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: May 25, 2006

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

FROM: Division of Economic Regulation (Sickel)

Office of the General Counsel (Fleming)

RE: Docket No. 060286-EG – Petition for approval of revisions to residential and

commercial/industrial heating, ventilating, and air conditioning programs by

Florida Power & Light Company.

AGENDA: 06/06/06 – Regular Agenda – Proposed Agency Action – Interested Persons May

Participate

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Administrative

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

FILE NAME AND LOCATION: S:\PSC\ECR\WP\060286.RCM.DOC

Case Background

Recent revisions have been made by the U.S. Department of Energy ("DOE") to the efficiency standards for air conditioning equipment, for both residential and commercial applications. Florida Power & Light Company (FPL or Company) requests authorization to modify its existing Commission-approved programs to adopt the updated minimum efficiency levels for the Seasonal Energy Efficiency Ratio (SEER). The SEER rating system is used as an indicator of the relative efficiency of energy usage by residential and commercial air conditioning equipment. Along with the updates relating to new SEER requirements, FPL

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proposes to add new conservation measures in response to technological innovations that are newly available in the marketplace.

This recommendation addresses FPL's petition requesting approval of modifications to the residential and business demand-side management programs that relate to equipment used for heating, cooling, and air conditioning. The Commission has jurisdiction over this matter pursuant to Sections 366.81 and 366.82, Florida Statutes.

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Discussion of Issues

<u>Issue 1</u>: Should the Commission approve FPL's proposed modifications to its Residential and Commercial/Industrial Heating, Ventilating and Air Conditioning Programs?

Recommendation: Yes. The modified programs meet the objectives of Rule 25-17.001, Florida Administrative Code, Florida Energy Efficiency and Conservation Act (FEECA), and Sections 366.80–366.85 and 403.519, Florida Statutes. They will continue to be cost effective, monitorable, and meet or exceed the Company's approved numeric conservation goals. Within 60 days of an order approving the requested program modifications, FPL should file detailed program standards for both the residential and commercial programs, to be administratively approved by staff. (Sickel)

<u>Staff Analysis</u>: In 2004, the U.S. Department of Energy (DOE) amended requirements relating to minimum efficiency standards that had been in effect for almost ten years. The new standards apply to both residential and commercial equipment manufactured as of January 23, 2006. After that date, all residential central air conditioners manufactured must have a Seasonal Energy Efficiency Rating (SEER) of 13 or better. Similar efficiency improvements are required for some other appliances, and for various commercial equipment.

The revisions to the manufacturing code requirements reflect multiple technological advances for both residential and commercial type equipment. For example, advances in fan motor technology now provide for blower speed to be optimized as air flow restrictions are changed by clean or dirty filters. Not only do these motors allow for a slower speed when that is adequate, they are more efficient at a given speed than the older designs.

Another example of energy conservation that can be accomplished through the use of new, innovative technology is the demand control ventilation (DCV) system. DCV systems are used in commercial installations where code standards require the introduction of a specified amount of fresh air from outside the conditioned space. If the amount of fresh air introduced is more than is needed, the peak load for heating or cooling will be increased unnecessarily. Use of DCV systems can reduce peak demand for capacity and energy, both for summer and winter.

The existing demand side management programs offered by FPL provide for specified incentive payments to those customers who are willing to purchase and install air conditioning or heating equipment that is more efficient than the minimum code requirement. The code previously allowed a SEER of 10 for residential air conditioning equipment. FPL's current approved standards for the Residential Air Conditioning Program provide an incentive payment for units having a SEER rating as low as 12, if other qualifications are met. The modified program for residential customers will update and expand the SEER requirements, with similar changes to the incentives to be offered. Incentives will also be offered for variable speed motors and the use of FPL approved software for equipment selection.

The modified offering for commercial and industrial customers is to be called the Business HVAC program. Revised program standards will provide details of the changes being made within the program. The qualifying SEER levels will be updated and expanded, based on the new code requirements, and the range of available incentives will be changed. Specifically,

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maximum available incentives for thermal storage, chillers, direct expansion units, and energy recovery ventilator units will be increased. Additionally, incentives will be offered for equipment that has recently become available in the marketplace, including variable speed motors, DCV systems, and efficient room air conditioning units. To promote more energy efficiency in system design and equipment selection, FPL will offer rebates for feasibility studies, data-logging and post-installation verification of equipment.

The incentive amount for the Business HVAC customers will be based on equipment efficiency and the kW demand that will be removed from FPL's peak loads. Within 60 days of an order approving the requested program modifications, FPL should file detailed program standards for both the residential and commercial programs, to be administratively approved by staff.

As FPL has described in its filing, the modified programs meet the three-pronged test by which such programs are evaluated:

- The Programs advance the policy objectives of Rule 25-17.001, Florida Administrative Code, and Sections 366.80 through 366.85, Florida Statutes, known as the "Florida Energy Efficiency and Conservation Act" (FEECA);
- The Programs are directly monitorable and produce measurable results; and,
- The Programs are cost effective.

The modified Programs will be monitorable and produce measurable results, and will provide increased energy savings. FPL has used the Commission-approved methods for determination of cost-effectiveness. For the modified Residential Air Conditioning program, FPL reports the following benefit-cost ratios: 1.20 participant, 1.12 RIM, and 1.01 TRC. For the Business HVAC program, the benefit-cost ratios are 1.57 Participant, 1.38 RIM, and 1.90 TRC.

FPL anticipates that the modified Programs will enable the Company to reach its full potential of peak demand and energy savings and help in achieving the conservation goals approved for the Company.

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Issue 2: Should this docket be closed?

Recommendation: If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a consummating order. (Fleming)

Staff Analysis: If no person whose substantial interests are affected by the proposed agency action files a protest within 21 days of the issuance of the order, this docket should be closed upon the issuance of a consummating order.