

FLORIDA PUBLIC SERVICE COMMISSION  
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MEMORANDUM

October 23, 1997

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FPSC - Records/Reporting

TO: DIRECTOR, DIVISION OF RECORDS AND REPORTING (BAYO)

FROM: DIVISION OF ELECTRIC & GAS (FUTRELL) *M77 JR*  
DIVISION OF LEGAL SERVICES (JAYE) *RD RVE JOY*

RE: DOCKET NO. 970545-EG, PETITION FOR MODIFICATION OF  
COMMERCIAL/INDUSTRIAL HEATING, VENTILATING AND AIR  
CONDITIONING PROGRAM BY FLORIDA POWER & LIGHT COMPANY

AGENDA: 11/04/97 - REGULAR AGENDA - PROPOSED AGENCY ACTION -  
INTERESTED PERSONS MAY PARTICIPATE

CRITICAL DATES: NONE

SPECIAL INSTRUCTIONS: S:\PSC\EAG\WP\970545.RCM

CASE BACKGROUND

In November 1995, the Commission approved Florida Power & Light's (FPL) Commercial/Industrial (C/I) Heating, Ventilating and Air Conditioning (HVAC) program as part of FPL's Demand Side Management (DSM) plan in Order Numbers PSC-95-1343-S-EG, and PSC-95-1343A-S-EG. The C/I HVAC program is designed to reduce FPL's summer and winter coincident peak demand and energy attributable to C/I heating, ventilating, and air conditioning (HVAC) loads. This program provides incentives for the installation of high efficiency HVAC equipment in commercial and industrial buildings.

In staff's first set of interrogatories in Docket No. 960002-EG, FPL was asked to evaluate each of its approved DSM programs using the company's most recent planning assumptions. The results showed that the C/I HVAC program along with several other DSM programs failed the Rate Impact Measure (RIM) test. FPL stated that the requested analyses were not sufficient to assess whether the programs should continue to be offered. FPL agreed at that time to reevaluate each of the programs that failed the RIM test to determine potential program modifications that may be desirable.

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As a result of its analysis, on May 6, 1997, FPL filed a petition to modify its C/I HVAC program.

#### DISCUSSION OF ISSUES

**ISSUE 1:** Should the Commission approve Florida Power & Light Company's petition for approval to modify its Commercial/Industrial Heating, Ventilating and Air Conditioning program, including approval for cost recovery through the Energy Conservation Cost Recovery Clause?

**RECOMMENDATION:** Yes. However, because the C/I HVAC program is marginally cost-effective, FPL should reassess the cost-effectiveness of the program and report, in its true-up filing in Docket No. 980002-EG in November 1998, the resulting cost-effectiveness ratios using the most current assumptions at the time the analysis is performed. FPL should also report to staff the results of its planned 1997 evaluation of thermal energy storage, and its planned 1999 evaluation of chillers for the C/I HVAC program. FPL should, through its survey efforts, determine the extent to which participants were aware of gas alternatives, the extent they considered gas alternatives, and if applicable what gas alternatives were available. FPL should also determine if participants were aware of a gas alternative, whether FPL's rebate caused in whole or in part the participant to remain an electric customer.

**STAFF ANALYSIS:** FPL proposes to modify the C/I HVAC program by taking the following actions:

1. Eliminate payment of additional incentives for cold air distribution;
2. Discontinue ventilation exhaust hoods as eligible equipment for program incentives;
3. Change incentive for thermal energy storage from not to exceed \$333 per summer kW reduced to not to exceed \$356 per summer kW reduced; and
4. Change incentive for duct seal of DX HVAC and heat pumps from not to exceed \$112 per summer kW reduced to not to exceed \$139 per summer kW reduced.

