Natalie F. Smith
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Florida Power & Light Company
700 Universe Boulevard
Juno Beach, FL 33408-0420
(561) 691-7207
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June 30,2004

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

040660-EQ

Re: Florida Power & Light Company's Petition for Approval of Modifications to its BuildSmart™ Prograin

Dear Ms. Bayó:

Enclosed for filing are the original and fifteen (15) copies of Florida Power & Light Company's (FPL's) Petition for Approval of Modifications to its BuildSmart™ Program with supporting documentation. Also enclosed is a computer diskette containing an electronic version of the petition and supporting documents. The enclosed diskette is HD density, the operating system is Windows 2000, and the word processing software in which the document appears is Word 2000.

Please contact me if you have questions regarding this filing.

Sincerely,

Natalie F. Smith

NFS:ec
Enclosures

DOCUMENT NUMBER-DATE
07159 JUN 30 04
FPSC-COMMISSION CLERK

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition of Florida Power & Light Company for Approval of Modifications to its BuildSmart™ Program	))))	**Docket No.** **Filed: June 30, 2004**

PETITION OF FLORIDA POWER & LIGHT COMPANY FOR APPROVAL OF MODIFICATIONS TO ITS BUILDSMART™ PROGRAM

Florida Power & Light Company ("FPL"), pursuant to Section 366.82(2)[1], petitions the Florida Public Service Commission (the "PSC" or the "Commission") for approval of modifications to its BuildSmart™ Program (the "Program") and to allow FPL to recover reasonable and prudent expenditures for the modified Program through FPL's Energy Conservation Cost Recovery ("ECCR")Clause. The grounds for this Petition are:

1. FPL's address is 9250 West Flagler Street, Miami, FL 33174. Correspondence, notices, orders and other documents concerning this Petition should be sent to:

William G. Walker, III Florida Power & Light Company Vice President 215 South Monroe Street Suite 810 Tallahassee, Florida 32301-1859 Telephone: (850) 521-3900	R. Wade Litchfield, Esq. Natalie F. Smith, Esq. Florida Power & Light Company 700 Universe Boulevard Juno Beach, Florida 33408 Telephone: (561) 691-7207 Facsimile: (561) 691-7135

2. FPL is a public utility regulated by the Commission pursuant to Chapter 366, Florida Statutes. FPL is subject to the Florida Energy Efficiency and Conservation Act ("FEECA"), Sections 366.80-366.85 and 403.519. Pursuant to FEECA, the Commission established conservation goals for FPL for 2000 through 2009. Order No. PSC-99-1942-FOF-

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[1] All references to "Section(s)," "Chapter(s)," or "§" are to the 2003 version of the Florida Statutes unless indicated otherwise.

EG, Docket No. 971004-EG (issued Oct. 1, 1999). The Commission has also approved a demand side management ("DSM") plan for FPL for meeting FPL's Commission-approved conservation goals. Order No. PSC-00-0915-PAA-EG, Docket No. 991788-EG (issued May 8, 2000). 'Pursuant to Section 366.82 and Rule 25-17.015, FPL has an ECCR Clause through which it recovers its reasonable and prudent unreimbursed costs for conservation audits, conservation programs, and implementation of FPL's conservation plan. FPL has a substantial interest in achieving its Commission-approved conservation goals. FPL also has a substantial interest in amending its BuildSmart™ Program and DSM Plan as proposed by this Petition. FPL also has a substantial interest in recovering the costs of the modified BuildSmart™ Program through its ECCR Clause.

BACKGROUND

3. In March 1993, the Commission approved the New Home Construction Research Project as part of FPL's Conservation Plan. Order No. PSC-93-0339-FOF-EG. The New Home Construction Research Project was a two-year research project designed to investigate, quantify and determine the cost-effectiveness of the conservation opportunities available in the residential, detached, single-family home construction market.

4. A significant part of the New Home Construction Research Project was the creation and offering of a BuildSmart™ pilot program that was used to evaluate the impact of education, inspections, and certification on new home construction energy-efficiency. In the BuildSmart™ pilot program, FPL educated builders and customers about energy-efficiency building practices and their benefits, performed new home inspections to verify installations, determined the energy efficiency of the homes, and provided certificates for qualifying new homes (homes that exceed Florida Energy Efficiency Code requirements by more than 10%-Bronze Certificates, 20%-Silver Certificates, and 30%-Gold Certificates).

5. FPL completed its New Home Construction Research Project and filed a final report with the Commission on June 1, 1995. The final report found that BuildSmart™ had proven preliminarily to be cost-effective.

6. On December 7, 1995, FPL petitioned the Commission for approval of a permanent BuildSmart™ Program. FPL's BuildSmart™ Program was approved by the Commission and authorized for ECCR recovery. Order No. PSC-97-1017-S-EG. When FPL's most recent DSM Plan was approved by the Commission, the BuildSmart™ Program was part of FPL's approved plan. Order No. PSC-00-0915-PAA-EG.

CURRENT BUILDSMART™ PROGRAM DESIGN

7. The BuildSmart™ Program is designed to promote the construction of energy-efficient homes. The BuildSmart™ Program 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.

8. FPL charges fees to homebuilders for plan inspection and certification. FPL charges different levels of fees per home, depending upon the level of efficiency achieved. Lower fees are charged to homes with higher energy efficiency, and homes that are 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 energy rating that is between 10 and 19% more energy efficient than the Florida Energy Efficiency Code requires (an Energy Performance Index ("EPI") rating[2] of 90-81); Silver homes are homes that achieve energy efficiency that is between 20 and 29% more efficient than the Florida Energy Efficiency Code requires (an EPI rating of

[2] The Florida Energy Efficiency Code requires an Energy Performance Index rating of 100 or less. Ratings below 100 reflect increases in energy efficiency.

80-71); and Gold homes are homes that achieve energy efficiency of 30% or greater than required under the Florida Energy Efficiency Code (an EPI rating of 70% or lower).

9. FPL has three different BuildSmart™ Program 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 EPI calculations for builders that elect not to participate in certification.

THE NEED FOR PROGRAM MODIFICATION

10. While a significant share of new home construction in the nation continues to occur in FPL's service territory, the participation rate in the BuildSmart™ Program has been lower than anticipated. **As** discussed in greater detail in Appendix C, FPL's analyses demonstrate there is an opportunity to improve the energy efficiency of new homes that is not being realized. To identify opportunities to increase participation in its BuildSmart™ Program, FPL performed a situational analysis of the Program. That analysis revealed that the Program performs well relative to most homebuyers' needs but performs poorly in meeting builders' key needs.

11. The target audiences for the success of the BuildSmart™ Program are builders and hornebuyers. However, these entities have different needs, and sometimes such needs conflict. FPL's 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.

12. 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 constmct represent a significant share - estimated at more than 50% in FPL's service territory - of the overall new construction market. 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), and are less cost sensitive than production builders.

13. To date, FPL's BuildSmart™ Program has had 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 BuildSmart™ Program's current design, 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 townhomes and villas.

14. Based upon the findings from the situational analysis performed, recommendations were developed to optimize Program features and specifications to meet the critical needs of builders, both custom and production, while enhancing features valued by homebuyers. It is FPL's expectation that, with the requested Program modifications, the BuildSmart™ Program can better achieve its potential.

