ORIGINAL

Natalie F. Smith
Attorney
Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408-0420
(561) 691-7207
(561) 691-7135 (Facsimile)

July 15, 2005

VIA OVERNIGHT MAIL
Ms. Blanca S. Bayó, Director
Division of the Commission Clerk and
Administrative Services
Florida Public Service Commission
Betty Easley Conference Center
2540 Shumard Oak Boulevard, Room 110
Tallahassee, FL 32399-0850

Re: In re: Petition for approval of numeric conservation goals by Florida Power & Light Company - DOCKET NO. 040029-EG / DOCKET NO. 040660-EG

Dear Ms. Bayó:

Enclosed for filing on behalf of Florida Power & Light Company ("FPL") are an original and fifteen (15) copies of Direct Testimony and Exhibits of FPL witnesses Daniel J. Haywood and Steven R. Sim.

Please indicate receipt of this document by stamping the enclosed extra copy of this letter. Please contact me should you or your Staff have any questions regarding this filing.

Sincerely,

Natalie F. Smith

NFS:ec
Enclosures
cc: Parties of Record in attached Certificate of Service

P
M 3
TR
CR
CL 1
PC
MS
RCA
SCR
SEC 1
OTH

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing was served by electronic mail and by U.S. Mail this 15th day of July, 2005, to the following:

Martha Carter Brown
Adrienne Vining
Office of the General Counsel
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Calcs-Plus (Titusville)
Jon F. Klongerbo
1351 Park Ave.
Titusville, Florida 32780

Calcs-Plus (Venice)
Dennis J. Stroer
417-F Commercial Court
Venice, Florida 34292

Harold McLean
Office of Public Counsel
111 West Madison Street, Room 812
Tallahassee, Florida 32399-1400

William J. Tait, Jr., Esq.
1061 Windwood Way
Tallahassee, Florida 32311

By: _____
NATALIE F. SMITH

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NOS. 040029-EG, 040660-EG FLORIDA POWER & LIGHT COMPANY

JULY 15, 2005

TESTIMONY & EXHIBITS OF:

DANIEL J. HAYWOOD

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

FLORIDA POWER & LIGHT COMPANY

TESTIMONY OF DANIEL J. HAYWOOD

DOCKET NOS. 040029-EG, 040660-EG

JULY 15, 2005

Q. Please state your name and business address.

A. My name is Daniel J. Haywood and my business address is: 700 Universe Boulevard, Juno Beach, Florida 33408.

Q. Who is your employer and what position do you hold?

A. I am employed by Florida Power & Light Company (FPL) as a Lead Business Specialist in the Marketing Department.

Q. What are your responsibilities and duties related to the development of FPL's Residential New Construction program ("BuildSmart®" or the "Program")?

A. I am responsible for the redesign of the BuildSmart® Program. This includes identification and analysis of customer needs, and development of program enhancements to meet demand side management (DSM) objectives and customer needs. I am also responsible for implementation of approved program modifications.

Q. Please describe your education and professional experience.

A. I received a Bachelor of Science Degree in Electrical Engineering from Florida Atlantic University in 1992. I received my Masters Degree in

Business Administration from the University of Florida in 2004. I am a licensed Professional Engineer in the State of Florida. I was hired by FPL in 1984 in the Customer Service Department and have worked in positions of increasing responsibility in the areas of Customer Service, Power Systems Design and Operations, Product Development and Marketing.

Q. What is the purpose of your direct testimony?

A. The primary purpose of my testimony is to describe BuildSmart and the proposed Program modifications. BuildSmart, which targets energy efficiency measures in new residential construction, is proposed as part of FPL's DSM plan designed to meet FPL's Commission-approved goals for the period 2005-2014. I will address the ways in which BuildSmart, as modified, is designed to advance the policy objectives of the Florida Energy Efficiency and Conservation Act (FEECA) and satisfy applicable Florida Public Service Commission (PSC or Commission) rules. In addition, I will demonstrate that the redesigned BuildSmart program is directly monitorable and yields measurable results. Also, I will describe how FPL developed the inputs used to determine the cost-effectiveness of BuildSmart, as modified, using the cost-effectiveness methodologies required by Florida Administrative Code (FAC) Rule 25-17.008 and the planning assumptions from FPL's 2005-2014 planning process. Dr. Sim's testimony will address the cost-effectiveness analysis.

My testimony also addresses FPL's Residential Conservation Service Program (RCS). I discuss the fact that, pursuant to FAC Rule 25-17.003, FPL is required to offer residential energy audits, which FPL delivers through RCS.

Q. Are you sponsoring an exhibit in this case?

A. Yes, it consists of the following documents:

Document No. DJH-1, Homebuyer and Homebuilder Key Needs;

Document No. DJH-2, Summary Comparison of Program Components and Features;

Document No. DJH-3, Projected Demand and Energy Savings;

Document No. DJH-4, Projected Participation (RCS Program).

CURRENT DESIGN OF BUILDSMART PROGRAM

Q. What is the objective of BuildSmart?

A. BuildSmart is designed to promote the construction of energy-efficient homes that cost-effectively reduce FPL's coincident peak load and customer energy consumption.

Q. How is the Program currently designed?

A. Currently, BuildSmart is targeted to the residential, new construction, single family, detached dwelling market. FPL performs plan reviews and conducts home inspections during the construction process and provides certification of completed homes that successfully meet Program standards.

Based on tiered criteria, FPL charges fees to homebuilders for plan inspection and certification. FPL charges different fees per home, depending upon the

calculated level of energy performance (e-Ratio) achieved. Lower fees are charged to homes with higher energy performance i.e. less projected energy consumption than a baseline home, and homes that have an e-Ratio at least 30% more efficient than the baseline have no fee. FPL certifies three different levels of BuildSmart homes: Bronze homes are homes that achieve an e-Ratio that is between 10 and 19% more efficient than a baseline home under the Florida Energy Efficiency Code. Silver homes are homes that achieve an e-Ratio that is between 20 and 29% more efficient than a baseline home Florida Energy Efficiency Code. Gold homes are homes that achieve an e-Ratio of 30% or greater more efficient than a baseline home under the Florida Energy Efficiency Code.

FPL also has three different BuildSmart service offerings: a Basic Service Offering that includes an initial and final inspection; a Premium Service Offering that includes an additional midpoint inspection; and a Permit Service Offering where FPL performs energy performance calculations for builders that elect not to participate in certification.

Q. What tools does FPL employ to determine energy performance levels?

A. The current recognized tool is Energy Gauge®, which produces a performance metric called the e-Ratio. The Florida Energy Efficiency Code requires a home to achieve a passing score, represented as an e-Ratio of 1 or less. E-Ratio scores below 1 reflect improvements in the home's energy performance beyond the Code's minimum requirements. Under the Program

as currently designed, to be certified as a Bronze home requires an e-Ratio of .9 - .81; Silver homes have an e-Ratio of .8 - .71; Gold homes have an e-Ratio of .7 or less.

Q. How does the existing BuildSmart program interact with the Department of Energy's (DOE's) and Environmental Protection Agency's (EPA's) ENERGY STAR® Program and other new home construction programs?

A. FPL uses BuildSmart to advocate and promote both ENERGY STAR® and the Florida Green Building Coalition's (FGBC's) green building standards, and facilitates builders' involvement in both of these programs. FPL supports and encourages builders to achieve increased levels of energy efficiency through key BuildSmart activities including builder education, energy performance analyses and recommendations, and energy efficient measure installation.

Q. Has the DOE's and EPA's ENERGY STAR® Program recognized FPL's efforts?

A. Yes, in 2004 FPL received the ENERGY STAR® Outstanding Achievement Award for BuildSmart. This award recognized FPL's measurable commitment to ENERGY STAR®, which has resulted in increased builder awareness and participation in the ENERGY STAR® program.

Q. Why is there a need for Program modification?

A. Florida continues to maintain a significant share of the national residential new home construction market. BuildSmart has had moderate success in capturing its expected market potential since its system-wide launch in

October 1997. FPL has undertaken numerous marketing activities and process improvements to enhance the existing Program. FPL performed a situational analysis to identify ways to further increase program participation.

The situational analysis was a comprehensive review all aspects of the Program including internal structure, costs, marketing, kW and kWh impacts, and market participants. The goal was to understand the complete end to end home construction/buying process to better understand where and how a program like BuildSmart can add value. That analysis revealed that the Program performs well relative to most homebuyers' needs but not as well in meeting builders' key needs.

Q. Who are the target audiences for BuildSmart?

A. The target audiences are builders and homebuyers, each of whom have different needs. Sometimes, these needs conflict. Document DJH-1 lists primary needs of builders and homebuyers based on research and feedback from builders, homebuyers and experienced BuildSmart representatives.

Q. Which target audience, homebuyers or homebuilders, is more critical to the success of the Program?

A. FPL's in-market experience suggests that of these two important target audiences, the builders have the greatest impact on the success or failure of the Program because of their influential role in the home buying decision process.

Q. Are there nuances associated with the builder target audience?

A. Yes. Within the builder community, there are two distinct types of builders: production and custom. Production builders build large volumes of relatively standardized homes. To achieve suitable profit margins, production builders attempt to minimize modifications to house plans to maximize production efficiency and to achieve volume purchase discounts. Although production builders represent a minority of total builders in FPL's service territory, the homes they construct represent a significant share – estimated at more than 50% of the new construction market in FPL's service territory.

Custom builders tend to build smaller volumes of high-end homes. Their customers tend to be less sensitive to price and more inclined to modify house plans. As a result, custom builders are more flexible than production builders in modifying house plans, including a wide range of custom options (including energy efficiency measures). In regard to price/cost sensitivity, custom homebuyers tend to be less price sensitive than production homebuyers. Correspondingly, custom homebuilders are less cost sensitive than production homebuilders.

Q. In which target audience(s) has BuildSmart enjoyed the most success?

A. To date, BuildSmart has achieved the most success among custom builders and homebuyers. While the per-home energy efficiency gains among such builders and buyers can be significant, given the current design of BuildSmart, FPL is missing the opportunity to significantly penetrate the production

housing market. The production housing market includes not only single-family detached homes, but also single family attached homes such as town homes and villas.

Q. What recommendations were developed from the situational analysis?

A. Based upon FPL's situational analysis relative to homebuilders and homebuyers, recommendations were developed to optimize the program features and specifications to meet the critical needs of builders, both custom and production, while enhancing features valued by homebuyers. These recommendations have resulted in a number of proposed changes to BuildSmart addressed below. FPL believes that with these Program changes, it can continue to offer a cost-effective residential new construction Program that will achieve far greater levels of participation and demand and energy savings.

PROPOSED PROGRAM MODIFICATIONS

Q. What modifications to BuildSmart does FPL propose?

A. FPL proposes a number of modifications to BuildSmart to better meet builder requirements and increase Program participation. In summary format, described in greater detail below, FPL proposes to:

- Introduce a prescriptive approach that simplifies energy efficiency options and allows production builders to make large volume, discounted purchases that do not trigger housing plan modifications.

- Modify the existing flexible approach to eliminate the Gold, Silver and Bronze levels. Under the revised Program, the prescriptive approach is targeted to achieve an e-Ratio below .9 and under the modified flexible approach, an e-Ratio must be .8 or below.
- Offer only the Basic Service level.
- Eliminate Program participation fees, specifically as these fees currently apply to Bronze and Silver level homes. Gold Homes currently incur no fees.
- Add single-family attached dwellings to the Program.
- Provide builder incentives for qualifying BuildSmart homes that also achieve ENERGY STAR® certification by meeting the requirements of the DOE's and EPA's ENERGY STAR® Program.

Q. Please describe the proposed prescriptive approach.

A. The prescriptive approach is designed to address large volume (production) builders' needs for simple and consistent participation requirements. With simplified participation requirements, production builders can engage in volume discount purchasing for energy efficiency measures and minimize the time and effort needed to review plans and qualify for BuildSmart certification. Document DJH-2 illustrates this approach, along with the proposed, revised Flexible approach, in more detail and in comparison to the existing Program approach.

Q. What modifications to the flexible approach does FPL propose?

A. FPL proposes to modify the flexible approach participation requirements. FPL will eliminate the Bronze, Silver and Gold BuildSmart certification levels. Instead of having certification levels, FPL will change the energy performance ratio for the flexible approach to achieve an e-Ratio minimum of 20% better than the corresponding baseline home as defined by the Florida Energy Efficiency Code.

