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#### 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:

July 9, 2015

TO:

Office of Commission Clerk (Stauffer)

FROM:

Division of Engineering (Ellis)

Division of Economics (S. Brown) 38

Office of the General Counsel (Tan).

RE:

Docket No. 150085-EG – Petition for approval of Florida Power & Light

Company's demand-side management plan and request to cancel closed on call

tariff sheets.

**AGENDA:** 07/21/15 – Regular Agenda – Proposed Agency Action (Issue 1) – Tariff Filing

(Issue 2) - Interested Persons May Participate

**COMMISSIONERS ASSIGNED:** All Commissioners

PREHEARING OFFICER:

Administrative

**CRITICAL DATES:** 

None

SPECIAL INSTRUCTIONS:

Staff recommends the Commission simultaneously consider Docket Nos. 150081-EG, 150083-EG, 150085-EG, 150086-EG, 150087-EG, 150088-EG, and 150089-

EG.

## Case Background

By Order No. PSC-14-0696-FOF-EU, the Commission established annual numeric demand-side management (DSM) goals for Florida Power & Light Company (FPL) for the period 2015 through 2024.1 The DSM goals were established for both FPL's residential and commercial/industrial customer classes for three categories: summer peak demand, winter peak demand, and annual energy consumption.

<sup>&</sup>lt;sup>1</sup> FPSC Order No. PSC-14-0696-FOF-EU, Docket No. 130199-EI, Commission review of numeric conservation goals (Florida Power & Light Company), issued December 16, 2014.

Docket No. 150085-EG Date: July 9, 2015

Rule 25-17.0021(4), Florida Administrative Code (F.A.C.), requires a utility to file DSM programs for Commission approval no later than 90 days from when goals are established. On March 16, 2015, FPL filed a petition requesting approval of its DSM Plan. As part of this filing, FPL provided a cost-effectiveness analysis of the proposed programs pursuant to Rule 25-17.008, F.A.C.

In addition to its DSM Plan, FPL also filed a request to cancel its rate schedule RSL, the Residential Load Management Program (also known as the "On Call" Program). This rate schedule has been closed to new participants since April 1, 2003, pursuant to Order No. PSC-03-0322-TRF-EG.<sup>2</sup> FPL's petition proposes transferring customers from the closed RSL rate class to its open Residential Load Control Program, rate schedule RLP.

On May 7, 2015, the Southern Alliance for Clean Energy (SACE) petitioned to intervene.

The Commission has jurisdiction over this matter pursuant to Sections 366.80 through 366.83 and 403.519, Florida Statutes (F.S.), collectively known as the Florida Energy Efficiency and Conservation Act (FEECA).

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<sup>&</sup>lt;sup>2</sup> FPSC Order No. PSC-03-0322-TRF-EG, Docket No. 030051-EG, Petition for modification of residential on-call program and for approval of residential load control pilot project by Florida Power & Light Company, issued March 6, 2003.

#### **Discussion of Issues**

**Issue 1:** Is FPL's DSM Plan projected to meet the annual numeric conservation goals established by the Commission in Order No. PSC-14-0696-FOF-EU?

**Recommendation:** Yes. FPL's DSM Plan is cost-effective based upon the Rate Impact Measure (RIM) test and results in a net decrease in ratepayers' monthly rates. FPL's DSM Plan is projected to meet or exceed the annual numeric conservation goals set by the Commission in Order No. PSC-14-0696-FOF-EU.

The Commission should approve the programs contained in FPL's DSM Plan. In addition, the Commission should allow FPL to file for cost recovery of the programs in the Energy Conservation Cost Recovery (ECCR) clause proceeding. FPL, however, must still demonstrate that its expenditures to implement these programs are reasonable and prudent in order to recover the expenditures through the ECCR clause. Staff recommends that FPL may not discontinue its DSM programs or change its programs' rebate levels without seeking formal Commission approval.

Finally, staff recommends that FPL file its administrative program standards for all programs within 30 days of the Consummating Order in this docket and that the Commission grant staff administrative authority to review and approve these standards. (Ellis)

**Staff Analysis:** The criteria used to review the appropriateness of DSM programs are: (1) whether the program advances the policy objectives of FEECA and its implementing rules; (2) whether the program is directly monitorable and yields measurable results; and (3) whether the program is cost-effective.<sup>3</sup> Staff has reviewed FPL's DSM Plan, including its demand and energy savings, cost-effectiveness, and rate impact. The resulting demand and energy savings appear to meet the goals established by the Commission in Order No. PSC-14-0696-FOF-EU. The programs that staff recommends should be counted towards FPL's goals appear to be directly monitorable and measurable. Lastly, FPL's DSM Plan as a whole appears to be costeffective and will reduce customer bills associated with conservation.

#### **Description of DSM Plan**

FPL's DSM Plan consists of 22 programs. A complete list of the programs and a brief description of each can be found in Attachment A. Of the 22 programs, six are residential, seven commercial/industrial, two other programs (for research and development and qualifying facilities), and seven pilot programs.

FPL has proposed to continue all of its existing programs, but modify five programs to reflect changes in rebate levels or measures offered, as illustrated in Table 1-1 below. As discussed in Issue 2, FPL is also proposing to cancel its closed Residential On Call tariff, the precursor program for the Residential Load Management program.