BUILDSMART™ PROGRAM MODIFICATIONS

15. FPL proposes a number of modifications to its BuildSmart™ Program to better meet builder requirements and increase Program participation. FPL proposes to:

a. Introduce a prescriptive approach that simplifies energy efficiency options and allows production builders to make large volume, discounted purchases that do not trigger plan modifications.
b. Modify the existing flexible approach to eliminate the Gold, Silver and Bronze levels. Under the revised Program, the prescriptive approach is

targeted to achieve EPI ratings below 90 and under the modified flexible approach, the EPI ratings will be 80 or below.

c. Offer only the Basic Service level.

d. Eliminate Program participation fees.

e. Add single-family attached dwellings to the Program.

f. Provide builder incentives for qualifying BuildSmart™ homes that also achieve ENERGY STAR® certification by meeting the requirements of the United States Department of Energy's (DOE's) and Environmental Protection Agency's (EPA's) ENERGY STAR* Program.

These Program modifications are addressed in more detail in Appendix **A,** which is attached to this Petition and incorporated by reference.

16. The BuildSmart™ Program as modified is cost-effective. FPL has enclosed as Appendix B a cost-effectiveness analysis of the modified BuildSmart™ Program using the Commission's approved methodology and based on planning assumptions out of FPL's 2005-2014 planning process, and it shows the BuildSmart™ Program is clearly cost-effective. As can be seen from the cost-effectiveness run in Appendix B, the BuildSmart™ Program's benefit-to-cost ratios are: 1.77 Participants, 1.05 RIM, and 1.10 Total Resource Cost (TRC) for the BuildSmart™ Program.

17. The BuildSmart™ Program is directly monitorable and yields measurable results as it has for years. FPL will continue to monitor the results of the BuildSmart™ Program, as described in Appendix C, which provides a description of the BuildSmart™ Program as modified.

18. Extension of the BuildSmart™ Program will help advance the policy objectives of FEECA and Rule 25-17.001. The BuildSmart™ Program, as modified, will allow it to reach its full potential of peak demand and energy savings, helping FPL to achieve its approved conservation goals.

19. The Commission has previously approved recovery of reasonable and prudent expenditures associated with the BuildSmart™ Program through the ECCR Clause. The ECCR

Clause is the appropriate vehicle for recovery **of** the costs associated with the modified Program.

20. FPL is not aware of any material facts that are in dispute as to FPL's Petition for Approval of Modifications to its BuildSmart™ Program.

21. FPL's requested modifications to its BuildSmart™ Program should be approved and incorporated into FPL's DSM Plan. FPL should be authorized to recover through its ECCR Clause its reasonable and prudent expenditures for the BuildSmart™ Program.

WHEREFORE, FPL respectfully petitions the Commission to approve FPL's modifications to its BuildSmart™ Program as part of FPL's DSM Plan and to allow FPL to recover through its ECCR Clause reasonable and prudent expenditures for its modified BuildSmart™ Program.

Respectfully submitted this 30th day of June, 2004.

R. Wade Litchfield, Senior Attorney
Natalie F. Smith, Esq.
Florida Power & Light Company
Law Department
700 Universe Boulevard
Juno Beach, FL 33408
Tele: (561) 691-7100
Fax: (561) 691-7135

Attorneys for Florida Power & Light Company

By: Natalie F. Smith
Natalie F. Smith, Esq.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of Florida Power & Light Company's Petition for Approval of Modifications to its BuildSmart™ Program has been furnished by hand delivery (*) and United States Mail this 30th day of June, 2004, to the following:

Office of Public Counsel*
Harold McLean, Esq.
Robert Vandiver, Esq.
111 West Madison Street, Room 812
Tallahassee, FL 32399-1400

By: _____
Natalie F. Smith, Esq.

APPENDIX A

RESIDENTIAL NEW CONSTRUCTION PROGRAM (BUILDSMART™ PROGRAM)

APPENDIX A

RESIDENTIAL NEW CONSTRUCTION PROGRAM (BUILDSMART™ PROGRAM)

Program Summary

The BuildSmart™ Program objective is to encourage the design and construction of energy-efficient homes that cost effectively reduce FPL's coincident peak load and customer energy consumption.

The BuildSmart™ Program will accomplish its program objective through a variety of activities. FPL will conduct educational activities, advertise and market to builders and homebuyers explaining and promoting the benefits of building new homes more energy efficiently than required under Florida's Energy Efficiency Code for Building Construction. Employing energy rating tools[1], FPL will review house plans and provide recommendations to improve energy efficiency ratings under the Florida Energy Efficiency Code. FPL will also perform post-construction inspections to assess energy efficiency of 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 United States Department of Energy's (DOE's) and Environmental Protection Agency's (EPA's) ENERGY STAR® Program.

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1 The current recognized rating tool is Florida's Energy Efficiency Code or the Energy Performance Index (EPI) rating. As rating tools and methodologies are developed or modified, FPL will review and consider them as a potential program rating standard.

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.

Description of Program Administration

The 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, 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.

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.

Under the flexible measure approach, to receive BuildSmart™ certification, a home must achieve an energy efficiency rating at least 20% better than the rating required by the Florida Energy Efficiency Code. Under this approach, when house plans are submitted for FPL review, a wide variety of energy efficiency measures may be employed to improve the home's energy efficiency

rating, and FPL may make suggestions as to additional or alternative measures that could be employed to achieve greater energy efficiency.

Under the prescriptive measure approach, to receive BuildSmart™ certification, a home must include specific prescriptive energy efficiency measures targeted to achieve an energy efficiency rating at least 10% better than the rating required by the Florida Energy Efficiency Code[2]. 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.

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 inspect the home to verify that all energy measures specified have been installed and to determine whether any changes were made to the home that will affect the energy efficiency level 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 energy efficiency level, if needed, and then certify the home at its final energy efficiency level. 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.

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2 These prescriptive measures will be developed employing the same energy rating tool used to measure compliance with or comparisons to the Florida Energy Efficiency Code.

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.

FPL will file Program Standards for this program. 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 rating tool improvements.

Projected Participation and Savings

The projected participation in this program as well as the projected demand and energy savings for a typical installation are shown on Attachment **A.**

Cost-Effectiveness Analysis

FPL has used the Commission-approved cost-effectiveness methodologies required by Rule 25-17.008 and the planning assumptions out of FPL's 2005 – 2014 planning process to determine the cost-effectiveness of this program. These cost-effectiveness analyses can be found in Appendix B to the Petition. These analyses show the following benefit-cost ratios: 1.77 Participants, 1.05 RIM, and 1.10 Total Resource Cost (TRC) for the BuildSmart™ Program.

Program Evaluation and Monitoring

The feasibility of a residential new construction program was originally studied in detail during FPL's 1995 Residential New Construction (RNC) Research Project. The June 1995 RNC final

report presented the results of an extensive engineering modeling effort supported by a large end-use metered study of 400 new homes. **A** detailed market analysis was developed in preparation for the subsequent pilot project which would come to be known as the BuildSmart™ Program.

After the completion of the pilot period, an evaluation of the BuildSmart™ Pilot Program was performed. This 1999 evaluation tested and validated the original RNC model using a small metered sample of BuildSmart™ pilot participants. This evaluation allowed FPL to confirm demand and energy impacts based upon the efficiency measures installed in the homes of actual program participants.

Over the next four years, several reevaluations of program impacts were performed when significant changes were made in Florida's Energy Efficiency Code and the state-prescribed EnergyGauge® software for calculating an Energy Performance Index (EPI) rating. Each time, prototypes were developed for the new code baseline and homes in the various combinations of climate zone and BuildSmart™ award level. In 2002, prototype models were also developed to calculate impacts for attached homes to confirm the feasibility of their addition to the BuildSmart™ Program.

FPL maintains **a** BuildSmart™ participant database to store the audit of energy efficiency features installed in the home of each program participant. FPL uses this information to periodically adjust program impacts according to any changes in the mix of efficiency measures which builders choose to install in BuildSmart™ homes. In 2002, FPL enhanced the BuildSmart™ model again using data gathered from code compliance forms compiled by the University of Florida. This valuable

data on residential new construction market practices was used to update the baseline prototype for detached homes and develop the prototype for attached homes.