Q. What is the purpose of the proposed changes to the flexible approach?

A. These changes are designed to address builders' and homebuyers' dissatisfaction with the use of levels in distinguishing BuildSmart-certified homes. Our situational analysis revealed that builders find these levels to be very difficult to explain to prospective homebuyers, and this issue leads to homebuyer confusion. Much of the current custom home participation in the existing Program achieves at least 20% efficiency improvement as determined using the Florida Energy Efficiency Code.

Q. What modifications does FPL propose relative to service levels?

A. FPL proposes to eliminate Premium Service and Permit Only service levels. As currently designed, the program has three service levels: basic, premium and permit only. The premium level incorporates a midpoint inspection not provided in the basic service, and the permit only service provides e-Ratio calculations without certification. Since the provision of the permit only service does not guarantee the required demand and energy impacts, FPL believes this service can be provided by third parties. The service levels other

than the basic service have received very little interest and do not warrant continued inclusion in the program.

Q. Why does FPL propose to eliminate Program participation fees?

A. During interviews with decision makers from major production builder firms, FPL uncovered that program participation fees were viewed as a major impediment to builder participation. Builders, and especially the large volume production builders that are necessary for the program to achieve scale economies, voiced their objections to paying per-home participation fees in addition to the investments they must make to achieve e-Ratio levels necessary for participation in the BuildSmart program. These builders believe that the cost increases associated with the home upgrades necessary to be a BuildSmart participant represent the "cost of entry." In effect, program participation fees act as a deterrent to production builder participation, which limits the BuildSmart Program's ability to fully tap this large market.

Q. Why does FPL propose that single-family attached dwellings should be added to the Program?

A. FPL proposes that single-family attached dwellings be permitted to participate in the Program because cost-effectiveness analyses revealed that single-family attached dwellings can be cost-effectively included in the Program depending on their configuration. Our analysis indicates that production builders frequently develop entire communities that include a mix of single family detached and single family attached dwellings. We learned that these builders

believe that both types of dwellings must be certified as BuildSmart to avoid homebuyers' perception that the attached dwellings are inferior.

Q. How does the proposed redesigned BuildSmart Program interact with the DOE's and EPA's ENERGY STAR® Program and other new home construction programs?

A. FPL will continue to advocate and promote the FGBC's green building standards through BuildSmart. Through increased promotional activities, FPL will enhance the Program's support of ENERGY STAR®. As ENERGY STAR® participation criteria is modified, BuildSmart representatives will also educate local builders on these changes and provide recommendations for how builders may achieve ENERGY STAR® certification under any revised criteria. All of these activities will further facilitate builders' involvement in ENERGY STAR® and FGBC's Green Building certification.

Q. How will FPL's proposed Program modifications promote ENERGY STAR® certification?

A. Builder incentives, such as cooperative advertising incentives of up to $50 per home, will be available to builders for qualifying BuildSmart homes that also achieve certification through DOE's and EPA's ENERGY STAR® program. Additionally, eliminating BuildSmart participation fees and providing incentives to builders further strengthens BuildSmart's ability to partner with private raters – who will charge an additional fee for their rating services – thereby creating a complement of services to those builders seeking ENERGY

STAR® certification, and creating a collaborative approach that strengthens both BuildSmart's and the raters' value proposition to these builders.

DESCRIPTION OF PROGRAM ADMINISTRATION

Q. How will BuildSmart, as redesigned, be administered?

A. As redesigned, BuildSmart will be 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. The new home must have whole-house electric air-conditioning to qualify. Each participating residential builder must enter into a BuildSmart Program Agreement with FPL. An owner-builder must enter into a BuildSmart Program Single Home Agreement with FPL. To be eligible for BuildSmart certification, builders must comply with all national, state and local codes and ordinances, as well as Program Standards discussed below.

Q. How does a home become BuildSmart certified?

A. The BuildSmart Program offers two certification tracks: a flexible measure approach and a prescriptive measure approach. Both approaches begin with a review of house plans. Both approaches are subject to post-construction inspections, as determined by FPL, to verify energy-efficiency measures have been incorporated. However, there are significant differences in each certification approach.

Q. Describe the two certification approaches: flexible measure and prescriptive measure approach.

A. Each approach is targeted at a specific market's needs. The Prescriptive approach is targeted at meeting the needs of the production builder/homebuyer market and will include measures related to HVAC, ductwork and insulation. Under the prescriptive approach, to receive BuildSmart certification, a home must include specific prescriptive energy efficiency measures targeted to achieve an e-Ratio value at least 10% better than a baseline home as prescribed by the Florida Energy Efficiency Code. Under this approach, builders must submit to FPL plans or specifications that FPL can use to validate that the installed measures meet BuildSmart prescriptive requirements.

The Flexible approach is targeted at the custom builder/homebuyer market and will allow any combination of measures necessary to achieve an e-Ratio value at least 20% better than a baseline home as prescribed by the Florida Energy Efficiency Code.

Q. How will FPL ensure the energy efficiency measures are implemented?

A. 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 to determine whether any changes were made to the home that will affect the calculated e-Ratio value of the home. In addition, an

air conditioning duct test may be performed to determine the level of tightness of the air ducts. Following this inspection, FPL will recalculate the e-Ratio if needed, and then certify the home. A certificate is then issued for the qualifying homes and provided to the builder or homeowner. FPL will determine whether the requirements of the BuildSmart Program are met.

Q. How will FPL promote the redesigned BuildSmart Program?

A. FPL plans to make residential customers aware of this Program through appropriate advertising and promotional channels. For example, the Program may be promoted through participating builders, community developments and new homebuyer workshops. FPL will also promote the Program by participating in workshops targeted at educating building professionals about energy efficiency, such as the continuing education workshops provided through the Florida Energy Extension Service of the University of Florida. Additionally, upon potential approval of proposed modifications, FPL will continue to promote the Program through its formal partnership with Habitat for Humanity®, through which FPL assists local Habitat for Humanity organizations in incorporating BuildSmart-specified energy efficiency measures into new Habitat for Humanity® homes.

PROGRAM COST-EFFECTIVENESS INPUTS

Q. How were energy and demand impacts for the revised BuildSmart Program developed?

A. Energy and demand impacts for BuildSmart were developed using estimation techniques based on extensive engineering modeling incorporating end use monitoring data.

Engineering modeling of prototypical BuildSmart homes was based on multiple data collection and analyses efforts, including end-use metered studies, program pilot findings, third party analyses and study findings, state-prescribed software-based analyses, and Florida Building Code reviews.

In developing gross energy and demand impacts, FPL investigated the relationship between e-Ratio values and the calibrated summer demand, winter demand and energy impacts.

Additional analyses were performed using the energy and demand impact table data. Estimation techniques were used to provide energy and demand impacts for homes following the prescriptive approach and the flexible approach.

Q. What assumptions were used to generate expected energy and demand impacts for the prescriptive approach?

A. Historic BuildSmart participation data was used to define the proportion of total homes attributed to each climate zone and expected e-Ratio values. This data was then matched to the energy and demand impact table data described

above to forecast weighted impacts of homes participating in the prescriptive approach.

Q. What assumptions were used to generate expected energy and demand impacts for the flexible approach?

A. Historic BuildSmart participation data was used to define the proportion of total homes attributed to each climate zone and expected e-Ratio values. This data was then matched to the energy and demand impact table data described above to forecast weighted impacts of homes participating in the flexible approach.

Q. How were the participation estimates for BuildSmart developed?

A. Achievable potential (participation) forecasts considered market factors such as residential homebuilding trends, builder characteristics and expected builder response to the two participation approaches – prescriptive and flexible – included in the new Program design. Additional insights, particularly in the area of expected builder response, were gained through extensive discussions with participating and prospective builders, to gain a deep understanding of the residential homebuilding planning, sales and construction process and the key stages of this process that will impact the adoption of the BuildSmart Program for new homes and communities. Builder feedback indicated that the proposed changes would have a positive influence on the adoption of BuildSmart criteria within new homes and communities under design should the Program changes be approved.

Participation forecasts were then developed based on the following factors:

- Single-family detached and single-family attached residential new construction unit forecasts.
- Projected builder participation by builder type (custom/production) and projected home participation by builder type, which also considered the Program approach – prescriptive or flexible – likely to be used by each type of builder, and builder enrollment factors, such as lead time for new community design, permitting and build.

These participation forecasts, by program component (prescriptive or flexible) and home type (single family attached or single family detached) were applied to calculated energy and demand impacts to forecast overall program participation energy and demand impacts.

These estimates reflect increasing market penetration resulting from the positive influence of the proposed Program changes and particularly from production builders enrolling in the prescriptive approach. The situational analysis of the BuildSmart Program revealed that although production builders represent a minority of the total residential new construction builders in FPL's service territory, they construct a majority of new homes and provide an opportunity to significantly increase participation in the BuildSmart Program.

Q. What is the projected participation and savings in the redesigned Program?

A. The projected participation in this Program as well as the projected demand and energy savings for a typical installation are shown in Document DJH-3. Note: All demand and energy values detailed in this testimony are at the meter unless otherwise stated.

Q. What are the estimated participant costs for the Program?

A. Total weighted participant costs are calculated to be $724 per home.

Q. How were participant costs for BuildSmart derived?

A. Participant costs were derived from BuildSmart program experience and validated against outputs from the state-approved energy analysis tool, Energy Gauge®.

Q. What are the expected Program administrative costs?

A. $400 per home.

Q. How were Program administrative costs derived?

A. Program administrative costs were based on actual historical costs from BuildSmart. Forecasted Program costs were estimated based on an analysis of current program cost elements and their applicability in the redesigned program. In addition, cost elements were identified for new activities under the proposed program and overall program administrative costs were developed based on modeling of the activities associated with the redesigned program, and the resource impacts driven by forecasted builder and home participation.

Q. How were benefit calculations for the Program derived?

A. Benefit calculations are based on the planning assumptions from FPL's 2005-2014 planning process, as discussed in Dr. Sim's testimony.

Q. How did FPL determine the BuildSmart Program, as redesigned, is cost-effective?

A. FPL determined the Program, as redesigned, is cost-effective using the cost-effectiveness methodologies required by FAC Rule 25-17.008 and the planning assumptions from FPL's 2005-2014 planning process. As discussed in greater detail in Dr. Sim's testimony, these analyses show the following benefit-cost ratios: 1.77 Participant, 1.05 RIM, and 1.10 TRC for the BuildSmart Program.

Q. Is BuildSmart directly monitorable and does it yield measurable results?

A. Yes. The feasibility and cost-effectiveness of a residential new construction program were first examined in detail in the mid 1990's using a 400 home metered study called the New Home Construction Research Project. FPL filed a final report for that study on June 1, 1995. Included in this final report were the results of the extensive end-use monitoring and engineering evaluation effort and a detailed pilot program market analysis. The results from these research efforts were used to develop a detailed engineering model for the BuildSmart program. The model is built around a minimum code (baseline) home load profile and profiles for each BuildSmart efficiency level in each of three climate zones.

The impacts predicted by the robust engineering model developed during the initial study were validated by a smaller metered study conducted in 1999. Since that time, the impacts in the BuildSmart model have been reviewed and/or adjusted several times. Revisions were made as changes have occurred in both the Florida Energy Efficiency Code and in the EnergyGauge® software. EnergyGauge® is used to certify that Florida homes meet minimum code requirements or the higher BuildSmart standards. The FPL BuildSmart model was used to develop demand and energy impacts for the proposed redesigned BuildSmart Program.. FPL believes the demand and energy impacts estimated by the BuildSmart model will be valid until there are substantial changes in construction practices or new technology applications emerge.

With the BuildSmart redesign, FPL is planning to increase program participation substantially, through the introduction of a prescriptive option for identifying the upgrades needed to qualify for BuildSmart certification. As the program grows, the larger savings will justify the increased evaluation planned over the next five years. This may include all three techniques of engineering modeling, billing analysis and possibly a new metered end-use study.

Program participation and efficiency upgrades will be tracked in a BuildSmart database. FPL will monitor the program's actual results on a continual basis

and re-evaluate the forecasted participation levels and the energy and demand impact data, as necessary, over time.

Q. Is BuildSmart designed to meet FPL's Commission-approved goals for the period 2005-2014?

A. Yes. The redesigned Program as described here is was a key component of FPL's goals for the period 2005-2014 that were approved by the Commission in Docket No. 040029-EG.

Q. Does BuildSmart satisfy FEECA and applicable Commission rules?

A. Yes. The redesigned BuildSmart Program is cost-effective, directly monitorable and will yield measurable results.

Q. Will FPL file Program Standards with the Commission?

A. Yes. FPL will file Program Standards for this Program. The FPL BuildSmart Program Standards will detail all applicable measures and Program requirements. The Program Standards will be subject to periodic review and may change over time based on factors including, but not limited to, technological advances, operational needs, program results, application assumptions, state energy code revisions or energy performance evaluation tool improvements.

Q. In summary, does FPL expect the redesigned BuildSmart Program will be successful in encouraging energy efficient new home construction?

A. Yes. As discussed above, BuildSmart is designed to promote the construction of energy-efficient homes that cost-effectively reduce FPL's coincident peak load and customer energy consumption. FPL will accomplish the Program

objectives by conducting outreach efforts to builders and homebuyers, and promoting the benefits of installing highly energy efficient measures in new homes. Employing energy performance calculation tools, FPL will review house plans and provide recommendations to improve energy performance under the Florida Energy Efficiency Code. FPL will also perform post-construction inspections to validate the installation of planned energy efficient measures in new homes. Qualifying homes that pass inspection will be certified by FPL as BuildSmart homes. Additionally, FPL will provide builder incentives for qualifying BuildSmart homes that also achieve ENERGY STAR® certification by meeting the requirements of the DOE's and EPA's ENERGY STAR® Program. These efforts are expected to significantly increase the energy efficiency of the new home construction market.

RESIDENTIAL CONSERVATION SERVICE PROGRAM

Q. What is the Residential Conservation Service Program?

A. The Residential Conservation Service (RCS) Program is an existing program which FPL intends to continue offering to its residential customers. The RCS Program has been an integral component of FPL's DSM efforts since the 1980s.

FPL offers its residential energy audits through the RCS Program. The program provides a walk- through energy audit, a computer-generated Class A audit and a customer-assisted energy audit. Procedures for conducting these

audits have been approved by the Commission. The walk-through energy audits and the computerized Class A audits are conducted by an FPL representative in order to inform residential customers of cost-effective conservation measures and practices that are suitable for the customer's home. The walk-through, computerized and customer-assisted energy audits provide an energy analysis directly to the customer based on the customer's responses to an energy survey. The customer-assisted audits are offered to those customers who prefer not to have an FPL representative visit their home. For these customers, a telephone, internet or mail-in audit may be offered.

In addition to providing conservation information, the RCS Program also serves as the vehicle for introducing customers to residential conservation incentive programs, featuring incentive payments for qualified customers to help them overcome the initial cost of implementing conservation measures.

Q. How is the RCS Program administered?

A. During the RCS Program audit, the auditor discusses a variety of potential conservation measures with the customer. In addition, if the customer is eligible for participating in any, or all, of the residential conservation programs featuring incentive payments, the customer receives a Watt-$aver certificate(s), which can be used by the customer as a partial payment for the cost of the conservation measure with the participating contractors. Upon request, FPL's representative also provides a list of participating contractors from which the customer can choose. The number of audits which FPL will conduct in the future is related to the number of projected participants for the

residential conservation programs featuring incentive payments as well as customers' requests for evaluations of their overall energy conservation opportunities.

Q. What is the projected participation and savings from the RCS Program?

A. The projected participation in this Program is shown in Document DJH-4. FPL does not project demand or energy savings associated with the performance of a home energy audit. Demand and energy savings attributable to the implementation of measures identified during the performance of a residential home energy audit will be reported through their respective programs. It should be pointed out that FPL recommends measures and practices beyond FPL's programs, and there should be additional savings associated with these measures, although FPL does not quantify or report these savings.

Q. Why does FPL not quantify or report demand or energy savings associated with the RCS Program?

A. Section 366.82(5) and FAC Rule 25-17.003 require FPL to offer a variety of residential audits, including a walk-through audit and computer-assisted audit. Both of these types of audits are included in this Program and meet the detailed requirements of the FAC.

