



March 30, 2010

100160-EG

Ms. Ann Cole, Commission Clerk
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, FL 32399-0850

Re: PEF's Petition for Approval of Proposed Demand-Side Management Plan

Dear Ms. Cole:

Enclosed for filing are the original and 15 copies of PEF's Petition for Approval of Proposed Demand-Side Management Plan with the proposed DSM plan attached.

This filing is in compliance with page 37 of Commission Order No. PSC-09-0855-FOF-EG issued December 30, 2009. Staff has recommended that each utility file its plan as an undocketed matter, indicating that a new docket will be created for each utility's DSM Plan.

Thank you for your assistance in this matter and please let me know if you have any questions.

Sincerely,

John T. Burnett

JTB/at
Attachments

COM	___
APA	___
ECR	___
GCL	3
RAD	12
SSC	___
ADM	___
OPC	___
CLK	___

DOCUMENT NUMBER - DATE

02307 MAR 30 09

FPSC-COMMISSION CLERK

BEFORE THE PUBLIC SERVICE COMMISSION

In Re: Petition for Approval of Modifications
to Progress Energy Florida, Inc.'s
Demand-Side Management Plan

Docket No. 100160-EG

Filed: March 30, 2010

**PROGRESS ENERGY FLORIDA, INC.'S PETITION FOR APPROVAL
OF PROPOSED DEMAND-SIDE MANAGEMENT PLAN**

Progress Energy Florida, Inc. ("PEF"), pursuant to Sections 366.82 and 366.06(1), Florida Statutes (2009), Rule 25-17.0021, Florida Administrative Code ("F.A.C."), and Order No. PSC-09-0855-FOF-EG, petitions the Florida Public Service Commission ("Commission") to approve PEF's Demand-Side Management ("DSM") Plan, which is being filed with this petition, and to authorize PEF to recover through the Energy Conservation Cost Recovery ("ECCR") clause reasonable and prudent expenditures associated with implementation of PEF's DSM Plan.

In support of this petition, PEF states:

1. PEF is a public utility subject to the jurisdiction of the Commission pursuant to Chapter 366 of the Florida Statutes. PEF's general offices are located at:

Progress Energy Florida, Inc.
299 First Avenue North
St. Petersburg, Florida 33701

2. Notices, orders, pleadings and correspondence to be served upon PEF in this proceeding should be directed to:

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Progress Energy Florida
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Tallahassee, FL 32301
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3. PEF is an investor-owned electric utility regulated by the Commission pursuant to Chapter 366, Florida Statutes. PEF is subject to FEECA, Sections 366.80-366.85 and 403.519, Florida Statutes (“F.S.”). Pursuant to FEECA and Commission rules implementing FEECA, PEF is required to file a DSM Plan for Commission approval and is entitled to seek recovery of associated expenditures. PEF currently has a Commission-approved DSM plan, but the Commission recently approved new conservation goals for PEF. Under Commission rules implementing FEECA and Order No. PSC-09-0855-FOF-EG that was subsequently revised by Commission vote on March 16, 2010, PEF must file a plan designed to achieve these goals. PEF has a substantial interest in whether the Commission approves the proposed DSM Plan and authorizes cost recovery for plan implementation expenditures.

PEF’s Existing DSM Plan

4. PEF’s most recent DSM Plan was approved by the Commission in August 2004.¹ The Commission approved PEF’s DSM Plan for meeting its conservation goals established in that docket. Subsequent to the submission and approval of PEF’s DSM Plan in 2004, the Plan has been modified.² PEF’s DSM Plan currently contains 16 programs incorporating over 100 measures. Through its conservation programs, PEF offers a wide array of conservation measures and audit services to its customers.

¹ PEF petitioned for plan approval on May 28, 2004. The Commission issued a PAA Order, Order No. PSC-04-0769-PAA-EG, on August 9, 2004, setting new numeric goals for PEF for the period 2005-2014 and approved PEF’s proposed plan. There were no protests of that order.

² In January, 2006, PEF petitioned for approval of modifications to its Residential Home Energy Improvement Program, Residential New Construction Program, Residential Low Income Weatherization Assistance Plan, Better Business Program, and Commercial/Industrial New Construction Program. In addition, PEF proposed modifications to its Program Participation Standards (to match certain HVAC regulation changes taking effect on July 1, 2006) and language refinements to certain programs for clarification of eligibility and requirements. By Order No. PSC-06-0537-PAA-EG, issued June 26, 2006, in Docket 060048-EG, the Commission approved PEF’s request. In September 2006, PEF requested Commission approval of cost-effective modifications to three residential programs (Home Energy Improvement, New Construction, and Residential Energy Management) and three commercial programs (Better Business, Commercial/Industrial New Construction, and Standby Generation). PEF also requested approval of two residential program additions (Neighborhood Energy Saver and Renewable Energy Programs). By Order No. PSC-06-1018-TRF-EG, issued December 11, 2006 in Docket 060647-EG, the Commission approved PEF’s request. There were no protests of that order.

PEF's Proposed DSM Plan

5. PEF's proposed DSM Plan, which is described in detail in the Plan Document attached as Appendix A to this Petition, will continue all 16 of PEF's approved conservation offerings. Of these 16 existing conservation offerings, PEF is proposing to continue 2 of the programs or projects with no modifications.³ PEF is requesting modifications to 14 of the existing programs.⁴ An overview of PEF's DSM Plan may be found in Section III of the Plan Document. PEF proposes to initiate program modifications and new programs after the Commission has approved the modifications and related changes to Program Standards and there has been an opportunity to properly implement the program changes.

6. PEF's DSM Plan is designed to meet the conservation goals approved for PEF by the Commission in Order No. PSC-09-0855-FOF-EG that was subsequently revised by Commission vote on March 16, 2010 to the best of PEF's ability.

7. In Sections IV, V, and VI of the plan document, PEF has provided a cost-effectiveness analyses for each of the proposed programs for which cost-effectiveness can be calculated.

8. PEF's monitoring efforts for each of its DSM programs and research projects are set forth in the program and project summaries in PEF's Plan Document.

9. PEF is not aware of any disputed issues of material fact. PEF's proposed DSM Plan, which is contemporaneously filed with this Petition, should be approved and the Commission should authorize recovery of the reasonable and prudent expenditures associated with PEF's DSM Plan through PEF's ECCR clause. PEF's proposed programs, as reflected in the plan document attached, should be approved, including the Tariff revisions to sheet nos. 2.6,

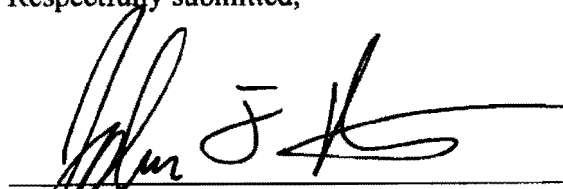
³ The existing programs and projects that PEF proposes to continue with no modifications are: Residential Energy Management, and Qualifying Facilities.

⁴ The programs and projects PEF proposes to continue with modifications are presented in Table III-1.

6.229, and 6.226, (Section VIII of the plan document attached) which are needed to implement the proposed plans. The statutes and rule which entitle PEF to relief are Sections 366.82(11), 366.06(1), F.S. (2009), and Rule 25-17.0021, F.A.C.

WHEREFORE, PEF respectfully requests that the Commission: (1) approve PEF's proposed DSM Plan, a copy of which is filed with this petition, as well as the tariff revisions contained in Section IX of the plan document attached; (2) authorize PEF to recover through its ECCR clause reasonable and prudent expenditures associated with the implementation of the modifications to PEF's DSM Plan; (3) direct PEF to file revisions to its Program Standards for administrative approval within 30 days of the Order approving PEF's DSM Plan in order to implement the Commission decision of this petition; and (4) grant such other relief as may be appropriate.

Respectfully submitted,



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Appendix A

Progress Energy Florida

PROPOSED 2010

DEMAND SIDE MANAGEMENT

PROGRAM PLAN

DOCUMENT NUMBER-DATE
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FPSC-COMMISSION CLERK

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I. INTRODUCTION

In accordance with Sections 25-17.001-.005, Florida Administrative Code, the Florida Public Service Commission (the “Commission”) requested numeric conservation goals, testimony and a Demand Side Management (DSM) Program Plan for Progress Energy Florida (“Progress Energy” or “PEF”) in Docket No. 080408-EG. Progress Energy is submitting this DSM Plan to meet the requirements resulting from the goals stated in Order No. PSC-09-0855-FOF-EG issued on December 30, 2009, reduced for a double counting error recognized and voted upon by the Commission on March 16, 2010 as follows: Summer (MW): 1,134; Winter (MW): 1,058; Energy(GWh): 3,205.

Progress Energy will endeavor to achieve the extremely aggressive conservation goals that the Commission has mandated. Although Progress Energy is proposing a plan to implement the Commission’s new aggressive goals, it is unclear at this time whether meeting such aggressive goals is feasible. Progress Energy’s proposed plan is intended to maximize participation and implementation processes to motivate customers to take full advantage of the programs and incentives presented.

Additionally, Progress Energy will strive to accomplish the total goal as we embark upon strategies and techniques that we have not utilized in the past. Meeting the new goals, however, will provide significant challenges that are restricted by time, customer awareness, product availability, economics, and emerging energy standards and codes. While there is significant uncertainty regarding PEF’s ability to achieve these goals, Progress Energy has designed this plan to leverage our decades of historical success in the implementation and effective management of highly successful energy efficiency programs. This success, based on the rate

impact measure test, has resulted in savings to our customers of over \$1 billion dollars on their electric bills.

This document is organized into nine sections:

- **Section I** provides an introduction of the DSM Program Plan.
- **Section II** presents an Executive Summary of Progress Energy’s proposed Demand Side Management Plan, summarizing the goals and cumulative impacts of the plan.
- **Section III** discusses general issues associated with demand-side management planning and implementation, including program operation, cost-effectiveness, program monitoring and evaluation, and cost-recovery.
- **Section IV** presents Progress Energy’s proposed residential programs.
- **Section V** presents Progress Energy’s proposed commercial/industrial programs.
- **Section VI** presents Progress Energy’s Demand Side Renewable Portfolio.
- **Section VII** presents Progress Energy’s Technology Development program.
- **Section VIII** presents Progress Energy’s Qualifying Facilities program.
- **Section IX** presents Progress Energy’s Tariff Revisions.

II. EXECUTIVE SUMMARY

The DSM Plan consists of eight residential programs, eleven commercial and industrial (C/I) programs, and an innovative demand side renewable portfolio consisting of six pilot programs. Included in these programs and pilots are three focused on low income families and one specifically focused on businesses located in low income neighborhoods. Additionally, the Plan includes a technology research and development program and a qualifying (small power production or cogeneration) facilities program. These programs were designed to offer energy solutions to all segments of customers in Progress Energy's service territory.

RESIDENTIAL PROGRAMS	COMMERCIAL INDUSTRIAL PROGRAMS
Home Energy Check	Business Energy Check
Home Energy Improvement	Better Business
Residential New Construction	Commercial/Industrial New Construction
Neighborhood Energy Saver	Business Energy Saver
Low Income Weatherization Assistance	Commercial Education
Residential Energy Management	Commercial Green Building New Construction
Residential Education	Innovation Incentive
Technical Potential	Standby Generation
	Interruptible Service
	Curtable Service
	Business Energy Response
Demand Side Renewable Portfolio	
Technology Development	
Qualifying Facilities	

Summary of the Portfolio

The DSM Plan represents the Company's best attempt at meeting the aggressive savings levels mandated by the PSC in its December 30, 2009 Order, reduced for a double counting error recognized and voted upon by the Commission on March 16, 2010.

The proposed DSM Portfolio represents:

- Programs and measures based on industry best practices and the Company's extensive experience in developing and delivering DSM Programs
- The continuation of the Company's push for market transformation through a comprehensive and innovative portfolio of programs
- Sustainability of savings through an enhanced educational component
- Flexibility and management of risk. While the Plan represents a comprehensive approach to meet the Commission's direction, it acknowledges the uncertainty of the marketplace during unprecedented adverse economic conditions. To respond to these changes, the Plan has been designed to shift program and measure composition to meet market evolution.
- New and enhanced two-way communication system to support a diverse mix of opportunities to reach customers in new ways that will enhance customer choice and energy decision-making

- Scalability as infrastructure is developed, technologies evolve and partnerships with other organizations are leveraged to maximize participation through innovative and expanded delivery channels

Tables II-1 and II-2 present the cumulative demand and energy impacts projected to be achieved by this DSM Plan toward the Commission established goals for each year during the planning period 2010-2019, for the residential and C/I sectors, respectively.

Table II-1

Proposed Residential Plan 2010 DSM Filing						
Year	Projected Summer Demand Savings (MW)		Projected Winter Demand Savings (MW)		Projected Annual Energy Savings (GWh)	
	Incremental	Cumulative	Incremental	Cumulative	Incremental	Cumulative
2010	47.45	47.45	64.19	64.19	97.93	97.93
2011	50.95	98.40	71.95	136.14	114.53	212.46
2012	57.15	155.56	76.22	212.36	137.18	349.64
2013	62.32	217.88	80.18	292.54	158.01	507.65
2014	66.42	284.30	84.11	376.65	173.59	681.23
2015	85.74	370.04	88.87	465.51	258.07	939.30
2016	111.18	481.22	107.74	573.25	335.26	1274.55
2017	129.40	610.61	121.06	694.31	393.09	1667.65
2018	147.37	757.99	133.23	827.54	478.83	2146.47
2019	151.95	909.93	132.30	959.84	525.56	2672.04

Table II-2

Proposed Commercial Plan 2010 DSM Filing						
Year	Projected Summer Demand Savings (MW)		Projected Winter Demand Savings (MW)		Projected Annual Energy Savings (GWh)	
	Incremental	Cumulative	Incremental	Cumulative	Incremental	Cumulative
2010	14.39	14.39	8.67	8.67	24.51	24.51
2011	14.67	29.05	8.87	17.54	27.17	51.68
2012	24.09	53.14	11.28	28.82	37.85	89.53
2013	25.37	78.51	12.97	41.79	36.07	125.60
2014	29.03	107.55	16.17	57.96	46.95	172.55
2015	31.25	138.80	17.92	75.87	59.74	232.29
2016	33.53	172.33	18.44	94.31	69.64	301.93
2017	36.20	208.53	19.11	113.42	77.56	379.50
2018	37.62	246.15	18.02	131.44	85.05	464.54
2019	34.30	280.45	12.12	143.56	68.06	532.60

Proposed Residential and Commercial/Industrial Segment Demand and Energy Data provided in Tables 11-1 and 11-2 include the Demand Side Renewable Demand and Energy Data provided in Table 11-3

Table II-3

Proposed Demand Side Renewable Plan 2010 DSM Filing						
Year	Projected Summer Demand Savings (MW)		Projected Winter Demand Savings (MW)		Projected Annual Energy Savings (GWh)	
	Incremental	Cumulative	Incremental	Cumulative	Incremental	Cumulative
2010	1.43	1.43	2.58	2.58	2.58	2.58
2011	3.11	4.53	5.17	7.74	6.48	9.05
2012	3.11	7.64	5.17	12.91	6.48	15.53
2013	3.11	10.75	5.17	18.08	6.48	22.01
2014	3.11	13.85	5.17	23.24	6.48	28.49

Table II-4, below, summarizes the energy goals (GWh) over the life of the plan, the program costs broken out for DSM and renewables, the residential ECCR at 1,200 KWh/month and non-fuel revenue impacts.

Table II-4

Progress Energy Florida DSM Cost Estimates

DSM Plan Reductions (GWh) (1)			DSM Plan Cost (2)		Residential ¹ ECCR Impacts @ 1200 kWh (3)	System Commission Approved Fixed Cost @ \$43/MWh (4) (1b x \$ 43 MWH)	System Program Cost + Non-fuel Revenue Impacts (2a +2b + 4)
Year	Annual (1a)	Cumulative (1b)	Energy Efficiency and Demand Response (2a)	Renewables (2b)			
<i>Current</i>	51		\$87,007,178		\$3.24		
2010	122	122	\$178,008,360	\$1,784,953	\$6.38	\$4,250,048	\$184,043,361
2011	142	264	\$189,863,075	\$6,467,592	\$7.06	\$9,231,491	\$205,562,158
2012	173	437	\$235,248,605	\$6,467,592	\$8.53	\$15,180,237	\$256,896,433
2013	197	634	\$305,962,269	\$6,467,592	\$10.92	\$22,028,586	\$334,458,447
2014	224	859	\$352,567,594	\$6,467,592	\$12.65	\$29,577,618	\$388,612,804
2015	317	1,176	\$502,276,233		\$17.66	\$40,812,676	\$543,088,909
2016	401	1,577	\$603,162,160		\$21.01	\$55,385,993	\$658,548,153
2017	467	2,044	\$725,615,764		\$24.97	\$72,439,462	\$798,055,226
2018	557	2,600	\$824,964,938		\$28.04	\$93,168,173	\$918,133,111
2019	604	3,205	\$892,060,225		\$30.17	\$115,904,950	\$1,007,965,176
TOTALS	3,205	3,205	\$4,809,729,222	\$27,655,321	Avg. \$16.76	\$457,979,235	\$5,295,363,778
Assumed 10 Year Life Total		32,046				\$1,377,991,870 ²	

¹ Residential Class ECCR impacts of the program costs in 2a and 2b based on PEF's standard ECCR calculation, calculated by applying those program costs to the residential class ECCR demand and energy allocation factors, summing the resulting costs, dividing that sum by the kWh energy sales for that customer class, and multiplying by 1200.

² Assumes average 10 year life of measures implemented each year of Plan

Table II-5, below, is the estimated annual program costs and residential bill impact per 1,200 KWh, relative to that ordered by the Commission. Included are the Lost Base Revenues and average impacts over the plan's ten-year life. The allocation indicated in Table II-5 would have a greater impact in the initial years of the plan, during adverse economic times.

Table II-5

Commission Goal Allocation

FPSC Approved 3,205 GWH			
Year	Program Costs	Residential Bill Impacts per 1,200 KWh	Lost Base Revenues
2010	\$407,672,066	\$14.08	\$11,531,495
2011	\$421,313,659	\$14.70	\$23,383,853
2012	\$439,466,065	\$15.42	\$35,826,052
2013	\$477,375,820	\$16.75	\$48,697,594
2014	\$507,790,812	\$18.10	\$62,171,731
2015	\$564,710,873	\$20.41	\$76,826,764
2016	\$537,018,595	\$19.42	\$90,891,235
2017	\$519,678,069	\$18.62	\$104,623,786
2018	\$489,725,776	\$17.24	\$117,474,335
2019	\$472,632,808	\$16.34	\$129,567,237
Total	\$4,837,384,543	N.A.	\$700,994,082
Average	\$483,738,454	\$17.12	\$70,099,408

III. PROGRAM INTRODUCTION

A. PROGRAM OBJECTIVES

This Demand Side Management Plan has been designed to meet the following objectives:

- Achieve, to the extent reasonably possible, the cumulative conservation goals for 2010-2019 established in Docket No. 080408-EG
- Fulfill the requirements of Section 366.82(3)(b), F.S.
- Reduce and control the growth rates of electric consumption and weather sensitive peak demand
- Provide enhanced efficiency measures in all end-use sectors
- Offer enhanced energy efficiency options for our low income customers to include the expansion of low income focused programs (Neighborhood Energy Saver, Business Energy Saver, and Low Income Weatherization), the inclusion of community based efforts, increased energy efficiency options for the rental community, and the addition of a solar thermal assistance program for low income families
- Increase emphasis on the development of demand side renewable pilot programs, as advised in amendments to Section 366.82 (2), F.S., with consideration of the expenditure cap placed on the development of these technologies
- Provide opportunities for the inclusion of measures that have less than a two-year payback

- Influence customer behaviors by offering energy efficiency education
- Promote measurable, sustainable achievements through cost effective monitoring and evaluation of program measures

Progress Energy's Demand Side Management Plan is designed to meet the aggressive, new cumulative goals, with the recognition that we will need to establish the infrastructure to enable the addition of new and emerging technologies needed to enhance our program complement in order to meet the aggressive Technical Potential portion of the goals. Additionally, as the market for a product matures and early adopters have been exhausted, customer adoption of measures is expected to become more difficult to achieve through standard marketing practices such as advertising and promotion strategies; making it even more difficult to meet the established goals. We anticipate that customer incentives will prove to be a key market driver that will impact the adoption of our program offerings; therefore we expect to analyze and re-file adjustments to our program incentives and participation estimates as needed.

As a result, Progress Energy has developed a plan that recognizes the barriers that may impede rapid deployment and long-term attainment of the mandated goals.

B. PROGRAM OPERATION

The focal point for both residential and the commercial/industrial sector programs is an energy audit program (Home Energy Check program for residential customers and Business Energy Check program for Commercial/Industrial customers). The energy audit program serves multiple purposes to satisfy the needs of Progress Energy, and its customers such as:

- Identify opportunities for improving energy efficiency at the customer's home or facility
- Serve as a mainline tool to introduce customers to Progress Energy's other conservation programs
- Assist Progress Energy in minimizing free ridership in other Demand Side Management programs, with the exception of the Technical Potential program
- Satisfy the Commission's mandate to offer energy audit services

For the residential sector, Progress Energy has consolidated most measures into eight programs consisting of:

Six Existing Programs:

- Home Energy Check
- Home Energy Improvement
- Residential New Construction
- Neighborhood Energy Saver

- Low Income Weatherization
- Residential Energy Management

Two New Programs:

- Residential Education program designed to focus on energy efficiency education and behavioral changes
- Technical Potential program intended to act as a means to generate awareness within the residential customer base regarding measures that have a payback period of two years or less

For the commercial/industrial sector, Progress Energy has consolidated most of the measures into eleven programs, consisting of:

Seven Existing Programs:

- Business Energy Check
- Better Business
- Commercial/Industrial New Construction
- Innovation Incentive
- Standby Generation
- Interruptible Service

- Curtailable Service

Four New Programs:

- Business Energy Saver program for our commercial customers located in low-income areas
- Commercial Education program designed to influence educational and behavioral changes
- Commercial Green Building New Construction program designed to achieve optimal energy efficiency from new commercial facilities under construction
- Business Energy Response program enables commercial/industrial customers to utilize current energy usage data to identify opportunities to reduce electric consumption during high peak/rate periods

An additional enhancement to our program offerings is the Demand Side Renewable Portfolio, a comprehensive group of pilot programs designed to emphasize the benefits of solar photovoltaic technology, encourage development of renewable programs, and place an added emphasis on low income and education pilots.

For residential customers we propose the following pilot programs:

- Solar Water Heating for Low-income Residential Customers
- Solar Water Heating with Energy Management
- Residential Solar Photovoltaic

For our commercial customers we propose the following pilot programs:

- Commercial Solar Photovoltaic
- Pilot Photovoltaic for Schools
- Research & Demonstration Component

The Technology Development program pursues research, development and demonstration projects of potential energy saving technologies to help determine new possible cost-effective measures. These projects may represent individual ventures as well as partnerships.

Additionally, under the Qualifying Facilities program, Progress Energy develops standard offer contracts, negotiates, enters into, amends and restructures firm energy and capacity contracts entered into with qualifying cogeneration and small power production facilities, and administers all such contracts.

C. COST-EFFECTIVENESS TESTS

Programs have been analyzed for cost-effectiveness using the Commission-approved tests described in Rule 25-17.008, Florida Administrative Code, with the exception of the following programs:

Program	Reason for Exception
Home Energy Check	Mandated in 25-17.003(3)(b)
Technical Potential	Mandated in Order No. PSC-09-0855-FOF-EG
Business Energy Check	Addressed in 25-17.003(3)(d)
Innovation Incentive	Cost effectiveness tests will be conducted at project consideration
Research and Development of the Demand Side Renewable Portfolio	Mandated in 25-17.001(5)(f)
Technology Development	Mandated in 25-17.001(5)(f)
Qualifying Facilities	Mandated in 25-17.082(1)

The Strategist Model was used to evaluate the applicable Demand Side Management programs against potentially avoidable supply-side capacity. In contrast to static models, Strategist is a more sophisticated dynamic model which more closely simulates the operation of the power system. For example, Strategist is directly integrated with other supply-side planning models,

thereby allowing variables such as marginal fuel costs, hourly production costs, and generation equivalency to be computed and applied.

A summary of the cost-effectiveness results for each of the applicable Demand Side Management programs included in this Demand Side Management Plan is shown in Table III-1. In addition, detailed program cost-effectiveness results are presented at the end of each applicable program discussion in Sections IV-VI of this document. These detailed results consist of one page each for the Rate Impact Measure (RIM), Total Resource Cost (TRC), and Participant Tests.

Summary of Demand Side Management Programs Included in Proposed Plan

Period 2010-2019

Table III-1

DSM Measure	Rate Impact Measure Test			Participant Test			Total Resource Cost Test			Program Status
	NPV Total Benefits (\$000)	NPV Total Costs (\$000)	B/C Ratio	NPV Total Benefits (\$000)	NPV Total Costs (\$000)	B/C Ratio	NPV Total Benefits (\$000)	NPV Total Costs (\$000)	B/C Ratio	
Residential Conservation Programs										
Home Energy Check	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Modified
Home Energy Improvement	\$607,154	\$817,766	0.74	\$679,464	\$373,711	1.82	\$607,154	\$512,013	1.19	Modified
Residential New Construction	\$85,349	\$114,615	0.74	\$99,725	\$53,153	1.88	\$85,349	\$68,043	1.25	Modified
Neighborhood Energy Saver	\$80,274	\$128,171	0.63	\$103,826	\$48,721	2.13	\$80,274	\$73,066	1.10	Modified
Low Income Weatherization	\$14,755	\$20,326	0.73	\$11,394	\$3,595	3.17	\$14,755	\$12,527	1.18	Modified
Residential Energy Management	\$950,529	\$810,825	1.17	\$279,444	\$0	N/A	\$950,529	\$531,381	1.79	Existing
Residential Education	\$224,249	\$332,094	0.68	\$207,918	\$15,249	13.64	\$224,249	\$139,425	1.61	New
Technical Potential	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	New
Commercial/Industrial Conservation Programs										
Business Energy Check	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Modified
Better Business	\$152,494	\$221,863	0.69	\$201,890	\$123,570	1.63	\$152,494	\$143,542	1.06	Modified
Commercial/Industrial New	\$48,870	\$68,945	0.71	\$59,073	\$36,940	1.60	\$48,870	\$46,812	1.04	Modified
Business Energy Saver	\$2,257	\$3,174	0.71	\$2,987	\$1,640	1.82	\$2,257	\$1,827	1.24	New
Commercial Education	\$11,198	\$17,735	0.63	\$10,584	\$988	10.72	\$11,198	\$8,138	1.38	New
Commercial Green Building	\$9,563	\$19,078	0.50	\$17,794	\$7,916	2.25	\$9,563	\$9,200	1.04	New
Innovation Incentive	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Modified
Standby Generation	\$80,510	\$11,584	6.95	\$10,235	\$0	N/A	\$80,510	\$1,349	59.68	Modified
Interruptible Service	\$6,187	\$1,315	4.71	\$1,127	\$0	N/A	\$6,187	\$187	33.06	Modified
Curtable Service	\$4,508	\$720	6.26	\$663	\$0	N/A	\$4,508	\$57	78.80	Modified
Business Energy Response	\$337,889	\$316,024	1.07	\$6,804	\$0	N/A	\$337,889	\$130,891	2.58	New
Demand Side Renewable Portfolio										
Solar Water Heating for Low-income Residential Customers	\$359	\$906	0.40	\$745	\$392	1.90	\$359	\$553	0.65	New
Solar Water Heating with Energy management	\$34,097	\$28,707	1.19	\$33,388	\$28,811	1.16	\$41,138	\$31,171	1.32	Modified
Residential Solar Photovoltaic	\$4,469	\$8,761	0.51	\$11,361	\$13,958	0.81	\$7,511	\$14,400	0.52	New
Commercial Solar Photovoltaic	\$5,119	\$8,809	0.58	\$10,904	\$12,714	0.86	\$7,713	\$13,213	0.58	New
Photovoltaics for Schools	\$1,681	\$7,913	0.21	\$4,550	\$1,042	4.37	\$5,100	\$7,824	0.65	New
Research & Development	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	New
Technology Development	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Modified
Qualifying Facilities	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	Existing

D. PROGRAM MONITORING AND EVALUATION

Program monitoring and evaluation are important components of Demand Side Management implementation. Specifically, program monitoring includes tracking program accomplishments and ensuring quality control. Program evaluation documents the energy and demand impacts of the program and also recommends how the program can be improved by increasing savings, reducing costs, or increasing participation.