As future changes occur in the energy code, construction market practices, or energy efficiency technology, FPL will perform engineering analyses to identify the impact of those changes and adjust demand and energy impacts accordingly. Program participation, including the specific efficiency measures installed in each home, will continue to be tracked in the BuildSmart™ database. Participation patterns will be compared to those forecasted in order to update participation expectations, peak demand impacts and program energy savings.

Attachment A

At the Meter

Year	Annual Number of Program Participants	Per Customer kWh Reduction	Per Customer Winter kW Reduction	Per Custonier Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2004	2,544	1,460	.88	.78	3,714,240	2,239	1,984
2005	3,816	1,460	.88	.78	5,570,995	3,358	2,976
2006	5,344	1,460	.88	.78	7,801,510	4,702	4,168
2007	6,945	1,460	.88	.78	10,139,700	6,112	5,417

At the Generator

Year	Annual Number of Program Participants	Per Custorner kWh Reduction	Per Customer Winter kW Reduction	Per Customer Summer kW Reduction	Total Annual kWh Reduction	Total Annual Winter kW Reduction	Total Annual Summer kW Reduction
2004	2,544	1,577	.97	.86	4,011,888	2,475	2,193
2005	3,816	1,577	.97	.86	6,017,438	3,712	3,290
2006	5,344	1,577	.97	.86	8,426,700	5,198	4,607
2007	6,945	1,577	.97	.86	10,952,265	6,755	5,988

APPENDIX B

COST-EFFECTIVENESS ANALYSIS OF THE MODIFIED BUILDSMART™ PROGRAM

INPUT DATA -- PART 1 CONTINUED
PROGRAM METHOD SELECTED: REV_REQ
PROGRAM NAME: Residential New Construction

PROGRAM DEMAND SAVINGS & LINE LOSSES

(1) CUSTOMER kW REDUCTION AT METER	0.79	kW
(2) GENERATOR kW REDUCTION PER CUSTOMER	1.07	kW
(3) kW LINE LOSS PERCENTAGE	9.53	%
(4) GENERATOR kWh REDUCTION PER CUSTOMER	1,577.18	kWh
(5) kWh LINE LOSS PERCENTAGE	1.43	%
(6) GROUP LINE LOSS MULTIPLIER	1.00	
(7) CUSTOMER kWh INCREASE AT METER	0.00	kWh

ECONOMIC LIFE & K FACTORS

(1) STUDY PERIOD FOR THE CONSERVATION PROGRAM	26	YEARS
(2) GENERATOR ECONOMIC LIFE	25	YEARS
(3) T&D ECONOMIC LIFE	35	YEARS
(4) K FACTOR FOR GENERATION	1.65516	
(5) K FACTOR FOR T & D	1.65761	

UTILITY & CUSTOMER COSTS

(1) UTILITY NON RECURRING COST PER CUSTOMER	***	$/CUST
(2) UTILITY RECURRING COST PER CUSTOMER	***	$/CUST
(3) UTILITY COST ESCALATION RATE	***	%**
(4) CUSTOMER EQUIPMENT COST	***	$/CUST
(5) CUSTOMER EQUIPMENT ESCALATION RATE	***	%**
(6) CUSTOMER O & M COST	***	$/CUST/YR
(7) CUSTOMER O & M COST ESCALATION RATE	***	%**
(8) INCREASED SUPPLY COSTS	***	$/CUST/YR
(9) SUPPLY COSTS ESCALATION RATES	***	%**
(10) UTILITY DISCOUNT RATE	7.93	%
(11) UTILITY AFUDC RATE	7.84	%
(12) UTILITY NON RECURRING REBATE/INCENTIVE	***	$/CUST
(13) UTILITY RECURRING REBATE/INCENTIVE	***	$/CUST
(14) UTILITY REBATE/INCENTIVE ESCALATION RATE	***	%

IV. AVOIDED GENERATOR AND T&D COSTS

(1) BASE YEAR	2004	
(2) IN-SERVICE YEAR FOR AVOIDED GENERATING UNIT	2010	
(3) IN-SERVICE YEAR FOR AVOIDED T&D	2007-2010	
(4) BASE YEAR AVOIDED GENERATING COST	485.29	$/kW
(5) BASE YEAR AVOIDED TRANSMISSION COST	$4.37	$/kW
(6) BASE YEAR DISTRIBUTION COST	23.05	$/kW
(7) GEN, TRAN & DIST COST ESCALATION RATE	3.00	%**
(8) GENERATOR FIXED O & M COST	27.78	$/kW/YR
(9) GENERATOR FIXED O&M ESCALATION RATE	4.24	%**
(10) TRANSMISSION FIXED O & M COST	241	$/kW
(11) DISTRIBUTION FIXED O & M COST	143	$/kW
(12) T&D FIXED O&M ESCALATION RATE	4.24	%**
(13) AVOIDED GEN UNIT VARIABLE O & M COSTS	0.018	CENTS/kWh
(14) GENERATOR VARIABLE O&M COST ESCALATION RATE	1.88	%**
(15) GENERATOR CAPACITY FACTOR	47%	** (In-service year)
(16) AVOIDED GENERATING UNIT FUEL COST	3.70	CENTS PER kWh** (In-service year)
(17) AVOIDED GEN UNIT FUEL COST ESCALATION RATE	3.14	%**

V. NON-FUEL ENERGY AND DEMAND CHARGES

(1) NON FUEL COST IN CUSTOMER BILL	***	CENTS/kWh
(2) NON-FUEL COST ESCALATION RATE	***	%
(3) DEMAND CHARGE IN CUSTOMER BILL	***	$/kW/MO
(4) DEMAND CHARGE ESCALATION RATE	***	%

* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK
** VALUE SHOWN IS FOR FIRST YEAR ONLY (VALUE VARIES OVER TIME)
*** PROGRAM COST CALCULATION VALUES ARE SHOWN ON PAGE 2

* INPUT DATA -- PART 1 CONTINUED
PROGRAM METHOD SELECTED: REV_REQ
PROGRAM NAME: **Residential New Construction**

YEAR	(1) UTILITY PROGRAM COSTS WITHOUT INCENTIVES $(000)	(2) UTILITY INCENTIVES $(000)	(3) OTHER UTILITY COSTS $(000)	(4) TOTAL UTILITY PROGRAM COSTS $(000)	(5) ENERGY CHARGE REVENUE LOSSES $(000)	(6) DEMAND CHARGE REVENUE LOSSES $(000)	(7) PARTICIPANT EQUIPMENT COSTS $(000)	(8) PARTICIPANT O&M COSTS $(000)	(9) OTHER PARTICIPANT COSTS $(000)	(10) TOTAL PARTICIPANT COSTS $(000)
2004	1,018	0	0	1,018	143	0	1,842	0	0	1,842
2005	1,555	0	0	1,555	490	0	2815	0	0	2815
2006	2,223	0	0	2,223	994	0	4,023	0	0	4,023
2007	2,953	0	0	2953	1656	0	5,345	0	0	5,345
2008	3,632	0	0	3,632	2,513	0	6,574	0	0	6574
2009	4.105	0	0	4,105	3,494	0	7.430	0	0	7,430
2010	0	0	0	0	4.012	0	0	0	0	0
2011	0	0	0	0	4,022	0	0	0	0	0
2012	0	0	0	0	4.070	0	0	0	0	0
2013	0	0	0	0	4.112	0	0	0	0	0
2014	0	0	0	0	4.112	0	0	0	0	0
2015	0	0	0	0	4,138	0	0	0	0	0
2016	0	0	0	0	4.149	0	0	0	0	0
2017	0	0	0	0	4.186	0	0	0	0	0
2018	0	0	a	0	4,269	0	0	0	0	0
2019	1,519	0	0	1,519	4,301	0	2,749	0	0	2749
2020	2,354	0	0	2354	4,343	0	4,260	0	0	4.269
2021	3,408	0	0	3,408	4,385	0	6,169	0	0	6.169
2022	4.582	0	0	4,582	4.427	0	8,293	0	0	8.293
2023	5,688	0	0	5,688	4,470	0	10,295	0	0	10,295
2024	6,475	0	0	6,475	4.514	0	11,719	0	0	11,719
2025	0	0	0	0	4,557	0	0	0	0	0
2026	0	0	0	0	4,602	0	0	0	0	0
2027	0	0	0	0	4.646	0	0	0	0	0
2028	0	a	0	0	4,691	0	0	0	0	0
2029	0	0	0	0	4,737	0	0	0	0	0
NOM	39.519	0	0	39.519	96.023	0	71,513	0	0	71,513
NPV	18,205	0	0	18,205	35.592	0	32,951	0	0	32,951