Q. Does the RCS Program comply with FAC Rule 25-17.003?

A. Yes. The RCS Program auditors meet the minimum auditor qualifications outlined in FAC Rule 25-17.003(5). Such certification, along with a list of

auditors performing energy audits, is on file with the PSC and updated annually. At least twice annually, FPL updates its pricing and climate data to ensure that the estimates of energy cost savings and costs for conservation measures are based on typical and up-to-date data. The auditors follow appropriate procedures for visiting residences and advising customers of applicable conservation practices. Results of computer-assisted audits include the necessary disclosures informing customers that actual installation costs may differ from the reported estimates. FPL follows the Commission guidelines for installation arrangements and post-audit inspections. FPL sends a program announcement to eligible customers every six months.

Q. Is the RCS Program cost-effective?

A. Since FPL does not project demand or energy savings from the implementation of this Program, a cost-effectiveness analysis is not applicable.

Q. Is the RCS Program directly monitorable?

A. Since FPL does not project demand or energy savings from the implementation of this program, separate monitoring and evaluation is not necessary for the RCS Program. Savings achieved through other programs will be monitored and evaluated in those programs.

Q. Does this conclude your testimony?

A. Yes, it does.

Table 1: Homebuyer and Homebuilder Key Needs

Homebuyers' Primary Needs	Homebuilders' Primary Needs
Quality and performance in their new home (no problems)	Selling homes with high margins (including options)
Affordability	Cost control
Conduct business with a reputable builder	Differentiating products and services
Choices and options in upgrades	Delivering on schedule
Home value to appreciate	Satisfying customers
Good community	
Energy efficiency	

Table 2: Summary Comparison of Program Components and Features

	Existing Program	Redesigned Program	
		"Prescriptive" Approach	"Flexible" Approach
Participation Requirements	• Install measures to reach one of three levels tied to energy performance– Bronze, Silver or Gold	• Install prescriptive measures targeted to result in an e-Ratio score < .91	• Install measures that exceed "Prescriptive" approach requirements and result in an e-Ratio score < .81
Dwelling types	• Single family detached	• Single family detached • Single family attached homes	
Participation Costs	• Combination of cost of measures + BuildSmart fees (for Bronze and Silver homes only)	• Cost of measures	
Applicable measures	• Flexible measures • Wide range of measures	• Prescriptive measures	• Flexible measures • Wide range of measures
ENERGY STAR®	• Limited participation	• N/A	• Increased promotion via builder incentives up to $50/home for qualifying BuildSmart homes that also achieve ENERGY STAR® certification.
Fees	• Gold = $0 • Silver = $75 • Bronze = $175	• No fees	
Inspections	• FPL reserves the right to perform a series of inspections on each home	• FPL reserves the right to perform a series of inspections on each home	
Energy Performance Analyses	• Performed for each participating home	• Based on analysis of model home design	• Performed for each participating home

Table 3: Projected Demand and Energy Savings

Year	Annual Number of Participants	Per Customer KWh	Per Customer Winter	Per Customer Summer	Total Annual KWh	Total Annual Winter	Total Annual Summer
2005	3,816	1,460	0.88	0.78	5,570,995	3,358	2,976
2006	5,344	1460	0.88	0.78	7,801,510	4,702	4,168
2007	6,945	1460	0.88	0.78	10,139,700	6,112	5,417
2008	8,335	1460	0.88	0.78	12,168,370	7,334	6,501
2009	9,170	1460	0.88	0.78	13,388,200	8,070	7,153
2010	10,084	1460	0.88	0.78	14,722,348	8,874	7,865
2011	10,084	1460	0.88	0.78	14,722,348	8,874	7,865
2012	10,084	1460	0.88	0.78	14,722,348	8,874	7,865
2013	10,084	1460	0.88	0.78	14,722,348	8,874	7,865
2014	10,084	1460	0.88	0.78	14,722,348	8,874	7,865

Table 4: Projected Participation (RCS Program)

Year	Annual Number of Participants
2005	75,000 - 100,000
2006	75,000 - 100,000
2007	75,000 - 100,000
2008	75,000 - 100,000
2009	75,000 - 100,000
2010	75,000 - 100,000
2011	75,000 - 100,000
2012	75,000 - 100,000
2013	75,000 - 100,000
2014	75,000 - 100,000