The program monitoring and evaluation methodologies that Progress Energy intends to use will include consideration of a variety of data sources such as customer specific audit and usage data; customer survey data regarding equipment stock, equipment usage, demographics, and building characteristics; weather data; and load research metering data. Thus, Progress Energy will determine on a program-by-program basis the most cost-effective evaluation method to employ based on factors such as participation levels, program performance, dollars invested, the level of uncertainty of measure performance, etc.

E. COST-RECOVERY

Progress Energy submits the programs herein described for approval and for inclusion as cost recoverable Conservation and Energy Efficiency programs under current Commission-approved procedures pursuant to Rule 25-17.015, Florida Administrative Code (“F.A.C.”), and recovers all prudent costs associated with the development, implementation, and administration of all program and pilots submitted with this Demand Side Management Plan.

Additionally, Progress Energy seeks cost recovery for previously closed programs that have ongoing costs associated with grandfathered participants. These programs include Commercial Energy Management, Interruptible Service (IS-1) and (IST-1), and Curtailable Service (CS-1) and (CST-1).

IV. RESIDENTIAL CONSERVATION PROGRAMS

Progress Energy's Demand Side Management Plan includes eight (8) residential programs:

- Home Energy Check - program focused on residential energy audits
- Home Energy Improvement - program focused on existing homes (single family, multi-family and manufactured homes)
- Residential New Construction - program for new construction, multi-family, and manufactured homes
- Neighborhood Energy Saver - program designed to assist low-income families with energy costs by making energy efficiency improvements
- Low Income Weatherization Assistance - program designed for the weatherization of low income family homes
- Residential Energy Management - program focused on residential load control
- Residential Education – program focused on energy efficiency education and behavioral changes
- Technical Potential – program designed to generate awareness regarding measures that have a payback period of two years or less

Each program is described in detail in the following sections.

A. HOME ENERGY CHECK PROGRAM

Program Start Date: 1995

Modifications proposed in 2010

Program Description

The Home Energy Check is Progress Energy's residential energy audit program which provides customers with an analysis of their energy use and recommendations on how they can save on their electricity bill. The audit also provides education on the implementation of minimal cost energy-saving practices and measures providing Progress Energy the opportunity to promote cost effective measures. The Home Energy Check serves as the foundation for participation in the Home Energy Improvement program through recommendations for the retrofit-type components of the Home Energy Improvement program.

The Home Energy Check program offers the following types of energy audits:

- Type 1: Free Walk-Through
- Type 2: Customer-completed Mail-In
- Type 3: Customer Online (Internet Option)
- Type 4: Customer Phone Assisted
- Type 5: Home Energy Check for Kids
- Type 6: Paid Walk-Through (Computer Assisted Audit)

- Type 7: Home Energy Rating (Class I, II)

The Free Walk Through audit has been enhanced to include a mobile delivery method that will help guide the company's improvements in its residential energy audits. This enhanced delivery of the Free Walk-Through provides the energy auditor with a more effective way to input information about the customer's home. The mobile device will address customer needs immediately through online information, and it will print a copy of the report while at the customer's home emphasizing the steps that the customer should focus on for improving energy efficiency. The mobile audit also allows the upload of the energy audit results to the company's customer database. The company intends to build on the benefits of this platform to increase the value it provides as well as to assure the customers' satisfaction with this energy audit.

Policies and Procedures

All residential customers of Progress Energy are eligible to receive any of the above energy audits conducted on residentially metered buildings, located in Progress Energy's service territory. There is no charge for Type 1 through Type 5 home energy checks, but there is a \$15 customer charge for the Type 6 Home Energy Check. When a customer requests a Home Energy Check, they will be given the option of receiving a Type 2 Home Energy Check survey in the mail, a Type 4 Phone Assisted Home Energy Check or the option of scheduling a Type 1 or Type 6 Walk-through Home Energy Check. A Progress Energy auditor will usually conduct the Walk-through Home Energy Check, although Progress Energy reserves the option to work with other agencies and/or utilities as an extension of Progress Energy's services, in which case an approved energy auditor from another organization may conduct the Home Energy Check. The Home Energy Rating as outlined in Progress Energy's "Florida Energy Gauge Ratings" rate tariff

(Section II, sheet number 2.6) is available to all eligible Progress Energy customers upon request.

Program Participation

Annual participation estimates for the Home Energy Check program are shown in the following table:

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	1,457,415	1,457,415	52,200	4%
2011	1,473,688	1,473,688	53,960	7%
2012	1,495,098	1,495,098	55,659	11%
2013	1,521,451	1,521,451	55,881	14%
2014	1,548,531	1,548,531	56,137	18%
2015	1,575,167	1,575,167	56,429	21%
2016	1,600,448	1,600,448	56,756	24%
2017	1,624,503	1,624,503	57,117	27%
2018	1,647,724	1,647,724	57,515	30%
2019	1,671,277	1,671,277	57,947	33%

1. The total number of customers is the forecast of residential customers in Progress Energy’s 2009 Ten Year Site Plan.
2. The entire residential class is eligible for participation..
3. Number of participants represents the customers that Progress Energy expects to reach through this program annually.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool.

B. HOME ENERGY IMPROVEMENT PROGRAM

Program Start Date: 1995

Program modified in 2000, 2006, 2007

Modifications proposed in 2010

Program Description

The Home Energy Improvement program is designed for the existing single family, multi-family and manufactured home customers who want to retrofit with high energy efficiency improvements. All residential customers are eligible to participate in one or more measures of this program. The program builds on customer awareness by utilizing various audit types, contractor participation and Progress Energy influence to educate customers on cost-effective measures relevant to their residence.

The program seeks to meet the following overall goals:

- Provide a cost-effective and comprehensive program portfolio of measures across all housing types
- Improve customer energy savings and demand reduction through the installation of energy efficient equipment and thermal envelope upgrades
- Obtain energy and demand impacts that are significant, accurate and measurable

- Educate the residential retrofit market about best practices, innovative technologies and opportunities to leverage participation in all applicable incentives for managing energy consumption

Policies and Procedures

The program provides incentives for high efficiency HVAC equipment including installation and maintenance, duct repair, attic, and wall insulation upgrades, reflective roofing, high performance windows, window film and heat pump water heaters to residential customers in Progress Energy's territory.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, updated measure and verification analysis or technological advances.

Progress Energy is proposing to include the following measures with this program:

High Efficiency HVAC Systems

The High Efficiency HVAC System measure will provide customers an incentive to install a high efficiency HVAC system when their existing system fails. The incentive will be awarded on a per unit basis according to efficiency rating and tonnage, regardless of the system type (*PTAC, Mini-Split, Multi-Split, Geothermal Heat Pumps, etc.*). Measure requirements will be outlined in the Program Participation Standards.

HVAC Early Replacement

This measure provides customers an incentive for replacing their low efficiency HVAC system, prior to it failing, with a high efficiency HVAC system. The incentive will be awarded on a per unit basis according to efficiency rating and tonnage regardless of the system type (*PTAC, Mini-Split, Multi-Split, Geothermal Heat Pumps, etc.*). Measure requirements will be outlined in the Program Participation Standards.

Proper Sizing of High Efficiency HVAC Systems

This portion of the program encourages the customer to have a new replacement air conditioning system properly sized by the HVAC contractor using industry accepted sizing software. The Proper Sizing of High Efficiency HVAC Systems measure is performed in conjunction with the installation of a new HVAC system.

Supply and Return Plenum Seal

This measure encourages the HVAC contractor to seal the supply and return portion of the plenum to a new air handler with mastic. The Supply and Return Plenum Seal measure is performed in conjunction with the installation of a new HVAC system.

HVAC Commissioning

An incentive will be provided for the Commissioning of HVAC system(s) in accordance with Progress Energy standards and requirements, eligible on all Florida Energy Code compliant HVAC systems. The requirements and incentives will be outlined in the Program Participation Standards. The HVAC Commissioning measure is performed in conjunction with the installation of a new HVAC system.

Duct Repair

This portion of the program is designed to promote energy efficiency through improved duct sealing. A customer must have electric heating and a centrally-ducted cooling system, either air conditioning or heat pump, to be eligible for this program. The requirements and incentives will be outlined in the Program Participation Standards.

Attic Insulation Upgrade

This program measure encourages customers to upgrade their attic insulation by paying a portion of the installed cost. Eligible residences must have whole house electric air conditioning and/or whole house electric heating. The residence must meet the requirements of the Program Participation Standards to qualify for this measure.

Wall Insulation Upgrade

This program measure encourages customers to upgrade the insulation value of the exterior walls of the home by paying a portion of the installed cost. The requirements and incentives will be outlined in the Program Participation Standards.

Reflective Roof Coating

This measure will provide incentives to install an ENERGY STAR or Cool Roof Rating Council approved Reflective Roof Coating product to a manufactured home's roof. The product must meet initial reflectance specifications as outlined in the Program Participation Standards.

Reflective Roof

This measure provides an incentive to install an ENERGY STAR or Cool Roof Rating Council Reflective Roof, on Single family, Multi-family, and applicable manufactured homes. The product must meet initial reflectance specifications as outlined in the Program Participation Standards.

Window Film

The measure awards an incentive for installing high performance window film. Qualifying residences will install window film that meets the specifications as outlined in the Program Participation Standards.

Replacement Windows

This measure awards an incentive for installing high performance windows. Qualifying residences will install windows that meet the specifications as outlined in the Program Participation Standards.

HVAC Tune-up

An HVAC contractor performs a tune-up on the customers' existing HVAC system(s) to include: verifying proper refrigerant charge, proper air flow to the residence, and cleaning indoor/outdoor coils and fan blades. During the performance assessment of the HVAC system, eligible customers will be encouraged to consider participating in the HVAC Early Replacement measure. The contractor must adhere to all requirements as outlined in the Program Participation Standards.

HVAC Quality Installation

The HVAC Quality Installation measure includes a requirement for the proper selection of equipment that is designed to perform efficiently in Florida's hot, humid climate. The Quality Installation measure also includes right-sizing of the equipment, supply and return plenum sealing, air flow verification and correct refrigerant charging. The contractor must adhere to all requirements as outlined in the Program Participation Standards.

Heat Pump Water Heater

Heat pump water heating technology is now available in a self-contained electric water heating appliance that can reduce water heating costs by 50% over traditional electric water heaters. Progress Energy will offer an incentive to install a new heat pump water heater that has an energy factor greater than 2.0 meeting the ENERGY STAR electric water heater qualifications. This appliance must also meet the specifications as outlined in the Program Participation Standards.

Financing

Financing assistance is another alternative to the direct incentive payment. Progress Energy will collaborate with 3rd party financing institutions to offer eligible program participants a financing option that focuses on achieving a low monthly payment. Longer amortization schedules will be utilized to create a monthly payment that corresponds with the monthly energy savings. As an alternative to receiving an incentive, the customer's applicable incentive(s) for the measure(s) installed may be applied to the loan to buy-down the amount of the monthly payment.

Program Participation

Annual participation estimates for the Home Energy Improvement program are shown in the following table.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	1,457,415	1,457,415	48,968	3%
2011	1,473,688	1,473,688	57,242	7%
2012	1,495,098	1,495,098	60,460	11%
2013	1,521,451	1,521,451	62,266	15%
2014	1,548,531	1,548,531	66,956	19%
2015	1,575,167	1,575,167	73,037	23%
2016	1,600,448	1,600,448	80,048	28%
2017	1,624,503	1,624,503	87,849	33%
2018	1,647,724	1,647,724	96,508	38%
2019	1,671,277	1,671,277	106,108	44%

1. The total number of customers is the forecast of residential customers in Progress Energy's 2009 Ten Year Site Plan.
2. The entire residential class is eligible for participation in at least one measure.
3. Number of program participants represents the number of individual measure participants projected in a given year.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool.

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and, annual projected participation. The total program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	637	0.56	0.36	31,171,041	27,248	17,700
2011	712	0.49	0.31	40,739,197	28,087	17,841
2012	717	0.49	0.31	43,374,133	29,697	18,868
2013	725	0.50	0.31	45,129,293	31,207	19,275
2014	724	0.50	0.31	48,493,599	33,429	20,742
2015	725	0.50	0.31	52,955,570	36,559	22,803
2016	723	0.50	0.31	57,894,234	40,162	25,147
2017	721	0.50	0.32	63,314,886	44,165	27,752
2018	718	0.50	0.32	69,267,211	48,605	30,644
2019	714	0.50	0.32	75,806,360	53,528	33,857

At the Generator

Year	Per Customer 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
2010	678	0.59	0.39	33,206,510	29,027	18,856
2011	758	0.52	0.33	43,399,467	29,921	19,006
2012	764	0.52	0.33	46,206,464	31,636	20,100
2013	772	0.53	0.33	48,076,236	33,245	20,534
2014	772	0.53	0.33	51,660,231	35,612	22,096
2015	772	0.53	0.33	56,413,569	38,946	24,292
2016	770	0.53	0.33	61,674,727	42,785	26,789
2017	768	0.54	0.34	67,449,348	47,049	29,564
2018	765	0.54	0.34	73,790,360	51,779	32,645
2019	761	0.54	0.34	80,756,515	57,023	36,068

Impact Evaluation Plan

The Home Energy Improvement program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels. These analyses are supported by end-use metering data, where feasible.

Cost-Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$607,154	\$817,766	-\$210,613	0.74
Participant	\$679,464	\$373,711	\$305,753	1.82
Total Resource Cost	\$607,154	\$512,013	\$95,141	1.19

PROGRAM: Res HEI - RIM

YEAR	BENEFITS					COSTS							NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	INCREASED T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0	0
2010	3,650	375	0	0	4,025	0	0	0	7,140	17,676	4,132	28,948	-24,923
2011	8,164	766	0	0	8,929	0	0	0	9,722	19,479	9,855	39,056	-30,127
2012	11,273	1,177	0	0	12,450	0	0	0	12,281	24,737	15,291	52,309	-39,859
2013	20,481	1,599	8,068	0	30,148	0	0	0	15,126	31,370	22,172	68,668	-38,520
2014	18,477	2,053	16,312	0	36,841	0	0	0	17,471	35,937	29,759	83,167	-46,325
2015	25,017	2,549	20,589	0	48,155	0	0	0	22,914	47,413	40,258	110,584	-62,429
2016	33,359	3,096	31,293	0	67,748	0	0	0	30,357	62,959	48,335	141,651	-73,903
2017	46,115	3,698	44,978	0	94,790	0	0	0	40,318	83,719	50,925	174,963	-80,173
2018	52,961	4,362	41,456	0	98,779	0	0	0	49,365	102,563	57,710	209,638	-110,859
2019	61,306	5,094	49,435	0	115,835	0	0	0	61,004	126,759	69,992	257,755	-141,921
2020	61,725	5,094	50,470	0	117,289	0	0	0	0	0	71,692	71,692	45,597
2021	61,233	5,094	51,536	0	117,863	0	0	0	0	0	76,852	76,852	41,011
2022	76,810	5,084	28,096	0	109,989	0	0	0	0	0	76,887	76,887	33,101
2023	79,618	5,040	40,524	0	125,181	0	0	0	0	0	76,694	76,694	48,487
2024	64,017	4,993	48,036	0	117,045	0	0	0	0	0	76,072	76,072	40,973
2025	59,581	4,676	45,826	0	110,083	0	0	0	0	0	71,938	71,938	38,145
2026	70,414	4,354	28,100	0	102,868	0	0	0	0	0	67,279	67,279	35,588
2027	54,372	4,011	46,783	0	105,166	0	0	0	0	0	62,068	62,068	43,098
2028	49,389	3,645	43,505	0	96,539	0	0	0	0	0	56,003	56,003	40,536
2029	53,065	3,254	24,784	0	81,102	0	0	0	0	0	49,331	49,331	31,771
2030	47,236	2,761	37,024	0	87,021	0	0	0	0	0	40,709	40,709	46,312
2031	37,661	2,244	31,956	0	71,860	0	0	0	0	0	30,965	30,965	40,896
2032	30,492	1,761	26,954	0	59,207	0	0	0	0	0	24,660	24,660	34,546
2033	22,140	1,227	20,818	0	44,185	0	0	0	0	0	17,484	17,484	26,702
2034	11,720	637	11,423	0	23,780	0	0	0	0	0	9,018	9,018	14,763
2035	10,649	559	10,374	0	21,583	0	0	0	0	0	8,212	8,212	13,371
2036	9,416	474	9,062	0	18,952	0	0	0	0	0	7,253	7,253	11,699
2037	7,898	380	7,442	0	15,720	0	0	0	0	0	6,124	6,124	9,596
2038	6,109	278	5,465	0	11,852	0	0	0	0	0	4,802	4,802	7,049
NOMINAL	1,094,341	80,336	780,308	0	1,954,985	0	0	0	265,698	552,612	1,182,472	2,000,782	-45,797
NPV	342,598	26,897	237,658	0	607,154	0	0	0	138,303	288,188	391,276	817,766	-210,613

Utility Discount Rate = 8.48
Benefit Cost Ratio = 0.742

PROGRAM: Res HEI - Participant

YEAR	BENEFITS				COSTS			NET BENEFITS TO PARTICIPANTS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	SAVINGS IN PARTICIPANT'S BILL \$(000)	INCENTIVE PAYMENTS \$(000)	OTHER PARTICIPANT'S BENEFITS \$(000)	TOTAL BENEFITS \$(000)	PARTICIPANT'S COST \$(000)	PARTICIPANT'S BILL INCREASE \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	4,132	17,676	0	21,808	20,483	0	20,483	1,325
2011	9,855	19,479	0	29,334	25,450	0	25,450	3,884
2012	15,291	24,737	0	40,028	32,441	0	32,441	7,587
2013	22,172	31,370	0	53,542	41,057	0	41,057	12,485
2014	29,759	35,937	0	65,695	47,242	0	47,242	18,454
2015	40,258	47,413	0	87,670	62,146	0	62,146	25,524
2016	48,335	62,959	0	111,294	82,279	0	82,279	29,015
2017	50,925	83,719	0	134,645	109,103	0	109,103	25,542
2018	57,710	102,563	0	160,273	133,256	0	133,256	27,018
2019	69,992	126,759	0	196,752	164,221	0	164,221	32,530
2020	71,692	0	0	71,692	0	0	0	71,692
2021	76,852	0	0	76,852	0	0	0	76,852
2022	76,887	0	0	76,887	0	0	0	76,887
2023	76,694	0	0	76,694	0	0	0	76,694
2024	76,072	0	0	76,072	0	0	0	76,072
2025	71,938	0	0	71,938	0	0	0	71,938
2026	67,279	0	0	67,279	0	0	0	67,279
2027	62,068	0	0	62,068	0	0	0	62,068
2028	56,003	0	0	56,003	0	0	0	56,003
2029	49,331	0	0	49,331	0	0	0	49,331
2030	40,709	0	0	40,709	0	0	0	40,709
2031	30,965	0	0	30,965	0	0	0	30,965
2032	24,660	0	0	24,660	0	0	0	24,660
2033	17,484	0	0	17,484	0	0	0	17,484
2034	9,018	0	0	9,018	0	0	0	9,018
2035	8,212	0	0	8,212	0	0	0	8,212
2036	7,253	0	0	7,253	0	0	0	7,253
2037	6,124	0	0	6,124	0	0	0	6,124
2038	4,802	0	0	4,802	0	0	0	4,802
NOMINAL	1,182,472	552,612	0	1,735,085	717,678	0	717,678	1,017,407
NPV	391,276	288,188	0	679,464	373,711	0	373,711	305,753

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.818

PROGRAM: Res HEI - TRC

YEAR	BENEFITS					COSTS						NET BENEFITS \$(000)
	(1) TOTAL FUEL & O&M SAVINGS \$(000)	(2) AVOIDED T&D CAP. COSTS \$(000)	(3) AVOIDED GEN. CAP. COSTS \$(000)	(4) OTHER PARTICIPANT BENEFITS \$(000)	(5) TOTAL BENEFITS \$(000)	(6) PARTICIPANT'S COST \$(000)	(7) TOTAL FUEL & O&M INCREASE \$(000)	(8) INCREASED T&D CAP. COSTS \$(000)	(9) INCREASED GEN. CAP. COSTS \$(000)	(10) UTILITY PROGRAM COSTS \$(000)	(11) TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	3,650	375	0	0	4,025	20,483	0	0	0	7,140	27,623	-23,598
2011	8,164	766	0	0	8,929	25,450	0	0	0	9,722	35,172	-26,243
2012	11,273	1,177	0	0	12,450	32,441	0	0	0	12,281	44,722	-32,272
2013	20,481	1,599	8,068	0	30,148	41,057	0	0	0	15,126	56,183	-26,035
2014	18,477	2,053	16,312	0	36,841	47,242	0	0	0	17,471	64,713	-27,872
2015	25,017	2,549	20,589	0	48,155	62,146	0	0	0	22,914	85,060	-36,905
2016	33,359	3,096	31,293	0	67,748	82,279	0	0	0	30,357	112,635	-44,888
2017	46,115	3,698	44,978	0	94,790	109,103	0	0	0	40,318	149,422	-54,631
2018	52,961	4,362	41,456	0	98,779	133,256	0	0	0	49,365	182,620	-83,842
2019	61,306	5,094	49,435	0	115,835	164,221	0	0	0	61,004	225,225	-109,390
2020	61,725	5,094	50,470	0	117,289	0	0	0	0	0	0	117,289
2021	61,233	5,094	51,536	0	117,863	0	0	0	0	0	0	117,863
2022	76,810	5,084	28,096	0	109,989	0	0	0	0	0	0	109,989
2023	79,618	5,040	40,524	0	125,181	0	0	0	0	0	0	125,181
2024	64,017	4,993	48,036	0	117,045	0	0	0	0	0	0	117,045
2025	59,581	4,676	45,826	0	110,083	0	0	0	0	0	0	110,083
2026	70,414	4,354	28,100	0	102,868	0	0	0	0	0	0	102,868
2027	54,372	4,011	46,783	0	105,166	0	0	0	0	0	0	105,166
2028	49,389	3,645	43,505	0	96,539	0	0	0	0	0	0	96,539
2029	53,065	3,254	24,784	0	81,102	0	0	0	0	0	0	81,102
2030	47,236	2,761	37,024	0	87,021	0	0	0	0	0	0	87,021
2031	37,661	2,244	31,956	0	71,860	0	0	0	0	0	0	71,860
2032	30,492	1,761	26,954	0	59,207	0	0	0	0	0	0	59,207
2033	22,140	1,227	20,818	0	44,185	0	0	0	0	0	0	44,185
2034	11,720	637	11,423	0	23,780	0	0	0	0	0	0	23,780
2035	10,649	559	10,374	0	21,583	0	0	0	0	0	0	21,583
2036	9,416	474	9,062	0	18,952	0	0	0	0	0	0	18,952
2037	7,898	380	7,442	0	15,720	0	0	0	0	0	0	15,720
2038	6,109	278	5,465	0	11,852	0	0	0	0	0	0	11,852
NOMINAL	1,094,341	80,336	780,308	0	1,954,985	717,678	0	0	0	265,698	983,376	971,609
NPV	342,598	26,897	237,658	0	607,154	373,711	0	0	0	138,303	512,013	95,141

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.186

C. RESIDENTIAL NEW CONSTRUCTION PROGRAM

Program Start Date: 1995

Program modified in 2000, 2004, 2006, 2007

Proposed modification in 2010

Program Description

The Residential New Construction program is designed to improve the energy efficiency of newly constructed residences in the single family, multi-family and manufactured homes segments.

The program seeks to meet the following overall goals:

- Provide a cost-effective comprehensive program portfolio of measures across all housing types
- Educate the residential new construction industry and home-buyers/renters about energy efficient building design
- Obtain energy and demand impacts that are significant, measurable and accurate
- Evaluate and recommend the most cost-effective energy efficient building envelope and equipment measures for the new construction market

Policies and Procedures

The Residential New Construction program will provide financial incentives to builders and developers for incorporating energy efficient measures into the construction process. To qualify for the program, the residence must be a new residentially-metered customer in Progress Energy territory

Additions do not qualify for the Residential New Construction program. An existing single family or multi-family residence will be eligible if more than two-thirds of the current air-conditioned floor space is remodeled or reconstructed

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, updated measurement and valuation analysis, or technological advances.

Progress Energy is proposing to include the following measures with this program:

High Efficiency HVAC Systems

High efficiency heat pumps will be expanded to 3 tiers of classification; 15 to 19+ SEER (*or equivalent EER*). Systems will qualify based on efficiency rating and tonnage regardless of the system type (*PTAC, Mini-Splits, Multi-Splits, Geothermal Heat Pumps, etc.*).

High Performance Windows

An incentive will be provided for the installation of high performance windows. The window specification has been adjusted in accordance with the increasing stringency in the Florida Energy Code. The product must meet the specifications as outlined in the Program Participation Standards.

High Performance Exterior Wall Insulation

An incentive will be provided for the installation of high performance exterior wall insulation that exceeds the current Florida Energy Code by a factor of two. Single family dwellings are the only housing type eligible for this measure. The product must meet the specifications as outlined in the Program Participation Standards.

HVAC Commissioning

An incentive will be provided for the commissioning of HVAC system(s) in accordance with Progress Energy standards and requirements, eligible on all Florida Energy Code compliant HVAC systems. The requirements and incentives will be outlined in the Program Participation Standards.

ENERGY STAR Certification

Progress Energy will offer the builder an incentive to help offset the cost to have a residence rated to meet the ENERGY STAR certification. The incentive is paid if the residence achieves

ENERGY STAR's qualifications and at least two Residential New Construction measures are installed. The builder who qualifies for this incentive is not eligible for any other RNC program incentives. The requirements and incentives will be outlined in the Program Participation Standards.

Code Plus 20 Construction

Progress Energy will offer an incentive to builders that construct a residence exceeding the current Florida Energy Code by at least 20% provided they install at least three Residential New Construction program measures. The builder who qualifies for this incentive is not eligible for any other RNC program incentives. The requirements and incentives will be outlined in the Program Participation Standards.

Multi-Family Complexes with Heat Pumps

Multi-family builders and developers that can verify a change in design from A/C systems with electric resistance heat to heat pumps will qualify for a per heat pump system incentive to offset the costs associated with the design change. The requirements and incentives will be outlined in the Program Participation Standards.

HVAC Quality Installation

The Quality Installation measure requires the proper selection of equipment and includes the right-sizing of the equipment, supply and return plenum sealing, air flow verification, and correct refrigerant charging. The contractor must adhere to all requirements as outlined in the Program Participation Standards.

Heat Pump Water Heaters

Heat pump water heating technology is now available in a self-contained electric water heating appliance that can reduce water heating costs compared to traditional electric water heaters. Progress Energy will offer builders an incentive to install new heat pump water heaters that have an energy factor greater than 2.0 meeting the ENERGY STAR electric water heater qualifications. This appliance must also meet the specifications as outlined in the Program Participation Standards.

