#### BEFORE THE PUBLIC SERVICE COMMISSION

In re: Petition for approval of modifications to DOCKET NO. 030999-EG Residential New Construction and Residential Energy Management DSM programs by Progress Energy Florida, Inc.

ORDER NO. PSC-04-0188-PAA-EG ISSUED: February 23, 2004

#### The following Commissioners participated in the disposition of this matter:

## BRAULIO L. BAEZ, Chairman J. TERRY DEASON LILA A. JABER RUDOLPH "RUDY" BRADLEY CHARLES M. DAVIDSON

### NOTICE OF PROPOSED AGENCY ACTION ORDER APPROVING MODIFICATIONS TO DEMAND SIDE MANAGEMENT PROGRAM AND ORDER ACKNOWLEDGING PARTIAL WITHDRAWAL OF PETITION

#### BY THE COMMISSION:

NOTICE is hereby given by the Florida Public Service Commission that the action discussed herein approving modifications to the Residential New Construction Program is preliminary in nature and will become final unless a person whose interests are substantially affected files a petition for a formal proceeding, pursuant to Rule 25-22.029, Florida Administrative Code.

#### CASE BACKGROUND

As part of its Commission approved Demand-Side Management (DSM) Plan, Progress Energy Florida, Inc. (Progress) offers a Residential New Construction program, an umbrella program that promotes energy-efficient construction exceeding the Florida Energy Code. The program provides information, education, and advice to home builders and contractors on energy-related issues and efficiency measures. The program promotes duct sealing measures, insulation, energy-efficient electric heat pumps, and alternative electric water heating equipment through combined incentives of up to \$350. Progress also offers a Residential Energy Management program, a winter-only program that provides for direct load control of electric water heating and central electric heating appliances between November and March. In each of

DOCUMENT NUMBER-DATE

EPSG=COMMISSION CLERK

02603 FEB 23 #

these months, Progress pays a credit of \$11.50 to program participants with a monthly energy consumption of at least 600 kWh.

On October 22, 2003, Progress petitioned for approval of modifications to the Residential New Construction and Residential Energy Management programs.<sup>1</sup> For the Residential New Construction program, Progress asked for approval to add two additional energy efficiency options, radiant barrier systems and high-performance windows. Progress also asked to increase the minimum Seasonal Energy Efficiency Rating (SEER) of heat pumps from 11.5 to 13.0 in order to qualify for builder incentives. For the reasons explained below we approve Progress' proposed changes to its Residential New Construction program. Progress voluntarily withdrew its request for modifications to the Residential Energy Management Program on January 27, 2004, and we hereby acknowledge that withdrawal.

Progress cites several factors contributing to the proposed increase in the minimum SEER for heat pumps. Recent changes to the Florida Energy Code imposed higher energy efficiency requirements on the total structure, but allowed for more options to meet these requirements. Home builders typically choose the lowest-cost combination of options to meet these requirements. Also, the cost of higher-efficiency heat pumps has declined since the Residential New Construction program was approved in 2000. At that time, the incremental cost of an 11.5 SEER heat pump over a 10.0 SEER heat pump, the minimum required by the Florida Energy Code, was approximately the same as the current incremental cost of a 13.0 SEER heat pump over an 11.5 SEER heat pump. Because of the decreased cost of an 11.5 SEER heat pump, builders have chosen to install the heat pump measure, in lieu of more costly measures, more than twice as often in 2003 as in 2002. The result is a "free rider" effect, in which builders would likely have chosen the 11.5 SEER heat pump regardless of whether an incentive was offered. Progress expects that increasing the minimum heat pump SEER rating from 11.5 to 13.0 will minimize free riders.

A radiant barrier is a layer of aluminum foil placed in an airspace to block radiant heat transfer between a heat radiating surface, such as a hot roof, and a heat absorbing surface, such as attic insulation. Progress added the attic radiant barrier system option to the Residential New Construction program based on research conducted with the Florida Solar Energy Center. This research demonstrated the value of a radiant barrier system in new home construction.

A high performance window improves the thermal performance of a home by minimizing heat loss in cold climates while minimizing solar heat gain in warm climates. PEF added high performance windows as an option to the Residential New Construction program due to recent advances in energy efficiency. At the same time, the cost of these windows has decreased.

<sup>&</sup>lt;sup>1</sup> By letter dated December 10, 2003, PEF voluntarily waived its right, pursuant to Section 366.06(3), Florida Statutes, to place the proposed rates filed in Rate Schedule RSL-2 into effect within 60 days of PEF's petition.

When we review conservation programs, we typically consider three criteria: (1.) Whether the program advances the policy objectives of Rule 25-17.001, Florida Administrative Code, and Sections 366.80-.85, Florida Statutes, also known as the "Florida Energy Efficiency and Conservation Act" (FEECA); (2.) Whether the program is directly monitorable and yields measurable results; and (3.) Whether the program is cost-effective. Progress' Residential New Construction program as modified meets our criteria.

The program will continue to achieve the goals of FEECA. As shown in Exhibit C to Progress' petition, the proposed modifications increase per customer savings by 2.16 KW winter peak demand, 2.00 KW summer peak demand, and 3826 kWh of annual energy consumption over the existing program. Combined with forecasted increases in customer participation, the program is expected to increase peak demand and annual energy savings on Progress' system.

The program is directly monitorable and will continue to yield measurable results. The proposed changes resulted from Progress' monitoring of activities in the current program, and these activities will remain unchanged in the revised program.

The modified program is also cost-effective. The increase in the minimum SEER rating for heat pumps is expected to minimize free riders and therefore increase the program's costeffectiveness. Progress forecasts a benefit-cost ratio under the RIM test of 1.68. This means that, for participants and non-participants alike, the Residential New Construction program is expected to be less costly than Progress' next identified power plants, starting with two 185 MW combustion turbines scheduled for 2005.

It is therefore

ORDERED by the Florida Public Service Commission that the Petition of Progress Energy Florida, Inc. for approval of modifications to its Residential New Construction Program is approved. It is further

ORDERED that this Order approving modifications to the Residential New Construction Program shall become final and effective upon the issuance of a Consummating Order unless an appropriate petition, in the form provided by Rule 28-106.201, Florida Administrative Code, is received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on the date set forth in the "notice of Further Proceedings" attached hereto. It is further

ORDERED that Progress Energy Florida, Inc.'s voluntary partial withdrawal of its Petition is acknowledged. It is further

ORDERED that in the event this Order becomes final, this docket shall be closed.

By ORDER of the Florida Public Service Commission this 23rd day of February, 2004.

BLANCA S. BAYÓ, Director Division of the Commission Clerk and Administrative Services

By:

Kay Flynn, Chief

Bureau of Records

(SEAL)

MCB

#### NOTICE OF FURTHER PROCEEDINGS OR JUDICIAL REVIEW

The Florida Public Service Commission is required by Section 120.569(1), Florida Statutes, to notify parties of any administrative hearing that is available under Section 120.57, Florida Statutes, as well as the procedures and time limits that apply. This notice should not be construed to mean all requests for an administrative hearing will be granted or result in the relief sought.

Mediation may be available on a case-by-case basis. If mediation is conducted, it does not affect a substantially interested person's right to a hearing.

The action proposed herein is preliminary in nature. Any person whose substantial interests are affected by the action proposed by this order may file a petition for a formal proceeding, in the form provided by Rule 28-106.201, Florida Administrative Code. This petition must be received by the Director, Division of the Commission Clerk and Administrative Services, 2540 Shumard Oak Boulevard, Tallahassee, Florida 32399-0850, by the close of business on March 15, 2004.

In the absence of such a petition, this order shall become final and effective upon the issuance of a Consummating Order.

Any objection or protest filed in this/these docket(s) before the issuance date of this order is considered abandoned unless it satisfies the foregoing conditions and is renewed within the specified protest period.

1. 1.