<sup>&</sup>lt;sup>3</sup> FPSC Order No. 22176, Docket No. 890737-PU, Implementation of Section 366.80-.85, Florida Statutes, Conservation Activities of Electric and Natural Gas Utilities, issued November 14, 1989.

Date: July 9, 2015

Table 1-1 **FPL DSM Plan Program Listing** 

P		Program Status			
Program Name	Existing	Modified	New		
Residential Progr	ams				
Residential Energy Survey	X				
Residential Load Management (On Call) <sup>4</sup>	X				
Residential Air Conditioning	X	X			
Residential New Construction (BuildSmart)	X				
Residential Ceiling Insulation	X	X			
Residential Low Income	X	X			
Commercial/Industrial	Programs				
Business Energy Evaluation	X				
Business On Call	X				
Commercial/Industrial Demand Reduction	X				
Commercial/Industrial Load Control	X				
Business Heating, Ventilating, & Air Conditioning (HVAC)	X	X			
Business Lighting	X	X			
Business Custom Incentive	X				
Other Program	ıs	1			
Cogeneration & Small Power Production	X				
Conservation Research & Development	X				
Pilot Programs	5				
Residential Photovoltaic	X				
Business Photovoltaic	X				
Business Photovoltaic for Schools	X				
Residential Solar Water Heating	X				
Residential Solar Water Heating for Low Income	X				
Business Solar Water Heating	X				
Renewable Research & Demonstration	X				

Source: FPL DSM Plan Filing

Of FPL's proposed continuation of six residential programs, three are modified. The Residential Air Conditioning program features lower rebates and would only be provided for units with a SEER greater than recent federal energy efficiency minimum requirements. Also, some residential building classifications, such as multi-family, and mobile homes, are no longer eligible to participate. The Residential Building Envelope program would be more limited in scope and renamed the Residential Ceiling Insulation program, eliminating measures associated with reflective roofs. Moreover, the Residential Low Income program would be expanded,

<sup>&</sup>lt;sup>4</sup> The Residential Load Management (On Call) program refers to the open Residential Load Control tariff, rate schedule RLP, and not the Residential On Call tariff discussed in Issue 2.

<sup>5</sup> FPL's Pilot Programs are set to expire on December 31, 2015, pursuant to FPSC Order No. PSC-14-0632-FOF-

EG.

including additional measures reducing water usage and duct system repair, while discontinuing room air conditioner replacements.

Issue 1

For FPL's commercial/industrial programs, the Business Heating, Ventilation, and Air Conditioning (HVAC) program would discontinue its rebates for electronically controlled motors, while the Business Lighting Program would add an LED lighting measure. Rebate levels for both programs would be revised to reflect the current cost-effectiveness analysis.

#### **Audit Programs**

In accordance with Rule 25-17.003, F.A.C., FPL will continue to offer energy audits for each sector, residential and commercial/industrial. The Residential Energy Survey and Business Energy Evaluation programs have no savings attributed to them, but are generally required for participation in other DSM programs. Both audit programs are free to the participant, and potentially identify ways for participants to reduce bills through free or low cost measures.

#### Comparison of DSM Plans to Goals

Based upon FPL's filings the DSM Plan meets or exceeds each of the established goals. The company's Proposed DSM Plan's projected savings for each goal and the Commission's established goals are summarized in Table 1-2 and Table 1-3 below.

Table 1-2 FPL Residential Sector Goals vs. DSM Plan

FFL Residential Sector Goals vs. DSW Flan							
Year	Summer (MW)		Winter (MW)		(MW) Winter (MW) Annual Energy (GWh)		0.
rear	Goal	DSM Plan	Goal	DSM Plan	Goal	DSM Plan	
2015	25.3	25.4	15.6	15.6	21.6	23.8	
2016	25.6	25.9	15.8	15.9	22.2	22.2	
2017	25.9	26.2	16.0	16.1	22.8	22.8	
2018	26.2	26.6	16.2	16.3	23.5	23.5	
2019	26.5	27.0	16.4	16.5	24.2	24.2	
2020	26.9	27.5	16.7	16.7	25.0	25.0	
2021	27.3	27.9	16.9	16.9	25.7	25.7	
2022	27.6	28.3	17.2	17.2	26.5	26.5	
2023	28.0	28.9	17.5	17.5	27.4	27.4	
2024	28.5	29.4	17.8	17.8	28.3	28.3	
Total <sup>6</sup>	267.8	273.2	166.0	166.5	247.2	249.5	

Source: FPSC Order No. PSC-14-0632-FOF-EG, FPL's DSM Plan Filing

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<sup>&</sup>lt;sup>6</sup> Totals may not equal due to rounding.