Program Participation

Annual participation estimates for the Residential New Construction program are shown in the following table.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	1,457,415	16,273	6,215	38%
2011	1,473,688	16,273	7,560	42%
2012	1,495,098	21,410	7,997	40%
2013	1,521,451	26,353	8,465	38%
2014	1,548,531	27,080	13,014	40%
2015	1,575,167	26,636	13,364	42%
2016	1,600,448	25,281	13,907	44%
2017	1,624,503	24,055	14,877	47%
2018	1,647,724	23,221	15,789	49%
2019	1,671,277	23,553	17,082	51%

1. The total number of customers is the forecast of residential customers in Progress Energy's 2009 Ten Year Site Plan.
2. Eligible Customers is the number of qualifying new homes built in Progress Energy's territory in the given year.
3. Number of program participants represents the number of individual participants projected in a given year.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and, annual projected participation. The total program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	500	0.25	0.24	3,107,272	1,546	1,498
2011	607	0.29	0.24	4,590,609	2,202	1,838
2012	623	0.31	0.25	4,978,791	2,447	1,981
2013	634	0.31	0.25	5,369,251	2,666	2,119
2014	584	0.29	0.25	7,603,632	3,826	3,278
2015	600	0.30	0.25	8,019,211	3,957	3,362
2016	615	0.30	0.25	8,555,163	4,146	3,493
2017	627	0.30	0.25	9,326,588	4,460	3,731
2018	641	0.30	0.25	10,123,119	4,765	3,953
2019	652	0.30	0.25	11,140,331	5,181	4,267

At the Generator

Year	Per Customer 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
2010	533	0.26	0.26	3,310,177	1,647	1,596
2011	647	0.31	0.26	4,890,376	2,346	1,958
2012	663	0.33	0.26	5,303,906	2,607	2,110
2013	676	0.34	0.27	5,719,863	2,840	2,257
2014	622	0.31	0.27	8,100,149	4,076	3,492
2015	639	0.32	0.27	8,542,865	4,215	3,582
2016	655	0.32	0.27	9,113,815	4,417	3,721
2017	668	0.32	0.27	9,935,614	4,751	3,975
2018	683	0.32	0.27	10,784,159	5,076	4,211
2019	695	0.32	0.27	11,867,795	5,519	4,546

Impact Evaluation Plan

The Residential New Construction program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels. These analyses are supported by end-use metering data, where feasible.

Cost-Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$85,349	\$114,615	-\$29,266	0.74
Participant	\$99,725	\$53,153	\$46,572	1.88
Total Resource Cost	\$85,349	\$68,043	\$17,306	1.25

PROGRAM: Res HA - RIM

YEAR	BENEFITS					COSTS							NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	INCREASED T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0	0
2010	343	36	0	0	379	0	0	0	764	2,058	385	3,207	-2,828
2011	848	80	0	0	928	0	0	0	891	2,652	1,002	4,545	-3,617
2012	1,216	128	0	0	1,343	0	0	0	1,120	3,435	1,612	6,167	-4,824
2013	2,223	178	785	0	3,186	0	0	0	1,419	4,445	2,408	8,272	-5,086
2014	2,276	256	1,782	0	4,314	0	0	0	2,144	6,622	3,550	12,315	-8,001
2015	3,256	337	2,383	0	5,976	0	0	0	2,677	8,427	5,049	16,152	-10,176
2016	4,419	422	6,522	0	11,362	0	0	0	3,408	10,916	6,251	20,576	-9,213
2017	6,759	513	8,306	0	15,577	0	0	0	4,464	14,488	6,721	25,673	-10,096
2018	7,147	609	5,065	0	12,821	0	0	0	5,331	17,581	7,725	30,636	-17,816
2019	8,418	714	6,060	0	15,191	0	0	0	6,546	21,828	9,481	37,855	-22,663
2020	8,493	714	6,186	0	15,394	0	0	0	0	0	9,711	9,711	5,683
2021	8,492	714	6,317	0	15,523	0	0	0	0	0	10,407	10,407	5,116
2022	10,387	713	3,443	0	14,543	0	0	0	0	0	10,422	10,422	4,122
2023	10,913	708	5,703	0	17,324	0	0	0	0	0	10,472	10,472	6,852
2024	8,954	703	5,901	0	15,558	0	0	0	0	0	10,470	10,470	5,089
2025	8,551	671	5,724	0	14,946	0	0	0	0	0	10,146	10,146	4,800
2026	9,993	634	3,553	0	14,179	0	0	0	0	0	9,683	9,683	4,496
2027	7,970	593	5,990	0	14,553	0	0	0	0	0	9,131	9,131	5,422
2028	7,418	550	5,654	0	13,621	0	0	0	0	0	8,450	8,450	5,171
2029	8,094	480	3,935	0	12,509	0	0	0	0	0	7,384	7,384	5,125
2030	7,778	405	7,753	0	15,936	0	0	0	0	0	6,131	6,131	9,805
2031	6,386	326	7,175	0	13,887	0	0	0	0	0	4,672	4,672	9,215
2032	5,270	256	6,283	0	11,808	0	0	0	0	0	3,760	3,760	8,048
2033	3,851	181	4,671	0	8,703	0	0	0	0	0	2,779	2,779	5,924
2034	2,242	100	2,708	0	5,050	0	0	0	0	0	1,622	1,622	3,428
2035	2,157	93	2,603	0	4,852	0	0	0	0	0	1,589	1,589	3,264
2036	2,081	86	2,481	0	4,648	0	0	0	0	0	1,549	1,549	3,099
2037	2,001	79	2,333	0	4,413	0	0	0	0	0	1,497	1,497	2,916
NOMINAL	157,929	11,282	119,314	0	288,525	0	0	0	28,765	92,450	164,059	285,273	3,252
NPV	47,343	3,678	34,328	0	85,349	0	0	0	14,890	47,457	52,268	114,615	-29,266

Utility Discount Rate = 8.48
Benefit Cost Ratio = 0.745

PROGRAM: Res HA - Participant

YEAR	BENEFITS				COSTS			(8) NET BENEFITS TO PARTICIPANTS \$(000)
	(1) SAVINGS IN PARTICIPANT'S BILL \$(000)	(2) INCENTIVE PAYMENTS \$(000)	(3) OTHER PARTICIPANT'S BENEFITS \$(000)	(4) TOTAL BENEFITS \$(000)	(5) PARTICIPANT'S COST \$(000)	(6) PARTICIPANT'S BILL INCREASE \$(000)	(7) TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	385	2,058	0	2,443	2,839	0	2,839	-397
2011	1,002	2,652	0	3,654	3,247	0	3,247	407
2012	1,612	3,435	0	5,047	4,119	0	4,119	928
2013	2,408	4,445	0	6,853	5,263	0	5,263	1,590
2014	3,550	6,622	0	10,171	7,209	0	7,209	2,962
2015	5,049	8,427	0	13,476	9,188	0	9,188	4,288
2016	6,251	10,916	0	17,167	11,920	0	11,920	5,248
2017	6,721	14,488	0	21,209	15,830	0	15,830	5,379
2018	7,725	17,581	0	25,306	19,224	0	19,224	6,082
2019	9,481	21,828	0	31,309	23,883	0	23,883	7,426
2020	9,711	0	0	9,711	0	0	0	9,711
2021	10,407	0	0	10,407	0	0	0	10,407
2022	10,422	0	0	10,422	0	0	0	10,422
2023	10,472	0	0	10,472	0	0	0	10,472
2024	10,470	0	0	10,470	0	0	0	10,470
2025	10,146	0	0	10,146	0	0	0	10,146
2026	9,683	0	0	9,683	0	0	0	9,683
2027	9,131	0	0	9,131	0	0	0	9,131
2028	8,450	0	0	8,450	0	0	0	8,450
2029	7,384	0	0	7,384	0	0	0	7,384
2030	6,131	0	0	6,131	0	0	0	6,131
2031	4,672	0	0	4,672	0	0	0	4,672
2032	3,760	0	0	3,760	0	0	0	3,760
2033	2,779	0	0	2,779	0	0	0	2,779
2034	1,622	0	0	1,622	0	0	0	1,622
2035	1,589	0	0	1,589	0	0	0	1,589
2036	1,549	0	0	1,549	0	0	0	1,549
2037	1,497	0	0	1,497	0	0	0	1,497
NOMINAL	164,059	92,450	0	256,509	102,722	0	102,722	153,787
NPV	52,268	47,457	0	99,725	53,153	0	53,153	46,572

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.876

PROGRAM: Res HA - TRC

YEAR	BENEFITS					COSTS						NET BENEFITS \$(000)
	(1) TOTAL FUEL & O&M SAVINGS \$(000)	(2) AVOIDED T&D CAP. COSTS \$(000)	(3) AVOIDED GEN. CAP. COSTS \$(000)	(4) OTHER PARTICIPANT BENEFITS \$(000)	(5) TOTAL BENEFITS \$(000)	(6) PARTICIPANT'S COST \$(000)	(7) TOTAL FUEL & O&M INCREASE \$(000)	(8) INCREASED T&D CAP. COSTS \$(000)	(9) INCREASED GEN. CAP. COSTS \$(000)	(10) UTILITY PROGRAM COSTS \$(000)	(11) TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	343	36	0	0	379	2,839	0	0	0	764	3,604	-3,225
2011	848	80	0	0	928	3,247	0	0	0	891	4,138	-3,210
2012	1,216	128	0	0	1,343	4,119	0	0	0	1,120	5,239	-3,896
2013	2,223	178	785	0	3,186	5,263	0	0	0	1,419	6,682	-3,497
2014	2,276	256	1,782	0	4,314	7,209	0	0	0	2,144	9,353	-5,039
2015	3,256	337	2,383	0	5,976	9,188	0	0	0	2,677	11,864	-5,888
2016	4,419	422	6,522	0	11,362	11,920	0	0	0	3,408	15,328	-3,966
2017	6,759	513	8,306	0	15,577	15,830	0	0	0	4,464	20,295	-4,717
2018	7,147	609	5,065	0	12,821	19,224	0	0	0	5,331	24,554	-11,734
2019	8,418	714	6,060	0	15,191	23,883	0	0	0	6,546	30,429	-15,238
2020	8,493	714	6,186	0	15,394	0	0	0	0	0	0	15,394
2021	8,492	714	6,317	0	15,523	0	0	0	0	0	0	15,523
2022	10,387	713	3,443	0	14,543	0	0	0	0	0	0	14,543
2023	10,913	708	5,703	0	17,324	0	0	0	0	0	0	17,324
2024	8,954	703	5,901	0	15,558	0	0	0	0	0	0	15,558
2025	8,551	671	5,724	0	14,946	0	0	0	0	0	0	14,946
2026	9,993	634	3,553	0	14,179	0	0	0	0	0	0	14,179
2027	7,970	593	5,990	0	14,553	0	0	0	0	0	0	14,553
2028	7,418	550	5,654	0	13,621	0	0	0	0	0	0	13,621
2029	8,094	480	3,935	0	12,509	0	0	0	0	0	0	12,509
2030	7,778	405	7,753	0	15,936	0	0	0	0	0	0	15,936
2031	6,386	326	7,175	0	13,887	0	0	0	0	0	0	13,887
2032	5,270	256	6,283	0	11,808	0	0	0	0	0	0	11,808
2033	3,851	181	4,671	0	8,703	0	0	0	0	0	0	8,703
2034	2,242	100	2,708	0	5,050	0	0	0	0	0	0	5,050
2035	2,157	93	2,603	0	4,852	0	0	0	0	0	0	4,852
2036	2,081	86	2,481	0	4,648	0	0	0	0	0	0	4,648
2037	2,001	79	2,333	0	4,413	0	0	0	0	0	0	4,413
NOMINAL	157,929	11,282	119,314	0	288,525	102,722	0	0	0	28,765	131,487	157,039
NPV	47,343	3,678	34,328	0	85,349	53,153	0	0	0	14,890	68,043	17,306

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.254

D. NEIGHBORHOOD ENERGY SAVER PROGRAM

Program Start Date: 2007

Proposed modification in 2010

Program Description

Progress Energy's Neighborhood Energy Saver program is a custom energy conservation program designed to assist low-income families with escalating energy costs by making energy efficiency improvements at their residence. Trained professional surveyors and installers representing Progress Energy will offer low-income families in targeted neighborhoods a home energy assessment followed by the installation of specified electric energy conservation measures. While in the home, residents will be provided energy saving tips for improving and sustaining household energy efficiency. The energy conservation measures installed and energy efficiency education provided will be at no cost to the participants.

The Neighborhood Energy Saver program seeks to achieve the following goals:

- Conduct a home energy assessment to identify energy efficiency opportunities within the customer's home
- Implement a comprehensive package of electric conservation measures to increase the efficiency in the resident's home
- Provide one-on-one customer education on energy efficiency techniques and energy conservation measures.

- Promote behavioral changes to assist customers in controlling their energy usage

Policies and Procedures:

Progress Energy's Neighborhood Energy Saver program participation is based on the median income guidelines and minimum percentage of households within the Census Block Group meeting those guidelines as calculated from the 2000 U.S. Census reports. Additional requirements are as follows:

- The residence must be a residentially-metered customer in Progress Energy territory
- Customer must reside in a selected Progress Energy qualifying Census Block Group that meets the definition of a Low-income neighborhood as stated above
- Multi-family dwellings that meet the above definition, are located in the Neighborhood Energy Saver city, but not within the census block may also be eligible to participate in the Neighborhood Energy Saver program if they meet the following criteria:
 - Must be attached multifamily units
 - Multi-family complexes may be HUD based public housing, USDA multifamily, people with disabilities, veterans, senior citizens and privately owned multi-family dwellings whose residents receive public assistance and the occupancy is 40% or greater low income residence
 - All installations must be verified by a Progress Energy representative

- A State of Florida General Licensed Contractor selected and approved by Progress Energy must be used to implement the Neighborhood Energy Saver program measures

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measurement and valuation analysis, or technological advances.

Progress Energy is proposing to include the following measures with this program:

Compact Fluorescent Bulbs

This portion of the program will provide for the installation of a maximum of five (5) compact fluorescent lamps (CFL's) which are in use for an average of at least four (4) hours per day.

Refrigerator Coil Brush

This portion of the program will provide the customer with a coil brush to remove dust and debris from condenser coils to improve the refrigerator efficiency.

Refrigerator Thermometer

This measure will provide for the installation of one thermometer in the food compartment and one thermometer in the freezer of the refrigerator.

Change Filter Calendar

This portion of the program will provide each homeowner a Progress Energy magnetic calendar to help remind them to clean or change HVAC filter monthly.

Weatherization Measures

This portion of the program will provide weather stripping, door sweeps, caulk, foam sealant, and clear patch tape which will be used to reduce or stop air infiltration around doors, windows, and where pipes enter the home. Air infiltration reduction is significant to saving energy and customer comfort.

Water heater insulation wrap and insulation for water pipes

This portion of the program will furnish and install a hot water heater wrap and pipe insulation as identified by the Neighborhood Energy Saver program Home Energy Evaluation. Foam insulated water heaters will be excluded from this measure.

Water conservation shower head and faucet aerators

This portion of the program will provide a maximum of three (3) aerators and two (2) low flow showerheads per household.

Water heater temperature check and adjustment

The portion of the program will provide a temperature check of the hot water heater and inform the customer of the possibility for turn-down adjustment.

HVAC filters

This portion of the program will allow each customer to receive a one year supply of filters (12). One filter may be installed at time of evaluation, if needed.

Indoor wall thermometer

This portion of the program will provide the installation of one wall plate thermometer per home.

HVAC winterization kit

This measure will provide for the installation of a winterization HVAC kit for wall/window AC units, if seasonably applicable. The resident will receive or have installed a maximum of three (3) kits. The customer will be educated on the proper use and value of the weatherization kit as a method of stopping air infiltration in the home.

Attic Insulation Upgrade

This portion of the program will upgrade the customer's insulation from R-0/4 to R-19 if required.

HVAC Maintenance

This portion of the program requires performing basic maintenance on the indoor and outdoor components of the central air and heating unit.

Window Film/Solar Screen

This portion of the program requires installing window film or solar screen on east, west and south oriented windows.

Program Participation

Annual participation estimates for the Neighborhood Energy Saver program are shown in the following table:

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	1,457,415	44,822	2,500	6%
2011	1,473,688	43,218	3,250	8%
2012	1,495,098	40,833	4,000	10%
2013	1,521,451	37,649	4,500	12%
2014	1,548,531	33,902	5,000	15%
2015	1,575,167	29,581	5,500	19%
2016	1,600,448	24,672	6,000	24%
2017	1,624,503	19,166	6,250	33%
2018	1,647,724	13,299	6,500	49%
2019	1,671,277	7,065	6,500	92%

1. The total number of customers is the forecast of residential customers in Progress Energy's 2009 Ten Year Site Plan.
2. Eligible customers represents the count of homes in Progress Energy service territory that are at or below program qualifying income levels based on US Census block data, escalated.
3. Number of participants represents the customers that Progress Energy expects to reach through direct offerings in each year.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool.

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and, annual projected participation. The total projected program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	1205	0.37	0.42	3,013,269	927	1,056
2011	1715	0.56	0.75	5,573,865	1,830	2,427
2012	1715	0.56	0.75	6,859,812	2,252	2,987
2013	1715	0.56	0.75	7,717,288	2,533	3,360
2014	1715	0.56	0.75	8,574,765	2,814	3,733
2015	1715	0.56	0.75	9,432,241	3,096	4,107
2016	1715	0.56	0.75	10,289,718	3,377	4,480
2017	1715	0.56	0.75	10,718,724	3,518	4,667
2018	1715	0.56	0.75	11,147,194	3,659	4,853
2019	1715	0.56	0.75	11,147,194	3,659	4,853

At the Generator

Year	Per Customer 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
2010	1284	0.40	0.45	3,210,035	988	1,125
2011	1827	0.60	0.80	5,937,838	1,949	2,585
2012	1827	0.60	0.80	7,307,758	2,399	3,182
2013	1827	0.60	0.80	8,221,227	2,698	3,579
2014	1827	0.60	0.80	9,134,697	2,998	3,977
2015	1827	0.60	0.80	10,048,166	3,298	4,375
2016	1827	0.60	0.80	10,961,637	3,598	4,773
2017	1827	0.60	0.80	11,418,657	3,748	4,972
2018	1827	0.60	0.80	11,875,106	3,898	5,170
2019	1827	0.60	0.80	11,875,106	3,898	5,170

Impact Evaluation Plan

The Neighborhood Energy Saver program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels.

Cost Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$80,274	\$128,171	-\$47,897	0.63
Participant	\$103,826	\$48,721	\$55,105	2.13
Total Resource Cost	\$80,274	\$73,066	\$7,208	1.10

PROGRAM: Neighborhood Energy Saver - RIM

YEAR	BENEFITS					COSTS					NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0
2010	330	23	0	0	353	0	567	1,810	410	2,787	-2,434
2011	973	73	0	0	1,046	0	1,366	4,774	1,217	7,357	-6,311
2012	1,543	135	0	0	1,678	0	1,987	5,977	2,131	10,095	-8,417
2013	3,005	205	1,078	0	4,287	0	2,672	6,863	3,346	12,881	-8,594
2014	2,947	282	2,341	0	5,571	0	2,954	7,773	4,744	15,471	-9,900
2015	4,178	367	3,099	0	7,644	0	3,724	8,224	6,661	18,609	-10,965
2016	5,677	460	4,698	0	10,835	0	4,923	9,067	8,207	22,197	-11,362
2017	7,382	543	5,837	0	13,762	0	6,214	9,533	8,480	24,227	-10,465
2018	8,412	617	6,125	0	15,154	0	7,179	9,983	9,264	26,426	-11,272
2019	9,327	685	6,945	0	16,956	0	8,002	9,999	10,695	28,696	-11,740
2020	8,757	639	6,636	0	16,033	0	0	0	10,198	10,198	5,834
2021	7,948	584	6,172	0	14,704	0	0	0	9,921	9,921	4,782
2022	8,700	521	2,996	0	12,217	0	0	0	8,834	8,834	3,383
2023	7,979	451	4,310	0	12,740	0	0	0	7,741	7,741	4,999
2024	5,455	377	3,730	0	9,562	0	0	0	6,481	6,481	3,081
2025	4,205	298	2,961	0	7,464	0	0	0	5,073	5,073	2,390
2026	3,657	217	1,383	0	5,257	0	0	0	3,524	3,524	1,732
2027	2,525	185	2,083	0	4,794	0	0	0	2,871	2,871	1,923
2028	1,932	152	1,681	0	3,765	0	0	0	2,156	2,156	1,609
2029	1,879	112	1,447	0	3,438	0	0	0	1,346	1,346	2,092
2030	1,812	102	2,177	0	4,090	0	0	0	1,236	1,236	2,854
2031	1,622	90	1,979	0	3,691	0	0	0	1,095	1,095	2,596
2032	1,395	76	1,734	0	3,205	0	0	0	932	932	2,273
2033	1,127	62	1,436	0	2,625	0	0	0	751	751	1,874
2034	834	46	1,084	0	1,964	0	0	0	540	540	1,424
2035	574	31	761	0	1,365	0	0	0	374	374	991
2036	293	15	395	0	704	0	0	0	192	192	512
2037	0	0	0	0	0	0	0	0	0	0	0
2038	0	0	0	0	0	0	0	0	0	0	0
NOMINAL	104,465	7,348	73,088	0	184,900	0	39,587	74,003	118,421	232,011	-47,110
NPV	46,244	3,372	30,658	0	80,274	0	24,345	48,721	55,105	128,171	-47,897

Utility Discount Rate = 8.48

Benefit Cost Ratio = 0.626

PROGRAM: Neighborhood Energy Saver - Participant

YEAR	BENEFITS				COSTS		NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	
	SAVINGS IN PARTICIPANT'S BILL \$(000)	INCENTIVE PAYMENTS \$(000)	OTHER PARTICIPANT'S BENEFITS \$(000)	TOTAL BENEFITS \$(000)	PARTICIPANT'S COST \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0
2010	410	1,810	0	2,220	1,810	1,810	410
2011	1,217	4,774	0	5,991	4,774	4,774	1,217
2012	2,131	5,977	0	8,108	5,977	5,977	2,131
2013	3,346	6,863	0	10,209	6,863	6,863	3,346
2014	4,744	7,773	0	12,517	7,773	7,773	4,744
2015	6,661	8,224	0	14,885	8,224	8,224	6,661
2016	8,207	9,067	0	17,274	9,067	9,067	8,207
2017	8,480	9,533	0	18,013	9,533	9,533	8,480
2018	9,264	9,983	0	19,247	9,983	9,983	9,264
2019	10,695	9,999	0	20,694	9,999	9,999	10,695
2020	10,198	0	0	10,198	0	0	10,198
2021	9,921	0	0	9,921	0	0	9,921
2022	8,834	0	0	8,834	0	0	8,834
2023	7,741	0	0	7,741	0	0	7,741
2024	6,481	0	0	6,481	0	0	6,481
2025	5,073	0	0	5,073	0	0	5,073
2026	3,524	0	0	3,524	0	0	3,524
2027	2,871	0	0	2,871	0	0	2,871
2028	2,156	0	0	2,156	0	0	2,156
2029	1,346	0	0	1,346	0	0	1,346
2030	1,236	0	0	1,236	0	0	1,236
2031	1,095	0	0	1,095	0	0	1,095
2032	932	0	0	932	0	0	932
2033	751	0	0	751	0	0	751
2034	540	0	0	540	0	0	540
2035	374	0	0	374	0	0	374
2036	192	0	0	192	0	0	192
2037	0	0	0	0	0	0	0
2038	0	0	0	0	0	0	0
NOMINAL	118,421	74,003	0	192,423	74,003	74,003	118,421
NPV	55,105	48,721	0	103,826	48,721	48,721	55,105

Utility Discount Rate = 8.48
Benefit Cost Ratio = 2.131

PROGRAM: Neighborhood Energy Saver - TRC

YEAR	BENEFITS					COSTS				NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	OTHER PARTICIPANT'S BENEFITS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT'S COST \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0
2010	330	23	0	0	353	0	567	1,810	2,377	-2,024
2011	973	73	0	0	1,046	0	1,366	4,774	6,140	-5,094
2012	1,543	135	0	0	1,678	0	1,987	5,977	7,963	-6,286
2013	3,005	205	1,078	0	4,287	0	2,672	6,863	9,535	-5,248
2014	2,947	282	2,341	0	5,571	0	2,954	7,773	10,727	-5,156
2015	4,178	367	3,099	0	7,644	0	3,724	8,224	11,948	-4,304
2016	5,677	460	4,698	0	10,835	0	4,923	9,067	13,990	-3,155
2017	7,382	543	5,837	0	13,762	0	6,214	9,533	15,747	-1,985
2018	8,412	617	6,125	0	15,154	0	7,179	9,983	17,162	-2,008
2019	9,327	685	6,945	0	16,956	0	8,002	9,999	18,001	-1,045
2020	8,757	639	6,636	0	16,033	0	0	0	0	16,033
2021	7,948	584	6,172	0	14,704	0	0	0	0	14,704
2022	8,700	521	2,996	0	12,217	0	0	0	0	12,217
2023	7,979	451	4,310	0	12,740	0	0	0	0	12,740
2024	5,455	377	3,730	0	9,562	0	0	0	0	9,562
2025	4,205	298	2,961	0	7,464	0	0	0	0	7,464
2026	3,657	217	1,383	0	5,257	0	0	0	0	5,257
2027	2,525	185	2,083	0	4,794	0	0	0	0	4,794
2028	1,932	152	1,681	0	3,765	0	0	0	0	3,765
2029	1,879	112	1,447	0	3,438	0	0	0	0	3,438
2030	1,812	102	2,177	0	4,090	0	0	0	0	4,090
2031	1,622	90	1,979	0	3,691	0	0	0	0	3,691
2032	1,395	76	1,734	0	3,205	0	0	0	0	3,205
2033	1,127	62	1,436	0	2,625	0	0	0	0	2,625
2034	834	46	1,084	0	1,964	0	0	0	0	1,964
2035	574	31	761	0	1,365	0	0	0	0	1,365
2036	293	15	395	0	704	0	0	0	0	704
2037	0	0	0	0	0	0	0	0	0	0
2038	0	0	0	0	0	0	0	0	0	0
NOMINAL	104,465	7,348	73,088	0	184,900	0	39,587	74,003	113,590	71,310
NPV	46,244	3,372	30,658	0	80,274	0	24,345	48,721	73,066	7,208

Utility Discount Rate = 8.48

Benefit Cost Ratio = 1.099

E. LOW INCOME WEATHERIZATION ASSISTANCE PROGRAM

Program Start Date: 2000

Program modified in 2006

Proposed modification in 2010

Program Description

The Low-Income Weatherization Assistance program is designed to leverage working relationships with providers to integrate Demand Side Management measures and offer energy efficiency with an education component. The Low Income Weatherization Assistance program combines weatherization provider partnerships with energy education and energy efficiency improvements to benefit low-income families. The program seeks to meet the following goals:

- Integrate Progress Energy 's Low Income Weatherization Assistance program procedures with the Department of Community Affairs and local home improvement providers to deliver energy efficiency measures to low-income families
- Identify and educate contractors and low income customers regarding energy saving opportunities to improve home energy efficiency
- Increase low-income families' participation in Progress Energy's Demand Side Management programs
- Educate low income families on achievable, sustainable strategies to reduce individual energy bills

Policies and Procedures

The program provides incentives for attic insulation upgrades, duct testing and repair, reduced air infiltration, water heater wrap, HVAC maintenance, high efficiency heat pumps, high efficiency electric water heater, low flow showerheads, compact fluorescent light bulbs, faucet aerators, refrigerator coil brush, dedicated heat pump water heaters, window screen/film, reflective roof coating, window air conditioning replacement/recycle with HVAC window unit winterization kit, and a community energy education component.

The program eligibility requirements to qualify for participation are as follows:

- The residence must be a residentially-metered customer in Progress Energy territory
- Must meet Florida's weatherization and local home improvement provider low-income criteria, in addition to income requirements determined by the DCA
- Homes must be greater than two years old
- A DCA approved provider or local provider's approved contractors must perform all work.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, updated measurement and valuation analysis, or technological advances.

