

State of Florida



Public Service Commission

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COMMISSION
CLERK

DATE: March 04, 2004

TO: Director, Division of the Commission Clerk & Administrative Services (Bayó)

FROM: Division of Economic Regulation (Colson) *RC TB RLT 108*
Office of the General Counsel (Brown) *MCB MCT*

RE: Docket No. 040049-EG – Petition for approval of low-income weatherization program by Florida Power & Light Company.

AGENDA: 03/16/04 – Regular Agenda – Proposed Agency Action - Interested Persons May Participate.

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\ECR\WP\040049.RCM.DOC

Case Background

In May of 2000, the Commission approved Florida Power and Light Company's (FPL) Low-Income Weatherization Research Project (Pilot Project) by Order No. PSC-00-0915-PAA-EG, issued May 8, 2000, in Docket No. 991788-EG, In Re: Approval of demand-side management plan of FPL. The Pilot Project was designed to evaluate the cost-effectiveness of weatherization measures for low-income housing by employing a combination of energy audits and incentives to encourage owners to retrofit their homes with energy efficiency measures. The purpose of the Pilot Project was to determine if a full-scale program might be offered cost-effectively. On November 16, 2003, FPL provided the Commission with a final report summarizing the Pilot Project. In the report FPL listed seven (7) different demand side management (DSM) measures that were evaluated for cost-effectiveness as a result of audits performed on low-income houses. Of the seven measures evaluated, only two, AC maintenance measures and Reduced Air Infiltration measures, were found to be cost-effective. The final report also contained a conclusion that FPL should file a petition with the Commission for a full-scale program consisting of measures found to be cost-effective.

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FPSC-COMMISSION CLERK

Docket No. 040049-EG
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On January 16, 2004, FPL filed a petition for approval of its Low-Income Weatherization Program as part of FPL's DSM plan, and to recover reasonable and prudent expenditures through the Energy Conservation Cost Recovery (ECCR) Clause.

The Commission is vested with jurisdiction over this matter pursuant to Sections 366.80 - .85, and 405.519, Florida Statutes (2003).

Discussion of Issues

Issue 1: Should Florida Power & Light Company's (FPL) Petition for Approval of its Low-Income Weatherization Program, including recovery of reasonable and prudent costs for the program through the ECCR clause, be approved?

Recommendation: Yes. FPL is to file Program Standards for the Low-Income Weatherization Program for administrative approval after the program is approved by the Commission. (Colson)

Staff Analysis: FPL's Low-Income Weatherization Program consists of two cost-effective DSM measures, AC maintenance and Reduced Air infiltration. These measures were among seven measures that FPL evaluated in its Low-Income Weatherization Research Project (Pilot Project) to encourage energy conservation in low-income housing. FPL's development of the Pilot Project resulted from a stipulation entered into by FPL and the Legal Environmental Assistance Foundation (LEAF). The Pilot Project, initiated in 2000, was a more than three year research project designed to analyze cost-effective methods of retrofitting homes of low-income customers with higher efficiency energy measures. The Pilot Project had the following goals:

- Integration of FPL's Pilot Project measures with the Department of Community Affairs (DCA) and local housing authorities to deliver energy efficiency measures to low-income families.
- Monitor costs and energy and demand impacts to design a future cost-effective low-income program.
- Increase low-income families' participation in FPL's DSM and load management programs.

The Pilot Project was designed as a custom, energy conservation program. FPL accepted audits performed by local housing authorities which used the Nation Energy Audit Tool (NEAT) to determine the need for energy efficiency measures in each home. The local housing authorities worked with the DCA to secure funding (grants) from both the Weatherization Assistance Program (WAP) providers and the State Housing Initiatives Partnership Program (SHIP) administrators. FPL offered incentives totaling \$60,506.00 to participating low-income weatherization agencies for weatherization measures. These matching funds from FPL allowed the agencies to help more low-income customers than would otherwise have been able to benefit from existing funds.

FPL's Pilot Project evaluation included a data gathering effort that culminated in the use of statistical billing analysis to calibrate impact models. The following energy end-uses were addressed in each energy audit and FPL offered the following incentives totaling a maximum of \$185 per home for combinations of the following measures:

- **AC maintenance** – a flat fee of \$30 toward the maintenance of central air conditioning (A/C) units.

- **Duct System** - \$30 per duct test (covered the cost of blower door test), \$15 per additional A/C unit (home must have central A/C) Note: this incentive only applied if the weatherization provider received certification through FPL.
- **Room A/C** - \$75 per unit for wall units with a SEER rating of 9.5 to 10.0 and \$115 per unit for SEER rating of 11.0 and above.
- **Water heater maintenance** - \$25 for insulation blanket, pipe insulation, and low-flow shower head. Note: each was evaluated separately.
- **Lighting** – up to \$50 for compact fluorescent lighting, based upon actual fixture cost for a typical home.
- **Reduced Air Infiltration** – up to \$50 towards weatherization, caulking or weather-stripping.