Table 1-3
FPL Commercial/Industrial Sector Goals vs. DSM Plan

Year	Summer (	(MW)	) Winter (MW)		(GWh)	
Tear	Goal	DSM Plan	Goal	DSM Plan	Goal	DSM Plan
2015	22.8	22.8	13.6	13.6	19.6	19.6
2016	24.0	24.0	14.3	14.3	23.4	23.4
2017	24.9	24.9	14.9	14.9	24.7	24.7
2018	25.3	25.3	15.3	15.3	26.0	26.0
2019	25.8	25.8	15.7	15.7	27.3	27.3
2020	26.2	26.2	16.1	16.1	28.7	28.7
2021	26.6	26.6	16.5	16.5	30.1	30.1
2022	27.1	27.1	16.9	16.9	31.6	31.6
2023	27.5	27.5	17.3	17.3	33.1	33.1
2024	28.0	28.0	17.7	17.7	34.7	34.7
Total <sup>7</sup>	258.3	258.2	158.2	158.3	279.1	279.2

Source: FPSC Order No. PSC-14-0632-FOF-EG, FPL's DSM Plan Filing

A majority of FPL's residential seasonal peak demand goals are met through the Residential Load Management (On Call) program, while annual energy goals are primarily met through the Residential Air Conditioning program. For commercial/industrial goals, the Business Heating Ventilating, and Air Conditioning program is the single largest in all three goal categories. However, in terms of total expenditures, the largest programs are Residential Load Management (On Call) and Commercial/Industrial Load Control, due to rebates to participants from previous goal periods. Program costs for these two programs account for approximately 55 percent of FPL's total ECCR costs.

The values presented above are projections based upon participation rates which may or may not occur. FPL will be responsible for monitoring actual participation rates and seeking Commission action if necessary to modify, add, or remove programs. If FPL is unable to meet the Commission's goals, the company may be subject to appropriate action by the Commission, up to and including financial penalties.

Section 366.82(10), F.S., requires that the Commission provide an annual report (FEECA Report) to the Governor and Legislature concerning the progress of each FEECA utility towards meeting its established goals. Rule 25-17.0021(5), F.A.C., requires that FPL submit an annual report that summarizes the achieved results of its DSM Plan no later than March 1 of each year. Staff will continue to monitor and report the actual amount of FPL's DSM savings each year, on an annual and cumulative basis, as part of the FEECA Report.

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<sup>&</sup>lt;sup>7</sup> Totals may not equal due to rounding.

Date: July 9, 2015

#### **Cost-Effectiveness Review**

Pursuant to Rule 25-17.008, F.A.C., FPL provided a cost-effectiveness analysis of the proposed programs using the RIM test, the Total Resource Cost (TRC) test, and the Participants test. While the Commission in Order No. PSC-14-0696-FOF-EU established goals based on the RIM test, staff reviewed the results for each test. Staff addresses the assumptions associated with FPL's avoided costs and program savings below.

#### **Avoided Cost**

FPL used a natural gas-fired combined cycle unit with an in-service date of 2019 for its avoided unit in calculating the economic benefit of its DSM programs. Savings associated with avoiding or deferring generation, transmission, distribution, operations & maintenance expenses (fixed and variable), line losses, and fuel were considered in determining the avoided costs for the each program. FPL's avoided unit is consistent with its filings in the goal-setting proceeding.<sup>8</sup>

## **Program Savings**

Seasonal peak demand and annual energy savings for FPL's programs were also reviewed. FPL estimates and measures savings by using a program with a combination of methodologies, including, engineering, modeling analyses, and actual performance of systems depending upon the program type. FPL states that it utilized the same seasonal peak demand and energy savings for all measures during the goal-setting proceeding in Docket No. 130199-EI. In accordance with Rule 25-17.003(10), F.A.C., FPL plans to conduct inspections of at least 10 percent of program installations to verify that the installations were performed and the installations meet quality standards.

#### Cost-Effectiveness Test Results

All of FPL's proposed programs with allocated demand and energy savings pass both the RIM and Participants tests, with the exception of one residential program. These tests consist of the benefits divided by the costs, as defined by Rule 25-17.008, F.A.C., so that programs are determined to be cost-effective if the result of the test is a ratio greater than 1.00. The only program in FPL's DSM Plan to fail the RIM test is the Residential Low Income program, which targets eligible low income ratepayers for assistance with weatherization, air conditioning, and water heating. The program does however pass the TRC test, and complies with the requirements established in Order No. PSC-14-0696-FOF-EU to assist and educate low-income customers. The only program in FPL's DSM Plan to fail the TRC test is Residential Air Conditioning, but the program passes both the RIM and Participants tests. Overall, FPL's DSM Plan passes the RIM test on a combined basis and therefore the DSM plan is considered cost-effective. The cost-effectiveness test results for each program are provided in Table 1-4 below.

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<sup>&</sup>lt;sup>8</sup> Docket No. 130199-EI, Commission review of numeric conservation goals (Florida Power & Light Company).