* SUPPLEMENTAL INFORMATION NOT SPECIFIED IN WORKBOOK
** NEGATIVE COSTS WILL BE CALCULATED AS POSITIVE BENEFITS FOR TRC AND RIM TESTS

CALCULATION OF GEN K-FACTOR
PROGRAM METHOD SELECTED REV_REQ
PROGRAM NAME: Residential New Construction

YEAR	(2) BEG-YEAR RATE BASE $(000)	(3) DEBT $(000)	(4) PREFERRED STOCK $(000)	(5) COMMON EQUITY $(000)	(6) INCOME TAXES $(000)	(7) PROPERTY TAX $(000)	(8) PROPERTY INSURANCE $(000)	(9) DEPREC. $(000)	(10) DEFERRED TAXES $(000)	(11) TOTAL FIXED CHARGES $(000)	(12) PRESENT WORTH FIXED CHARGES $(000)	(13) CUMULATIVE PW FIXED CHARGES $(000)	(14) REPLACEMENT COST BASIS FOR PROPERTY INSURANCE $(000)
2010	24,811	759	0	1,501	993	0	0	969	1	4,222	4,222	4,222	24,225
2011	23,841	730	0	1,442	638	476	97	969	318	4,671	4,328	8,550	24,952
2012	22,554	690	0	1,365	639	456	100	969	269	4,488	3,853	12403	25,701
2013	21,317	652	0	1,290	637	437	103	969	223	4,311	3,429	15,832	26,472
2014	20,125	616	0	1,218	635	417	106	969	180	4,141	3,051	18,883	27,266
2015	18,975	581	0	1,148	630	397	110	969	141	3,976	2,714	21.597	28,084
2016	17,865	547	0	1,081	625	377	113	969	105	3,816	2,414	24,011	28,926
2017	16,792	514	0	1,016	617	357	116	969	71	3,651	2,146	26.157	29,794
2018	15,751	482	0	953	583	337	120	969	66	3,510	1,906	28,063	30.688
2019	14.717	450	0	890	544	318	123	969	66	3,360	1,691	29,754	31,608
2020	13,682	419	0	828	505	298	127	969	66	3.210	1,497	31,251	32,557
2021	12,647	387	0	765	465	278	131	969	66	3,061	1,322	32,573	33,533
2022	11.613	355	0	703	426	258	135	969	66	2,911	1.165	33,738	34.539
2023	10,578	324	0	640	387	238	139	969	66	2,762	1,024	34,762	35.576
2024	9.543	292	0	577	347	218	143	969	66	2613	898	35,660	36.643
2025	8,508	260	0	515	308	198	147	969	66	2,464	784	36,444	37.742
2026	7.474	229	0	452	269	179	152	969	66	2315	683	37.126	33,874
2027	6.439	197	0	390	229	159	156	969	66	2,166	592	37,718	40,041
2028	5,404	165	0	327	190	139	161	969	66	2,017	511	38,229	41,242
2029	4.370	134	0	254	151	119	166	969	66	1868	438	38,661	42479
2030	3.335	102	0	202	316	99	171	969	(139)	1,720	374	39.041	43,753
2031	2,505	77	0	152	488	79	176	969	(343)	1,598	322	39,363	45.066
2032	1,878	57	0	114	465	60	181	969	(343)	1,503	280	39.645	46,418
2033	1,252	38	0	76	441	40	186	969	(343)	1,407	243	39.886	47,811
2034	626	19	0	38	417	20	192	969	(343)	1,312	210	40,097	49,245

IN SERVICE COST	($000)	24,225
IN SERVICE YEAR		2010
BOOK LIFE (YRS)		25
EFFEC. TAX RATE		38.575
DISCOUNT RATE		7.9%
PROPERTY TAX		2.05%
PROPERTY INSURANCE		0.39%

CAPITAL STRUCTURE

SOURCE	WEIGHT	COST	
DEBT	45%	6.80	%
P/S	0%	0.00	%
C/S	55%	11.00	%

K-FACTOR = CPWFC / IN-SVC COST = 1.65516

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION
PROGRAM METHOD SELECTED: REV_REQ
PROGRAM NAME: **Residential New Construction**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION $(000)	ACCUMULATED TAX DEPRECIATION $(000)	BOOK DEPRECIATION $(000)	ACCUMULATED BOOK DEPRECIATION $(000)	BOOK DEPRECIATION FOR DEFERRED TAX $(000)	ACCUMULATED BOOK DEPR FOR DEFERRED TAX $(000)	DEFERRED TAX DUE TO DEPRECIATION $(000)	TOTAL EQUITY AFUDC $(000)	BOOK DEPR RATE MINUS 1/LIFE	(10)*(11) TAX RATE $(000)	SALVAGE TAX RATE $(000)	ANNUAL DEFERRED TAX (9)-(12)+(13) $(000)	ACCUMULAIED DEFERRED TAX $(000)
2010	3.75%	890	890	969	969	889	889	1	2,009	0	0	0	1	(585)
2011	7.22%	1,713	2603	969	1,938	889	1,777	318	2,009	0	0	0	318	(267)
2012	6.68%	1,585	4,188	969	2,907	889	2,666	269	2009	0	0	0	269	1
2013	6.18%	1.467	5,655	969	3,876	889	3.555	223	2,009	0	0	0	223	224
2014	5.71%	1,356	7,011	969	4,845	889	4,443	180	2,009	0	0	0	180	405
2015	5.29%	1,254	8,265	969	5,814	889	5,332	141	2009	0	0	0	141	546
2016	4.89%	1,160	9,426	969	6,783	889	6,221	105	2009	0	0	0	105	651
2017	4.52%	1,073	10.499	969	7,752	889	7,109	71	2,009	0	0	0	71	722
2018	4.46%	1,059	11,558	969	8.721	889	7998	66	2,009	0	0	0	66	787
2019	4.46%	1,059	12,617	969	9,690	889	8,886	66	2,009	0	0	0	66	853
2020	4.46%	1,059	13,676	969	10.659	889	9,775	66	2,009	0	0	0	66	919
2021	4.46%	1.059	14,735	969	11,628	889	10,664	66	2,009	0	0	0	66	984
2022	4.46%	1,059	15,794	969	12,597	889	11.552	66	2,009	0	0	0	66	1,050
2023	4.46%	1,059	16,852	969	13,566	889	12,441	66	2,009	0	0	0	66	1,116
2024	4.46%	1,059	17,911	969	14,535	889	13,330	66	2,009	0	0	0	66	1,182
2025	4.46%	1.059	18,970	969	15,504	889	14.218	66	2,009	0	0	0	66	1,247
2026	4.46%	1,059	20,029	969	16.473	889	15,107	66	2,009	0	0	0	66	1,313
2027	4.46%	1,059	21.088	969	17.442	889	15,996	66	2,009	0	0	0	66	1,379
2028	4.46%	1,059	22,147	969	18,411	889	16,884	66	2009	0	0	0	66	1,444
2029	4.46%	1,059	23.206	969	19,380	889	17m	66	2009	0	0	0	66	1,510
2030	2.23%	530	23,735	969	20.349	889	18,662	(139)	2009	0	0	0	(139)	1,371
2031	0.00%	0	23,735	969	21,318	889	19,550	(343)	2,009	0	0	0	(343)	1,029
2032	0.00%	0	P.735	969	22,287	889	20,439	(343)	2,009	0	0	0	(343)	686
2033	0.00%	0	23,735	969	23,256	889	21,327	(343)	2,009	0	0	0	(343)	343
2034	0.00%	0	23,735	969	24,225	889	22216	(343)	2,009	0	0	0	(343)	0