Progress Energy is proposing to include the following measures with this program:

Attic Insulation Upgrade

This portion of the program encourages customers to add insulation to the ceiling area by paying a portion of the installed cost. The customer must have either whole house electric cooling or electric heating to be eligible for this program.

Duct Test and Repair

This portion of the program is designed to encourage eligible customers to improve their central duct system by reducing the air leakage rate. This is accomplished by performing a duct leakage test, then offering to repair the leakage that is discovered by the duct test. The home must have central ducted electric cooling and electric heat to participate in this measure.

Reduced Air Infiltration

The provider must demonstrate a minimum reduction of air infiltration into the home of 1500 cfm at 50 pascal's to receive an incentive. The home must not exceed ASHRAE Standard 92.2-1989 for acceptable indoor air quality.

Water Heater Wrap

This portion of the program will provide and install a water heater wrap as identified in the Program Participation Standards.

High Efficiency Electric Heat Pumps

For high efficient electric heat pumps, Progress Energy will provide an incentive per unit. The specific incentive available is dependent upon the efficiency level of the unit installed and the type of electric heat the new equipment is replacing. In order to qualify for an incentive, both the air handler and the outdoor condensing unit shall be replaced, and both units shall be new.

High Efficiency Electric Water Heating

The high efficiency water heating portion of this program promotes technologies that heat water more efficiently than a standard electric water heater and save energy. The incentive depends on the type of technology being installed.

Heating and Air Conditioning Maintenance

To maximize efficiency an incentive will be provided for a heating & air conditioning contractor to perform service/tune-up maintenance on existing electric central heating and air conditioning systems.

Low Flow Showerhead – Aerators

This measure will improve energy efficiency for low-income customers in existing homes. Progress Energy will pay an incentive per showerhead for a maximum of two (2) per home, and an additional incentive per aerator for a maximum of three (3) per home.

Compact Fluorescent Light

This measure will help low income customers reduce their energy costs by installing up to three (3) compact fluorescent lamps (CFL's) per home.

Refrigerator Coil Brush

This portion of the program will encourage low income customers to clean the coils on their refrigerator. The local provider will demonstrate coil cleaning techniques and leave one brush with the customer for future use.

Window Film/Screen

The local provider will be responsible for meeting manufacturer's instructions and specifications, and installing this measure on west, southwest and northwest oriented windows only. Jalousie, double/triple pane, frosted/plastic windows and skylights are not eligible.

Roof Coating for Manufactured Homes

This portion of the program can lower cooling cost and extend roof life for manufactured homes by providing an incentive to install an ENERGY STAR or Cool Roof Rating Council approved reflective roof coating product.

Window AC Replacement/Recycle with HVAC Window Unit Winterization Kit

This measure will provide an incentive for replacement/recycle of one window A/C unit per home. Customer will receive a HVAC window winterization kit. This will allow customers to cool space with increased energy efficiency. The window A/C unit to be replaced must be in operating condition and the provider must be sure the window A/C unit is removed from the premise and recycled appropriately.

Community Energy Connection

This part of the program will provide low income residents with energy education training and interactive workstations that focus on assisting low-income families with developing achievable, sustainable strategies to reduce individual energy bills and each attendee will receive an Energy Conservation Kit. The energy education training will provide a series of Community Energy Connection workshops in low income communities, designed to partner with low income providers. These educational workshops will include three stations: Energy Education Presentation, Social Service Agency Presentation, and Expo/Interactive Workstation. The interactive display station will consist of the following: A/C Thermostat, Lighting, Blower Door, Attic Insulation, Air Handler, and Refrigerator Coil Cleaning.

Program Participation

Annual participation estimates for the Low Income Weatherization Assistance program are shown in the following table:

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	1,457,415	3,000	950	32%
2011	1,473,688	6,033	1,150	35%
2012	1,495,098	8,111	1,450	44%
2013	1,521,451	12,243	1,850	44%
2014	1,548,531	15,430	2,250	50%
2015	1,575,167	18,673	2,650	55%
2016	1,600,448	21,967	3,050	61%
2017	1,624,503	25,311	3,450	66%
2018	1,647,724	28,703	3,850	72%
2019	1,671,277	32,143	4,250	77%

1. The total number of customers is the forecast of residential customers in Progress Energy's 2009 Ten Year Site Plan.
2. Eligible customers is the count that State agencies expects to participate in low income programs
3. Number of participants represents the eligible customers that Progress Energy expects to reach via partnership with State agencies
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and annual projected participation. The total program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	337	0.18	0.15	319,994	173	139
2011	426	0.19	0.19	490,296	214	218
2012	493	0.20	0.22	714,712	295	322
2013	506	0.23	0.22	936,195	433	411
2014	467	0.21	0.20	1,051,626	483	441
2015	456	0.26	0.19	1,208,250	691	515
2016	439	0.34	0.21	1,337,626	1,031	639
2017	421	0.33	0.20	1,451,220	1,154	691
2018	433	0.35	0.19	1,666,826	1,354	742
2019	437	0.39	0.20	1,859,005	1,650	837

At the Generator

Year	Per Customer 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
2010	359	0.19	0.16	340,890	184	148
2011	454	0.20	0.20	522,312	228	232
2012	525	0.22	0.24	761,383	314	343
2013	539	0.25	0.24	997,329	461	438
2014	498	0.23	0.21	1,120,297	515	470
2015	486	0.28	0.21	1,287,149	736	549
2016	467	0.36	0.22	1,424,973	1,098	681
2017	448	0.36	0.21	1,545,985	1,229	736
2018	461	0.37	0.21	1,775,670	1,442	790
2019	466	0.41	0.21	1,980,398	1,758	892

Impact Evaluation Plan

The Low Income Weatherization program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels.

Cost-Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$14,755	\$20,326	-\$5,571	0.73
Participant	\$11,394	\$3,595	\$7,799	3.17
Total Resource Cost	\$14,755	\$12,527	\$2,228	1.18

PROGRAM: Low-Income Weatherization Assistance - RIM

YEAR	BENEFITS					COSTS					NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0
2010	78	8	0	0	86	0	417	330	83	831	-745
2011	139	15	0	0	154	0	211	383	155	749	-595
2012	197	25	0	0	222	0	308	530	246	1,084	-862
2013	408	38	187	0	632	0	456	737	387	1,580	-948
2014	374	53	402	0	828	0	563	858	552	1,973	-1,145
2015	525	69	534	0	1,128	0	816	1,075	789	2,681	-1,553
2016	755	88	1,160	0	2,002	0	1,160	1,227	989	3,376	-1,374
2017	1,113	102	1,467	0	2,681	0	1,619	1,433	1,005	4,058	-1,376
2018	1,191	119	1,050	0	2,360	0	2,046	1,659	1,147	4,852	-2,492
2019	1,355	136	1,222	0	2,713	0	2,577	1,951	1,384	5,912	-3,200
2020	1,275	126	1,157	0	2,558	0	0	0	1,326	1,326	1,232
2021	1,156	116	1,086	0	2,358	0	0	0	1,316	1,316	1,042
2022	1,357	106	540	0	2,003	0	0	0	1,216	1,216	787
2023	1,306	96	805	0	2,206	0	0	0	1,128	1,128	1,078
2024	931	85	738	0	1,754	0	0	0	1,026	1,026	728
2025	802	73	639	0	1,514	0	0	0	909	909	605
2026	862	61	345	0	1,268	0	0	0	779	779	488
2027	707	60	611	0	1,378	0	0	0	776	776	602
2028	679	57	592	0	1,327	0	0	0	744	744	583
2029	924	52	662	0	1,639	0	0	0	702	702	937
2030	889	47	997	0	1,933	0	0	0	647	647	1,286
2031	788	41	897	0	1,725	0	0	0	565	565	1,160
2032	659	34	764	0	1,456	0	0	0	467	467	989
2033	456	23	548	0	1,028	0	0	0	322	322	706
2034	218	12	286	0	515	0	0	0	143	143	373
2035	158	9	212	0	379	0	0	0	105	105	274
2036	97	5	131	0	233	0	0	0	64	64	169
2037	0	0	0	0	0	0	0	0	0	0	0
2038	0	0	0	0	0	0	0	0	0	0	0
NOMINAL	19,395	1,656	17,030	0	38,081	0	10,174	10,183	18,975	39,332	-1,251
NPV	7,538	707	6,510	0	14,755	0	6,114	6,413	7,799	20,326	-5,571

Utility Discount Rate = 8.48

Benefit Cost Ratio = 0.726

PROGRAM: Low-Income Weatherization Assistance - Participant

YEAR	BENEFITS				COSTS		NET BENEFITS \$(000)
	(1) SAVINGS IN PARTICIPANT'S BILL \$(000)	(2) INCENTIVE PAYMENTS \$(000)	(3) OTHER PARTICIPANT'S BENEFITS \$(000)	(4) TOTAL BENEFITS \$(000)	(5) PARTICIPANT'S COST \$(000)	(6) TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0
2010	83	330	0	774	330	691	83
2011	155	383	0	349	383	193	155
2012	246	530	0	492	530	246	246
2013	387	737	0	719	737	332	387
2014	552	858	0	944	858	391	552
2015	789	1,075	0	1,301	1,075	512	789
2016	989	1,227	0	1,573	1,227	584	989
2017	1,005	1,433	0	1,696	1,433	690	1,005
2018	1,147	1,659	0	1,953	1,659	806	1,147
2019	1,384	1,951	0	2,348	1,951	964	1,384
2020	1,326	0	0	1,326	0	0	1,326
2021	1,316	0	0	1,316	0	0	1,316
2022	1,216	0	0	1,216	0	0	1,216
2023	1,128	0	0	1,128	0	0	1,128
2024	1,026	0	0	1,026	0	0	1,026
2025	909	0	0	909	0	0	909
2026	779	0	0	779	0	0	779
2027	776	0	0	776	0	0	776
2028	744	0	0	744	0	0	744
2029	702	0	0	702	0	0	702
2030	647	0	0	647	0	0	647
2031	565	0	0	565	0	0	565
2032	467	0	0	467	0	0	467
2033	322	0	0	322	0	0	322
2034	143	0	0	143	0	0	143
2035	105	0	0	105	0	0	105
2036	64	0	0	64	0	0	64
2037	0	0	0	0	0	0	0
2038	0	0	0	0	0	0	0
NOMINAL	18,975	10,183	0	24,385	10,183	5,410	18,975
NPV	7,799	6,413	0	11,394	6,413	3,595	7,799

Utility Discount Rate = 8.48
Benefit Cost Ratio = 3.170

PROGRAM: Low-Income Weatherization Assistance - TRC

YEAR	BENEFITS					COSTS				NET BENEFITS	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)		(10)
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	OTHER PARTICIPANT'S BENEFITS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT'S COST \$(000)	TOTAL COSTS \$(000)		NET BENEFITS \$(000)
2008	0	0	0	0	0	0	0	0	0	0	
2009	0	0	0	0	0	0	0	0	0	0	
2010	78	8	0	0	86	0	417	330	748	-662	
2011	139	15	0	0	154	0	211	383	594	-440	
2012	197	25	0	0	222	0	308	530	837	-615	
2013	408	38	187	0	632	0	456	737	1,193	-561	
2014	374	53	402	0	828	0	563	858	1,421	-592	
2015	525	69	534	0	1,128	0	816	1,075	1,892	-763	
2016	755	88	1,160	0	2,002	0	1,160	1,227	2,387	-385	
2017	1,113	102	1,467	0	2,681	0	1,619	1,433	3,053	-371	
2018	1,191	119	1,050	0	2,360	0	2,046	1,659	3,705	-1,345	
2019	1,355	136	1,222	0	2,713	0	2,577	1,951	4,528	-1,816	
2020	1,275	126	1,157	0	2,558	0	0	0	0	2,558	
2021	1,156	116	1,086	0	2,358	0	0	0	0	2,358	
2022	1,357	106	540	0	2,003	0	0	0	0	2,003	
2023	1,306	96	805	0	2,206	0	0	0	0	2,206	
2024	931	85	738	0	1,754	0	0	0	0	1,754	
2025	802	73	639	0	1,514	0	0	0	0	1,514	
2026	862	61	345	0	1,268	0	0	0	0	1,268	
2027	707	60	611	0	1,378	0	0	0	0	1,378	
2028	679	57	592	0	1,327	0	0	0	0	1,327	
2029	924	52	662	0	1,639	0	0	0	0	1,639	
2030	889	47	997	0	1,933	0	0	0	0	1,933	
2031	788	41	897	0	1,725	0	0	0	0	1,725	
2032	659	34	764	0	1,456	0	0	0	0	1,456	
2033	456	23	548	0	1,028	0	0	0	0	1,028	
2034	218	12	286	0	515	0	0	0	0	515	
2035	158	9	212	0	379	0	0	0	0	379	
2036	97	5	131	0	233	0	0	0	0	233	
2037	0	0	0	0	0	0	0	0	0	0	
2038	0	0	0	0	0	0	0	0	0	0	
NOMINAL	19,395	1,656	17,030	0	38,081	0	10,174	10,183	20,357	17,724	
NPV	7,538	707	6,510	0	14,755	0	6,114	6,413	12,527	2,228	

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.178

F. RESIDENTIAL ENERGY MANAGEMENT PROGRAM

Program Start Date: 1981

Program Modified in 1995, 2000, 2007

Modifications proposed in 2010

Program Description

Residential Energy Management is a voluntary customer program that allows Progress Energy to reduce peak demand and defer generation construction. Peak demand is reduced by interrupting service to selected electrical equipment with radio controlled switches installed on the customers' premises. These controlled interruptions are at Progress Energy's option during specified time periods and coincident with hours of peak demand.

Policies and Procedures

It continues to be cost-effective to add new participants to the Residential Year Round Energy Management (RSL-1) and Winter Only (RSL-2) Rate Schedules. Continuing the Residential Energy Management program will increase the summer and winter load control capabilities. In addition to increasing the program's winter effectiveness, the 100% strip control will continue to be offered to any new participants and existing participants requesting a change with heat pump equipment.

This program has grown to be one of the largest direct load control programs in the nation today. Progress Energy will continue to offer this program to residential customers, but major infrastructure maintenance procedures are required to maintain a reliable program. The current

direct load control one-way communications and home appliance switching infrastructure that allows Progress Energy to load shed over 700 MW of winter peak demand is becoming obsolete due to the end-of-life of major components in the near future. Major infrastructure maintenance and system upgrades are necessary to continue to ensure the availability of the existing 700 MW of direct load control capacity and support additional capacity in the future.

Program Participation

Annual program participation estimates beginning in the year 2010 are shown in the table below. The estimates reflect continuing the year round program, maintaining a winter only option, 100% strip control, and adding new participants.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	1,457,415	931,134	7,700	1%
2011	1,473,688	941,530	7,700	2%
2012	1,495,098	955,209	7,700	2%
2013	1,521,451	972,046	7,700	3%
2014	1,548,531	989,347	7,700	4%
2015	1,575,167	1,006,365	7,700	5%
2016	1,600,448	1,022,517	13,950	6%
2017	1,624,503	1,037,885	13,950	7%
2018	1,647,724	1,052,721	13,950	8%
2019	1,671,277	1,067,769	9,750	9%

1. The total number of customers is the forecast of residential customers in Progress Energy's 2009 Ten Year Site Plan.
2. Estimate of the eligible customers are based on customers that are not presently on Energy Management and have electric heat.
3. New participants of winter only or year round Energy Management Schedule.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool.

Savings Estimates

The total program savings shown in the following tables reflect the demand and energy savings associated with the new program participants projected for the Residential Energy Management Program.

At the Meter

Year	Per Customer 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
2010	0	2.55	1.08	-	19,651	8,314
2011	0	2.89	1.08	-	22,249	8,314
2012	0	2.89	1.08	-	22,249	8,314
2013	0	2.89	1.08	-	22,249	8,314
2014	0	2.89	1.08	-	22,249	8,314
2015	0	2.58	1.08	-	19,898	8,314
2016	0	1.93	1.08	-	26,860	15,062
2017	0	1.93	1.08	-	26,860	15,062
2018	0	1.93	1.08	-	26,860	15,062
2019	0	1.93	1.08	-	18,773	10,527

At the Generator

Year	Per Customer 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
2010	0	2.72	1.15	-	20,934	8,857
2011	0	3.08	1.15	-	23,702	8,857
2012	0	3.08	1.15	-	23,702	8,857
2013	0	3.08	1.15	-	23,702	8,857
2014	0	3.08	1.15	-	23,702	8,857
2015	0	2.75	1.15	-	21,198	8,857
2016	0	2.05	1.15	-	28,614	16,045
2017	0	2.05	1.15	-	28,614	16,045
2018	0	2.05	1.15	-	28,614	16,045
2019	0	2.05	1.15	-	19,999	11,214

Impact Evaluation Plan

Progress Energy is conducting an ongoing residential end-use metering study that will be used to estimate the appliance level and duty-cycle impacts of residential load control. This end-use metering data will be used to perform engineering and statistical analysis to calculate the impacts of the program.

Cost-Effectiveness

The following economic results are for the total Residential Energy Management program, including existing and new participants:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$950,529	\$810,825	\$139,704	1.17
Participant	\$279,444	\$0	\$279,444	N/A
Total Resource Cost	\$950,529	\$531,381	\$419,148	1.79

PROGRAM: Residential Energy Management - RIM

YEAR	BENEFITS					COSTS								NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
	TOTAL FUEL & O&M SAVINGS	AVOIDED O&M COSTS	AVOIDED GEN. CAP. COSTS	REVENUE GAINS	TOTAL BENEFITS	TOTAL FUEL & O&M INCREASE	INCREASED T&D CAP. COSTS	INCREASED GEN. CAP. COSTS	UTILITY PROGRAM COSTS	INCENTIVE PAYMENTS	REVENUE LOSSES	TOTAL COSTS	NET BENEFITS	
	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0	0	0	
2009	11,715	0	22,992	0	34,707	0	0	0	11,040	20,000	815	31,855	2,852	
2010	18,068	0	24,095	0	42,163	0	0	0	14,663	20,385	783	35,830	6,333	
2011	16,995	0	24,864	0	41,859	0	0	0	15,594	20,770	888	37,252	4,607	
2012	20,049	0	25,849	0	45,898	0	0	0	20,678	21,155	956	42,789	3,109	
2013	20,247	0	37,713	0	57,961	0	0	0	51,400	21,540	1,270	74,210	(16,249)	
2014	10,580	0	38,662	0	49,242	748	0	0	86,236	20,996	829	108,808	(59,566)	
2015	0	0	64,114	0	64,114	14,256	0	0	116,400	21,975	1,492	154,123	(90,009)	
2016	0	0	74,989	0	74,989	3,262	0	0	109,266	22,672	1,601	136,800	(61,811)	
2017	41,029	0	138,858	0	179,887	0	0	0	103,536	23,370	1,495	128,400	51,486	
2018	18,217	0	83,569	0	101,786	0	0	0	87,234	24,067	1,302	112,602	(10,816)	
2019	12,907	0	87,782	0	100,689	0	0	0	71,723	24,765	1,391	97,878	2,811	
2020	11,535	0	90,312	0	101,848	0	0	0	44,303	24,765	1,458	70,525	31,322	
2021	1,999	0	92,926	0	94,925	0	0	0	41,690	24,765	1,884	68,338	26,587	
2022	27,501	0	64,346	0	91,847	0	0	0	40,952	24,765	1,555	67,271	24,576	
2023	36,212	0	65,153	0	101,365	0	0	0	37,514	24,765	1,725	64,004	37,361	
2024	7,724	0	90,921	0	98,644	0	0	0	32,173	24,765	1,843	58,780	39,864	
2025	1,994	0	93,165	0	95,159	0	0	0	25,873	24,765	1,819	52,457	42,702	
2026	26,493	0	73,667	0	100,160	0	0	0	18,648	24,765	1,866	45,278	54,882	
2027	10,415	0	112,704	0	123,119	0	0	0	15,418	24,765	1,888	42,070	81,049	
2028	8,654	0	116,169	0	124,822	0	0	0	13,784	24,765	1,934	40,483	84,339	
2029	16,099	0	104,848	0	120,947	0	0	0	11,632	24,765	2,069	38,466	82,481	
2030	25,618	0	107,591	0	133,209	0	0	0	12,569	24,765	2,576	39,910	93,299	
2031	25,406	0	111,895	0	137,300	0	0	0	14,355	24,765	2,361	41,481	95,820	
2032	24,979	0	116,370	0	141,349	0	0	0	18,485	24,765	2,365	45,614	95,735	
2033	23,109	0	121,026	0	144,135	0	0	0	17,853	24,765	2,770	45,388	98,747	
2034	25,401	0	125,866	0	151,267	0	0	0	18,327	24,765	2,357	45,448	105,819	
2035	21,525	0	130,901	0	152,425	0	0	0	18,906	24,765	2,675	46,346	106,079	
2036	19,424	0	136,137	0	155,560	0	0	0	18,082	24,765	2,990	45,837	109,723	
2037	20,426	0	141,582	0	162,008	0	0	0	40,207	24,765	2,683	67,655	94,353	
NOMINAL	504,317	0	2,519,066	0	3,023,383	18,265	0	0	1,128,540	687,455	51,640	1,885,900	1,137,484	
NPV	185,672	0	764,857	0	950,529	11,090	0	0	520,291	263,082	16,362	810,825	139,704	

Utility Discount Rate = 8.48

Benefit Cost Ratio = 1.172

PROGRAM: Residential Energy Management - Participant

YEAR	BENEFITS				COSTS			NET BENEFITS TO PARTICIPANTS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	SAVINGS IN PARTICIPANT'S BILL	INCENTIVE PAYMENTS	OTHER PARTICIPANT BENEFITS	TOTAL BENEFITS	PARTICIPANT'S COST	PARTICIPANT'S BILL INCREASE	TOTAL COSTS	
	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2009	815	\$20,000	\$0	20,815	\$0	\$0	\$0	20,815
2010	783	\$20,385	0	21,168	0	0	0	21,168
2011	888	\$20,770	0	21,658	0	0	0	21,658
2012	956	\$21,155	0	22,111	0	0	0	22,111
2013	1,270	\$21,540	0	22,810	0	0	0	22,810
2014	829	\$20,996	0	21,825	0	0	0	21,825
2015	1,492	\$21,975	0	23,467	0	0	0	23,467
2016	1,601	\$22,672	0	24,273	0	0	0	24,273
2017	1,495	\$23,370	0	24,864	0	0	0	24,864
2018	1,302	\$24,067	0	25,369	0	0	0	25,369
2019	1,391	\$24,765	0	26,156	0	0	0	26,156
2020	1,458	\$24,765	0	26,223	0	0	0	26,223
2021	1,884	\$24,765	0	26,648	0	0	0	26,648
2022	1,555	\$24,765	0	26,319	0	0	0	26,319
2023	1,725	\$24,765	0	26,490	0	0	0	26,490
2024	1,843	\$24,765	0	26,607	0	0	0	26,607
2025	1,819	\$24,765	0	26,584	0	0	0	26,584
2026	1,866	\$24,765	0	26,631	0	0	0	26,631
2027	1,888	\$24,765	0	26,653	0	0	0	26,653
2028	1,934	\$24,765	0	26,699	0	0	0	26,699
2029	2,069	\$24,765	0	26,834	0	0	0	26,834
2030	2,576	\$24,765	0	27,341	0	0	0	27,341
2031	2,361	\$24,765	0	27,126	0	0	0	27,126
2032	2,365	\$24,765	0	27,129	0	0	0	27,129
2033	2,770	\$24,765	0	27,535	0	0	0	27,535
2034	2,357	\$24,765	0	27,121	0	0	0	27,121
2035	2,675	\$24,765	0	27,440	0	0	0	27,440
2036	2,990	\$24,765	0	27,755	0	0	0	27,755
2037	2,683	\$24,765	0	27,448	0	0	0	27,448
NOMINAL	51,640	687,455	0	739,094	0	0	0	739,094
NPV	16,362	263,082	0	279,444	0	0	0	279,444

Participant Test - NA

PROGRAM: Residential Energy Management - TRC

YEAR	BENEFITS					COSTS							NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	INCREASED T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0	0	0
2009	11,715	0	22,992	0	34,707	0	0	0	11,040	0	0	11,040	23,667
2010	18,068	0	24,095	0	42,163	0	0	0	14,663	0	0	14,663	27,500
2011	16,995	0	24,864	0	41,859	0	0	0	15,594	0	0	15,594	26,265
2012	20,049	0	25,849	0	45,898	0	0	0	20,678	0	0	20,678	25,220
2013	20,247	0	37,713	0	57,961	0	0	0	51,400	0	0	51,400	6,561
2014	10,580	0	38,662	0	49,242	748	0	0	86,236	0	0	86,984	-37,742
2015	0	0	64,114	0	64,114	14,256	0	0	116,400	0	0	130,656	-66,542
2016	0	0	74,989	0	74,989	3,262	0	0	109,266	0	0	112,528	-37,539
2017	41,029	0	138,858	0	179,887	0	0	0	103,536	0	0	103,536	76,351
2018	18,217	0	83,569	0	101,786	0	0	0	87,234	0	0	87,234	14,553
2019	12,907	0	87,782	0	100,689	0	0	0	71,723	0	0	71,723	28,966
2020	11,535	0	90,312	0	101,848	0	0	0	44,303	0	0	44,303	57,545
2021	1,999	0	92,926	0	94,925	0	0	0	41,690	0	0	41,690	53,235
2022	27,501	0	64,346	0	91,847	0	0	0	40,952	0	0	40,952	50,895
2023	36,212	0	65,153	0	101,365	0	0	0	37,514	0	0	37,514	63,851
2024	7,724	0	90,921	0	98,644	0	0	0	32,173	0	0	32,173	66,471
2025	1,994	0	93,165	0	95,159	0	0	0	25,873	0	0	25,873	69,285
2026	26,493	0	73,667	0	100,160	0	0	0	18,648	0	0	18,648	81,512
2027	10,415	0	112,704	0	123,119	0	0	0	15,418	0	0	15,418	107,702
2028	8,654	0	116,169	0	124,822	0	0	0	13,784	0	0	13,784	111,038
2029	16,099	0	104,848	0	120,947	0	0	0	11,632	0	0	11,632	109,315
2030	25,618	0	107,591	0	133,209	0	0	0	12,569	0	0	12,569	120,639
2031	25,406	0	111,895	0	137,300	0	0	0	14,355	0	0	14,355	122,945
2032	24,979	0	116,370	0	141,349	0	0	0	18,485	0	0	18,485	122,864
2033	23,109	0	121,026	0	144,135	0	0	0	17,853	0	0	17,853	126,281
2034	25,401	0	125,866	0	151,267	0	0	0	18,327	0	0	18,327	132,940
2035	21,525	0	130,901	0	152,425	0	0	0	18,906	0	0	18,906	133,519
2036	19,424	0	136,137	0	155,560	0	0	0	18,082	0	0	18,082	137,478
2037	20,426	0	141,582	0	162,008	0	0	0	40,207	0	0	40,207	121,801
NOMINAL	504,317	0	2,519,066	0	3,023,383	18,265	0	0	1,128,540	0	0	1,146,805	1,876,578
NPV	185,672	0	764,857	0	950,529	11,090	0	0	520,291	0	0	531,381	419,148

Utility Discount Rate = 8.48

Benefit Cost Ratio = 1.789

G. RESIDENTIAL EDUCATION PROGRAM

Program Start Date: Proposed in 2010

Program Description

The Residential Education program is designed for all existing residential customers, focusing on energy efficiency education and behavioral changes. This program builds on the Home Energy Check program, utilizing all energy audit types. The customers will be provided with energy efficiency tips and examples of easily installed energy efficiency measures. The program promotes continued customer involvement by demonstrating sustainable and measurable energy reductions in energy usage through the implementation of low cost energy efficiency measures.

The customer will receive a residential Energy Efficiency Kit via the following methods:

- At the time of the onsite Home Energy Check
- Through the mail following completion of all other types of Home Energy Checks

The kit provides items that are program approved and easily implemented for energy efficiency. The contents of the kit will change as needed to achieve high savings impacts while recognizing changes in technology and customer habits. Items that may be included in the kit include but are not limited to energy efficient lighting, thermometers, weatherization items, low-flow devices as well as education for the customer on the savings associated with the installation of the items in the kit.

This program seeks to meet the following overall goals:

- Enhance customer awareness of the capabilities of energy efficient technologies
- Educate the customer about opportunities to achieve measurable and sustainable savings
- Provide information about the energy usage in the customer's home and information that helps the customer to understand the potential savings that can be made in their home by using energy efficiently. This may include a comparison of the home's energy usage to the energy usage of neighbor's homes that are similar
- Install low cost energy efficient items during the Home Energy Check or provide an energy efficient kit to customers choosing other audit types
- Reinforce behavioral modifications by providing collateral material about energy efficiency
- Capitalize on Progress Energy's industry role in energy efficiency and environmental leadership

The onsite Home Energy Check provides unique opportunities for increasing the energy efficiency of the home because of the face-to-face interaction of the energy auditor with the customer. During the onsite Home Energy Check, the expertise of the energy auditor is applied to the customer's situation, equipment, motivation, and preferred method of learning to build trust. In addition, the onsite Home Energy Check provides the best opportunity for addressing the customer's concerns about energy costs. The trust that is established during this process may help provide energy efficiency guidance and priorities that motivate the customer to make sustainable changes that reduce energy costs.

Policies and Procedures

Specific eligibility requirements for each item installed in this program will be presented in the Program Participation Standards and are subject to revision based on changes in market conditions such as baseline, code revisions, updated measure and valuation analysis, or technological advances.

Program Participation

Annual participation estimates for the Residential Education program are shown in the following table.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	1,457,415	1,457,415	47,141	3%
2011	1,473,688	1,426,547	50,079	7%
2012	1,495,098	1,397,878	51,979	11%
2013	1,521,451	1,419,393	52,354	14%
2014	1,548,531	1,444,198	52,760	18%
2015	1,575,167	1,470,053	53,199	21%
2016	1,600,448	1,494,489	53,672	24%
2017	1,624,503	1,517,632	52,760	27%
2018	1,647,724	1,541,292	54,176	30%
2019	1,671,277	1,564,341	54,714	33%

1. The total number of customers is the forecast of residential customers in Progress Energy's 2009 Ten Year Site Plan.
2. The entire residential class is eligible for participation, less previous participation.
3. Number of participants represents the customers that Progress Energy expects to reach through direct offerings in each year.
4. Cumulative penetration is the ratio of projected participating customer to the eligible customer pool.

Savings Estimates

The total program savings were developed by estimating impacts for each audit level and for low-cost energy efficiency measures promoted through the program. The total Residential Education program savings are shown in the following tables:

At the Meter

Year	Per Customer 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
2010	586	0.11	0.16	27,641,314	5,116	7,734
2011	535	0.10	0.15	26,792,466	4,933	7,707
2012	523	0.10	0.15	27,193,005	4,999	7,879
2013	517	0.10	0.15	27,080,253	4,975	7,874
2014	511	0.09	0.15	26,984,307	4,954	7,875
2015	506	0.09	0.15	26,905,313	4,936	7,880
2016	500	0.09	0.15	26,843,582	4,921	7,891
2017	508	0.09	0.15	26,797,869	4,909	7,906
2018	494	0.09	0.15	26,769,447	4,900	7,927
2019	489	0.09	0.15	26,757,161	4,895	7,952

At the Generator

Year	Per Customer 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
2010	625	0.12	0.17	29,446,292	5,450	8,239
2011	570	0.10	0.16	28,542,014	5,255	8,210
2012	557	0.10	0.16	28,968,708	5,325	8,393
2013	551	0.10	0.16	28,848,594	5,300	8,388
2014	545	0.10	0.16	28,746,382	5,277	8,389
2015	539	0.10	0.16	28,662,230	5,258	8,395
2016	533	0.10	0.16	28,596,468	5,242	8,406
2017	541	0.10	0.16	28,547,770	5,230	8,422
2018	526	0.10	0.16	28,517,492	5,220	8,445
2019	521	0.10	0.15	28,504,404	5,215	8,471

Impact Evaluation Plan

The Residential Education program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels. These analyses are supported by end-use metering data, where feasible.

Cost-Effectiveness

The following economic results are for the Residential Education program:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$224,249	\$332,094	-\$107,844	0.68
Participant	\$207,918	\$15,249	\$192,669	13.64
Total Resource Cost	\$224,249	\$139,425	\$84,825	1.61

PROGRAM: Res Education - RIM

YEAR	BENEFITS					COSTS							NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	INCREASED T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0	0
2010	5,245	384	0	0	5,629	0	0	0	13,744	1,071	6,526	21,340	-15,711
2011	10,752	772	0	0	11,523	0	0	0	12,380	1,356	13,869	27,606	-16,082
2012	14,375	1,169	0	0	15,543	0	0	0	14,708	1,693	20,542	36,943	-21,399
2013	23,620	1,567	6,218	0	31,405	0	0	0	17,354	2,046	28,882	48,282	-16,877
2014	22,647	1,966	12,291	0	36,904	0	0	0	17,204	2,220	37,558	56,982	-20,078
2015	25,758	1,982	12,595	0	40,335	0	0	0	20,674	2,698	41,033	64,406	-24,071
2016	26,954	1,996	18,442	0	47,392	0	0	0	25,032	3,299	40,757	69,089	-21,698
2017	32,886	2,001	38,107	0	72,994	0	0	0	30,378	4,041	36,037	70,456	2,538
2018	28,888	2,007	14,997	0	45,892	0	0	0	33,978	4,560	34,749	73,287	-27,395
2019	29,419	2,014	15,361	0	46,794	0	0	0	38,349	5,192	36,283	79,824	-33,030
2020	23,813	1,614	12,569	0	37,996	0	0	0	0	0	29,784	29,784	8,212
2021	18,299	1,213	9,646	0	29,157	0	0	0	0	0	23,989	23,989	5,168
2022	14,244	810	3,521	0	18,576	0	0	0	0	0	16,143	16,143	2,433
2023	7,605	406	2,947	0	10,959	0	0	0	0	0	8,289	8,289	2,670
2024	0	0	0	0	0	0	0	0	0	0	0	0	0
2025	0	0	0	0	0	0	0	0	0	0	0	0	0
2026	0	0	0	0	0	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	0	0	0	0	0	0	0
2029	0	0	0	0	0	0	0	0	0	0	0	0	0
2030	0	0	0	0	0	0	0	0	0	0	0	0	0
2031	0	0	0	0	0	0	0	0	0	0	0	0	0
2032	0	0	0	0	0	0	0	0	0	0	0	0	0
2033	0	0	0	0	0	0	0	0	0	0	0	0	0
2034	0	0	0	0	0	0	0	0	0	0	0	0	0
2035	0	0	0	0	0	0	0	0	0	0	0	0	0
2036	0	0	0	0	0	0	0	0	0	0	0	0	0
2037	0	0	0	0	0	0	0	0	0	0	0	0	0
NOMINAL	284,505	19,900	146,694	0	451,099	0	0	0	223,802	28,176	374,441	626,419	-175,320
NPV	144,247	10,267	69,735	0	224,249	0	0	0	124,176	15,249	192,669	332,094	-107,844

Utility Discount Rate = 8.48
Benefit Cost Ratio = 0.675

PROGRAM: Res Education - Participant

YEAR	BENEFITS				COSTS			NET BENEFITS TO PARTICIPANTS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	SAVINGS IN PARTICIPANT'S BILL \$(000)	INCENTIVE PAYMENTS \$(000)	OTHER PARTICIPANT'S BENEFITS \$(000)	TOTAL BENEFITS \$(000)	PARTICIPANT'S COST \$(000)	PARTICIPANT'S BILL INCREASE \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	6,526	1,071	0	7,596	1,071	0	1,071	6,526
2011	13,869	1,356	0	15,225	1,356	0	1,356	13,869
2012	20,542	1,693	0	22,235	1,693	0	1,693	20,542
2013	28,882	2,046	0	30,928	2,046	0	2,046	28,882
2014	37,558	2,220	0	39,778	2,220	0	2,220	37,558
2015	41,033	2,698	0	43,731	2,698	0	2,698	41,033
2016	40,757	3,299	0	44,057	3,299	0	3,299	40,757
2017	36,037	4,041	0	40,078	4,041	0	4,041	36,037
2018	34,749	4,560	0	39,310	4,560	0	4,560	34,749
2019	36,283	5,192	0	41,475	5,192	0	5,192	36,283
2020	29,784	0	0	29,784	0	0	0	29,784
2021	23,989	0	0	23,989	0	0	0	23,989
2022	16,143	0	0	16,143	0	0	0	16,143
2023	8,289	0	0	8,289	0	0	0	8,289
2024	0	0	0	0	0	0	0	0
2025	0	0	0	0	0	0	0	0
2026	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	0	0
2029	0	0	0	0	0	0	0	0
2030	0	0	0	0	0	0	0	0
2031	0	0	0	0	0	0	0	0
2032	0	0	0	0	0	0	0	0
2033	0	0	0	0	0	0	0	0
2034	0	0	0	0	0	0	0	0
2035	0	0	0	0	0	0	0	0
2036	0	0	0	0	0	0	0	0
2037	0	0	0	0	0	0	0	0
NOMINAL	374,441	28,176	0	402,617	28,176	0	28,176	374,441
NPV	192,669	15,249	0	207,918	15,249	0	15,249	192,669

Utility Discount Rate = 8.48
Benefit Cost Ratio = 13.635

PROGRAM: Res Education - TRC

YEAR	BENEFITS					COSTS						NET BENEFITS
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	OTHER PARTICIPANT BENEFITS \$(000)	TOTAL BENEFITS \$(000)	PARTICIPANT'S COST \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	INCREASED T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	5,245	384	0	0	5,629	1,071	0	0	0	13,744	14,815	-9,186
2011	10,752	772	0	0	11,523	1,356	0	0	0	12,380	13,736	-2,213
2012	14,375	1,169	0	0	15,543	1,693	0	0	0	14,708	16,401	-858
2013	23,620	1,567	6,218	0	31,405	2,046	0	0	0	17,354	19,400	12,005
2014	22,647	1,966	12,291	0	36,904	2,220	0	0	0	17,204	19,424	17,480
2015	25,758	1,982	12,595	0	40,335	2,698	0	0	0	20,674	23,373	16,962
2016	26,954	1,996	18,442	0	47,392	3,299	0	0	0	25,032	28,332	19,060
2017	32,886	2,001	38,107	0	72,994	4,041	0	0	0	30,378	34,419	38,575
2018	28,888	2,007	14,997	0	45,892	4,560	0	0	0	33,978	38,538	7,354
2019	29,419	2,014	15,361	0	46,794	5,192	0	0	0	38,349	43,541	3,253
2020	23,813	1,614	12,569	0	37,996	0	0	0	0	0	0	37,996
2021	18,299	1,213	9,646	0	29,157	0	0	0	0	0	0	29,157
2022	14,244	810	3,521	0	18,576	0	0	0	0	0	0	18,576
2023	7,605	406	2,947	0	10,959	0	0	0	0	0	0	10,959
2024	0	0	0	0	0	0	0	0	0	0	0	0
2025	0	0	0	0	0	0	0	0	0	0	0	0
2026	0	0	0	0	0	0	0	0	0	0	0	0
2027	0	0	0	0	0	0	0	0	0	0	0	0
2028	0	0	0	0	0	0	0	0	0	0	0	0
2029	0	0	0	0	0	0	0	0	0	0	0	0
2030	0	0	0	0	0	0	0	0	0	0	0	0
2031	0	0	0	0	0	0	0	0	0	0	0	0
2032	0	0	0	0	0	0	0	0	0	0	0	0
2033	0	0	0	0	0	0	0	0	0	0	0	0
2034	0	0	0	0	0	0	0	0	0	0	0	0
2035	0	0	0	0	0	0	0	0	0	0	0	0
2036	0	0	0	0	0	0	0	0	0	0	0	0
2037	0	0	0	0	0	0	0	0	0	0	0	0
NOMINAL	284,505	19,900	146,694	0	451,099	28,176	0	0	0	223,802	251,978	199,121
NPV	144,247	10,267	69,735	0	224,249	15,249	0	0	0	124,176	139,425	84,825

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.608

H. TECHNICAL POTENTIAL PROGRAM

Program Start Date: Proposed in 2010

Program Description

The Technical Potential program will target the residential customer segment and promote measures that have a payback period of two years or less. This program is designed to meet a technical goal of 1621 GWhs by the end of 2019. The measures within this program include but are not limited to the following:

- Installation of water heater blanket
- HVAC annual maintenance
- Installation of solar window screens
- Electronically commutated motors as part of HVAC replacement 16 SEER or higher
- Pool pump replacement - variable speed
- Residential lighting (CFLs)
- Refrigerator and freezer recycling
- Air filter replacement

Progress Energy will continue to pursue measures that will focus on providing savings opportunities for customers who may be unable to make capital investments, but have a desire to focus on low-cost measures or practices that will enable them to achieve their savings goals.

Technical Potential is an unprecedented program, and Progress Energy will employ multiple strategies to support goal achievement including: education, traditional incentives and retail partnerships. Also, since many of the measures in the Technical Potential program share the same general target audience as the Home Energy Improvement program, these measures will be marketed through the Home Energy Improvement Program and other programs as appropriate.

Education

Our educational outreach efforts will consist of multiple delivery channels and will reach all customer segments.

- **Community Education**

- Progress Energy will expand its educational efforts in the local communities. Through local outreach we will work with homeowners' associations to provide energy-efficiency workshops. Additionally, the Company will provide energy-related news articles to insert into community newsletters. Technical Potential measures will be included as recommendations during the Home Energy Check, as appropriate. Additionally, community competitions will be developed to raise awareness of energy efficiency among neighbors.

- **Education Through Behavior Modification**

- Progress Energy proposes to incorporate personalized feedback into customer education to motivate customers to adopt behaviors that will support energy efficiency. By using behavior modification tools like those offered by OPOWER and other such vendors, we will help the customer better understand their energy

usage and help them to see how their energy consumption compares to other similar customers, set personal goals for energy reduction, and obtain feedback on their progress. Studies have shown that similar tools have supported customer's energy usage reductions by about 2%. Energy reductions achieved through these tools will be counted within this program.

- The incorporation of personalized feedback in this tool increases the success of the behavior change. These tools provide customers the opportunity to compare their energy usage to neighbors with similar demographics and similar home size and make informed energy choices. This program gives Progress Energy the opportunity to expand our reach with energy efficiency to all customers segments including low-income and rental communities. All customer groups will be able to take advantage of this education and benefit from it.

- **Education of Low-Income Customers**

Low income customers are typically the hardest to motivate to participate in energy efficiency measures due to cost barriers and lack of access to energy education information. Progress Energy has successfully utilized its Neighborhood Energy Saver program as a means to weatherize the homes of thousands of low income Progress Energy customers. Tied in with the weatherization efforts, Progress Energy has also offered in-home energy education at the time of the Neighborhood Energy Saver visit to teach customers about regularly changing their air filters, using CFL bulbs, and the benefits of insulating their water heaters, as well as a many other energy-saving

behaviors. To increase our educational outreach efforts, Progress Energy has developed an educational video that highlights simple behavioral changes customers can make to save energy throughout the home. This video will be shown at weatherization agency offices throughout the service territory. In addition, we will be conducting energy education workshops that will include seminars, product demonstrations and question and answer sessions for customer to learn about cost-effective ways to save energy now and in the future.

- **Student Education**

Progress Energy will reach out to local schools and youth organizations to expose students to no-cost and low-cost energy-efficient behaviors and improvements that they and their families can do in their homes. As part of this effort, Progress Energy will expand the Home Energy Check for Kids program to incorporate all grade levels. In addition, we have started to pilot an after-school program with a YMCA in Clearwater, Florida where high school students will develop a “green club” with the goal of mentoring younger students about energy efficiency. Progress Energy’s employees will act as mentors, assist with energy education for the club and participate as guest speakers at student events. Our goal is to expand this program to other YMCAs and youth organizations through our service territory.

- **Education of External Influencers**

Developing partnerships with external parties that help influence our customers is important to ensuring that the energy efficiency message is heard. Contractors, builders, retailers, realtors and local businesses are just a few of those external parties who act as an extension of Progress Energy to help educate our customers about being energy efficient. These partnerships will include training seminars, follow-up communications including newsletters and email blasts, and the development of co-op and joint advertising strategies to ensure the greatest impact.

- **General Customer Education**

Progress Energy will utilize campaigns like the Save-the-Watts themed campaign to educate and inform customers about the energy efficiency programs that we offer. Progress Energy will provide online content and mass media messaging to ensure customers have the tools they need to make informed decisions regarding energy efficiency.

Traditional Incentives

Educating our customers will be a strategy that is utilized throughout the life of the program, but in order to move the market and achieve Progress Energy's GWh reduction goal, we will also employ the use of traditional customer incentives.

- **Customer Incentives**

As most product adoption bell curves indicate, there is a steep incline in participation early in the lifecycle of the program (participants are called ‘early adopters’), a point where participation flattens out (‘early and late majority’), followed by a steady decline (‘laggards’). In order to effectively manage this adoption curve, Progress Energy will increase financial incentives as the market matures, changing from easy-to-acquire early adopters who may be motivated by education and a lower incentive, to those customers who are harder to motivate (laggards), who will require a higher incentive. Flexibility to react to market conditions will be the key in successfully managing incentives and customer participation.

Incentives will be offered on measures at some point during the lifecycle of the program, and will be used to drive participation in the measures that may require more motivation due to higher initial out-of-pocket cost to the customer, such as: appliance recycling, HVAC replacement and pool pump replacement.

- **Contractor Incentives**

Progress Energy will also offer financial incentives for contractors who install measures as part of this program. The incentives serve to motivate the contractor to make energy efficient recommendations and encourage them to document installation of the measure for verification.

Retail Partnerships

Many of the measures that make up the Technical Potential program lend themselves naturally to partnerships with retailers.

- **Do-it-yourself Measures**

Measures such as air filters, water heater blankets and CFL bulbs can be purchased and installed directly by the customer. By developing partnerships with retailers, Progress Energy can ensure that customers who are in stores and in a buying mode receive the education they need about these products. Through ongoing contractor education, we will ensure store staff is educated about energy efficiency measures so that they can act as an extension of Progress Energy and answer questions that customers may have about the energy-saving benefits of the measures.

- **Financial Incentives**

Progress Energy will offer financial incentives to the customers when they purchase qualifying measures from the retail store. These incentives will be administered through buy-downs (where Progress Energy pays a portion of the item cost so that it will have a lower price in the store) as well as mail-in rebates where customers will receive money back once proof of purchase has been verified.

Marketing Tactics

Progress Energy will employ a variety of standard marketing strategies to drive customer participation in the Technical Potential program. Some of these marketing tactics include:

- Mass Media
- Market Segmentation
- Direct Marketing
- Event Marketing

Implementation Approach

Progress Energy plans a gradual implementation of this program. This method of implementation will provide time to expand resources and design infrastructure needed to achieve the significant goal ahead. We will also continue to research and monitor emerging technologies (like LED lighting) that may offer greater energy savings for our customers versus what is currently available in the market.

The general timeline for the implementation of The Technical Potential Program is noted below:

- Test strategies to generate baseline results in which to determine if strategy is sound or if changes are needed to maximize the participation
- Expand existing infrastructure to support increased customer participation levels in the future.
- Test marketing strategies to optimize effectiveness

- Build upon existing contractor relationships and develop relationships for new measures
- Execute contracts with 3rd party vendors for CFL and Appliance Recycling measure roll-out and develop turnkey retail partnerships
- Phased-in incentives to meet market demand and maximize participation
- Leverage existing infrastructure, relationships, and established baselines to increase adoption
- Continuously monitor the market for the best adaptation strategies and mix of incentives and education to move the market to the next level

Policies and Procedures

The program seeks to meet the following overall goals:

- To accelerate the adoption of energy efficiency measures with a short payback period
- Develop cost-effective marketing strategies and strategies that will deliver participation and energy reduction goals
- Obtain energy reductions that are significant and measurable
- Expand the portfolio of energy efficiency offerings for existing residential homes and new home construction

The program eligibility requirements to qualify for participation are as follows:

- The residence must be in Progress Energy’s service area and be an active residentially-metered Progress Energy customer.
- Existing or newly constructed residential single-family, multifamily or manufactured homes.
- Specific eligibility requirements for each item installed in this program will be presented in the Program Participation Standards and are subject to revision based on changes in market conditions such as baseline, code revisions, updated measure and valuation analysis, or technological advances.

The program will encourage customers to implement the following program measures:

Water Heater Blanket

This measure encourages the purchase and installation of water heater blankets on older, existing electric water heaters. This measure will be promoted through the consumer and retail channels in order to generate awareness and participation.

HVAC Annual Maintenance

This measure encourages the annual cleaning of outdoor coils in the HVAC system in order to ensure the system will continue to function as efficiently as possible. Education directly to the customers and through the contractor channels will be used to generate awareness of and participation in this measure.

Installation of Solar Window Screens

Solar window screens are a more affordable alternative to window film and provide the customer with many of the same benefits. This measure will be promoted through education to both consumers and through the contractor channels to generate awareness and participation.

Electronically Commutated Motors as part of HVAC Replacement 16 SEER or Higher

Electronically Commutated Motors are the standard air handler motor on high efficiency HVAC systems (typically 16 SEER or higher) and offer significant energy savings compared to other motor types. This measure will be promoted through education to both consumers and through the contractor channels to generate awareness and participation.

Pool Pump Replacement (variable speed)

This measure will encourage customers to upgrade to a variable speed pool pump. Progress Energy will educate consumers, contractors, pool builders, and pool maintenance service companies about the additional energy savings of variable speed pool pump motors.

Residential Lighting (CFLs)

The residential lighting measure will provide incentives and marketing support through retailers to encourage greater Progress Energy customer adoption of CFL lighting. Progress Energy will

partner with various manufacturers and retailers across its service territory to offer a wide selection of products to customers.

Refrigerator and freezer recycling

The refrigerator and freezer recycling measure are designed to remove less efficient refrigerators and freezers that are operating within residences across the Progress Energy service territory. The program will include scheduling and free appliance pick-up at the customer's location, transportation to a recycling facility, and recovery and recycling of appliance materials.

Air filter replacement

Progress Energy will encourage customers to regularly replace air filters on central HVAC systems that have standard air filtration. Continuous education and awareness marketing will play a key role in encouraging customers to adopt this energy-saving behavior.

Program Participation

Annual participation estimates for the Technical Potential program are shown in the following table

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	1,457,415	1,457,415	18,101	1%
2011	1,473,688	1,473,688	18,102	2%
2012	1,495,098	1,495,098	34,893	5%
2013	1,521,451	1,521,451	51,693	8%
2014	1,548,531	1,548,531	67,177	12%
2015	1,575,167	1,575,167	150,899	22%
2016	1,600,448	1,600,448	233,028	36%
2017	1,624,503	1,624,503	271,076	52%
2018	1,647,724	1,647,724	382,305	74%
2019	1,671,277	1,671,277	444,003	100%

1. The total number of customers is the forecast of residential customers in Progress Energy's 2009 Ten Year Site Plan.
2. The entire residential class is eligible for participation
3. Number of participants represents the customers that Progress Energy expects to reach through this program annually
4. Cumulative penetration is the ratio of projected participating customer to the eligible customer pool

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure, based on each measure's per customer savings and annual projected participation. The total program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	1355	0.18	0.38	24,518,807	3,175	6,810
2011	1355	0.18	0.38	24,534,402	3,175	6,814
2012	1171	0.14	0.30	40,856,823	4,762	10,628
2013	1108	0.12	0.28	57,301,449	6,349	14,474
2014	974	0.09	0.23	65,447,440	6,349	15,298
2015	952	0.09	0.22	143,726,252	14,286	33,499
2016	900	0.09	0.20	209,784,626	20,635	47,655
2017	950	0.11	0.23	257,389,979	28,572	61,656
2018	864	0.09	0.20	330,500,701	34,921	75,157
2019	826	0.08	0.18	366,636,884	36,508	80,341

At the Generator

Year	Per Customer 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
2010	1443	0.19	0.40	26,119,885	3,382	7,255
2011	1444	0.19	0.40	26,136,498	3,382	7,259
2012	1247	0.15	0.32	43,524,774	5,073	11,322
2013	1181	0.13	0.30	61,043,234	6,764	15,419
2014	1038	0.10	0.24	69,721,158	6,764	16,297
2015	1015	0.10	0.24	153,111,576	15,219	35,686
2016	959	0.09	0.22	223,483,562	21,982	50,767
2017	1012	0.11	0.24	274,197,545	30,438	65,682
2018	921	0.10	0.21	352,082,397	37,201	80,065
2019	880	0.09	0.19	390,578,273	38,892	85,587

Impact Evaluation Plan

Progress Energy will measure participation in the program through the use of data from our third party partners as well as market surveys.

V. COMMERCIAL/INDUSTRIAL CONSERVATION PROGRAMS

Progress Energy's Demand Side Management Plan includes eleven (11) commercial/industrial programs:

- Business Energy Check - commercial/industrial energy audits
- Better Business - program for existing facilities
- Commercial/Industrial New Construction - program for new construction facilities
- Business Energy Saver –low-income energy conservation program
- Commercial Education – influencing customer educational and behavior
- Commercial Green Building New Construction - new facilities program to achieve optimal energy efficiency
- Innovation Incentive - program of custom measures
- Standby Generation - Rate Tariff GSLM-2
- Interruptible Service - Rate Tariff IS-2
- Curtailable Service - Rate Tariff CS-2
- Business Energy Response - program designed to reduce system peak demand and increase renewable energy generation on the Progress Energy grid

A. BUSINESS ENERGY CHECK PROGRAM

Program Start Date: 1995

Modifications proposed in 2010

Program Description

The Business Energy Check program is an energy audit program that provides commercial, industrial and governmental customers with an analysis of their energy usage as well as recommendations on how they can save on their electric bill. The audit encourages customers to implement minimal cost energy-saving practices and measures. The audit also provides Progress Energy the opportunity to promote cost effective measures in customers' facilities. The Business Energy Check program serves as the foundation for other commercial, industrial and governmental Demand Side Management programs.

The Business Energy Check program offers the following types of audits:

Type 1: Free Walk-Through

Type 2: Paid Walk-Through

Type 3: Customer Online (Internet Option)

Type 4: Customer Phone Assisted

Policies and Procedures

All commercial, industrial, and governmental customers of Progress Energy are eligible to receive any of the above mentioned audit types conducted on any of their buildings located in Progress Energy's service territory. There is no charge for Type 1, Type 3 and Type 4 audits, while there is a nominal customer charge for the Type 2 energy analysis. When a customer requests a Business Energy Check, they will be given the option of any of the above offered audit types. Progress Energy reserves the option to work with other agencies and/or companies as an extension of the Business Energy Check service. The specific details on the procedures for each type of audit will be presented in the Program Participation Standards.

Program Participation

Annual participation estimates for the Business Energy Check program are shown in the following table:

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	167,233	3,000	2%
2011	170,886	170,886	3,060	4%
2012	175,147	175,147	3,152	5%
2013	178,542	178,542	3,278	7%
2014	182,030	182,030	3,442	9%
2015	185,461	185,461	3,683	11%
2016	188,717	188,717	3,867	12%
2017	191,817	191,817	3,983	14%
2018	194,809	194,809	4,102	16%
2019	197,848	197,848	4,143	18%

1. The total number of customers is the forecast of commercial/industrial customers in Progress Energy's 2009 Ten Year Site Plan.
2. All commercial, industrial and governmental rate classes are eligible to participate.
3. Number of program participants represents the number of individual measure participants projected in a given year.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool

B. BETTER BUSINESS PROGRAM

Program Start Date: 1995

Program modified 2000, 2005, 2006 and 2007

Modifications proposed in 2010

Program Description

The Better Business program is designed for existing commercial, industrial, and government customers who want to retrofit with high efficiency improvements. All business customers are eligible for this program. The Better Business program builds on customer awareness, utilizing the various audit types, contractor participation, and Progress Energy influence to educate customers on cost effective measures relevant to their businesses.