Date: July 9, 2015

Table 1-4
FPL Cost-Effectiveness Test Results by Program

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Program Name	RIM Test	TRC Test	Participants Test	
Residential	Programs			
Residential Load Management (On Call)	2.34	5.62	Infinite	
Residential Air Conditioning	1.01	0.83	1.01	
Residential New Construction (BuildSmart)	1.03	1.70	2.13	
Residential Ceiling Insulation	1.02	2.19	2.83	
Residential Low Income	0.86	2.78	Infinite	
Commercial/Indu	strial Progra	ms		
Business On Call	2.72	8.16	Infinite	
Commercial/Industrial Demand Reduction	1.62	88.30	Infinite	
Business Heating, Ventilating, & Air	1.03	1.69	1.80	
Conditioning (HVAC)				
Business Lighting	1.02	3.54	4.06	

Source: FPL's DSM Plan Filing

To perform the calculations in Table 1-4 above, FPL estimated the administrative costs for implementing the proposed programs, and added it as a cost to the relevant tests. These administrative costs are not final. Moreover, the Commission's acceptance of these test values would not signify that these values are reasonable for cost recovery purposes. FPL should continue to explore ways to reduce the administrative costs associated with implementing its DSM Plan. FPL must demonstrate that the administrative costs associated with implementing its DSM programs are reasonable and prudent as part of its annual cost recovery filings in the ECCR clause proceeding.

#### Rate Impact

If approved, the cost to implement FPL's DSM Plan programs would flow through to the ratepayers through the ECCR clause proceeding. In this annual docket, FPL would file for recovery of incentives, equipment and administrative costs. The ECCR clause represents a monthly bill impact to customers as part of the non-fuel cost of energy and/or demand charges on their bill.

Much like investments in generation, transmission, and distribution, investments in energy efficiency have an immediate rate impact, but produce savings over time. In addition to one time rebates and equipment costs, some programs have continued expenses from monthly bill credits for the duration of participation. FPL has several such programs, with demand response accounting for approximately 70 percent of ECCR clause expenditures over the next 10 years.

Overall, the ECCR impact of FPL's DSM Plan is a small portion of a customer's bill, and is anticipated to decrease over the ten-year period compared to 2014. Table 1-5 below is an estimate of the monthly bill impact of the ECCR clause on a typical residential and commercial/industrial customer over a ten-year period. The estimated ECCR factors are based

Date: July 9, 2015

upon the participation rates and administrative costs used in the cost-effectiveness analysis discussed above, and are not final.

Table 1-5
FPL Estimated Monthly Bill Impact of Proposed DSM Plan

Residential Customer		Commercial/Industrial Customer		
Year (1200 kWh/mo)		(400,000 kWh/mo, 1000 kW)		
1 cai	Bill Impact	Savings	Bill Impact	Savings
	(\$/mo)	From 2014	(\$/mo)	From 2014
2014	\$4.04	n/a	\$1,190.00	n/a
2015	\$2.40	\$1.64	\$720.00	\$470.00
2016	\$1.85	\$2.19	\$594.83	\$595.17
2017	\$1.84	\$2.20	\$598.99	\$591.01
2018	\$1.82	\$2.22	\$598.70	\$591.30
2019	\$1.80	\$2.24	\$599.45	\$590.55
2020	\$1.78	\$2.26	\$599.46	\$590.54
2021	\$1.77	\$2.27	\$605.42	\$584.58
2022	\$1.77	\$2.27	\$610.34	\$579.66
2023	\$1.77	\$2.27	\$615.42	\$574.58
2024	\$1.77	\$2.27	\$618.81	\$571.19

Source: FPL response to staff's first data request

FPL's DSM Plan includes a variety of programs that would allow participation by a wide spectrum of customer groups, including low-income, residential, and commercial/industrial customers. By participating in a DSM program, customers should be able to reduce their bills, potentially eliminating the additional cost associated with FPL's DSM Plan. In addition, since the Commission approved goals based on the RIM test, which considers the impact of lost revenues, even customers who do not participate in a DSM program should see a benefit of lower rates.

#### **Other Concerns**

On May 7, 2015, the Southern Alliance for Clean Energy (SACE) petitioned to intervene in this proceeding. In its Petition for Intervention, SACE posed three disputed issues: 1) do the company's DSM programs meet the requirements of the Commission's goal-setting order, 2) are the company's DSM programs designed in the most efficient way to maximize customer energy savings, and 3) is the company's evaluation, measurement and verification process adequate to capture empirical data on so called free-ridership.

With regard to SACE's first disputed issue and as discussed above, the projected demand and energy savings from FPL's DSM Plan appears to meet the goals established by the Commission in Order No. PSC-14-0696-FOF-EU. Addressing SACE's second disputed issue, SACE's issue only addresses energy savings, and not seasonal peak demand. DSM programs should not focus solely on maximizing energy savings. Rather, programs should be a method for delivering the annual goals for seasonal peak demand and energy savings in a cost-effective manner, in order to

decrease fuel consumption and to avoid or defer the construction of additional generating, transmission, and distribution facilities. As noted above, it is FPL's burden to demonstrate that the administrative costs associated with implementing its DSM programs are reasonable and prudent in its annual cost recovery filings in the ECCR clause.

SACE's third disputed issue addresses the methodology used to determine free-ridership. In the goal-setting proceeding, the Commission established a two-year payback methodology to account for free riders, but that educational and low income programs, including those with measures with a less than two year payback, were encouraged. In its Order establishing DSM goals, the Commission stated:

In response to Rule 25-17.0021(3), F.A.C., and Order No. PSC-13-0386-PCO-EU, the FEECA utilities filed a base case with a two-year payback to account for free riders. We approved goals based on a two-year payback criterion to identify free riders since 1994 and we find it appropriate to continue this policy. Each utility should continue to broadly educate all customer groups on energy efficiency opportunities. When the FEECA utilities file their DSM implementation plans, each plan should address how the utilities will assist and educate their low income customers, specifically with respect to the measures with a two-year or less payback.<sup>9</sup>

FPL has incorporated the two-year payback methodology into the design of its DSM Plan, and only includes savings from measures with a less than two-year payback in its residential low-income program.

SACE's disputed issue focuses on the collection of additional data associated with FPL's DSM Plan regarding the adoption rates of measures in order to determine free ridership. This data collection, typically done through surveys sent to customers, would result in additional administrative cost with no additional seasonal peak demand or annual energy savings.

#### Conclusion

FPL's DSM Plan is cost-effective based upon the Rate Impact Measure (RIM) test and results in a net decrease in ratepayers' monthly rates. FPL's DSM Plan is projected to meet or exceed the annual numeric conservation goals set by the Commission in Order No. PSC-14-0696-FOF-EU.

The Commission should approve the programs contained in FPL's DSM Plan. In addition, the Commission should allow FPL to file for cost recovery of the programs in the Energy Conservation Cost Recovery (ECCR) clause proceeding. FPL, however, must still demonstrate that its expenditures to implement these programs are reasonable and prudent in order to recover the expenditures through the ECCR clause. Staff recommends that FPL may not discontinue its DSM programs or change its programs' rebate levels without seeking formal Commission approval.

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<sup>&</sup>lt;sup>9</sup> FPSC Order No. PSC-14-0696-FOF-EU, Docket No. 130199-EI, Commission review of numeric conservation goals (Florida Power & Light Company), issued December 16, 2014, p. 27.

Docket No. 150085-EG

Date: July 9, 2015

Finally, staff recommends that FPL file its administrative program standards for all programs within 30 days of the Consummating Order in this docket and that the Commission grant staff administrative authority to review and approve these standards.

Issue 1

Date: July 9, 2015

**Issue 2:** Should the Commission approve FPL's request to cancel its closed Residential On Call Tariff Sheets?

**Recommendation:** Yes. FPL expects to save approximately \$8.3 million in annual costs due to lower bill credits being provided to certain participants in the closed Residential On Call tariff that would be shifted to the similar Residential Load Control tariff. FPL also expects administrative savings from reduced system and reporting requirements associated with the closed tariff. These combined savings will ultimately result in a reduction of costs recovered through the Energy Conservation Cost Recovery clause. Staff further recommends that the Commission grant permission to administratively approve the notifications that FPL will submit to its customers affected by the change in tariffs. (S. Brown)

**Staff Analysis:** FPL currently offers two similar residential load control tariffs: the Residential On Call tariff and the Residential Load Control tariff. By Order No. PSC-03-0322-TRF-EG<sup>10</sup> issued March 6, 2003, the Commission closed the Residential On Call tariff to new participants and approved FPL's proposed Residential Load Control Pilot Project. The primary purpose of the Residential Load Control Pilot was to measure customer response to reduced incentives. The Commission approved the Residential Load Control Pilot as an energy efficiency program in 2007. <sup>11</sup>

As of March 31, 2015, there were 250,725 participants remaining in FPL's closed Residential On Call tariff. FPL believes the number of customers on the closed Residential On Call tariff will continue to decline due to attrition from its peak of approximately 703,000 participants. As of March 31, 2015, there were 559,305 participants in FPL's open Residential Load Control tariff. Both tariffs provide a monthly bill credit to residential customers in exchange for permission to interrupt the power to the following appliances: central electric air conditioning, electric space heating, electric water heaters, and swimming pool pumps. The only difference between the closed and open tariffs is the bill credit for two of the appliance control options: central air conditioning cycling and electric water heating. Table 2-1 below displays the monthly bill credits residential customers receive for each appliance under the two load management programs.

<sup>&</sup>lt;sup>10</sup> FPSC Order No. PSC-03-0322-TRF-EG, Docket No. 030051-EG, Petition for modification of Residential On Call Program and for approval of Residential Load Control Pilot Project by Florida Power and Light Company, issued March 6, 2003.

<sup>&</sup>lt;sup>11</sup> FPSC Order No. PSC-07-0720-TRF-EG, Docket No. 070350-EG, Petition for approval of residential load control program by Florida Power & Light Company, issued September 4, 2007.

