FLORIDA PUBLIC SERVICE COMMISSION
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MEMORANDUM

October 23, 1997

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

FROM: **DIVISION OF ELECTRIC & GAS (HAFF)** MSH TDS JVF
DIVISION OF LEGAL SERVICES (KEATING) WCK RVE JDJ

RE: **DOCKET NO. 970540-EG, PETITION BY FLORIDA POWER & LIGHT COMPANY FOR MODIFICATION OF DUCT SYSTEM TESTING AND REPAIR PROGRAM**

AGENDA: **11/4/97 - REGULAR AGENDA - PROPOSED AGENCY ACTION - INTERESTED PERSONS MAY PARTICIPATE**

CRITICAL DATES: **NONE**

SPECIAL INSTRUCTIONS: **S:\PSC\EAG\WP\970540.RCM**

CASE BACKGROUND

In November, 1995, the Commission approved Florida Power & Light Company's (FPL) Duct System Testing and Repair Program as part of its demand-side management (DSM) plan (Order Nos. PSC-95-1343-S-EG and PSC-95-1343A-S-EG). The Duct System Testing and Repair Program encourages demand and energy conservation through the identification of air leaks in air conditioning duct systems, and the repair of those leaks by qualified contractors. Under this program, FPL performs on-site tests at the customer's premise, identifies leak sites, and provides financial incentives to customers for leak repairs. The current program is open to all residential customers and to small, non-demand metered commercial and industrial (C/I) customers.

When the Commission approved this program in November, 1995, the program was cost-effective under all three Commission-approved tests: the Rate Impact Measure (RIM) test, the Total Resource Cost

(TRC) test, and the Participants test. In the most recent Energy Conservation Cost Recovery (ECCR) clause proceedings (Docket No. 960002-EG), staff asked FPL to evaluate the cost-effectiveness of all Commission-approved DSM programs using FPL's most recent planning assumptions. These results showed that the Duct System Testing and Repair Program, along with several other DSM programs, failed the RIM test. FPL stated that these analyses did not sufficiently determine at that time whether FPL should continue to offer these DSM programs. FPL agreed to reevaluate each DSM program that failed the RIM test to determine potential program modifications that would restore cost-effectiveness.

The purpose of FPL's petition in this docket is to seek Commission approval of two program modifications which, if granted, are expected to restore the cost-effectiveness of the Duct System Testing and Repair Program. The two changes proposed by FPL are: (1) reduce the average customer incentive from $629/kW to $369/kW of summer peak demand reduced; and (2) exclude small, non-demand metered C/I customers from further program participation.

DISCUSSION OF ISSUES

ISSUE 1: Should the Commission approve Florida Power & Light Company's (FPL) petition to modify its Duct System Testing and Repair Program, including approval for continued cost recovery through the Energy Conservation Cost Recovery (ECCR) Clause?

RECOMMENDATION: Yes. However, the Duct System Testing and Repair Program is minimally cost-effective even after modification. For this reason, FPL should report, in its true-up filing in the ECCR docket (Docket No. 980002-EG), the cost-effectiveness ratios of this program using the most current assumptions available. If, at that time, the program is not cost-effective under the RIM test, FPL should petition to modify or terminate the program.

STAFF ANALYSIS: FPL proposed two modifications to its existing Duct System Testing and Repair Program: (1) reduce the average customer incentive from $629/kW to $369/kW of summer peak demand reduced; and (2) exclude small, non-demand metered C/I customers from further participation in the program.

FPL's Duct System Testing and Repair Program appears to be monitorable and able to yield measurable results. FPL provided staff with its program evaluation plan for the 1997-1999 period. This evaluation plan reflects FPL's intent to perform end-use monitoring at 100 sites in 1997 and 1998 to record the energy usage during every hour of the day. FPL also plans to conduct post-participation phone surveys of 400 customers in 1997 and 1998.