The program seeks to meet the following overall goals:

- Fulfill financial obligations to customers and the Commission by providing the market place with a cost-effective comprehensive program portfolio of measures across all building types
- Improve customer energy savings and demand reduction through the installation of energy efficient equipment and thermal envelope upgrades
- Obtain energy and demand reductions that are significant, accurate and measurable

- Educate the commercial retrofit market about best practices, innovative technologies and opportunities to participate in additional non- Progress Energy incentives for managing energy consumption

Policies and Procedures

The general eligibility requirements are as follows:

- Must have been influenced by one of Progress Energy’s educational opportunities
- The facility must be a commercially metered customer in Progress Energy territory

Commercial multi-family is defined as commercially metered accounts of multi-family residential apartments or condominiums, or assisted living residential apartment units. Any multi-family residential dwellings that are metered (referred to as “Domestic/Commercial”) shall be eligible to participate in this program.

Progress Energy reserves the right to inspect the installation of measures and equipment prior to issuing any incentive payments

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measurement and valuation analysis, or technological advances.

Progress Energy is proposing to include the following measures with this program:

HVAC Equipment & Heat Pump Water Heaters

The HVAC equipment component of Better Business provides customers with information on high efficiency HVAC equipment and financial incentives for the purchase of high efficiency unitary heat pumps and air conditioners including heat pump water heaters, hybrid desiccant and geothermal units, thermal energy storage systems, packaged terminal heat pumps and package terminal air conditioners, water-cooled chillers, air-cooled chillers, EMS Chiller Optimization, and high efficiency straight cool air conditioners 14 to 19+ SEER. The Better Business HVAC measures also provide our customers with a one-time incentive to maintain/recommission and/or repair their current DX units. The incentives will be based on a per unit basis. PTAC/PTHP coil cleaning is also a one-time incentive to stimulate the annual maintenance of customer's equipment. Hotel AC sensors for controlling HVAC systems during unoccupied periods in hotel rooms will be offered as a per room incentive. Variable Speed Drive controls and Variable Speed Drive's for Chiller and Cooling Tower Pumps incentives will also be offered under this program.

Energy Recovery Ventilation / Demand Control Ventilation / Heat Pipes / Exhaust Hood Optimization

The program promotes the installation of high efficiency energy recovery ventilation units in the conditioned air stream for customers using electric cooling and heating. These units are capable of removing over 70% of the sensible heat and over 60% of the latent heat when properly sized and installed. To qualify for Progress Energy's incentive, the energy recovery ventilation must

meet qualifications outlined in the Program Participation Standards. Demand Control Ventilation will provide incentives for the installation of Demand Control Ventilation using CO₂ sensors. Demand Control Ventilation saves energy by automatically adjusting building ventilation rates in real time based on occupancy. Heat Pipe technology for pre-conditioning fresh air will also be incented and must meet the Program Participation Standards. Exhaust hood controls for varying ventilation will be included as an incentive.

Duct Leakage Test and Repair

This portion of the program is designed to promote energy efficiency through improved duct system sealing. This program component applies to HVAC equipment and systems that are no larger than 65,000 Btu/h. A customer must have electric heating and a centrally-ducted cooling system, either air conditioning or heat pump, to be eligible for this program.

Efficient Indoor lighting

This measure will provide customers with an incentive to upgrade their lighting systems to an approved lighting technology. The following technologies will be included: Premium T-8's and T-5's, occupancy sensors, ceramic metal halides, LED display lighting, Induction/Cold cathode, and CFL hardwire fixtures only. The Program Participation Standards will outline the incentive adjustments due to code changes.

Ceiling Insulation Upgrade

This portion of the program encourages customers to add insulation to the conditioned ceiling area by paying for a portion of the installed cost. The facility must meet the Program Participation Standard requirements in order to qualify for this measure.

Cool Roof/ Green Roof/ Roof Insulation

The cool roof measure will provide customers with an incentive to install an Energy Star approved “cool roof” providing the facility has electric cooling. Customers must meet the specifications for solar reflectance and reliability, having initial reflectance as outlined in the Program Participation Standards. The green roof measure will provide an incentive for customers to install an approved green roof on their facility. The roof insulation measure encourages customers to add insulation to the conditioned roof area.

Efficient Compressed Air System

This measure will provide an incentive to encourage business customers to utilize a proactive approach to increase the efficiency of compressed air systems. The customer must provide a pre- and post-analysis of the system in order to be eligible for incentives.

Efficient Motors

This measure promotes the installation of certain high efficiency polyphase motors through a simple incentive structure based on the motor size and a specified \$/hp. The specific incentive amount will be a function of the motor size and efficiency.

Window Film / Solar Screen

This measure provides an incentive to install window film or solar screen on windows having east, west, and south exposures. The qualifying facilities and requirements are outlined in the Program Participation Standards.

Refrigeration

This measure provides an incentive to install energy efficient devices to reduce energy consumption of refrigeration equipment. The eligible devices include vending machine controls, over sized air cooled condensers, multiplex compressor systems, and high efficient ice makers.

Building Commissioning

This measure provides an incentive to customers for conducting whole building commissioning. The requirement and incentives will be outlined in the Program Participation Standards.

Incentive Levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in the market conditions, such as baseline or code revisions, updated measures and valuation analysis or technological advances.

Program Participation

Annual participation estimates for the Better Business program are shown in the following table.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	167,233	2,016	1.2%
2011	170,886	170,886	2,115	2.4%
2012	175,147	175,147	2,184	3.6%
2013	178,542	178,542	1,771	4.5%
2014	182,030	182,030	1,882	5.5%
2015	185,461	185,461	2,367	6.7%
2016	188,717	188,717	2,893	8.1%
2017	191,817	191,817	3,617	9.8%
2018	194,809	194,809	4,677	12.1%
2019	197,848	197,848	6,178	15.0%

1. The total number of customers is the forecast of commercial/industrial customers in Progress Energy's 2009 Ten Year Site Plan.
2. All commercial, industrial and governmental rate classes are eligible to participate.
3. Number of program participants represents the number of individual measure participants projected in a given year.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and, annual projected participation. The total program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	7801	0.95	2.47	15,727,255	1,913	4,988
2011	7768	0.94	2.46	16,430,535	1,997	5,207
2012	7767	0.94	2.46	16,966,183	2,049	5,368
2013	8124	0.87	2.53	14,387,819	1,543	4,475
2014	8081	0.82	2.51	15,208,595	1,543	4,717
2015	7895	0.78	2.43	18,686,332	1,849	5,760
2016	7753	0.75	2.38	22,426,272	2,182	6,881
2017	7621	0.73	2.33	27,566,792	2,636	8,415
2018	7498	0.70	2.28	35,068,774	3,293	10,657
2019	7393	0.68	2.24	45,676,921	4,216	13,831

At the Generator

Year	Per Customer 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
2010	8228	1.00	2.61	16,587,536	2,018	5,261
2011	8193	1.00	2.60	17,329,285	2,106	5,492
2012	8192	0.99	2.59	17,894,233	2,161	5,662
2013	8569	0.92	2.67	15,174,833	1,627	4,720
2014	8523	0.86	2.64	16,040,505	1,627	4,975
2015	8327	0.82	2.57	19,708,474	1,950	6,075
2016	8177	0.80	2.51	23,652,989	2,301	7,257
2017	8038	0.77	2.45	29,074,696	2,780	8,875
2018	7908	0.74	2.40	36,987,036	3,473	11,240
2019	7798	0.72	2.36	48,175,449	4,447	14,588

Impact Evaluation Plan

The Better Business program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels. These analyses are supported by end-use metering data, where feasible.

Cost Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$152,494	\$221,863	-\$69,369	0.69
Participant	\$201,890	\$123,570	\$78,321	1.63
Total Resource Cost	\$152,494	\$143,542	\$8,952	1.06

PROGRAM: Better Business - RIM

YEAR	BENEFITS					COSTS							NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	INCREASED T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2010	1,288	68			1,356				1,346	7,539	1,403	10,288	-8,932
2011	2,776	139			2,915				1,478	8,116	3,067	12,661	-9,746
2012	3,726	211			3,936				1,533	8,260	4,546	14,339	-10,403
2013	6,048	272	1,775		8,095				1,675	8,263	6,226	16,165	-8,069
2014	5,562	336	3,446		9,343				1,742	8,489	8,067	18,298	-8,955
2015	7,575	413	4,296		12,284				2,840	12,999	10,955	26,793	-14,510
2016	9,880	507	5,473		15,860				4,026	17,666	13,309	35,001	-19,141
2017	14,518	620	4,766		19,904				5,456	22,729	14,210	42,394	-22,490
2018	16,166	765	9,208		26,139				7,843	31,682	16,880	56,405	-30,266
2019	20,517	954	11,639		33,110				11,202	44,077	22,217	77,496	-44,386
2020	20,157	926	11,519		32,601						22,289	22,289	10,313
2021	19,870	891	11,305		32,066						23,424	23,424	8,642
2022	22,979	871	6,042		29,892						23,107	23,107	6,784
2023	23,871	847	9,829		34,546						23,085	23,085	11,461
2024	20,263	819	9,944		31,027						22,864	22,864	8,162
2025	18,857	746	9,190		28,793						21,419	21,419	7,374
2026	20,016	663	5,372		26,051						19,565	19,565	6,486
2027	15,687	570	8,335		24,592						17,314	17,314	7,278
2028	13,493	473	7,108		21,074						14,779	14,779	6,295
2029	11,672	352	3,239		15,263						11,387	11,387	3,876
2030	10,614	302	4,647		15,562						10,019	10,019	5,543
2031	9,099	251	4,013		13,362						8,459	8,459	4,903
2032	7,138	194	3,226		10,557						6,506	6,506	4,051
2033	4,657	130	2,260		7,046						4,121	4,121	2,926
2034	1,660	59	1,102		2,821						1,267	1,267	1,554
2035	1,557	54	1,042		2,653						1,174	1,174	1,479
2036	1,394	46	935		2,376						1,037	1,037	1,339
2037	1,119	36	759		1,914						828	828	1,085
2038	711	22	483		1,216						524	524	692
NOMINAL	312,863	12,539	140,951		466,353				39,142	169,820	334,047	543,010	-76,657
NPV	102,672	4,415	45,407		152,494				19,973	88,970	112,920	221,863	-69,369

Utility Discount Rate = 8.48
Benefit Cost Ratio = 0.687

PROGRAM: Better Business - Participant

YEAR	BENEFITS				COSTS			NET BENEFITS TO PARTICIPANTS \$(000)
	(1) SAVINGS IN PARTICIPANT'S BILL \$(000)	(2) INCENTIVE PAYMENTS \$(000)	(3) OTHER PARTICIPANT'S BENEFITS \$(000)	(4) TOTAL BENEFITS \$(000)	(5) PARTICIPANT'S COST \$(000)	(6) PARTICIPANT'S BILL INCREASE \$(000)	(7) TOTAL COSTS \$(000)	
2010	1,403	7,539		8,942	10,471		10,471	-1,529
2011	3,067	8,116		11,183	11,273		11,273	-90
2012	4,546	8,260		12,806	11,473		11,473	1,333
2013	6,226	8,263		14,489	11,476		11,476	3,013
2014	8,067	8,489		16,555	11,790		11,790	4,765
2015	10,955	12,999		23,953	18,054		18,054	5,900
2016	13,309	17,666		30,975	24,536		24,536	6,439
2017	14,210	22,729		36,938	31,567		31,567	5,371
2018	16,880	31,682		48,562	44,002		44,002	4,559
2019	22,217	44,077		66,294	61,219		61,219	5,075
2020	22,289			22,289				22,289
2021	23,424			23,424				23,424
2022	23,107			23,107				23,107
2023	23,085			23,085				23,085
2024	22,864			22,864				22,864
2025	21,419			21,419				21,419
2026	19,565			19,565				19,565
2027	17,314			17,314				17,314
2028	14,779			14,779				14,779
2029	11,387			11,387				11,387
2030	10,019			10,019				10,019
2031	8,459			8,459				8,459
2032	6,506			6,506				6,506
2033	4,121			4,121				4,121
2034	1,267			1,267				1,267
2035	1,174			1,174				1,174
2036	1,037			1,037				1,037
2037	828			828				828
2038	524			524				524
NOMINAL	334,047	169,820		503,867	235,861		235,861	268,006
NPV	112,920	88,970		201,890	123,570		123,570	78,321

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.634

PROGRAM: Better Business - TRC

YEAR	BENEFITS					COSTS						NET BENEFITS \$(000)
	(1) TOTAL FUEL & O&M SAVINGS \$(000)	(2) AVOIDED T&D CAP. COSTS \$(000)	(3) AVOIDED GEN. CAP. COSTS \$(000)	(4) OTHER PARTICIPANT BENEFITS \$(000)	(5) TOTAL BENEFITS \$(000)	(6) PARTICIPANTS COST \$(000)	(7) TOTAL FUEL & O&M INCREASE \$(000)	(8) INCREASED T&D CAP. COSTS \$(000)	(9) INCREASED GEN. CAP. COSTS \$(000)	(10) UTILITY PROGRAM COSTS \$(000)	(11) TOTAL COSTS \$(000)	
2010	1,288	68			1,356	10,471				1,346	11,817	-10,461
2011	2,776	139			2,915	11,273				1,478	12,751	-9,836
2012	3,726	211			3,936	11,473				1,533	13,006	-9,069
2013	6,048	272	1,775		8,095	11,476				1,675	13,152	-5,057
2014	5,562	336	3,446		9,343	11,790				1,742	13,532	-4,189
2015	7,575	413	4,296		12,284	18,054				2,840	20,894	-8,610
2016	9,880	507	5,473		15,860	24,536				4,026	28,562	-12,703
2017	14,518	620	4,766		19,904	31,567				5,456	37,023	-17,119
2018	16,166	765	9,208		26,139	44,002				7,843	51,846	-25,706
2019	20,517	954	11,639		33,110	61,219				11,202	72,421	-39,311
2020	20,157	926	11,519		32,601							32,601
2021	19,870	891	11,305		32,066							32,066
2022	22,979	871	6,042		29,892							29,892
2023	23,871	847	9,829		34,546							34,546
2024	20,263	819	9,944		31,027							31,027
2025	18,857	746	9,190		28,793							28,793
2026	20,016	663	5,372		26,051							26,051
2027	15,687	570	8,335		24,592							24,592
2028	13,493	473	7,108		21,074							21,074
2029	11,672	352	3,239		15,263							15,263
2030	10,614	302	4,647		15,562							15,562
2031	9,099	251	4,013		13,362							13,362
2032	7,138	194	3,226		10,557							10,557
2033	4,657	130	2,260		7,046							7,046
2034	1,660	59	1,102		2,821							2,821
2035	1,557	54	1,042		2,653							2,653
2036	1,394	46	935		2,376							2,376
2037	1,119	36	759		1,914							1,914
2038	711	22	483		1,216							1,216
NOMINAL	312,863	12,539	140,951		466,353	235,861				39,142	275,003	191,350
NPV	102,672	4,415	45,407		152,494	123,570				19,973	143,542	8,952

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.062

C. COMMERCIAL/INDUSTRIAL NEW CONSTRUCTION PROGRAM

Program Start Date: 1995

Program modified in 2000, 2005, 2006 and 2007

Modifications proposed in 2010

Program Description

The Commercial/Industrial New Construction program is designed to improve the energy efficient construction of commercial buildings.

The program seeks to meet the following overall goals:

- Fulfill financial obligation to customers and the Commission by providing a cost-effective comprehensive program portfolio of measures across all building types
- Educate the commercial new construction industry about energy efficient commercial building design
- Obtain energy and demand impacts that are significant, accurate, and measurable
- Provide customers with current information of innovative technologies for managing energy consumption to maximize participation

Policies and Procedures

The general eligibility requirements are as follows:

- Must have been influenced by one of Progress Energy's educational opportunities

- Equipment and measures must be installed in facilities that are commercially metered in Progress Energy territory
- Progress Energy reserves the right to inspect the installation of measures and equipment prior to issuing any incentive payments
- Evaluate and recommend the most cost-effective energy efficient building envelope and equipment measures for the new construction market
- The owner/builder or manufacturer must meet the requirements listed in the Program Participation Standards and comply with all state, local and federal codes

Incentive Levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measures, and valuation analysis or technological advances.

Progress Energy is proposing to include the following measures with this program:

HVAC Equipment

The HVAC equipment component of Commercial/Industrial New Construction provides customers with information on high efficiency HVAC equipment and financial incentives for the purchase of high efficiency unitary heat pumps and air conditioners, hybrid desiccant and geothermal units, high efficient straight cool air conditioners, thermal energy storage, packaged terminal heat pumps, and water-cooled and air-cooled chillers. The incentive is calculated for

each unit based on the KW difference between the high efficiency unit and the program-specified baseline efficiency. Variable Speed Drive controls and Variable Speed Drives for Chiller and Cooling Tower Pumps incentives will also be offered under this program.

Energy Recovery Ventilation / Demand Control Ventilation / Heat Pipes

The program promotes the installation of high efficiency energy recovery ventilation units in the conditioned air stream for customers using electric cooling and heating. These units are capable of removing over 70% of the sensible heat and over 60% of the latent heat when properly sized and installed. To qualify for Progress Energy's incentive, the energy recovery ventilation must meet Program Participation Standards qualifications. Demand Control Ventilation will provide incentives for the installation of Demand Control Ventilation using *C02* sensors. Demand Control Ventilation saves energy by automatically adjusting building ventilation rates in real time based on occupancy. An incentive will be offered for Heat Pipe technology for pre-conditioning fresh air and must meet the Program Participation Standards. Exhaust hood controls for varying ventilation will be included as an incentive.

Cool Roof / Green Roof / Roof Insulation

The cool roof measure will provide customers with an incentive to install an Energy Star approved "*cool roof*" providing the facility has electric cooling. Customers must meet the specifications for solar reflectance and reliability, having initial reflectance as outlined in the Program Participation Standards. The green roof measure will provide an incentive for

customers to install an approved green roof on their facility. The roof insulation measure encourages customers to add insulation to the conditioned roof area.

Efficient Indoor lighting

This measure will provide customers with an incentive to install lighting systems which are above code. The following technologies will be included: Premium T-8's and T-5's, ceramic metal halides, LED display lighting, and Induction/Cold cathode. The Program Participation Standards will outline the incentive adjustments due to code changes.

Window Film / Solar Screen

This measure promotes the purchase of windows that meet Progress Energy requirements for window film or solar screen on windows having east, west, and south exposures. The qualifying facilities and requirements are outlined in the Program Participation Standards.

Refrigeration

This measure provides an incentive to install energy efficient devices to reduce energy consumption of refrigeration equipment. These devices include vending machine controls, oversized air cooled condensers, multiplex compressor systems, and high efficiency ice makers.

Building Commissioning

This measure provides an incentive to customers for conducting whole building commissioning. The requirement and incentives will be outlined in the Participation Standards.

Efficient Motors

This measure promotes the installation of certain high efficiency poly-phase motors through a simple incentive structure based on the motor size and a specified \$/hp. The specific incentive amount will be a function of the motor size and efficiency.

Program Participation

Annual participation estimates for the Commercial/Industrial New Construction program are shown in the following table.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	2,093	181	9%
2011	170,886	3,653	187	6%
2012	175,147	4,261	193	6%
2013	178,542	3,395	200	6%
2014	182,030	3,488	207	6%
2015	185,461	3,431	214	6%
2016	188,717	3,256	222	6%
2017	191,817	3,100	230	6%
2018	194,809	2,992	239	6%
2019	197,848	3,039	198	6%

1. The total number of customers is the forecast of commercial/industrial customers in Progress Energy's 2009 Ten Year Site Plan.
2. All commercial, industrial and governmental rate class customers who build new metered facilities in a given year are eligible to participate.
3. Number of program participants represents the number of individual participants projected in a given year.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool.

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and, annual projected participation. The total program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	20,519	4.42	7.62	3,718,111	801	1,381
2011	22,387	4.45	8.40	4,190,161	832	1,572
2012	23,687	4.45	8.94	4,582,013	861	1,730
2013	25,511	6.42	10.31	5,102,874	1,284	2,062
2014	25,769	6.28	10.52	5,332,900	1,299	2,178
2015	30,132	6.42	12.68	6,455,619	1,376	2,717
2016	29,716	3.29	12.39	6,595,172	731	2,749
2017	34,678	2.84	14.44	7,978,034	653	3,321
2018	38,913	2.41	16.19	9,286,094	574	3,863
2019	51,574	2.47	21.44	10,220,795	489	4,249

At the Generator

Year	Per Customer 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
2010	21,642	4.66	8.04	3,921,492	845	1,457
2011	23,611	4.69	8.86	4,419,363	878	1,658
2012	24,983	4.69	9.43	4,832,649	908	1,825
2013	26,907	6.77	10.87	5,382,001	1,354	2,175
2014	27,178	6.62	11.10	5,624,610	1,370	2,297
2015	31,780	6.77	13.38	6,808,741	1,451	2,866
2016	31,342	3.47	13.06	6,955,928	771	2,899
2017	36,575	2.99	15.23	8,414,432	689	3,503
2018	41,041	2.54	17.07	9,794,043	605	4,074
2019	54,396	2.60	22.61	10,779,872	516	4,481

Impact Evaluation Plan

The Commercial/Industrial New Construction program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels. These analyses are supported by end-use metering data, where feasible.

Cost Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$48,870	\$68,945	-\$20,075	0.71
Participant	\$59,073	\$36,940	\$22,133	1.6
Total Resource Cost	\$48,870	\$46,812	\$2,058	1.04

PROGRAM: Business New Construction - RIM

YEAR	BENEFITS					COSTS							NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2010	328	20			348				615	2,920	330	3,866	-3,518
2011	721	43			763				777	3,399	734	4,910	-4,147
2012	987	67			1,054				906	3,792	1,112	5,809	-4,756
2013	1,761	93	581		2,435				1,162	4,431	1,626	7,218	-4,784
2014	1,638	121	1,188		2,947				1,283	4,757	2,176	8,215	-5,268
2015	2,229	153	1,539		3,921				1,853	6,314	2,955	11,122	-7,201
2016	2,822	184	1,938		4,944				2,254	6,772	3,384	12,410	-7,466
2017	4,153	218	1,653		6,023				2,793	8,177	3,359	14,329	-8,306
2018	4,278	256	3,081		7,616				3,281	9,450	3,668	16,399	-8,783
2019	4,946	298	3,675		8,918				3,688	10,467	4,353	18,509	-9,591
2020	4,839	291	3,676		8,806						4,325	4,325	4,481
2021	4,656	284	3,673		8,613						4,512	4,512	4,102
2022	5,653	278	1,967		7,898						4,395	4,395	3,503
2023	5,903	271	3,220		9,394						4,342	4,342	5,052
2024	4,598	264	3,292		8,155						4,262	4,262	3,893
2025	4,366	252	3,210		7,828						4,029	4,029	3,799
2026	5,178	242	2,037		7,456						3,809	3,809	3,647
2027	3,992	231	3,539		7,762						3,562	3,562	4,200
2028	3,794	222	3,494		7,510						3,307	3,307	4,203
2029	4,357	213	2,052		6,623						3,060	3,060	3,563
2030	4,300	201	3,244		7,745						2,800	2,800	4,944
2031	4,075	189	3,197		7,461						2,557	2,557	4,904
2032	3,804	177	3,131		7,112						2,262	2,262	4,850
2033	3,414	164	3,029		6,607						1,921	1,921	4,686
2034	3,025	151	2,910		6,086						1,571	1,571	4,515
2035	3,040	137	2,752		5,929						1,665	1,665	4,264
2036	3,104	121	2,540		5,766						1,866	1,866	3,899
2037	3,139	102	2,223		5,464						2,117	2,117	3,347
2038	3,156	79	1,793		5,027						2,388	2,388	2,640
NOMINAL	102,251	5,325	68,634		176,210				18,611	60,478	82,446	161,536	14,674
NPV	29,209	1,629	18,032		48,870				9,872	33,246	25,827	68,945	-20,075

Utility Discount Rate = 8.48
Benefit Cost Ratio = 0.709

PROGRAM: Business New Construction - Participant

YEAR	BENEFITS				COSTS			NET BENEFITS TO PARTICIPANTS \$(000)
	(1) SAVINGS IN PARTICIPANT'S BILL \$(000)	(2) INCENTIVE PAYMENTS \$(000)	(3) OTHER PARTICIPANT'S BENEFITS \$(000)	(4) TOTAL BENEFITS \$(000)	(5) PARTICIPANT'S COST \$(000)	(6) PARTICIPANT'S BILL INCREASE \$(000)	(7) TOTAL COSTS \$(000)	
2010	330	2,920		3,251	3,245		3,245	6
2011	734	3,399		4,133	3,776		3,776	357
2012	1,112	3,792		4,904	4,213		4,213	690
2013	1,626	4,431		6,057	4,923		4,923	1,134
2014	2,176	4,757		6,932	5,285		5,285	1,647
2015	2,955	6,314		9,269	7,015		7,015	2,254
2016	3,384	6,772		10,156	7,525		7,525	2,632
2017	3,359	8,177		11,536	9,086		9,086	2,450
2018	3,668	9,450		13,117	10,500		10,500	2,618
2019	4,353	10,467		14,821	11,630		11,630	3,190
2020	4,325			4,325				4,325
2021	4,512			4,512				4,512
2022	4,395			4,395				4,395
2023	4,342			4,342				4,342
2024	4,262			4,262				4,262
2025	4,029			4,029				4,029
2026	3,809			3,809				3,809
2027	3,562			3,562				3,562
2028	3,307			3,307				3,307
2029	3,060			3,060				3,060
2030	2,800			2,800				2,800
2031	2,557			2,557				2,557
2032	2,262			2,262				2,262
2033	1,921			1,921				1,921
2034	1,571			1,571				1,571
2035	1,665			1,665				1,665
2036	1,866			1,866				1,866
2037	2,117			2,117				2,117
2038	2,388			2,388				2,388
NOMINAL	82,446	60,478		142,925	67,198		67,198	75,726
NPV	25,827	33,246		59,073	36,940		36,940	22,133

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.599

PROGRAM: Business New Construction - TRC

YEAR	BENEFITS					COSTS						NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	OTHER PARTICIPANT BENEFITS \$(000)	TOTAL BENEFITS \$(000)	PARTICIPANT'S COST \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	T&D CAP. COSTS \$(000)	GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	TOTAL COSTS \$(000)	
2010	328	20			348	3,245				615	3,860	-3,512
2011	721	43			763	3,776				777	4,553	-3,790
2012	987	67			1,054	4,213				906	5,119	-4,065
2013	1,761	93	581		2,435	4,923				1,162	6,085	-3,650
2014	1,638	121	1,188		2,947	5,285				1,283	6,568	-3,621
2015	2,229	153	1,539		3,921	7,015				1,853	8,868	-4,948
2016	2,822	184	1,938		4,944	7,525				2,254	9,778	-4,834
2017	4,153	218	1,653		6,023	9,086				2,793	11,879	-5,855
2018	4,278	256	3,081		7,616	10,500				3,281	13,781	-6,165
2019	4,946	298	3,675		8,918	11,630				3,688	15,318	-6,400
2020	4,839	291	3,676		8,806							8,806
2021	4,656	284	3,673		8,613							8,613
2022	5,653	278	1,967		7,898							7,898
2023	5,903	271	3,220		9,394							9,394
2024	4,598	264	3,292		8,155							8,155
2025	4,366	252	3,210		7,828							7,828
2026	5,178	242	2,037		7,456							7,456
2027	3,992	231	3,539		7,762							7,762
2028	3,794	222	3,494		7,510							7,510
2029	4,357	213	2,052		6,623							6,623
2030	4,300	201	3,244		7,745							7,745
2031	4,075	189	3,197		7,461							7,461
2032	3,804	177	3,131		7,112							7,112
2033	3,414	164	3,029		6,607							6,607
2034	3,025	151	2,910		6,086							6,086
2035	3,040	137	2,752		5,929							5,929
2036	3,104	121	2,540		5,766							5,766
2037	3,139	102	2,223		5,464							5,464
2038	3,156	79	1,793		5,027							5,027
NOMINAL	102,251	5,325	68,634		176,210	67,198				18,611	85,809	90,401
NPV	29,209	1,629	18,032		48,870	36,940				9,872	46,812	2,058

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.044

D. BUSINESS ENERGY SAVER PROGRAM

Program Start Date: Proposed in 2010

Program Description

The Business Energy Saver program is designed to encourage and educate business customers located in low income areas by demonstration and installation of sustainable energy conservation measures to help control and reduce energy consumption within their business. The business must be located within the surrounding area of the Progress Energy qualifying Census Block Group that meets the definition of a low-income neighborhood. Trained, professional surveyors and installers representing Progress Energy will offer businesses an energy assessment followed by the installation of specified electric energy conservation measures. While in the business, the owner will be provided energy saving tips for improving and sustaining energy efficiency. The energy conservation measures installed and energy efficiency education provided will be at no cost to the participants.

The Business Energy Saver program seeks to achieve the following goals:

- Conduct an energy assessment to identify energy efficiency opportunities in the business
- Implement a comprehensive package of electric energy conservation measures to increase the business' energy efficiency and lower energy consumption

- Provide one-on-one customer education on energy efficiency techniques and the installation of energy conservation measures to create an immediate measurable and sustainable energy reduction in their business
- Promote behavioral changes that will help businesses in targeted areas to more effectively control their energy consumption over time

Policies and Procedures

The program eligibility requirements to qualify for participation are as follows:

- The business must be a Progress Energy metered customer within Progress Energy service area
- Business must be in a selected Progress Energy qualifying Census Block Group which meets the definition of a low-income neighborhood and surrounding area
- National and Chain Accounts are not eligible for participation in the Business Energy Saver program
- All installations must be accessible for verification by a Progress Energy representative
- A State of Florida General Licensed Contractor, selected and approved by Progress Energy must be used to implement the Business Energy Saver program measures
- The business energy consumption shall be within Progress Energy defined standards

- The business will have been in operation for at least one year within Progress Energy service area
- The business must meet the licensing requirement as established by the local municipality and state regulatory agencies

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions such as baseline or code revisions, updated measurement and valuation analysis, or technological advances.

Progress Energy is proposing to include the following measures with this program:

Compact Fluorescent Bulbs

This measure will install in the business up to five (5) compact fluorescent bulbs to replace incandescent bulbs with comparable lumens output.

Refrigerator Coil Brush

This portion of the program will provide the customer with a coil brush and demonstration how to remove dust and debris from condenser coils to improve the refrigerator efficiency.

Refrigerator Thermometer

This measure will install one thermometer in the food or freezer compartment of the refrigerator to provide a reference temperature for efficient operation of the appliance.

Change Filter Calendar

This portion of the program will provide each business with a Progress Energy magnetic calendar to help remind them to clean or change the HVAC filter monthly.

Weatherization Measures

This portion of the program will install weather stripping, door sweeps, caulk, foam sealant, and clear patch tape where needed; to reduce or stop air infiltration around doors, windows, and where pipes enter the business.

Water Heater Insulation Wrap and Insulation for Water Pipes

This portion of the program will install a water heater wrap and pipe insulation as identified to improve the efficiency of the water heating system. Foam insulated water heaters will be excluded from this measure.

Water Conservation Faucet Aerators

This portion of the program will install a maximum of two (2) aerators per business. This measure will reduce energy consumption related to the water heater system.

Water Heater Temperature Check and Adjustment

This portion of the program will provide a temperature check of the water heater and inform the customer of the possibility for reducing temperatures within manufacturer's recommendation and code requirements.

HVAC Filters

This portion of the program will provide each customer with a one-year supply of filters (12) for the main HVAC system. One filter may be installed at time of evaluation, if needed.

Indoor Wall Thermometer

This portion of the program will install one wall plate thermometer per business to encourage the business owner to be aware of thermostat setting.

HVAC Window Unit Winterization Kit

This measure will install a winterization HVAC kit on wall/window AC units, if seasonably applicable. The business will receive or have installed a maximum of three (3) kits. The customer will be educated on the proper use and value of the winterization kit as a method of stopping air infiltration in the business.

HVAC Maintenance

This measure will provide basic maintenance on the condensing and air handling units to increase energy efficiency through proper operational maintenance of mechanical equipment.

Attic Insulation Upgrade

This portion of the program will upgrade the customer's ceiling insulation up to R-30 as building code will allow. This measure will improve the efficiency of the business' building envelope.

Window Film/Solar Screen

This portion of the program will install window film or solar screen on south, east, or west oriented windows to reduce solar heat gain within the building.

Program Participation

Annual participation estimates for the Business Energy Saver program are shown in the following table.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	1,000	100	10%
2011	170,886	960	100	10%
2012	175,147	918	120	13%
2013	178,542	853	120	14%
2014	182,030	784	140	18%
2015	185,461	691	140	20%
2016	188,717	592	160	27%
2017	191,817	468	160	34%
2018	194,809	336	175	52%
2019	197,848	181	175	97%

1. The total number of customers is the forecast of commercial/industrial customers in Progress Energy's 2009 Ten Year Site Plan.
2. Eligible customers represents the count of businesses in Progress Energy's service territory that are at or below program qualifying income levels based on US Census block data, escalated.
3. Number of program participants represents the number of individual measure participants projected in a given year.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool.

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and annual projected participation. The total projected program savings were then computed as the sum of the individual measure savings, as shown in the following tables.

At the Meter

Year	Per Customer 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
2010	2308	0.41	1.64	230,790	41	164
2011	2308	0.41	1.64	230,790	41	164
2012	2308	0.42	1.64	276,948	50	197
2013	2308	0.42	1.64	276,948	50	197
2014	2308	0.41	1.64	323,106	58	229
2015	2308	0.41	1.64	323,106	58	229
2016	2308	0.41	1.64	369,264	66	262
2017	2308	0.41	1.64	369,264	66	262
2018	2308	0.42	1.64	403,883	73	287
2019	2308	0.42	1.64	403,883	73	287

At the Generator

Year	Per Customer 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
2010	2434	0.43	1.73	243,414	43	173
2011	2434	0.43	1.73	243,414	43	173
2012	2434	0.44	1.73	292,097	53	208
2013	2434	0.44	1.73	292,097	53	208
2014	2434	0.44	1.73	340,780	61	242
2015	2434	0.44	1.73	340,780	61	242
2016	2434	0.44	1.73	389,463	70	276
2017	2434	0.44	1.73	389,463	70	276
2018	2434	0.44	1.73	425,975	77	303
2019	2434	0.44	1.73	425,975	77	303

Impact Evaluation Plan

The Business Energy Saver program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels.

Cost-Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$2,257	\$3,174	-\$917	0.71
Participant	\$2,987	\$1,640	\$1,347	1.82
Total Resource Cost	\$2,257	\$1,827	\$430	1.24

PROGRAM: Business Energy Saver Program - RIM

YEAR	BENEFITS					COSTS							NET BENEFITS \$(000)
	(1) TOTAL FUEL & O&M SAVINGS \$(000)	(2) AVOIDED T&D CAP. COSTS \$(000)	(3) AVOIDED GEN. CAP. COSTS \$(000)	(4) REVENUE GAINS \$(000)	(5) TOTAL BENEFITS \$(000)	(6) TOTAL FUEL & O&M INCREASE \$(000)	(7) INCREASED T&D CAP. COSTS \$(000)	(8) INCREASED GEN. CAP. COSTS \$(000)	(9) UTILITY PROGRAM COSTS \$(000)	(10) INCENTIVE PAYMENTS \$(000)	(11) REVENUE LOSSES \$(000)	(12) TOTAL COSTS \$(000)	
2010	26	2			29				23	294	27	344	-315
2011	54	5			59				23	268	57	349	-290
2012	74	7			81				28	311	87	427	-345
2013	137	10	60		208				28	266	125	419	-211
2014	120	13	122		255				33	319	170	521	-267
2015	150	15	144		309				33	244	218	494	-185
2016	195	18	175		387				37	253	251	542	-155
2017	298	20	141		459				37	228	248	513	-55
2018	283	22	243		547				41	236	260	536	11
2019	302	23	265		590				41	239	294	574	17
2020	266	20	232		518						266	266	251
2021	223	17	195		434						248	248	187
2022	238	14	88		340						210	210	130
2023	202	11	116		329						173	173	156
2024	122	8	87		216						130	130	86
2025	97	6	70		173						106	106	66
2026	88	4	32		125						78	78	46
2027	46	2	34		83						49	49	34
2028	37	2	29		68						39	39	29
2029	32	1	14		47						28	28	19
2030	31	1	20		52						23	23	29
2031	26	1	18		45						18	18	27
2032	22	1	16		39						15	15	23
2033	17	1	14		31						13	13	18
2034	14	1	11		25						10	10	15
2035	7	0	8		15						7	7	8
2036	6	0	4		10						4	4	6
2037													
2038													
NOMINAL	3,109	225	2,139		5,473				324	2,659	3,154	6,137	-664
NPV	1,292	100	866		2,257				187	1,640	1,347	3,174	-917

Utility Discount Rate = 8.48
Benefit Cost Ratio = 0.711

PROGRAM: Business Energy Saver Program - Participant

YEAR	BENEFITS				COSTS			NET BENEFITS TO PARTICIPANTS \$(000)
	(1) SAVINGS IN PARTICIPANT'S BILL \$(000)	(2) INCENTIVE PAYMENTS \$(000)	(3) OTHER PARTICIPANT'S BENEFITS \$(000)	(4) TOTAL BENEFITS \$(000)	(5) PARTICIPANT'S COST \$(000)	(6) PARTICIPANT'S BILL INCREASE \$(000)	(7) TOTAL COSTS \$(000)	
2010	27	294		321	294		294	27
2011	57	268		326	268		268	57
2012	87	311		399	311		311	87
2013	125	266		391	266		266	125
2014	170	319		489	319		319	170
2015	218	244		461	244		244	218
2016	251	253		505	253		253	251
2017	248	228		476	228		228	248
2018	260	236		496	236		236	260
2019	294	239		533	239		239	294
2020	266			266				266
2021	248			248				248
2022	210			210				210
2023	173			173				173
2024	130			130				130
2025	106			106				106
2026	78			78				78
2027	49			49				49
2028	39			39				39
2029	28			28				28
2030	23			23				23
2031	18			18				18
2032	15			15				15
2033	13			13				13
2034	10			10				10
2035	7			7				7
2036	4			4				4
2037								
2038								
NOMINAL	3,154	2,659		5,813	2,659		2,659	3,154
NPV	1,347	1,640		2,987	1,640		1,640	1,347

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.822

PROGRAM: Business Energy Saver Program - TRC

YEAR	BENEFITS					COSTS						NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	OTHER PARTICIPANT BENEFITS \$(000)	TOTAL BENEFITS \$(000)	PARTICIPANT'S COST \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	INCREASED T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	TOTAL COSTS \$(000)	
2010	26	2			29	294				23	317	-289
2011	54	5			59	268				23	292	-233
2012	74	7			81	311				28	339	-258
2013	137	10	60		208	266				28	294	-87
2014	120	13	122		255	319				33	352	-97
2015	150	15	144		309	244				33	276	32
2016	195	18	175		387	253				37	291	96
2017	298	20	141		459	228				37	265	194
2018	283	22	243		547	236				41	277	271
2019	302	23	265		590	239				41	280	311
2020	266	20	232		518							518
2021	223	17	195		434							434
2022	238	14	88		340							340
2023	202	11	116		329							329
2024	122	8	87		216							216
2025	97	6	70		173							173
2026	88	4	32		125							125
2027	46	2	34		83							83
2028	37	2	29		68							68
2029	32	1	14		47							47
2030	31	1	20		52							52
2031	26	1	18		45							45
2032	22	1	16		39							39
2033	17	1	14		31							31
2034	14	1	11		25							25
2035	7	0	8		15							15
2036	6	0	4		10							10
2037												
2038												
NOMINAL	3,109	225	2,139		5,473	2,659				324	2,983	2,490
NPV	1,292	100	866		2,257	1,640				187	1,827	430

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.236

E. COMMERCIAL EDUCATION PROGRAM

Program Start Date: Proposed for 2010

Program Description

The Commercial Education program is designed for all existing commercial customers and offers educational and behavior change information. The program builds on the Business Energy Check program. The customers will be provided with sustainable educational and behavioral energy saving examples of easily installed energy conservation measures to reduce energy consumption. The program promotes continued customer involvement by demonstrating sustainable and measureable energy reduction in the business' energy consumption by the implementation of low-cost energy conservation measures.

The customer will receive a Commercial Energy Efficiency Kit via the following methods:

- At the time of the onsite Business Energy Check
- Through the mail following completion of the online or phone assisted audit

The kit provides items that are program approved and easily implemented for energy efficiency.

This program seeks to meet the following overall goals:

- Enhance customer awareness of the capabilities of energy efficient technologies
- Educate the customer on opportunities to achieve measurable and sustainable savings through minimal or no cost changes the customer can easily implement
- Educate the customer about the environmental benefits of energy efficiency

- Provide low cost energy efficient items during the onsite Business Energy Check or provide an energy efficient kit to customers choosing the online or phone assisted audit
- Obtain energy and demand reductions that are measurable
- Reinforce behavioral modifications by providing collateral material that depicts immediate measureable energy savings
- Capitalize on Progress Energy's industry role in energy efficiency and environmental leadership

Policies and Procedures

Specific eligibility requirements for each item provided in this program will be presented in the Program Participation Standards and are subject to revision based on changes in market conditions such as baseline, code revisions, updated measurement and valuation analysis or technological advances.

The contents of the kit will be subject to updates in order to maintain energy savings and new technologies. The Program Participation Standards will outline participation requirements and changes due to code updates.

Progress Energy is proposing to include the following measures with this program:

Energy Conservation Measure Kit

- ***Lighting***

This measure will provide customers with up to three (3) compact fluorescent light bulbs to upgrade an existing incandescent fixture located in their lighting systems. This demonstration will encourage additional lighting energy conservation measures changes within the facility.

- ***Indoor room thermometer***

This measure will provide one room thermometer per business. This measure will establish a reference point for customers to select an energy savings setting for the HVAC system thermostat.

- ***Refrigerator Thermometer***

This measure will provide one thermometer in the food or freezer compartment of the refrigerator. This measure will establish a reference point for customers to select an energy savings setting for the refrigeration system thermostat.

- ***Power Conservation Strip***

This measure will provide a power conservation strip to reduce idle energy use when appliances are not in operation. The ease of installation and the demonstration of immediate energy reduction will encourage additional customer participation.

- ***Change Filter Calendar***

This portion of the program will provide each business a Progress Energy magnetic calendar to help remind them to clean or change the HVAC filter monthly to facilitate optimal HVAC performance.

- ***Additional Kit Components***

The energy conservation measure kit will also include educational tools that will assist the business owner in making decisions about their energy use. Examples of these educational tools include, but are not limited to the following:

- ***Energy Use Data Sheet***

A common appliance and equipment energy use data sheet will be provided to the customer. This will demonstrate to the customer examples where energy is being utilized within their facility, encouraging the customer to make behavior changes to reduce energy consumption.

- ***Facility Setback Procedure***

This measure will provide a suggested setback process for relative facilities. The process can be used as behavior modification training for employees or as a poster located at entrances and exits of the facility. It will provide a point of reference to remind employees to choose the best energy saving setting for the facility when shutting down.

Program Participation

Annual participation estimates for the Commercial Education program are shown in the following table.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	167,233	3,000	2%
2011	170,886	167,886	3,060	4%
2012	175,147	169,087	3,152	5%
2013	178,542	172,330	3,278	7%
2014	182,030	175,600	3,442	9%
2015	185,461	178,741	3,683	11%
2016	188,717	181,592	3,867	13%
2017	191,817	184,267	3,983	15%
2018	194,809	186,959	4,102	17%
2019	197,848	189,763	4,143	19%

1. The total number of customers is the forecast of commercial/industrial customers in Progress Energy's 2009 Ten Year Site Plan.
2. The entire commercial/industrial and governmental classes is eligible for participation, less previous participation.
3. Number of program participants represents the number of individual measure participants projected in a given year.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool.

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and, annual projected participation. The total program savings were then computed as the sum of the individual measure savings and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	867	0.21	0.52	2,601,000	642	1,546
2011	867	0.21	0.52	2,653,020	655	1,577
2012	867	0.21	0.52	2,732,784	674	1,624
2013	867	0.21	0.52	2,842,026	701	1,689
2014	867	0.21	0.52	2,984,214	736	1,774
2015	546	0.12	0.22	2,010,918	442	810
2016	546	0.12	0.22	2,111,382	464	851
2017	546	0.12	0.22	2,174,718	478	876
2018	546	0.12	0.22	2,239,692	492	902
2019	546	0.12	0.22	2,262,078	497	911

At the Generator

Year	Per Customer 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
2010	914	0.23	0.54	2,743,275	677	1,631
2011	914	0.23	0.54	2,798,140	691	1,663
2012	914	0.23	0.54	2,882,267	711	1,713
2013	914	0.23	0.54	2,997,485	739	1,781
2014	914	0.23	0.54	3,147,451	776	1,871
2015	576	0.13	0.23	2,120,915	466	854
2016	576	0.13	0.23	2,226,875	489	898
2017	576	0.13	0.23	2,293,675	504	924
2018	576	0.13	0.23	2,362,203	519	951
2019	576	0.13	0.23	2,385,814	524	961

Impact Evaluation Plan

As part of the Commercial Education program, Progress Energy provides the customer with varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts, although the specific method may vary depending on measure-specific participation levels. These analyses are supported by end-use metering data, where feasible.

Cost Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$11,198	\$17,735	-\$6,537	0.63
Participant	\$10,584	\$988	\$9,596	10.72
Total Resource Cost	\$11,198	\$8,138	\$3,060	1.38

PROGRAM: Commercial Educational Tools - RIM

YEAR	BENEFITS					COSTS							NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	INCREASED T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2010	281	15			296				1,843	177	314	2,334	-2,038
2011	588	31			618				1,717	180	679	2,576	-1,957
2012	792	47			839				1,694	186	1,003	2,883	-2,044
2013	1,345	63	405		1,812				1,502	193	1,429	3,123	-1,311
2014	1,206	74	749		2,029				1,128	203	1,809	3,140	-1,111
2015	1,415	80	815		2,310				610	120	2,108	2,837	-527
2016	1,472	77	799		2,348				568	126	2,056	2,750	-402
2017	1,704	74	535		2,312				517	129	1,767	2,413	-101
2018	1,416	65	727		2,208				503	133	1,595	2,232	-24
2019	1,318	56	622		1,996				520	134	1,571	2,226	-230
2020	1,077	45	498		1,620						1,309	1,309	311
2021	912	39	437		1,388						1,155	1,155	233
2022	816	32	198		1,047						893	893	153
2023	618	25	263		906						631	631	274
2024	306	19	201		526						348	348	178
2025	207	13	138		358						241	241	117
2026	132	6	46		184						124	124	59
2027													
2028													
2029													
2030													
2031													
2032													
2033													
2034													
2035													
2036													
2037													
2038													
NOMINAL	15,602	761	6,433		22,796				10,601	1,581	19,034	31,215	-8,419
NPV	7,789	389	3,020		11,198				7,150	988	9,596	17,735	-6,537

Utility Discount Rate = 8.48
Benefit Cost Ratio = 0.631

PROGRAM: Commercial Educational Tools - Participant

YEAR	BENEFITS				COSTS			NET BENEFITS TO PARTICIPANTS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	SAVINGS IN PARTICIPANT'S BILL \$(000)	INCENTIVE PAYMENTS \$(000)	OTHER PARTICIPANT'S BENEFITS \$(000)	TOTAL BENEFITS \$(000)	PARTICIPANT'S COST \$(000)	PARTICIPANT'S BILL INCREASE \$(000)	TOTAL COSTS \$(000)	
2010	314	177		491	177		177	314
2011	679	180		859	180		180	679
2012	1,003	186		1,189	186		186	1,003
2013	1,429	193		1,622	193		193	1,429
2014	1,809	203		2,012	203		203	1,809
2015	2,108	120		2,227	120		120	2,108
2016	2,056	126		2,182	126		126	2,056
2017	1,767	129		1,896	129		129	1,767
2018	1,595	133		1,729	133		133	1,595
2019	1,571	134		1,706	134		134	1,571
2020	1,309			1,309				1,309
2021	1,155			1,155				1,155
2022	893			893				893
2023	631			631				631
2024	348			348				348
2025	241			241				241
2026	124			124				124
2027								
2028								
2029								
2030								
2031								
2032								
2033								
2034								
2035								
2036								
2037								
2038								
NOMINAL	19,034	1,581		20,614	1,581		1,581	19,034
NPV	9,596	988		10,584	988		988	9,596

Utility Discount Rate = 8.48
Benefit Cost Ratio = 10.716

PROGRAM: Commercial Educational Tools - TRC

YEAR	BENEFITS					COSTS						NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	OTHER PARTICIPANT BENEFITS \$(000)	TOTAL BENEFITS \$(000)	PARTICIPANT'S COST \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	INCREASED T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	TOTAL COSTS \$(000)	
2010	281	15			296	177				1,843	2,020	-1,723
2011	588	31			618	180				1,717	1,897	-1,279
2012	792	47			839	186				1,694	1,879	-1,041
2013	1,345	63	405		1,812	193				1,502	1,695	118
2014	1,206	74	749		2,029	203				1,128	1,331	698
2015	1,415	80	815		2,310	120				610	729	1,581
2016	1,472	77	799		2,348	126				568	693	1,655
2017	1,704	74	535		2,312	129				517	646	1,665
2018	1,416	65	727		2,208	133				503	636	1,572
2019	1,318	56	622		1,996	134				520	654	1,342
2020	1,077	45	498		1,620							1,620
2021	912	39	437		1,388							1,388
2022	816	32	198		1,047							1,047
2023	618	25	263		906							906
2024	306	19	201		526							526
2025	207	13	138		358							358
2026	132	6	46		184							184
2027												
2028												
2029												
2030												
2031												
2032												
2033												
2034												
2035												
2036												
2037												
2038												
NOMINAL	15,602	761	6,433		22,796	1,581				10,601	12,181	10,615
NPV	7,789	389	3,020		11,198	988				7,150	8,138	3,060

Utility Discount Rate = 8.48
Benefit Cost Ratio = 1.376

F. COMMERCIAL GREEN BUILDING NEW CONSTRUCTION

Program Start Date: Proposed in 2010

Program Description

The Commercial Green Building New Construction program is designed for commercial, industrial, and governmental customers who are building new facilities to achieve optimal energy efficiency. The Commercial Green Building New Construction program is designed to encourage the energy efficient construction of new commercial facilities according to guidelines set forth by LEED-NC. The LEED-NC rating system for commercial buildings focuses on improving energy efficiency, reducing carbon emissions, and addressing other environmental and human-health outcomes.

The program seeks to achieve the following goals:

- Drive a clear focus on energy conservation
- Promote use and increased quantity of Progress Energy approved energy efficient measures during certification process
- Motivate new construction builders to obtain LEED-NC certification
- Demonstrate green building design costs are offset by sustainable energy reductions through installation of energy efficient measures

Policies and Procedures

The general eligibility requirements are as follows:

- Qualification is limited to LEED-NC certified buildings only
- Incentive based on LEED-NC registration and certification fees
- Building must have installed a minimum number of Progress Energy Commercial New Construction program measures as outlined in the Program Participation Standards
- Commercial Green Building New Construction program incentive will be paid in addition to Commercial New Construction program incentives
- This program will offer a capped incentive in the amount of 50% of the registration and certification fees for obtaining a LEED-NC certificate for a New Construction building.

Incentive levels and specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards and will be subject to revision based on changes in market conditions, such as baseline or code revisions, updated measurement and valuation analysis, technological advances, or changes to the structure in the LEED-NC registration and certification fees.

Program Participation

Annual participation estimates for the Commercial Green Building New Construction program are shown in the following table:

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	2,093	150	7%
2011	170,886	3,653	206	6%
2012	175,147	4,261	250	6%
2013	178,542	3,395	307	7%
2014	182,030	3,488	352	7%
2015	185,461	3,431	554	9%
2016	188,717	3,256	753	11%
2017	191,817	3,100	954	13%
2018	194,809	2,992	1,137	16%
2019	197,848	3,039	1,291	18%

1. The total number of customers is the forecast of commercial/industrial customers in Progress Energy's 2009 Ten Year Site Plan.
2. All commercial, industrial and governmental rate class customers who build new metered facilities in a given year are eligible to participate.
3. Number of program participants represents the gross number of individual measure participants projected in a given year.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool.

Savings Estimates

The total program savings were developed by analyzing new construction facilities compared to LEED-NC certified buildings. The total program savings are shown in the following table.

At the Meter

Year	Per Customer 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
2010	4618	1.23	2.01	692,700	184	301
2011	4618	1.23	2.00	951,308	253	413
2012	4618	1.23	2.01	1,154,500	307	502
2013	4618	1.23	2.01	1,417,726	377	616
2014	4618	1.23	2.01	1,625,536	432	706
2015	4618	1.23	2.01	2,558,372	680	1,112
2016	4618	1.23	2.01	3,477,354	924	1,511
2017	4618	1.23	2.01	4,405,572	1,170	1,914
2018	4618	1.23	2.01	5,250,666	1,395	2,281
2019	4618	1.23	2.01	5,961,838	1,584	2,590

At the Generator

Year	Per Customer 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
2010	4871	1.29	2.12	730,591	194	317
2011	4871	1.30	2.11	1,003,345	267	436
2012	4871	1.30	2.12	1,217,651	324	529
2013	4871	1.30	2.12	1,495,276	398	650
2014	4871	1.29	2.12	1,714,453	456	745
2015	4871	1.29	2.12	2,698,315	717	1,173
2016	4871	1.29	2.12	3,667,565	975	1,594
2017	4871	1.29	2.12	4,646,557	1,234	2,019
2018	4871	1.29	2.12	5,537,877	1,471	2,406
2019	4871	1.29	2.12	6,287,951	1,671	2,732

Impact Evaluation Plan

The Commercial Green Building New Construction program includes the installation of varied types of measures. As such, the impact evaluation plan addresses interactive effects of multiple measures. In order to capture the impacts of these measures, engineering simulations and statistical billing analysis will represent the primary methods used to estimate demand and energy impacts.