Date: July 9, 2015

Table 2-1 FPL's Load Management Tariffs

TTE 3 Load Management Tarms					
Closed Residential On Call		Residential Load Control			
Device (Option)	Credit	Device (Option)	Credit		
Conventional Electric Water Heater	\$3.50	Conventional Electric Water Heater	\$1.50		
Central Electric Air Conditioning (Option C)	\$6.00	Central Electric Air Conditioning (Option C)	\$3.00		
Central Electric Air Conditioning (Option S)	\$9.00	Central Electric Air Conditioning (Option S)	\$9.00		
Swimming Pool Pump	\$3.00	Swimming Pool Pump	\$3.00		
Central Electric Space Heating (Option C)	\$2.00	Central Electric Space Heating (Option C)	\$2.00		
Central Electric Space Heating (Option S)	\$4.00	Central Electric Space Heating (Option S)	\$4.00		

Source: FPL's RSL and RLP rate schedules

Of the approximately 250,000 participants, FPL's proposal will affect the monthly bill credit amount for participants that have selected either of the two appliance control options, conventional electric water heater and central electric air conditioning (Option C). Of these two, FPL states that 131,396 customers receive bill credits for both options, while 72,770 receive credits for the central electric air conditioning (Option C) only, and 36,048 receive credits for the conventional electric water heater only. Currently participants in the closed Residential On Call tariff receive a monthly bill credit of \$3.50 under the conventional electric water heater option. Under FPL's proposal, those customers would see a decrease in the monthly bill credit for this appliance to \$1.50. Under the central air conditioning option (Option C), participants would experience a decrease in the monthly bill credit from \$6.00 to \$3.00 in the Residential Load Control tariff.

FPL states that it is not proposing to change any of the current monthly bill credit amounts for the appliance options in the open Residential Load Control tariff. Instead, FPL asserts that it is because of fairness reasons that the company has proposed to migrate existing customers in its closed Residential On Call tariff to the open Residential Load Control tariff. As part of discovery, staff asked if the closed Residential On-Call program is cost-effective. FPL provided an analysis illustrating that the closed Residential On Call tariff is currently cost-effective. Allowing FPL to cancel its closed Residential On Call tariff will address a pricing disparity between the two groups of participating customers in FPL's closed Residential On Call tariff and Residential Load Control tariff. FPL also believes that the change will not cause a significant drop in participants in Residential Load Control.

As part of its data requests, staff asked the company if the proposal were to be approved by the Commission, what procedures were in place to notify participating customers in the closed

Date: July 9, 2015

Residential On Call tariff that they would be shifted to the open Residential Load Control program. The company states that once Commission approval of the tariff is final, FPL will send a letter to all customers on the closed Residential On Call tariff explaining the transition from the closed Residential On Call tariff to the open Residential Load Control tariff. The letter will be sent at least 30 days in advance of the date when the newly-approved credit will be reflected on the customer's bill. However, if a participant in the closed Residential On Call tariff does not wish to continue to participate in the Residential Load Control tariff, he/she can request to cease participating in the program without any penalties. Staff recommends that the Commission grant permission for staff to administratively approve the notifications that FPL will submit to its customers regarding the tariffs.

#### Conclusion

Staff recommends that the Commission should allow FPL to cancel its closed residential On Call Tariff Sheets. FPL expects to save approximately \$8.3 million annually due to lower bill credits being provided to certain participants in the closed Residential On Call tariff that would be shifted to the Residential load control tariff. FPL also expects to experience administrative savings from reduced system and reporting requirements associated with the closed tariff. FPL does not expect significant reductions in participation due to the requested change. Therefore, the general body of ratepayers will continue to experience the benefits from residential load control, while the costs recovered by FPL through the Energy Conservation Cost Recovery clause are expected to be reduced.

Date: July 9, 2015

#### **Issue 3:** Should this docket be closed?

**Recommendation:** Yes. If no person whose substantial interests are affected by the proposed agency action on Issue 1 files a protest within 21 days of the issuance of the PAA Order, a Consummating Order should be issued. If the Commission approves any programs, the programs should become effective on the date of the Consummating Order. If a protest is filed within 21 days of the issuance of the PAA Order, the programs should not be implemented until after the resolution of the protest.

If Issue 2 is approved, the tariff should be cancelled effective as of the date of the Commission's vote. If a protest is filed within 21 days of the issuance of the PAA Order, the tariff should remain in effect subject to refund pending resolution of the protest.

However, if there are no protests for Issues 1 and 2 the docket should remain open for staff's verification that the program standards have been filed by the utility and approved by staff. When the PAA issues become final and the program standards have been approved, this docket should be closed administratively. (Tan)

**Staff Analysis:** If no person whose substantial interests are affected by the proposed agency action on Issue 1 files a protest within 21 days of the issuance of the PAA Order, a Consummating Order should be issued. If the Commission approves any programs, the programs should become effective on the date of the Consummating Order. If a protest is filed within 21 days of the issuance of the PAA Order, the programs should not be implemented until after the resolution of the protest.

If Issue 2 is approved, the tariff should be cancelled effective as of the date of the Commission's vote. If a protest is filed within 21 days of the issuance of the PAA Order, the tariff should remain in effect subject to refund pending resolution of the protest.

However, if there are no protests for Issues 1 and 2 the docket should remain open for staff's verification that the program standards have been filed by the utility and approved by staff. When the PAA issues become final and the program standards have been approved, this docket should be closed administratively.

## Florida Power & Light Company (FPL) - 2015 DSM Program List

## **Residential Programs**

#### Residential Energy Survey

This program educates customers on energy efficiency and encourages them to participate in applicable FPL DSM programs and/or implement other recommended actions not included as part of FPL's Residential programs. Surveys are delivered through three channels: (1) Home Energy Survey (HES), which is a walk-through performed by an FPL representative in the customer's home; (2) Online Home Energy Survey (OHES), which is performed by the customer using FPL's online application; and (3) Phone Energy Survey (PES), which is performed by an FPL representative with information provided by the customer over the phone.