SALVAGE / REMOVAL COST	0.00
YEAR SALVAGE / COST OF REMOVAL	2029
DEFERRED TAXES DURING CONSTRUCTION (SEE PAGE 5)	(586)
TOTAL EQUITY AFUDC CAPITALIZED (SEE PAGE 5)	2,009
BOOK DEPR RATE - 1/USEFUL LIFE	4.00%

DEFERRED TAX AND MID-YEAR RATE BASE CALCULATION
PROGRAM METHOD SELECTED: REV_REQ
PROGRAM NAME: **Residential New Construction**

(1)	(2)	(3)	(4)	(5)	(5a)*	(5b)*	(6)	(7)	(8)
YEAR	TAX DEPRECIATION SCHEDULE	TAX DEPRECIATION $(000)	DEFERRED TAX $(000)	END OF YEAR NET PLANT IN SERVICE $(000)	ACCUMULATED DEPRECIATION $(000)	ACCUMULATED DEF TAXES $(000)	BEGINNING YEAR RATE BASE $(000)	ENDING OF YEAR RATE BASE $(000)	MID-YEAR RATE BASE $(000)
2010	3.75%	890	1	24,225	*969*	(585)	24,811	23,841	24,326
2011	7.22%	1,713	318	23,256	1,938	(267)	23,841	22,554	23,198
2012	6.68%	1,585	269	22,287	2,907	I	22.554	21.317	21,936
2013	6.18%	1,467	223	21.318	3,876	224	21,317	20,125	20,721
2014	5.71%	1,356	180	20,349	4,845	405	20,125	18,975	19,550
2015	5.29%	1,254	141	19,380	5,814	546	18,975	17,865	18,420
2016	4.89%	1,160	105	18.411	6,783	651	17.865	16.792	17,328
2017	4.52%	1,073	71	17,442	7,752	722	16.792	15,751	16,272
2018	4.46%	1,059	66	16.473	8,721	787	15.751	14,717	15,234
2019	4.46%	1,059	66	15.504	9.689	853	14.717	13,682	14,199
2020	4.46%	1,059	66	14.535	10.659	919	13,682	12,647	13.165
2021	4.46%	1,059	66	13,566	11,628	984	12,647	11,613	12,130
2022	4.46%	1,059	66	12597	12,597	1,050	11,613	10.578	11.095
2023	4.46%	1,059	66	11,628	13,566	1.116	10,578	*9,543*	10,061
2024	4.46%	1,059	66	10,659	14.535	1,182	9,543	8,508	*9,026*
2025	4.46%	1,059	66	9,699	15,504	1,247	8,508	7,474	7,991
2026	4.46%	1,059	66	8,721	16,473	1,313	7.474	6,439	6.956
2027	4.46%	1,059	66	7.752	17.442	1.379	6.439	5,404	5,922
2028	4.46%	1,059	66	6,783	18.411	1,444	5.404	4.370	4,887
2029	4.46%	1,059	66	5.814	*19,380*	1,510	4.370	3,335	3,852
2030	2.23%	530	(139)	4,845	20,349	1.371	3,335	2,505	2,920
2031	0.00%	0	(343)	3,876	21,318	1,029	2,505	1,878	2.191
2032	0.00%	0	(343)	2,907	22,287	686	1,878	1,252	1,565
2033	0.00%	0	(343)	1,938	23.256	343	1,252	626	939
2034	0.00%	0	(343)	*969*	24,225	*0*	*626*	*0*	313

* Column not specified in workbook

(1) YEAR	(2) NO.YEARS BEFORE IN-SERVICE	(3) PLANT ESCALATION RATE	(4) CUMULATIVE ESCALATION FACTOR	(5) YEARLY EXPENDITURE (%)	(6) ANNUAL SPENDING ($/kW)	(7) CUMULATIVE AVERAGE SPENDING
2004	-6	0.00%	1.000	0.00%	0.00	0.00
2W5	5	3.00%	1.030	0.00%	0.00	0.00
2006	4	3.00%	1.061	16.00%	82.38	41.19
2007	3	3.00%	1.093	30.00%	159.09	161.92
2008	2	3.00%	1.126	32.00%	174.78	328.85
2009	1	3.00%	1.159	22.00%	123.77	478.13
				100.00%	540.01	

YEAR	NO.YEARS BEFORE IN-SERVICE	(8) CUMULATIVE SPENDING WITH AFUDC ($/kW)	(8a)* DEBT AFUDC ($/kW)	(8b)* CUMULATIVE DEBT AFUDC ($/kW)	(9) YEARLY TOTAL AFUDC ($/kW)	(9a)* CUMULATIVE TOTAL AFUDC ($/kW)	(9b)* CONSTRUCTION PERIOD INTEREST ($/kW)	(9c)* CUMULATIVE CPI ($/kW)	(9d)* DEFERRED TAXES ($/kW)	(9e)* CUMULATIVE DEFERRED TAXES ($/kW)	(10) INCREMENTAL YEAR-END BOOK VALUE ($/kW)	(11) CUMULATIVE YEAR-END BOOK VALUE ($/kW)
2004	-6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2005	5	0.00	0.00	0.00	0.00	0.00	0.00	000	0.00	0.00	*0.00*	0.00
2006	4	41.19	1.26	1.26	3.23	3.23	2.80	2.80	(0.59)	(0.59)	85.60	85.60
2007	3	165.15	5.07	6.33	12.99	16.22	11.20	14.00	(2.36)	(2.96)	172.08	257.69
2008	-2	345.08	10.65	16.98	27.29	43.51	23.31	37.32	(4.89)	(7.84)	202.07	459.75
2009	1	521.64	16.20	33.18	41.51	85.02	35.05	72.37	(7.27)	(15.11)	165.28	625.03
			33.18		*85.02*		72.37		(15.11)		625.03	

LANT COSTS 485.29

	BOOK BASIS	BOOK BASIS FORDEFTAX	TAX BASIS
CONSTRUCTIONCASH	20,930	20,930	20,930
EQUITY AFUDC	2,009		
DEBT AFUDC	1,286	1,286	
CPI			2,805
TOTAL	24,225	22,216	23,735

• Column not specified in workbook

INPUT DATA -- PART 2
PROGRAM METHOD SELECTED : REV_REQ
PROGRAM NAME: Residential New Construction