The cost-effectiveness of the C/I HVAC program has changed since Commission approval in 1995. The table below contains the cost-effectiveness test results:

	Approval 11/95	11/96	5/97
RIM	1.13	0.90	1.05
Total Resource Cost	1.97	1.42	1.76
Participant	2.43	2.01	2.09

FPL provided, in November 1996, the cost-effectiveness results of its programs, in response to a staff interrogatory in the Energy Conservation Cost Recovery (ECCR) docket (960002-EG). This response showed many of FPL's programs not to be cost-effective. FPL stated that it would reanalyze all of its programs and may modify those programs that are not cost-effective. FPL filed for modification of seven programs, and termination of two in May 1997.

FPL has also committed, to staff, to evaluate program participants regarding natural gas substitution. The C/I HVAC program offers rebates on equipment with gas alternatives, namely electric chillers. FPL should, through its survey efforts, determine the extent to which participants were aware of gas alternatives, the extent they considered gas alternatives, and if applicable what gas alternatives were available. FPL should also determine if participants were aware of a gas alternative, whether FPL's rebate caused in whole or in part the participant to remain an electric customer.

FPL's C/I customers have much more diverse electricity usage characteristics, as a group, than residential customers. A number of factors contribute to this effect including different business types, operating hours, level of usage (kW), time of usage, and duration of usage. There is more risk, therefore, in utilizing average demand and energy savings for C/I programs because of this effect. FPL now plans to turn more of its attention to the evaluation of C/I programs as shown in its evaluation plans for 1997-1999. For the C/I HVAC program, FPL intends to meter 13 thermal energy storage sites in 1997, and 10 chiller sites in 1999 to record the energy usage of the equipment of participating customers during every hour of the day. These efforts, along with

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surveys of program participants in 1997 and 1999 will assist FPL in verifying the projected savings of the program. FPL also plans to survey participants and non-participants to assess the effectiveness of program design, and program implementation. FPL should report to staff the results of its planned 1997 evaluation of thermal energy storage, and its planned 1999 evaluation of chillers for the C/I HVAC program.

Because the program as modified is marginally cost-effective under RIM (1.05), the program is susceptible to becoming not cost-effective if avoided costs drop slightly, or if assumed demand and energy savings are less than projected. Because of the risk to FPL's ratepayers of a marginally cost-effective program, staff recommends that FPL should reassess the cost-effectiveness of the program, and file the cost-effectiveness ratios with its true-up filing in Docket No. 980002-EG. The filing date will be in November 1998, a specific date will be set when the docket is opened. The reassessment should include the most current assumptions at the time the analysis is performed.

A reduction in avoided cost appears to be the primary reason for the decline in cost-effectiveness of FPL's programs. As modified the C/I HVAC program meets Commission requirements for cost-effectiveness. Marginally cost-effective programs, however, are more vulnerable to declining avoided cost, and overstated demand and energy savings assumptions. This puts ratepayers at greater risk of subsidizing participants without receiving the capacity deferral benefit of cost-effective programs. FPL should monitor and evaluate the C/I HVAC program as discussed above to insure continued cost-effectiveness.

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**ISSUE 2:** Should Florida Power & Light Company be required to submit detailed program participation standards?

**RECOMMENDATION:** Yes. Florida Power & Light Company should file program participation standards within 30 days of the issuance of the order in this docket. These standards should be administratively approved.

**STAFF ANALYSIS:** FPL's program standards should clearly state the Company's requirements for participation in the program, customer eligibility requirements, details on how rebates or incentives will be processed, technical specifications on equipment eligibility, and necessary reporting requirements. Staff requests that it be allowed to administratively approve the program participation standards if they conform to the description of the program contained in FPL's petition.

**ISSUE 3:** Should this docket be closed?

**RECOMMENDATION:** Yes. If no person whose substantial interests are affected by the Commission's proposed agency action timely files a protest within twenty-one days of the issuance of the order, this docket should be closed.

**STAFF ANALYSIS:** Pursuant to Rule 25-22.029(4), Florida Administrative Code, any person whose substantial interests are affected by the Commission's proposed agency action shall have 21 days after the issuance of the order, to file a protest. If no timely protest is filed, the docket should be closed.