuant to the terms of this Rate Schedule.
5. The following types of electric water heaters are ineligible for participation in the ~~Pilot-Project~~Program: solar water heaters, heat recovery units and heat pump water heaters.
6. If the Company determines that the Customer no longer uses one or more of the appliances signed up for ~~Pilot-Project~~Program participation, then the Company has the right to remove the appropriate load management equipment and to discontinue the appropriate credits.
7. The Customer shall give the Company and the licensed, independent contractor reasonable access for installing, maintaining, testing and removing the Company's load management equipment, and for verifying that the equipment effectively controls the Customer's appliances as intended by this Rate Schedule.
8. If the Company determines that the effect of equipment interruptions has been offset by the Customer's use of supplementary or alternative electrical equipment, then service under this Rate Schedule may be discontinued and the Customer billed for all prior Monthly Credits received under this Rate Schedule over a period not to exceed six (6) months.
9. If the Company determines that its load management equipment at the Customer's premise has been rendered ineffective by mechanical, electrical or other devices or actions ("tampering"), then the Company may discontinue the Customer's participation in the ~~Pilot-Project~~Program and bill for all expenses involved in removal of the load management equipment, plus applicable investigative charges. The Company may rebill all prior Monthly Credits received by the Customer from an established tampering date. If such a date cannot be established, then rebilling of the Monthly Credits shall be for the lesser of the number of months receiving service under this Rate Schedule or the previous twelve (12) months.

Issued by: S. E. Romig, Director, Rates and Tariffs  
Effective: April 1, 2003

FLORIDA POWER & LIGHT COMPANY

First Revised Sheet No. 8.219  
Cancels Original Sheet No. 8.219

(Continued from Sheet No. 8.218)

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5. The following types of electric water heaters are ineligible for participation in the Program: solar water heaters, heat recovery units and heat pump water heaters.
6. If the Company determines that the Customer no longer uses one or more of the appliances signed up for Program participation, then the Company has the right to remove the appropriate load management equipment and to discontinue the appropriate credits.
7. The Customer shall give the Company and the licensed, independent contractor reasonable access for installing, maintaining, testing and removing the Company's load management equipment, and for verifying that the equipment effectively controls the Customer's appliances as intended by this Rate Schedule.
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9. If the Company determines that its load management equipment at the Customer's premise has been rendered ineffective by mechanical, electrical or other devices or actions ("tampering"), then the Company may discontinue the Customer's participation in the Program and bill for all expenses involved in removal of the load management equipment, plus applicable investigative charges. The Company may rebill all prior Monthly Credits received by the Customer from an established tampering date. If such a date cannot be established, then rebilling of the Monthly Credits shall be for the lesser of the number of months receiving service under this Rate Schedule or the previous twelve (12) months.

Issued by: S. E. Romig, Director, Rates and Tariffs  
Effective: