

State of Florida



# Public Service Commission

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COMMISSION CLERK

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**DATE:** September 23, 2004

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

**FROM:** Division of Economic Regulation (Colson) *RE J3 RT 100*  
Office of the General Counsel (Brown) *NCB Nant*

**RE:** Docket No. 040660-EG – Petition for Approval of Modifications to BuildSmart program by Florida Power & Light Company.

**AGENDA:** *10/5/04 14* ~~09/21/04~~ – Regular Agenda – Proposed Agency Action – Interested Persons May Participate.

**CRITICAL DATES:** None

**SPECIAL INSTRUCTIONS:** None

**FILE NAME AND LOCATION:** S:\PSC\ECR\WP\040660.RCM.DOC

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## Case Background

In March 1993, the Commission approved the New Home Construction Research Project as part of Florida Power and Light Company's (FPL) Conservation Plan. A significant part of the project was the creation and offering of a BuildSmart pilot program, which FPL introduced, in March 1994. The BuildSmart program educates builders and customers about energy-efficient building practices and their benefits. FPL inspects qualifying new single family detached homes to verify installations of conservation measures and rates the new homes for energy-efficiency. FPL awards bronze, silver and gold certificates to qualifying homes that exceed Florida Energy Efficiency Code requirements by more than 10, 20 and 30 percent respectively. The initial program was offered in Charlotte, Lee, Glades, Hendry, and Collier counties. When the Commission approved the BuildSmart pilot program, it was expected to end during the first quarter of 1995, but the Commission granted FPL an extension in Order No PSC-95-0611-FOF-EG, issued May 19, 1995, in Docket No. 950358-EG, In Re: Petition to Extend BuildSmart offerings through December 31, 1995 by Florida Power & Light Company. The Commission allowed FPL to incorporate the Build-Smart program into the analysis of its Integrated Resource Planning (IRP) process through December 31, 1995. FPL completed the pilot program and filed

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a final report with the Commission on June 1, 1995. FPL reported that BuildSmart had preliminarily proven to be cost-effective. On August 25, 1997, the Commission approved a permanent BuildSmart program in Order No. PSC-97-1017-S-EG, in Docket No. 951536-EG.

On June 30, 2004, FPL filed a petition for Approval of Modifications to its BuildSmart program. FPL believes that certain requirements of the program significantly limit its effectiveness in the production housing market. This is Staff's recommendation to approve the proposed modifications. The Commission has jurisdiction pursuant to Sections 366.81 and 366.82, Florida Statutes.

### Discussion of Issues

**Issue 1:** Should the Commission approve the BuildSmart program as modified in Florida Power & Light Company's petition filed on June 30, 2004, including approval for energy conservation cost recovery ?

**Recommendation:** Yes: The program is designed to encourage energy conservation that cost-effectively reduces FPL's coincident peak load and its customer's energy consumption through the building of energy efficient residential new construction. The modified BuildSmart program is cost effective for both single-family detached and attached homes. The program can be monitored and FPL will file program standards within 30 days from the approval of the program. Staff requests permission to administratively approve the program standards.

**Staff Analysis:** The current BuildSmart program is targeted to the residential, new construction, single family detached housing market. FPL performs plan reviews and conducts home inspections during the construction process and provides certification of completed homes that successfully meet FPL's BuildSmart program standards. FPL charges fees to home builders for plan inspection and certification depending on the level of efficiency achieved per home. Lower fees are charged to homes with higher energy efficiency, and homes that are at least 30% or more energy efficient than the baseline have no fees. As stated in the background, FPL awards bronze, silver and gold certificates to qualifying homes that exceed the Florida Energy Efficiency Code. The Florida Energy Efficiency Code requires that newly constructed homes have an energy performance index (EPI) rating of 100 or less. Ratings below 100 reflect increases in energy efficiency. FPL has three different BuildSmart program service offerings: Premium service, which includes the initial, mid-point, and final inspection (fees are - \$300.00 for bronze, \$200 for silver, and \$125 for gold); Basic Service which includes the initial and final inspection only (fees are \$175 for bronze, \$125 for silver and \$0 for gold); and Permit only which includes the EPI calculations only (fees are \$125 for permit only – no certificate).

FPL stated in its petition that while the trend of new home construction in the nation continues to increase, and while a significant share of this new construction is located in FPL's service territory, the participation rate in the BuildSmart program has been lower than anticipated. FPL believes that the success of the BuildSmart program depends on how well it can meet the needs of both the builders and the homebuyers. FPL's experience suggests that of these two important target audiences, the builders have the greatest impact on the success or failure of the BuildSmart program. FPL identified two distinct groups of builders: production builders and custom builders. Production built homes represent more than 50 percent of new home construction in FPL's service territory. Production builders tend to minimize modification to house plans in order to maximize production efficiency. Custom builders are more flexible than production builders in modifying house plans, including a wide range of custom options, such as energy efficiency measures.

According to FPL, the present BuildSmart program has had the most success among custom builders and homebuyers, and even though the per-home energy efficiency gains among such builders and buyers are significant under the program, FPL is missing the opportunity to significantly penetrate the production housing market. FPL has defined the production housing market as not only single-family detached homes but also single family attached homes such as

townhomes and villas. The modifications to the BuildSmart program were developed to optimize program features and specifications that meet the critical needs of both customer and production builders, while enhancing features valued by homebuyers. The modified program offers two certification tracks: a flexible measure approach and a prescriptive measure approach.

### **Modifications to the BuildSmart program**

- **Introduce a prescriptive approach.** This modification is intended to simplify energy efficiency options and allow production builders to make large volume, discounted purchases that do not trigger plan modifications. The prescriptive approach will include measures related to HVAC, ductwork, and insulation. Under this approach, to receive BuildSmart certification, a home must include specific prescriptive energy measures targeted to achieve an energy efficiency rating at least 10% better than the rating required by the Florida Energy Efficiency Code. Energy star certification is not available under the prescriptive approach.
- **Modify the existing flexible approach to eliminate the gold, silver, and bronze levels.** FPL will replace the certification levels to measure energy efficiency it presently used with a new flexible approach. To obtain BuildSmart certification under this flexible approach, a home must achieve an energy efficiency rating at least 20% or better than the rating required by the Florida Energy Efficiency Code using any combination of measures permitted by energy rating tools.
- **Eliminate premium service and permit only service levels.** As currently designed, the BuildSmart program has three service levels: basic, premium, and permit only. FPL stated that service levels other than basic service have received very little interest and do not warrant continued inclusion in the program. Therefore, FPL is proposing to offer only the basic service level.
- **Eliminate program participation fees.** The current program requires participation fees, with lower fees being charged to homes with higher levels of efficiency. FPL stated that a major impediment to builder participation has been the fees associated with participation in the BuildSmart program. According to FPL, market experience indicates that the builders are central to the process of marketing BuildSmart, and they have the greatest impact on the success or failure of the program. As stated above, the service levels other than the basic service have received very little interest and do not warrant continued inclusion in the program. FPL stated that most of the current custom homes that participated in the existing program achieved at least 20% gains in efficiency. Large volume production builders that are necessary for the program to achieve economies of scale, are not willing to pay per home participation fees. FPL believes that eliminating the basic service fee will not only increase the number of BuildSmart homes built by production builders but will also have a positive effect on the number of custom built homes that participate in the program.
- **Permit single-family attached dwellings to participate in the program.** FPL stated that single-family attached dwellings can be cost effectively included in the program depending on their configuration. According to FPL, production builders frequently

develop entire communities that include a mix of single family detached and single family attached dwellings. Both types of dwellings can be built using the same prescriptive approach. The builders believe that both types of dwellings must be certified as BuildSmart to avoid homebuyers perception that the attached dwellings are inferior.

- **Provide builder incentives for qualifying BuildSmart homes that also achieve ENERGY STAR certification.** Once FPL has determined whether the requirements of the BuildSmart program are met, builder incentives, such as cooperative advertising incentives up to \$50 per home, are available to builders of BuildSmart homes that also achieve certification through DOE's and EPA's ENERGY STAR program.

The modified BuildSmart program is available to all new, residential single-family homes, whether detached or attached, in FPL's service territory, whether built by a residential builder or an owner builder. Each house must have whole-house electric air-conditioning to qualify. Also builders must comply with all national, state, and local codes and ordinances.

FPL reserves the right to perform a series of inspections on each BuildSmart home to verify that energy efficiency upgrades are incorporated as submitted. For each inspected home, FPL will verify that all energy measures specified have been installed and determine whether any changes were made to the home that will affect the energy efficiency level of the home. The projected participation in this program as well as the projected demand and energy savings for a typical installation are shown on Attachment A.

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008, Florida Administrative Code, and the planning assumptions out of FPL's 2005 – 2014 Ten-Year Site Plan to determine the cost effectiveness of this program. These analyses show that the benefit-to cost ratios are; 1.77 Participants, 1.05 rate impact measure (RIM), and 1.10 total resource cost (TRC) for the BuildSmart program.

Staff believes that the modifications to the BuildSmart program should accomplish the program's objective of encouraging the design and construction of energy efficient homes that cost effectively reduce FPL's coincident peak load and customer energy consumption. The Modified Buildsmart program appears to be cost effective for both single-family detached and attached homes. The program can be monitored and FPL will file program standards within 30 days from the approval of the program. Staff also requests permission to administratively approve standards. Therefore, staff recommends that the Commission approve FPL's petition to modify its BuildSmart program.

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**Issue 2:** Should this docket be closed

**Recommendation:** Yes. If no protest is filed by a person whose substantial interests are affected within 21 days of the issuance of the Commissioner's PAA order, this docket should be closed upon issuance of a Consummating order. (Brown)

**Staff Analysis:** If no protest is filed by a person whose substantial interests are affected within 21 days of the issuance of the Commissioner's PAA order, this docket should be closed upon issuance of a Consummating order.



At the Meter

Year	Annual	Per	Per	Per	Total	Total	Total
	Number of	Customer	Customer	Customer	Annual	Annual	Annual
	Program	kWh	Winter	Summer	kWh	Winter	Summer
	Participants	Reduction	kW	kW	Reduction	kW	kW
			Reduction	Reduction		Reduction	Reduction
2004	2,544	1,460	0.88	0.78	3,714,240	2,239	1,984
2005	3,816	1,460	0.88	0.78	5,570,995	3,358	2,976
2006	5,344	1,460	0.88	0.78	7,801,510	4,702	4,168
2007	6,945	1,460	0.88	0.78	10,139,700	6,112	5,417

At the Generator

Year	Annual	Per	Per	Per	Total	Total	Total
	Number of	Customer	Customer	Customer	Annual	Annual	Annual
	Program	kWh	Winter	Summer	kWh	Winter	Summer
	Participants	Reduction	kW	kW	Reduction	kW	kW
			Reduction	Reduction		Reduction	Reduction
2004	2,544	1,577	0.97	0.86	4,011,888	2,475	2,193
2005	3,816	1,577	0.97	0.86	6,017,438	3,712	3,290
2006	5,344	1,577	0.97	0.86	8,426,700	5,198	4,607
2007	6,945	1,577	0.97	0.86	10,952,265	6,755	5,988