## Residential Load Management (On Call)

This program allows FPL to turn off customers' appliances for varying time periods during system emergencies, consistent with the applicable tariff. FPL-installed equipment is connected to eligible customer-selected end-use equipment (i.e., central air conditioning, central electric heating, electric water heaters, and pool pumps), allowing FPL to control these loads.

• Monthly bill credit varies by time of year, frequency of interruption allowed, and device.

Device (Option)	Applicable Months	Monthly Credit
Conventional Electric Water Heater	January – December	\$1.50
Central Electric Air Conditioner (Option C)	April - October	\$3.00
Central Electric Air Conditioner (Option S)	April - October	\$9.00
Swimming Pool Pump	January – December	\$3.00
Central Electric Space Heating (Option C)	November – March	\$2.00
Central Electric Space Heating (Option S)	November – March	\$4.00

## Residential Air Conditioning

This program encourages customers to install high-efficiency central air conditioning systems. The program targets single family detached homes and provides rebates to replace existing systems.

• Average rebate of \$208 per participant.

## Residential New Construction (BuildSmart)

This program encourages builders and developers to design and construct new homes in a manner that moves towards ENERGY STAR® qualifications. The program targets single family homes and the rebate is available to builders, developers, and owner-builders.

• Average rebate of \$894 per participant.

#### Residential Ceiling Insulation

This program encourages customers to improve the building envelope's thermal efficiency. The program targets older homes that have been determined to have less than current code insulation and central air conditioning.

• Average rebate of \$220 per participant.

#### Residential Low Income

This program is targeted to assist low income customers. Delivery will be provided through two channels. First, is through state Weatherization Assistance Provider (WAP) agencies to which FPL will provide rebates for certain energy measures as part of the total assistance they provide to their selected low income customers. Second, is through FPL conducting Energy Retrofits in selected neighborhoods. FPL Energy Retrofits will include promotional events followed by concentrated installations of DSM measures. FPL will conduct an Energy Survey for each customer and install, as appropriate, measures which address the main areas of energy use: weatherization (caulking, weather stripping and door sweeps); air conditioning (duct testing and repair, air conditioning unit maintenance and outdoor unit coil cleaning); and water heating (low flow showerheads, faucet aerators and pipe wrap).

• Rebate varies by measure, and are paid to the WAP agency or its designee

Category	Measure	Rebate
Weatherization	Weatherization	\$90
	Duct Testing & Repair	\$60
Air Conditioning	Unit Maintenance	\$80
	Outdoor Coil Cleaning	\$60
	Low Flow Showerhead	\$30
Water Heating	Faucet Aerator	\$10
	Pipe Wrap	\$40

## **Commercial/Industrial Programs:**

#### Business Energy Evaluation (BEE)

This program educates customers on energy efficiency and encourages them to participate in applicable FPL DSM programs and/or implement other recommended actions not included as part of FPL's Business programs. There are two delivery channels for the BEE: (1) the Field BEE, which is performed by an FPL representative at the customer's facility; and (2) the Online BEE, which is performed by the customer using FPL's online application.

#### **Business On Call**

This program allows FPL to turn off customers' direct expansion (DX) central electric air conditioning units for varying time periods during system emergencies, consistent with the applicable tariff. FPL-installed equipment is connected to the customer's DX units allowing FPL to control this load.

• Monthly Credit of \$2 per ton of central electric air conditioning capacity during April through October.

## Commercial/Industrial Demand Reduction (CDR)

This program allows FPL to control customer-established loads of 200 kW or greater during system emergencies, consistent with the applicable tariff. Load control equipment is installed at the customer's facility to allow FPL to control customer loads.

• Monthly Credit of \$7.89 per kW.

# Commercial/Industrial Load Control (CILC) Closed to New Participants

This program allows FPL to control customer-established loads of 200 kW or greater during system emergencies, consistent with the applicable tariff. Load control equipment is installed at the customer's facility to allow FPL to control customer loads. Incentive provided by reduced base rate for electric service.

## Business Heating, Ventilating & Air Conditioning (HVAC)

This program encourages customers to install high-efficiency HVAC systems. The primary types of eligible HVAC systems include: chillers; thermal energy storage (TES); split/packaged DX; demand control ventilation ("DCV"); and energy recovery ventilation (ERV).

• Rebate varies by measure

Measure	Rebate (per Sum kW)
Chillers	\$210
TES	\$600
DX	\$180
DCV	\$2,010
ERC	\$1,270

## **Business Lighting**

This program encourages customers to install high-efficiency lighting systems. The primary types of eligible lighting systems include: compact fluorescent lights ("CFL"); pulse-start metal halides (PSMH); premium linear fluorescents with high-efficiency electronic ballasts; and high bay light-emitting diodes (LED).