(1)	(2)	(3)	(4)	(5)	(6)*	(7)	(8)	(9)
YEAR	CUMULATIVE TOTAL PARTICIPATING CUSTOMERS	ADJUSTED CUMULATIVE PARTICIPATING CUSTOMERS	UTILITY AVERAGE SYSTEM FUEL COST (C/kWh)	AVOIDED MARGINAL FUEL COST (C/kWh)	INCREASED MARGINAL FUEL COST (C/kWh)	REPLACEMENT FUEL COST (C/kWh)	PROGRAM kW EFFECTIVENESS FACTOR	PROGRAM kWh EFFECTIVENESS FACTOR
2004	2,544	2,544	4.22	5.16	4.52	0.00	1.00	1.00
2005	6.360	6,360	3.88	4.69	4.15	0.00	1.00	1.00
2006	11,703	11.703	3.77	4.68	4.04	0.00	1.00	1.00
2007	18.648	18,648	3.71	4.52	396	0.00	1.00	1.00
2008	26983	26,983	3.66	4.61	3.92	0.00	1.00	1.00
2009	36, 153	36.153	3.79	4.77	4.05	0.00	1.00	1.00
2010	36,153	36,153	3.90	4.72	4.14	5.14	1.00	1.00
2011	36,153	36,153	4.17	4.99	4.42	5.31	1.00	1.00
2012	36,153	36,153	4.18	5.11	4.41	4.92	1.00	1.00
2013	36,153	36.153	4.31	5.31	4.56	4.83	1.00	1.00
2014	36,153	36.153	4.39	5.43	4.64	4.91	1.00	1.00
2015	36.153	36,153	4.55	5.71	4.81	498	1.00	1.00
2016	36.153	36,153	4.69	5.86	4.94	5.27	1.00	1.00
2017	36.153	36,153	4.77	5.97	5.03	6.18	1.00	1.00
2018	36,153	36,153	4.92	6.19	5.18	6.59	1.00	1.00
2019	36,153	36,153	5.06	6.35	531	5.84	1.00	1.00
2020	36.153	36.153	5.16	6.54	5.43	5.71	1.00	1.00
2021	36,153	36,153	5.26	6.67	5.52	5.71	1.00	1.00
2022	36,153	36,153	5.50	6.98	5.n	6.49	1.00	1.00
2023	36.153	36,153	5.57	6.90	5.83	7.93	1.00	1.00
2M4	36,153	36,153	5.66	697	5.92	8.04	1.00	1.00
2025	36,153	36,153	5.76	7.05	6.01	8.15	1.00	1.00
2026	36,153	36,153	5.87	7.12	6.10	8.26	1.00	1.00
2027	36, 153	36,153	5.97	7.20	6.20	8.37	1.00	1.00
2028	36,153	36,153	6.07	7.27	6.29	8.49	1.00	1.00
2029	36,153	36,153	6.18	7.35	639	8.60	1.00	1.00

* THIS COLUMN IS USED ONLY FOR LOAD SHIFTING PROGRAMS WHICH SHIFT CONSUMPTION TO OFF-PEAK PERIODS
THE VALUES REPRESENT THE OFF PEAK SYSTEM FUEL COSTS.

AVOIDED GENERATING BENEFITS
PROGRAM METHOD SELECTED: REV_REQ
PROGRAM NAME: Residential New Construction

YEAR	(2) AVOIDED GEN UNIT CAPACITY COST $(000)	(3) AVOIDED GEN UNIT FIXED O&M $(000)	(4) AVOIDED GEN UNIT VARIABLE O&M $(000)	(5) AVOIDED GEN UNIT FUEL COST $(000)	(6) REPLACEMENT FUEL COST $(000)	(7) AVOIDED GEN UNIT BENEFITS $(000)
2004	0	0	0	0	0	0
2005	0	0	0	0	0	0
2006	0	0	0	0	0	0
2007	0	0	0	0	0	0
2008	0	0	0	0	0	0
2009	0	0	0	0	0	0
2010	4,222	1.376	33	5.848	8,134	3.347
2011	4.671	1,438	57	10,036	13,979	2,222
2012	4.488	1,502	59	10,347	13.111	3,285
2013	4,311	1,570	61	10,589	12,895	3,636
2014	4,141	1,642	63	10,935	13,057	3,693
2015	3,976	1.718	63	11,212	12,969	4,000
2016	3.816	1,795	65	11,904	13,860	3,720
2017	3.661	1,874	65	11,904	15,737	1,767
2018	3,510	1,955	66	12,147	16.631	1,047
2019	3,360	2,042	69	12.596	14.761	3.306
2020	3.219	2,134	70	12,873	14,200	4,088
2021	3.081	2232	71	12,977	13.912	4,429
2022	2,911	2333	74	13,946	15,995	3,269
2023	2,762	2,432	70	U.150	17.881	613
2024	2613	2,538	70	13,289	17.642	868
2025	2,464	2,650	71	13,428	17,485	1,128
2026	2,315	2,770	72	13,570	17,328	1,398
2027	2,166	2,896	73	13,713	17.174	1,673
2028	2017	3,027	74	13,857	17,029	1,955
2029	1,868	3.165	75	14,003	16,868	2243
NOM	65.541	43.088	1.321	242.325	300.588	51.687
NPV	24,462	13,019	422	76.583	95,448	19.038

AVOIDED T&D AND PROGRAM FUEL SAVINGS
PROGRAM METHOD SELECTED: REV_REQ
PROGRAM NAME : Residential New Construction

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(8a)*
YEAR	AVOIDED TRANSMISSION CAP COST $(000)	AVOIDED TRANSMISSION O&M COST $(000)	TOTAL AVOIDED TRANSMISSION COST $(000)	AVOIDED DISTRIBUTION CAP COST $(000)	AVOIDED DISTRIBUTION O&M COST $(000)	TOTAL AVOIDED DISTRIBUTION COST $(000)	PROGRAM FUEL SAVINGS $(000)	PROGRAM OFF-PEAK PAYBACK $(000)
2004	0	0	0	0	0	0	116	0
2005	44	7	51	9	3	12	365	0
2006	110	18	128	22	8	30	749	0
2007	200	35	235	41	15	56	1,205	0
2008	318	58	376	64	25	89	1,875	0
2009	458	87	545	93	38	130	2,689	0
2010	610	122	732	124	53	176	2993	0
2011	587	128	715	119	55	174	3,145	0
2012	564	134	698	114	57	172	3,252	0
2013	542	140	682	110	60	170	3,395	0
2014	521	146	667	106	63	168	3,476	0
2015	501	153	653	101	66	167	3,679	0
2016	480	160	640	97	69	166	3,771	0
2017	461	167	627	93	72	165	3,844	0
2018	441	174	615	89	75	164	3,994	0
2019	421	182	603	85	78	163	4,089	0
2020	401	190	591	81	81	163	4,229	0
2021	381	198	580	77	85	162	4.316	0
2022	362	207	569	73	89	162	4.518	0
2023	342	216	558	69	93	162	4,418	0
2024	322	226	548	65	97	162	4,451	0
2025	303	236	538	61	101	162	4,484	0
2026	283	246	530	57	106	163	4,518	0
2027	265	257	523	54	111	164	4.551	0
2028	248	269	517	50	116	166	4.584	0
2029	232	281	514	47	121	168	4,617	0
NOM.	9397	4.087	13.434	1,904	1,733	3.637	87.326	0
NPV	3,956	1,310	5,266	802	562	1,364	30,830	0

* THESE VALUES REPRESENT THE COST OF THE INCREASED FUEL CONSUMPTION DUE TO GREATER OFF-PEAK ENERGY USAGE. USED FOR LOAD SHIFTING PROGRAMS ONLY.