This Pilot Project eventually extended into ten counties although seventy percent of the participants were from Dade and Broward counties. FPL acquired 500 participants by 2002, and then began its evaluation of the measures’ implementation and cost-effectiveness. The cost-effective analyses were based on the Commission’s approved methodology using the rate impact (RIM), total resource (TRC), and Participants tests. Of the measures listed above, FPL evaluated the following seven measures for cost-effectiveness:

	<u>RIM Test</u>	<u>TRC Test</u>	<u>Participant Test</u>
AC Maintenance	1.010	3.00	4.722
Reduced Air Infiltration	1.009	1.88	2.143
Pipe Insulation	0.449	1.24	16.851
Insulation Blanket	0.522	1.90	6.269
Low-Flow Shower Head	0.600	3.64	15.085
Compact Fluorescent Lamps	0.513	1.54	8.316
Room ACs	0.38	0.66	1.985

Note: FPL assumes duct impacts to be the same as the Commission approved FPL program.

After the evaluation, FPL filed a final report recommending that the AC maintenance and Reduced Air Infiltration measures provided the best opportunity to offer cost-effective improvements. FPL stated that the AC Maintenance measure was capable of supporting incentives up to \$35, which was greater than the \$30 incentive provided in the pilot. And the Reduced Air Infiltration measure was capable of supporting a \$10 incentive (note that this incentive was reduced from the \$50 incentive offered during the Pilot Project in order to be cost-

effective). All water heating and room air conditioning measures were not cost-effective (even after reducing the incentives) and were not recommended.

According to the petition, the Low-Income Weatherization Program will consist of the AC Maintenance and Reduced Air Infiltration measures. The Program will employ a combination of energy audits and incentives to encourage low-income housing administrators to retrofit homes with these cost-effective measures. FPL will accept energy audits performed by FPL, its designees, or local housing authorities to determine the need for energy efficiency measures in each home. Residential customers who are eligible for WAP and SHIP weatherization programs will be eligible for FPL's Low-Income Weatherization Program. Thus, local housing authorities will be responsible for identifying which customers are eligible to participate in FPL's Low-Income Weatherization Program. The DCA is responsible for providing annual updates to participating housing authorities.

The following are the requirements for low-income weatherization participation:

- The residence must be in FPL's service area and be an FPL residential metered customer.
- Participants must meet all state weatherization low-income criteria.
- All installations must be accessible for verification by an FPL representative.
- New homes that have been occupied less than one year are not eligible for incentives.
- All work must be performed by state approved providers or their approved contractors.

Staff believes that FPL's petition is consistent with the Pilot Project's final report containing a recommendation that a full-scale program containing the AC Maintenance and Reduced Air Infiltration measures be filed with the Commission. Staff also believes that the Low-Income Weatherization Program will help advance the policy objectives set forth in Commission Rule 25-17.001, Florida Administrative Code and the Florida Energy Efficiency and Conservation Act (FEECA), Sections 366.80-85, Florida statutes. Also, staff believes that the Low-Income Weatherization Program is cost-effective and will result in peak demand and energy savings, helping FPL to achieve its conservation goals.

The cost-effectiveness analyses show that the benefit-to-cost ratios for the AC Maintenance measures are: 1.01 RIM; 4.72 TRC; and 3.00 Participants; and for the Reduced Air Infiltration measures are: 1.01 RIM; 1.88 TRC; and 2.14 Participants. The demand and energy impacts for the AC Maintenance measures are: winter demand .000 kw; summer demand 0.235 kw; and energy 484 kwh. The demand and energy impact for the Reduced Air Infiltration measures are: winter demand .090 kw; summer demand 0.083; and energy 186 kwh.

Staff also believes that the Low-Income Weatherization Program can be monitored and will yield measurable results. Therefore, staff recommends that FPL petition for approval of Low-Income Weatherization Program and to recover reasonable and prudent costs for the program through the ECCR clause be approved.

Docket No. 040049-EG

Date: March 04, 2004

Issue 2: Should this docket be closed?

Recommendation: Yes. If the Commission approves staff's recommendation in Issue 1, and no timely protest is filed within 21 days of the issuance of the Commission's order, this docket should be closed upon the issuance of a Consummating Order. (Brown)

Staff Analysis: If the Commission approves staff's recommendation in Issue 1, and no timely protest is filed within 21 days of the issuance of the Commission's order, this docket should be closed upon the issuance of a Consummating Order.