• Rebate varies by measure

Measure	Rebate (per Sum kW)
CFL	\$70
PSMH	\$185
Premium Linear Fluorescents	\$65
High Bay LED	\$95

#### **Business Custom Incentive**

This program encourages customers to install unique high-efficiency technologies not covered by other FPL DSM programs. The primary types of customized technologies include, but are not limited to, process controls, efficient machinery, and other measures unique to particular industrial processes or business applications.

• Rebate determined on a project specific basis, but must pass RIM and Participants test with a payback period of no less than two years.

## Other Programs:

### Conservation Research and Development (CRD)

This program identifies and scientifically evaluates the energy and demand savings and customer economic performance under FPL's climate conditions of emerging energy efficiency and demand response technologies and practices. FPL typically collaborates with Florida-based universities, utilities, the U.S. Department of Energy, and other independent research organizations to conduct joint studies to maximize the use of research funds. CRD projects are conducted in laboratory and field settings. For weather sensitive technologies, testing incorporates the climate conditions unique to FPL's service area to obtain accurate savings estimates. All results are weather normalized and weighted for FPL's regional population distribution. FPL plans to continue the CRD program through December 31, 2020 which coincides with the year in which the next DSM Plan is expected to be approved. Expenditures for the six-year period of 2015-2020 will not exceed \$1,500,000.

## Cogeneration & Small Power Production

This program was established to recover the administrative costs through the Energy Conservation Cost Recovery (ECCR) clause for executing FPL's obligations to facilities defined as Qualifying Facilities (QF) under the Public Utility Regulatory Policies Act of 1978 (PURPA) and PSC rules. Such costs are associated with interconnection; installation, inspection, calibration and maintenance of meters; administration of power billing and accounting processes; PSC reporting; contract negotiation; contract administration, including legal expenses resulting from litigation; facility verifications and audits; communications; operating coordination; and problem resolution. This program does not include the costs associated with FPL payments for firm capacity and energy and for as-available energy made to QFs pursuant to FPL's tariff which are recoverable by FPL through the PSC's periodic review of its fuel and purchased power costs.

#### Solar Pilot Programs

These programs are part of a five year pilot program approved by the Commission in FPSC Order No. PSC-11-0079-PAA-EG. The first four years of the five year pilot were completed under the 2010 DSM Plan. The programs described below are offered only during 2015, the last year of the five year pilot.

#### Residential Photovoltaic Pilot

This pilot encourages residential customers to install photovoltaic (PV) systems. The primary components of eligible PV systems are: panels; mounting hardware; electric inverter; cabling; a disconnect device for systems greater than 10 kWDC; and optional backup battery systems.

• \$2.00 per WDC installed, with a maximum incentive of \$20,000.

#### **Business Photovoltaic Pilot**

This pilot encourages business customers to install PV systems. The primary components of eligible PV systems are: panels; mounting hardware; electric inverter; cabling; a disconnect device for systems greater than 10 kWDC; and optional backup battery systems.

- \$2.00 per WDC installed up to 10 kWDC.
- \$1.50 per WDC installed above 10 kWDC but below 25 kWDC.
- \$1.00 per WDC installed above 25 kWDC with a maximum incentive of \$50,000.

#### **Business Photovoltaic for Schools Pilot**

This pilot installs PV systems at public schools with accompanying educational materials for children to demonstrate the practical application of PV. The primary components of these systems are: panels; mounting hardware; electric inverter; cabling; controls; and sensors. FPL will also provide: classroom educational materials; system monitoring and comparison tools; and training for teachers and facility personnel.

• Installed PV system provided for free to participating school.

#### Residential Solar Water Heating Pilot

This pilot encourages residential customers to install solar water heating systems. The primary components of an eligible solar water heating system are: a solar collector, mounting hardware, a water retention tank, associated plumbing, controls, and sensors.

• \$1,000 per participant.

#### Residential Solar Water Heating (Low Income New Construction) Pilot

This pilot encourages installation of solar water heating systems in low income housing. The primary components of an eligible solar water heating system are: a solar collector, mounting hardware, a water retention tank, associated plumbing, controls, and sensors.

• Installed solar water heating system provided for free to participant.

#### **Business Solar Water Heating Pilot**

This pilot encourages business customers to install solar water heating systems. The primary components of an eligible solar water heating system are: a solar collector, mounting hardware, a water retention tank, associated plumbing, controls, and sensors.

• \$30 per 1,000 BTU/day maximum rated output with a maximum incentive of \$50,000.

## Renewable Research and Demonstration Pilot

This pilot involves three activities: (1) conducting demonstration projects at public non-profit and government facilities to increase public, governmental and contractor awareness of renewables; (2) evaluating emerging renewable technologies (e.g., PV-power pool pumps) to understand and quantify the effectiveness and their applications; and (3) educational grants for universities and technical centers to host contractor training classes and seminars. For 2015, FPL's focus will be on demonstration projects. FPL identifies appropriate public non-profit or governmental facilities which can host the installation of PV systems with accompanying instructional displays and educational materials. Examples of installations FPL has completed are the Museum of Discovery and Science in Fort Lauderdale, the Kennedy Space Center Visitor Center in Cape Canaveral, and the Imaginarium Science Museum in Fort Myers. The placement of these systems, along with associated monitoring equipment to encourage interaction, serves as a working demonstration for those visiting the host facility.