Projected demand and energy savings for FPL's modified Duct System Testing and Repair Program are based on past end-use metering of the current program. End-use metering showed that FPL was receiving less demand and energy savings than it originally projected in 1995 for the current program. As a result, FPL's new demand and energy savings projections for the modified program are less than those made for the current program, as illustrated in the following table:

FPL'S FORECASTED PER-PARTICIPANT DEMAND & ENERGY SAVINGS		
	Nov. 1995 (current program)	May 1997 (as modified)
Summer Peak Demand	0.34 kW	0.28 kW
Winter Peak Demand	0.65 kW	0.31 kW
Annual Energy Consumption	547 kWh	467 kWh

One of FPL's proposed program modifications would reduce the average customer incentive level from $629/kW to $369/kW of summer peak demand reduced. FPL expects to suffer decreased program participation as a result of the reduced customer incentive. By the year 2000, FPL forecasts 78,931 program participants with the new, reduced customer incentive; 98,937 customers were forecasted to participate in the year 2000 absent any change in the incentive level. Using the new program participant forecast, FPL expects the Duct System Testing and Repair Program to reduce summer peak demand by a total of 21.94 MW, winter peak demand by 24.15 MW, and annual energy consumption by 36,860 MWh in the year 2000.

FPL's other proposed program modification would exclude small, non-demand metered C/I customers from further participation in the program. FPL found difficulty in including C/I buildings in a

residential DSM program. Further, past program participation by small, non-demand metered C/I customers has been minimal at best. For the first six months of 1997, only 40 (0.115%) of the 34,673 program participants were small, non-demand metered C/I customers. While small, non-demand metered C/I customers would no longer be eligible for inclusion in this program, these customers are still eligible for duct sealing for rooftop package units in FPL's C/I Heating, Ventilating, and Air Conditioning Program.

The reduced customer incentive levels mentioned on the previous page appear to have restored the cost-effectiveness of the Duct System Testing and Repair Program, although only minimally under the RIM test. The following table compares the benefit-cost ratio over time since the current program was approved:

	BENEFIT-COST RATIO		
COST-EFFECTIVENESS TEST	Nov. 1995	Nov. 1996	May 1997 (as modified)
Rate Impact Measure (RIM)	1.22	0.82	1.02
Total Resource Cost (TRC)	1.51	1.00	1.51
Participants	1.88	1.80	2.42

Staff is concerned that the Duct System Testing and Repair Program only minimally passes the RIM test, even after modifications were made to restore the program's cost-effectiveness. DSM programs that marginally pass the RIM test provide no room for errors in forecasted demand and energy savings, or changes (reductions) in avoided generation costs. This is clearly the case with FPL's modified Duct System Testing and Repair Program. With a RIM value of 1.02, non-participants are at greater risk of subsidizing participants without receiving the capacity deferral benefit of cost-effective DSM programs. Because of this risk, staff recommends that FPL be required to reassess the cost-effectiveness of this program and submit the revised cost-effectiveness ratios in its annual ECCR true-up filing in Docket No. 980002-EG. This reassessment should include the most current assumptions available at the time the analysis is performed. If the program proves not to be cost-effective under the RIM test, FPL should petition to modify or terminate the program.

Subject to this condition, staff recommends that the Commission approve FPL's petition to modify the Duct System Testing and Repair Program, including cost recovery through the ECCR clause.

ISSUE 2: Should Florida Power & Light Company be required to submit detailed program participation standards for its modified Duct System Testing and Repair Program?

RECOMMENDATION: Yes. FPL should file program participation standards within 30 days of the issuance of the order in this docket. These program participation standards should be administratively approved.

STAFF ANALYSIS: FPL should file program standards that clearly state its 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 recommends that it be allowed to administratively approve FPL's program participation standards if they conform to the program description contained in the petition for this docket.

ISSUE 3: Should this docket be closed?

RECOMMENDATION: Yes. If no person whose substantial interests are affected by the Commission's proposed agency action files a protest within twenty-one days of the issuance of the order, Docket No. 970540-EG 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 issuance of the order to file a protest. If no timely protest is filed, the docket should be closed.