TOTAL RESOURCE COST TEST
PROGRAM METHOD SELECTED: REV_REQ
PROGRAM NAME: Residential New Construction

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)
YEAR	INCREASED SUPPLY COSTS $(000)	UTILITY PROGRAM COSTS $(000)	PARTICIPANT PROGRAM COSTS $(000)	OTHER COSTS $(000)	TOTAL COSTS $(000)	AVOIDED GEN UNIT BENEFITS $(000)	AVOIDED T&D BENEFITS $(000)	PROGRAM FUEL SAVINGS $(000)	OTHER BENEFITS $(000)	TOTAL BENEFITS $(000)	NET BENEFITS $(000)	CUMULATIVE DISCOUNTED NET BENEFITS $(000)
20w	0	1,018	1,842	0	2,859	0	0	116	0	116	(2.744)	(2,744)
2005	0	1.555	2,815	0	4.370	0	63	365	0	429	(3,941)	(6,395)
2006	0	2,223	4,023	0	6.246	0	158	749	0	907	(5.339)	(10.979)
2007	0	2,953	5.345	0	8,298	0	291	1,205	0	1%	(6,802)	(16,389)
2008	0	3,632	6,574	0	10,206	0	465	1.875	0	2,340	(7,866)	(22,186)
2009	0	4,105	7.439	0	11,534	0	675	2,689	0	3,365	(8,170)	(27,764)
2010	0	0	0	0	0	3,343	908	2993	0	7,247	7,247	(23,179)
2011	0	0	0	0	0	2.222	888	3.145	0	6.256	6,256	(19,512)
2012	0	0	0	0	0	3,285	869	3,252	a	7.407	7.407	(15,490)
2013	0	0	0	0	0	3,636	852	3,395	0	7,384	7,884	(11,523)
2014	0	0	0	0	0	3,693	835	3.476	0	8,004	8,004	(7,791)
2015	0	0	0	0	0	4,000	820	3,679	0	8.500	8,500	(4,120)
2016	0	0	0	0	0	3.720	806	3,771	0	8,298	8,298	(799)
2017	0	0	0	0	0	1.767	792	3,844	0	6,403	6, 403	1,576
2018	0	0	0	0	0	1,047	778	3.994	0	5,820	5,820	3,575
2019	0	1,519	2,749	0	4,267	3.306	766	4,089	0	8.161	3,894	4,815
2020	0	2,354	4.269	0	6,613	4,088	754	4,229	0	9,070	2,457	5,539
2021	0	3.408	6.169	0	9.577	4, 429	742	4,316	0	9.487	(90)	5,515
2022	0	4,582	8.293	0	12,874	3,269	732	4.518	0	8,518	(4,356)	4,412
2023	0	5,688	10,295	0	15,983	613	720	4.41%	0	5, 752	(10,231)	2,012
2024	0	6,475	11,719	0	18,194	868	710	4,451	0	6,029	(12,165)	(633)
2025	0	0	0	0	0	1,128	701	4.484	0	6,313	6, 313	639
2026	0	0	0	0	0	1.398	693	4.518	0	6,608	6,608	1,872
2027	0	0	0	0	0	1,673	687	4.551	0	6,911	6,911	3,066
2028	0	0	0	0	0	1,955	683	4,584	0	7,222	7,222	4,223
2029	0	0	0	0	0	2243	682	4.617	0	7.542	7.542	5,342
NOM	0	39,510	71,513	0	111,023	51,687	17,071	87,326	0	156,083	45,060	
NPV	0	18,205	32,951	0	51,156	19,038	6,630	30,830	0	56,499	5,342	

Discount Rate: 7.93 %
Benefit/Cost Ratio (Col(11) / Col(6)) : 1.10

PARTICIPANT COSTS AND BENEFITS
PROGRAM METHOD SELECTED: REV_REQ
PROGRAM NAME: **Residential New Construction**

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
YEAR	SAVINGS IN PARTICIPANTS BILLS $(000)	TAX CREDITS $(000)	UTILITY REBATES $(000)	OTHER BENEFITS $(000)	TOTAL BENEFITS $(000)	CUSTOMER EQUIPMENT COSTS $(000)	CUSTOMER O&M COSTS $(000)	OTHER COSTS $(000)	TOTAL COSTS $(000)	NET BENEFITS $(000)	CUMULATIVE DISCOUNTED NET BENEFITS $(000)
2004	234	0	0	0	234	1,842	0	0	1,842	(1,608)	(1,608)
2005	804	0	0	0	804	4815	0	0	2,815	(2,010)	(3,471)
2006	1,630	0	0	0	1,630	4,023	0	0	4.023	(2,394)	(5,526)
2007	2,715	0	0	0	2,715	5,345	0	0	5,345	(2,630)	(7,618)
2008	4,120	0	0	0	4.120	6.574	0	0	6.574	(2,454)	(9,426)
2009	5,727	0	0	0	5,727	7.439	0	0	7.439	(1,702)	(10.589)
2010	6,576	0	0	0	6.576	0	0	0	0	6.576	(6,428)
2011	6,594	0	0	0	6,594	0	0	0	0	6,594	(2,564)
2012	6.671	0	0	0	6,671	6	0	0	0	6.671	1,060
2013	6.741	0	0	0	6.741	0	0	0	0	6.741	4,451
2014	6.741	0	0	0	6,741	0	0	0	0	6.741	7,594
2015	6,784	0	0	0	6,784	0	0	0	0	6,784	10,524
2016	6,801	0	0	0	6,801	0	0	0	0	6,801	13,246
2017	6,862	0	0	0	6,862	0	0	0	0	6,862	15.791
2018	6.983	0	0	0	6,983	0	0	0	0	6,983	18,190
2019	7.051	0	0	0	7,051	2,749	0	0	4749	4,302	19,559
2020	7,119	0	0	0	7,119	4.260	0	0	4,260	2,859	20,402
2021	7.188	0	0	0	7.188	6,169	0	0	6,169	1,019	20.681
2022	7,258	0	0	0	7,258	8,293	0	0	8,293	(1.035)	20,419
2023	7,328	0	0	0	7,328	10,295	0	0	10,295	(2,967)	19,723
2024	7,399	0	0	0	7,399	11,719	0	0	11,719	(4,320)	18,784
2025	7,471	0	0	0	7,471	0	0	0	0	7,471	20.189
2026	7,544	0	0	0	7,544	0	0	0	0	7.544	21.686
2027	7.617	0	0	0	7,617	0	0	0	0	7,617	23,013
2028	7.691	0	0	0	7.691	0	0	0	0	7,691	24,245
2029	7,766	0	0	0	7.766	0	0	0	0	7,766	25.397
NOM	157.414	0	0	0	157.414	71.513	0	0	71.513	85.901	
NPV	58,348	0	0	0	58,348	32,951	0	0	32,951	25,397	

In Service of Gen Unit: 2010
Discount Rate : 7.93 %
Benefit/Cost Ratio (Col(6) / Col(10)) 1.77

RATE IMPACT TEST
PROGRAM METHOD SELECTED: REV_REQ
PROGRAM NAME: Residential New Construction

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)
YEAR	INCREASED SUPPLY COSTS $(000)	UTILITY PROGRAM COSTS $(000)	INCENTIVES $(000)	REVENUE LOSSES $(000)	OTHER COSTS $(000)	TOTAL COSTS $(000)	AVOIDED GEN UNIT & FUEL BENEFITS $(000)	AVOIDED T&D BENEFITS $(000)	REVENUE GAINS $(000)	OTHER BENEFITS $(000)	TOTAL BENEFITS $(000)	NET BENEFITS $(000)	CUMULATIVE DISCOUNTED NET BENEFITS $(000)
2004	0	1,018	0	143	0	1,160	116	0	0	0	116	(1,044)	(1,044)
2005	0	1,555	0	490	0	2,045	365	63	0	0	429	(1,617)	(2,543)
2006	0	2,223	0	994	0	3,217	749	158	0	0	907	(2,310)	(4,526)
2007	0	2953	0	1,656	0	4,609	1,205	291	0	0	1,496	(3,113)	(7,002)
2008	0	3,632	0	2,513	0	6,145	1,875	465	0	0	2,340	(3,805)	(9,806)
2009	0	4,105	0	3,494	0	7,599	2,689	675	0	0	3,365	(4,234)	(12,697)
2010	0	0	0	4,612	0	4,012	6,339	908	0	0	7,247	3,236	(10,650)
2011	0	0	0	4,022	0	4,022	5,367	888	0	0	6,256	2,234	(9,340)
2012	0	0	0	4,070	0	4,070	6,537	869	0	0	7,407	3,337	(7,528)
2013	0	0	0	4,112	0	4,112	7,032	852	0	0	7,884	3,772	(5,630)
2014	0	0	0	4,112	0	4,112	7,169	835	0	0	8,004	3,893	(3,815)
2015	0	0	0	4,138	0	4,138	7,679	820	0	0	8,500	4,362	(1,931)
M16	0	0	0	4149	0	4,149	7,492	806	0	0	8.298	4,149	(271)
2017	0	0	0	4186	0	4.186	5,611	792	0	0	6.403	2,218	552
2018	0	0	0	4.260	0	4.260	5,041	778	0	0	5,820	1,560	1,087
2019	0	1,519	0	4,301	0	5,819	7,396	766	0	0	8,161	2,342	1,833
2020	0	2354	0	4.343	0	6,696	8,316	754	0	0	9,070	2,374	2,533
2021	0	3.408	0	4.385	0	7,793	8,745	742	0	0	9,487	1,694	2,996
2022	0	4,582	0	4,427	0	9.009	7,787	732	0	0	3.518	(491)	2,872
2023	0	5.688	0	4,470	0	10,158	5.031	720	0	0	5.752	(4,407)	1,838
2024	0	6.475	0	4,514	0	10,988	5.3 W	710	0	0	6,029	(4,959)	760
2025	0	0	0	4.557	0	4.557	5,613	701	0	0	6,313	1,756	1,114
2026	0	0	0	4,602	0	4,602	5.915	693	0	0	6.608	2,006	1,488
2027	0	0	0	4.646	0	4,646	6,224	687	0	0	6,911	2,264	1,880
2028	0	0	0	4.691	0	4.691	6.539	683	0	0	7,222	2,530	2,285
2029	0	0	0	4,737	0	4.737	6.860	682	0	0	7,542	2,805	2,701
NOM	0	39.510	0	96,023	0	135,532	139.012	17,071	0	0	156,083	20,551	
NPV	0	18,205	0	35,592	0	53,797	49,869	6,630	0	0	56,499	2,701	

Discount Rate 7.93 %

Benefit/Cost Ratio (Col(12) / Col(7)) : 1.05

APPENDIX C

BUILDSMART™ REDESIGN OVERVIEW

APPENDIX C

BUILDSMART™ REDESIGN OVERVIEW

Background

FPL'S BuildSmart™ Program is designed to promote the construction of energy-efficient homes. While Florida has maintained a significant share of the national residential new home construction market, BuildSmart™ has experienced difficulty in reaching its forecasted participation levels since its system-wide launch in October 1997. A situational analysis of the current BuildSmart™ Program revealed that the Program performs well overall relative to most homebuyers' needs but performs poorly against key needs identified by homebuilders.

The target audiences for the BuildSmart™ Program are homebuilders and homebuyers, each of whom have different needs. Sometimes these needs conflict. The following table lists primary needs of builders and homebuyers based on research and feedback from FPL BuildSmart™ representatives.

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	

FPL's in-market experience indicates that the **builder** is FPL's "keystone" customer, that is, the builders are central to the process of marketing BuildSmart™, and they have the greatest impact on the success or failure of the program.

Beyond the basic homebuyer and builder needs, the need for flexibility and price/cost sensitivity further distinguish homebuyers and builders into two primary sub-markets: production or custom. In regard to flexibility, custom homebuilders are more flexible than production homebuilders in terms of modifying house plans to a specific homebuyer's tastes or including a wide range of custom options. Production homebuilders attempt to minimize changes to maximize production efficiency and to achieve volume purchase discounts. 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.

Based upon these findings from the situational analysis, recommendations were developed to optimize the program features and specifications to meet the critical needs of builders while preserving and enhancing the features valued by homebuyers. These recommendations have resulted in a number of proposed changes to the BuildSmart™ Program. 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. A detailed discussion of the proposed changes follows.

Proposed Program Changes

1. Introduce a "prescriptive" program approach to complement the existing flexible program approach. This 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. Table 1 below describes this approach in more detail and in comparison to the current approach.

Table 1: Summary Comparison of Program Components and Features

		Redesigned Program	
	Existing Program	"Prescriptive" Approach	"Flexible" Approach
Participation Requirements	• Install measures to reach one of three levels tied to EPI– Bronze, Silver or Gold	• Install prescriptive measures targeted to result in an EPI rating:< 91	• Install measures that exceed "Prescriptive" approach requirements and result in an EPI rating < 81
Dwelling types	• Single family detached	• Single family detached • Single family attached homes	
Participation costs	• Combination of cost of measures + BuildSmart fees	• 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	
EPI calculations	• Performed for each participating home	• Based on analysis of model home design	• Performed for each participating home

2. **Modify the existing 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 efficiency level for the flexible approach to a minimum of 20% more energy efficient than required by the Florida Energy Efficiency Code and create a lower efficiency level of 10% better than the Code for the prescriptive approach. These changes are designed to address builders' and homebuyers' dissatisfaction with the use of levels in distinguishing BuildSmart™-certified homes. 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% gains in efficiency. **A** significant amount of the production homes targeted under the prescriptive approach are unlikely to achieve such levels.

3. 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 EPI ratings without certification. The service levels other than the basic service have received very little interest and do not warrant continued inclusion in the program.

4. Eliminate program participation fees. The current program requires participation fees, with lower fees being charged to homes with higher levels of efficiency. **A** major impediment to builder participation has been the fees associated with participation in the BuildSmart™ program. Builders, and especially the large volume production builders that are necessary for the program to achieve scale economies, are often unwilling to pay per-home participation fees in addition to the investments they must make to achieve high energy efficiency 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."

5. Permit single family attached dwellings **to** participate in the program. Cost-effectiveness analyses revealed that single-family attached dwellings can be cost effectively included in the program depending on their configuration. Production builders frequently develop entire communities that include a mix of single family detached and single family attached dwellings. These builders believe that both types of dwellings must be certified as BuildSmart™ to avoid homebuyers' perception that the attached dwellings are inferior.

6. Provide builder incentives, such **as** cooperative advertising incentives, for achieving **ENERGY STAR@** certification. FPL will provide builder incentives for qualifying BuildSmart™ homes that also achieve ENERGY STAR® certification.

Redesigned Program Measures

The redesigned Program includes two approaches each targeted at a specific sub-market's needs. The "Prescriptive" approach is targeted at meeting the needs of the production builder/homebuyer sub-market and will include measures related to HVAC, ductwork and insulation. The "Flexible" approach is targeted at the custom builder/homebuyer sub-market and will allow any combination of measures permitted by energy rating tools and necessary to achieve an energy efficiency rating at least 20% better than the rating required by the Florida Energy Efficiency Code. The FPL BuildSmart™ Program Standards will detail all applicable measures.