Cost-Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$9,563	\$19,078	-\$9,515	0.5
Participant	\$17,794	\$7,916	\$9,878	2.25
Total Resource Cost	\$9,563	\$9,200	\$363	1.04

PROGRAM: Commercial Green Building - RIM

YEAR	BENEFITS					COSTS							NET BENEFITS \$(000)
	(1) TOTAL FUEL & O&M SAVINGS \$(000)	(2) AVOIDED T&D CAP. COSTS \$(000)	(3) AVOIDED GEN. CAP. COSTS \$(000)	(4) REVENUE GAINS \$(000)	(5) TOTAL BENEFITS \$(000)	(6) TOTAL FUEL & O&M INCREASE \$(000)	(7) INCREASED T&D CAP. COSTS \$(000)	(8) INCREASED GEN. CAP. COSTS \$(000)	(9) UTILITY PROGRAM COSTS \$(000)	(10) INCENTIVE PAYMENTS \$(000)	(11) REVENUE LOSSES \$(000)	(12) TOTAL COSTS \$(000)	
2010	42	1			43				236	490	48	775	-732
2011	107	4			110				84	697	129	909	-799
2012	171	6			177				69	974	226	1,268	-1,091
2013	382	12	73		468				92	2,017	450	2,559	-2,091
2014	450	18	170		637				72	1,982	690	2,744	-2,107
2015	692	24	235		951				359	2,517	1,028	3,903	-2,952
2016	899	31	309		1,239				373	2,671	1,279	4,323	-3,084
2017	1,132	35	252		1,419				377	1,781	1,262	3,420	-2,002
2018	1,136	38	438		1,612				357	1,549	1,330	3,236	-1,623
2019	1,252	41	480		1,773				308	1,273	1,497	3,078	-1,305
2020	1,272	41	490		1,803						1,539	1,539	264
2021	1,319	41	501		1,861						1,666	1,666	194
2022	1,482	41	274		1,796						1,680	1,680	117
2023	1,573	41	457		2,071						1,721	1,721	350
2024	1,458	41	477		1,976						1,760	1,760	216
2025	1,445	40	468		1,953						1,742	1,742	212
2026	1,564	38	292		1,893						1,685	1,685	208
2027	1,369	35	488		1,891						1,595	1,595	297
2028	1,182	29	418		1,629						1,365	1,365	264
2029	1,063	23	204		1,291						1,128	1,128	163
2030	814	17	249		1,079						840	840	240
2031	527	11	162		699						537	537	163
2032	327	6	101		434						328	328	106
2033	150	3	47		200						150	150	50
2034													
2035													
2036													
NOMINAL	21,803	618	6,583		29,005				2,326	15,951	25,673	43,950	-14,945
NPV	7,184	216	2,163		9,563				1,284	9,103	8,691	19,078	-9,515

Utility Discount Rate = 8.48
Benefit Cost Ratio = 0.501

PROGRAM: Commercial Green Building - Participant

YEAR	BENEFITS				COSTS			(8) NET BENEFITS TO PARTICIPANTS \$(000)
	(1) SAVINGS IN PARTICIPANT'S BILL \$(000)	(2) INCENTIVE PAYMENTS \$(000)	(3) OTHER PARTICIPANT'S BENEFITS \$(000)	(4) TOTAL BENEFITS \$(000)	(5) PARTICIPANT'S COST \$(000)	(6) PARTICIPANT'S BILL INCREASE \$(000)	(7) TOTAL COSTS \$(000)	
2010	48	490		539	426		426	112
2011	129	697		825	606		606	220
2012	226	974		1,199	847		847	353
2013	450	2,017		2,467	1,754		1,754	713
2014	690	1,982		2,672	1,724		1,724	949
2015	1,028	2,517		3,544	2,188		2,188	1,356
2016	1,279	2,671		3,950	2,323		2,323	1,627
2017	1,262	1,781		3,043	1,549		1,549	1,495
2018	1,330	1,549		2,879	1,347		1,347	1,532
2019	1,497	1,273		2,770	1,107		1,107	1,663
2020	1,539			1,539				1,539
2021	1,666			1,666				1,666
2022	1,680			1,680				1,680
2023	1,721			1,721				1,721
2024	1,760			1,760				1,760
2025	1,742			1,742				1,742
2026	1,685			1,685				1,685
2027	1,595			1,595				1,595
2028	1,365			1,365				1,365
2029	1,128			1,128				1,128
2030	840			840				840
2031	537			537				537
2032	328			328				328
2033	150			150				150
2034								
2035								
2036								
NOMINAL	25,673	15,951		41,624	13,870		13,870	27,753
NPV	8,691	9,103		17,794	7,916		7,916	9,878

Utility Discount Rate = 8.48
Benefit Cost Ratio = 2.248

PROGRAM: Commercial Green Building - TRC

YEAR	BENEFITS					COSTS						NET BENEFITS \$(000)
	(1) TOTAL FUEL & O&M SAVINGS \$(000)	(2) AVOIDED T&D CAP. COSTS \$(000)	(3) AVOIDED GEN. CAP. COSTS \$(000)	(4) OTHER PARTICIPANT BENEFITS \$(000)	(5) TOTAL BENEFITS \$(000)	(6) PARTICIPANT'S COST \$(000)	(7) TOTAL FUEL & O&M INCREASE \$(000)	(8) INCREASED T&D CAP. COSTS \$(000)	(9) INCREASED GEN. CAP. COSTS \$(000)	(10) UTILITY PROGRAM COSTS \$(000)	(11) TOTAL COSTS \$(000)	
2010	42	1			43	426				236	663	-620
2011	107	4			110	606				84	690	-580
2012	171	6			177	847				69	916	-738
2013	382	12	73		468	1,754				92	1,846	-1,378
2014	450	18	170		637	1,724				72	1,795	-1,158
2015	692	24	235		951	2,188				359	2,547	-1,596
2016	899	31	309		1,239	2,323				373	2,696	-1,457
2017	1,132	35	252		1,419	1,549				377	1,925	-507
2018	1,136	38	438		1,612	1,347				357	1,703	-91
2019	1,252	41	480		1,773	1,107				308	1,415	358
2020	1,272	41	490		1,803							1,803
2021	1,319	41	501		1,861							1,861
2022	1,482	41	274		1,796							1,796
2023	1,573	41	457		2,071							2,071
2024	1,458	41	477		1,976							1,976
2025	1,445	40	468		1,953							1,953
2026	1,564	38	292		1,893							1,893
2027	1,369	35	488		1,891							1,891
2028	1,182	29	418		1,629							1,629
2029	1,063	23	204		1,291							1,291
2030	814	17	249		1,079							1,079
2031	527	11	162		699							699
2032	327	6	101		434							434
2033	150	3	47		200							200
2034												
2035												
2036												
NOMINAL	21,803	618	6,583		29,005	13,870				2,326	16,196	12,808
NPV	7,184	216	2,163		9,563	7,916				1,284	9,200	363

Utility Discount Rate = 8.48

Benefit Cost Ratio = 1.039

G. INNOVATION INCENTIVE PROGRAM

Program Start Date: 1992

Program modified in 1995

Modifications proposed in 2010

Program Description

The objective of the Innovation Incentive program is to encourage customers to make capital investments for the installation of energy efficiency measures which reduce peak KW and energy on the Progress Energy system. This program offers customized incentives specifically designed for individual innovative projects which are not otherwise addressed by Progress Energy Demand Side Management programs.

Representative examples of energy efficient technologies that would be considered under this program include, but are not limited to, refrigeration equipment replacement and new lighting technologies.

Policies and Procedures

The timeline of the Innovation Incentive program can range from six months to one year depending on the project. The steps included are application, monitoring, data collection, analysis of data, inspection, and processing incentive to the customer.

Program eligibility requirements to qualify for participation are as follows:

- Participant must be located in the Progress Energy service territory and be a commercially metered customer
- Participant must be willing to allow Progress Energy to inspect the installations of all measures and equipment

Specific eligibility requirements for each measure promoted in this program will be presented in the Program Participation Standards.

Progress Energy will perform a customer-specific cost-effectiveness analysis for each project being considered under the Innovation Incentive program, using the Commission-approved cost-effectiveness tests described in Rule 25-17.008, Florida Administrative Code. The customer's incentive shall be based upon the cost effectiveness test results and will be the lesser of 50% of the total project cost or buy down to a two year payback. The maximum incentive for one facility or premise is \$500,000 per year. For large, complex engineering projects, Progress Energy reserves the right to stage the total incentive amount.

After Progress Energy has reviewed and approved the project, an application will be executed between Progress Energy and the customer, in which Progress Energy agrees to subsidize the customer upon completion and inspection of the project.

Program Participation

Annual participation estimates for the Innovation Incentive program are shown in the following table.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	167,233	2	0.0%
2011	170,886	170,886	2	0.0%
2012	175,147	175,147	2	0.0%
2013	178,542	178,542	2	0.0%
2014	182,030	182,030	2	0.0%
2015	185,461	185,461	2	0.0%
2016	188,717	188,717	2	0.0%
2017	191,817	191,817	2	0.0%
2018	194,809	194,809	2	0.0%
2019	197,848	197,848	2	0.0%

1. The total number of customers is the forecast of commercial/industrial customers in Progress Energy's 2009 Ten Year Site Plan.
2. All commercial, industrial and governmental rate classes are eligible to participate.
3. Number of program participants represents the number of participants that pass cost effectiveness analysis.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool.

Savings Estimates

Program savings were not estimated during the planning stage and are not included in the Demand Side Management plan total. Any impacts obtained by this program will be calculated for each individual project and will be reported to the Commission to be counted toward achieving Progress Energy's conservation goals.

Impact Evaluation Plan

To verify the estimated savings for each project, an engineering/billing analysis based on customer-specific site and usage data will be performed. Monitoring will continue until Progress Energy has reasonable assurance that the project will remain in place and produce cost-effective energy savings for its estimated life. An incentive will not be issued to the customer until Progress Energy is reasonably sure of the projected savings.

Cost Effectiveness

Each individual project will be analyzed for cost-effectiveness at the time of project submittal to Progress Energy, using the Commission-approved tests of cost-effectiveness. Therefore, total program cost-effectiveness results are not shown.

H. STANDBY GENERATION PROGRAM

Program Start Date: 1993

Program modified in 1995, 2007

Modifications proposed in 2010

Program Description

The Standby Generation program is a demand control program that will reduce Progress Energy's demand based upon the indirect control of customer equipment. The program is a voluntary program available to all commercial and industrial customers who have on-site generation capability and are willing to reduce their Progress Energy demand when deemed necessary. The program is offered through the General Service Load Management-2 (GSLM-2) rate schedule.

Progress Energy may have direct control of the customer equipment or will rely upon the customer to initiate the generation upon being notified by Progress Energy and continue running it until Progress Energy notifies the customer that the generation is no longer needed. Progress Energy does not restrict other use of the equipment by the customer.

Standby Generation program participants receive a monthly credit on their energy bill according to the demonstrated ability of the customer to reduce demand at Progress Energy's request. An additional credit will be based on the KWh the customer provides. The credits are based upon the load served by the customer's generator, which would have been served by Progress Energy if the Standby Generation program were not in operation. By compensating the customer for the

use of their on-site generation, Progress Energy can impact the commercial and industrial market while minimizing rate impacts. The incentive will be based on a per KWh credit per month plus and additional compensation per KWh to support customer O&M associated with run time requested by the company.

Policies and Procedures

The general program eligibility requirements to qualify for participation are as follows:

- Customer must be eligible for service under the GS-1, GST-1, GSD-1 or GSDT-1 Rate Schedules
- Customer must have standby generation that will allow facility demand reduction at the request of Progress Energy
- Customer's Standby Generation Capacity calculation must be at least 50 KW
- Customer must be within the range of Progress Energy's load management system

Program Participation

Annual participation estimates for the Standby Generation program are shown in the following table.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	535	10	2%
2011	170,886	547	10	4%
2012	175,147	560	10	5%
2013	178,542	571	10	7%
2014	182,030	582	10	9%
2015	185,461	593	10	10%
2016	188,717	604	10	12%
2017	191,817	614	10	13%
2018	194,809	623	10	14%
2019	197,848	633	10	16%

1. Total Number of Customers is the forecast of commercial/industrial customers in the Progress Energy 2009 Ten Year Site Plan.
2. Eligible Customers is based upon tariff GSLM-2 Rate Schedule.
3. Annual number of program participants represents the projected number of customers expected to join this program in each year. New annual participation is projected to be small relative to other programs due to the unique characteristics and requirements of the program.
4. Cumulative penetration level equals the sum of annual number of program participants in the current year and all prior years divided by the number of eligible customers in the current year.

Savings Estimates

The KW and KWh savings estimates for this program were determined from historical data and are presented below.

At the Meter

Year	Per Customer 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
2010		400.00	400.00	-	4,000	4,000
2011		400.00	400.00	-	4,000	4,000
2012		400.00	400.00	-	4,000	4,000
2013		400.00	400.00	-	4,000	4,000
2014		400.00	400.00	-	4,000	4,000
2015		400.00	400.00	-	4,000	4,000
2016		400.00	400.00	-	4,000	4,000
2017		400.00	400.00	-	4,000	4,000
2018		400.00	400.00	-	4,000	4,000
2019		400.00	400.00	-	4,000	4,000

At the Generator

Year	Per Customer 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
2010		425.08	425.08	-	4,251	4,251
2011		425.08	425.08	-	4,251	4,251
2012		425.08	425.08	-	4,251	4,251
2013		425.08	425.08	-	4,251	4,251
2014		425.08	425.08	-	4,251	4,251
2015		425.08	425.08	-	4,251	4,251
2016		425.08	425.08	-	4,251	4,251
2017		425.08	425.08	-	4,251	4,251
2018		425.08	425.08	-	4,251	4,251
2019		425.08	425.08	-	4,251	4,251

Impact Evaluation Plan

Progress Energy uses on-site metering to measure the generation capability of each Standby Generation program participant to reduce load at the time they join the program. The customer and a Progress Energy representative will observe the metering tests to determine the load that the standby generator carries. This system testing will also determine the initial readings that will be recorded in order to determine the incentive that the customer will receive on their bill each month.

Cost Effectiveness

The economic results of the program are as follows.

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$80,510	\$11,584	\$68,926	6.95
Participant	\$10,235		\$10,235	N/A
Total Resource Cost	\$80,510	\$1,349	\$79,161	59.68

PROGRAM: Standby Generation - RIM

YEAR	BENEFITS					COSTS					NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0
2010	15	0	0	0	15	0	63	117	8	189	-174
2011	37	0	0	0	37	0	68	235	22	325	-288
2012	42	0	0	0	42	0	73	352	26	451	-409
2013	975	0	1,949	0	2,924	0	78	470	27	575	2,349
2014	0	0	3,839	0	3,839	87	83	587	36	793	3,047
2015	0	0	4,682	0	4,682	716	88	704	47	1,556	3,127
2016	140	0	5,203	0	5,343	0	93	822	90	1,005	4,338
2017	1,498	0	6,233	0	7,731	0	98	939	89	1,126	6,605
2018	2,040	0	8,261	0	10,301	0	103	1,057	95	1,255	9,046
2019	1,708	0	9,368	0	11,076	0	108	1,174	111	1,393	9,683
2020	1,557	0	9,565	0	11,122	0	50	1,174	114	1,338	9,784
2021	632	0	9,767	0	10,398	0	50	1,174	124	1,348	9,051
2022	3,629	0	5,337	0	8,965	0	50	1,174	125	1,349	7,617
2023	3,999	0	8,911	0	12,910	0	50	1,174	128	1,352	11,558
2024	1,139	0	9,305	0	10,444	0	50	1,174	131	1,355	9,090
2025	584	0	9,464	0	10,048	0	50	1,174	134	1,358	8,690
2026	3,639	0	6,234	0	9,872	0	50	1,174	137	1,361	8,512
2027	1,315	0	11,267	0	12,582	0	50	1,174	112	1,336	11,246
2028	1,169	0	11,535	0	12,704	0	50	1,174	143	1,367	11,337
2029	3,138	0	6,061	0	9,199	0	50	1,174	147	1,371	7,828
2030	3,434	0	10,141	0	13,574	0	50	1,174	151	1,375	12,199
2031	3,517	0	10,546	0	14,063	0	50	1,174	154	1,378	12,685
2032	3,532	0	10,968	0	14,500	0	50	1,174	157	1,381	13,119
2033	3,460	0	11,407	0	14,867	0	50	1,174	161	1,385	13,482
2034	3,634	0	11,863	0	15,497	0	50	1,174	164	1,388	14,109
2035	3,528	0	12,338	0	15,866	0	50	1,174	168	1,392	14,473
2036	3,469	0	12,831	0	16,300	0	50	1,174	172	1,396	14,904
2037	3,586	0	13,344	0	16,930	0	50	1,174	176	1,400	15,530
2038	3,681	0	13,878	0	17,559	0	50	1,174	179	1,403	16,156
NOMINAL	59,093	0	234,299	0	293,391	803	1,807	28,763	3,327	34,700	258,692
NPV	14,764	0	65,746	0	80,510	539	810	9,282	953	11,584	68,926

Utility Discount Rate = 8.48

Benefit Cost Ratio = 6.950

PROGRAM: Standby Generation - Participant

YEAR	BENEFITS				COSTS		NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	
	SAVINGS IN PARTICIPANT'S BILL \$(000)	INCENTIVE PAYMENTS \$(000)	OTHER PARTICIPANT'S BENEFITS \$(000)	TOTAL BENEFITS \$(000)	PARTICIPANT'S COST \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0
2010	8	117	0	126	0	0	126
2011	22	235	0	257	0	0	257
2012	26	352	0	378	0	0	378
2013	27	470	0	497	0	0	497
2014	36	587	0	623	0	0	623
2015	47	704	0	751	0	0	751
2016	90	822	0	911	0	0	911
2017	89	939	0	1,028	0	0	1,028
2018	95	1,057	0	1,152	0	0	1,152
2019	111	1,174	0	1,285	0	0	1,285
2020	114	1,174	0	1,288	0	0	1,288
2021	124	1,174	0	1,298	0	0	1,298
2022	125	1,174	0	1,299	0	0	1,299
2023	128	1,174	0	1,302	0	0	1,302
2024	131	1,174	0	1,305	0	0	1,305
2025	134	1,174	0	1,308	0	0	1,308
2026	137	1,174	0	1,311	0	0	1,311
2027	112	1,174	0	1,286	0	0	1,286
2028	143	1,174	0	1,317	0	0	1,317
2029	147	1,174	0	1,321	0	0	1,321
2030	151	1,174	0	1,325	0	0	1,325
2031	154	1,174	0	1,328	0	0	1,328
2032	157	1,174	0	1,331	0	0	1,331
2033	161	1,174	0	1,335	0	0	1,335
2034	164	1,174	0	1,338	0	0	1,338
2035	168	1,174	0	1,342	0	0	1,342
2036	172	1,174	0	1,346	0	0	1,346
2037	176	1,174	0	1,350	0	0	1,350
2038	179	1,174	0	1,353	0	0	1,353
NOMINAL	3,327	28,763	0	32,090	0	0	32,090
NPV	953	9,282	0	10,235	0	0	10,235

Utility Discount Rate = 8.48

PROGRAM: Standby Generation - TRC

YEAR	BENEFITS					COSTS					NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	OTHER PARTICIPANT BENEFITS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT'S COST \$(000)	TOTAL COSTS \$(000)		
2008	0	0	0	0	0	0	0	0	0	0	
2009	0	0	0	0	0	0	0	0	0	0	
2010	15	0	0	0	15	0	63	0	63	-48	
2011	37	0	0	0	37	0	68	0	68	-31	
2012	42	0	0	0	42	0	73	0	73	-31	
2013	975	0	1,949	0	2,924	0	78	0	78	2,846	
2014	0	0	3,839	0	3,839	87	83	0	170	3,669	
2015	0	0	4,682	0	4,682	716	88	0	804	3,878	
2016	140	0	5,203	0	5,343	0	93	0	93	5,250	
2017	1,498	0	6,233	0	7,731	0	98	0	98	7,633	
2018	2,040	0	8,261	0	10,301	0	103	0	103	10,198	
2019	1,708	0	9,368	0	11,076	0	108	0	108	10,968	
2020	1,557	0	9,565	0	11,122	0	50	0	50	11,072	
2021	632	0	9,767	0	10,398	0	50	0	50	10,348	
2022	3,629	0	5,337	0	8,965	0	50	0	50	8,915	
2023	3,999	0	8,911	0	12,910	0	50	0	50	12,860	
2024	1,139	0	9,305	0	10,444	0	50	0	50	10,394	
2025	584	0	9,464	0	10,048	0	50	0	50	9,998	
2026	3,639	0	6,234	0	9,872	0	50	0	50	9,822	
2027	1,315	0	11,267	0	12,582	0	50	0	50	12,532	
2028	1,169	0	11,535	0	12,704	0	50	0	50	12,654	
2029	3,138	0	6,061	0	9,199	0	50	0	50	9,149	
2030	3,434	0	10,141	0	13,574	0	50	0	50	13,524	
2031	3,517	0	10,546	0	14,063	0	50	0	50	14,013	
2032	3,532	0	10,968	0	14,500	0	50	0	50	14,450	
2033	3,460	0	11,407	0	14,867	0	50	0	50	14,817	
2034	3,634	0	11,863	0	15,497	0	50	0	50	15,447	
2035	3,528	0	12,338	0	15,866	0	50	0	50	15,816	
2036	3,469	0	12,831	0	16,300	0	50	0	50	16,250	
2037	3,586	0	13,344	0	16,930	0	50	0	50	16,880	
2038	3,681	0	13,878	0	17,559	0	50	0	50	17,509	
NOMINAL	59,093	0	234,299	0	293,391	803	1,807	0	2,609	290,782	
NPV	14,764	0	65,746	0	80,510	539	810	0	1,349	79,161	

Utility Discount Rate = 8.48

Benefit Cost Ratio = 59.683

I. INTERRUPTIBLE SERVICE PROGRAM

Program Start Date: 1996 for the IS-2 and IST-2 rate schedules.

Modifications proposed in 2010

Program Description

The Interruptible Service program is a direct load control program that reduces Progress Energy's demand at times of capacity shortage during peak or emergency conditions.

Policies and Procedures

The program is available throughout the entire territory served by Progress Energy to any non-residential customer who is willing to have their power interrupted. The program is currently offered through the Interruptible General Service (IS-2) and Interruptible General Service Time of Use (IST-2) rate schedules. The IS-1 and IST-1 rate schedules were closed to new customers in 1996, but remain active for those customers that were grand-fathered onto the rate.

Progress Energy will have remote control of the circuit breaker or disconnect switch supplying the customer's equipment. If purchased power is available at the time of potential interruption, customers who choose not to have their load interrupted will be assessed at the price of that purchased power supplied. Customers participating in the Interruptible Service program will receive a monthly interruptible demand credit based on their billing demand and billing load factor.

The general program eligibility requirements to qualify for participation are as follows:

- Customer must be eligible for service under the IS-2 or IST-2 Rate Schedules.
- Minimum billing demand must be 500 KW or more.
- Available at primary, transmission and secondary service voltages.

Program Participation

Annual participation estimates for the Interruptible Service program are shown in the following table.

Year	Total Number of Customers (1)	Total Number of Measure Eligible Customers (2)	Annual Number of Program Measure Participants (3)	Cumulative Penetration Level (%) (4)
2010	167,233	449	1	0%
2011	170,886	459	1	0%
2012	175,147	470	1	1%
2013	178,542	479	1	1%
2014	182,030	489	1	1%
2015	185,461	498	1	1%
2016	188,717	507	1	1%
2017	191,817	515	1	2%
2018	194,809	523	1	2%
2019	197,848	531	1	2%

1. Total Number of Customers is the forecast of commercial/industrial customers in the Progress Energy 2009 Ten Year Site Plan.
2. Eligible Customers is based upon tariff IS-2 Rate Schedule.
3. Annual number of program participants represents the projected number of customers expected to join this program in each year. New annual participation is projected to be small relative to other programs due to the unique characteristics and requirements of the programs.
4. Cumulative penetration level equals the sum of annual number of program participants in the current year and all prior years divided by the number of eligible customers in the current year.

Savings Estimates

Savings estimate for the Interruptible Service program are shown in the following tables.

At the Meter

Year	Per Customer 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
2010		326.00	311.00	-	326	311
2011		326.00	311.00	-	326	311
2012		326.00	311.00	-	326	311
2013		326.00	311.00	-	326	311
2014		326.00	311.00	-	326	311
2015		326.00	311.00	-	326	311
2016		326.00	311.00	-	326	311
2017		326.00	311.00	-	326	311
2018		326.00	311.00	-	326	311
2019		326.00	311.00	-	326	311

At the Generator

Year	Per Customer 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
2010		336.79	321.30	-	337	321
2011		336.79	321.30	-	337	321
2012		336.79	321.30	-	337	321
2013		336.79	321.30	-	337	321
2014		336.79	321.30	-	337	321
2015		336.79	321.30	-	337	321
2016		336.79	321.30	-	337	321
2017		336.79	321.30	-	337	321
2018		336.79	321.30	-	337	321
2019		336.79	321.30	-	337	321

Impact Evaluation Plan

Program impacts are evaluated through on-site interval metering data of all Interruptible Service customers.

Cost-Effectiveness

The cost-effectiveness results of the Interruptible Service program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$6,187	\$1,315	\$4,872	4.71
Participant	\$1,127		\$1,127	N/A
Total Resource Cost	\$6,187	\$187	\$6,000	33.06

PROGRAM: Interruptible Service - RIM

YEAR	BENEFITS					COSTS					NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0
2010	1	0	0	0	1	0	16	13	1	30	-29
2011	3	0	0	0	3	0	17	27	1	45	-42
2012	3	0	0	0	3	0	17	40	2	59	-56
2013	76	0	147	0	223	0	18	54	3	74	149
2014	0	0	290	0	290	4	18	67	3	93	197
2015	0	0	353	0	353	51	19	81	5	155	198
2016	12	0	412	0	424	0	19	94	5	119	305
2017	119	0	493	0	612	0	20	108	5	133	479
2018	155	0	623	0	779	0	20	121	5	147	632
2019	130	0	707	0	837	0	21	135	6	162	675
2020	120	0	722	0	841	0	5	135	7	146	695
2021	50	0	737	0	787	0	5	135	8	148	639
2022	274	0	403	0	677	0	5	135	7	147	530
2023	301	0	672	0	974	0	5	135	8	147	826
2024	88	0	702	0	790	0	5	135	8	148	643
2025	45	0	714	0	759	0	5	135	8	148	611
2026	273	0	470	0	743	0	5	135	8	148	595
2027	103	0	850	0	953	0	5	135	8	148	805
2028	91	0	871	0	962	0	5	135	9	148	813
2029	247	0	479	0	726	0	5	135	9	149	577
2030	270	0	802	0	1,071	0	5	135	10	150	922
2031	277	0	834	0	1,110	0	5	135	10	149	961
2032	280	0	867	0	1,147	0	5	135	10	150	998
2033	272	0	902	0	1,174	0	5	135	11	150	1,024
2034	286	0	938	0	1,224	0	5	135	10	150	1,074
2035	277	0	976	0	1,253	0	5	135	11	150	1,102
2036	273	0	1,015	0	1,287	0	5	135	11	151	1,136
2037	280	0	1,055	0	1,335	0	5	135	11	151	1,185
2038	289	0	1,098	0	1,386	0	5	135	11	151	1,235
NOMINAL	4,590	0	18,133	0	22,724	56	278	3,304	209	3,846	18,877
NPV	1,141	0	5,046	0	6,187	37	150	1,066	61	1,315	4,872

Utility Discount Rate = 8.48
Benefit Cost Ratio = 4.706

PROGRAM: Interruptible Service - Participant

YEAR	BENEFITS				COSTS		NET BENEFITS \$(000)
	(1) SAVINGS IN PARTICIPANT'S BILL \$(000)	(2) INCENTIVE PAYMENTS \$(000)	(3) OTHER PARTICIPANT'S BENEFITS \$(000)	(4) TOTAL BENEFITS \$(000)	(5) PARTICIPANT'S COST \$(000)	(6) TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0
2010	1	13	0	14	0	0	14
2011	1	27	0	28	0	0	28
2012	2	40	0	42	0	0	42
2013	3	54	0	57	0	0	57
2014	3	67	0	71	0	0	71
2015	5	81	0	86	0	0	86
2016	5	94	0	100	0	0	100
2017	5	108	0	113	0	0	113
2018	5	121	0	127	0	0	127
2019	6	135	0	141	0	0	141
2020	7	135	0	141	0	0	141
2021	8	135	0	143	0	0	143
2022	7	135	0	142	0	0	142
2023	8	135	0	142	0	0	142
2024	8	135	0	143	0	0	143
2025	8	135	0	143	0	0	143
2026	8	135	0	143	0	0	143
2027	8	135	0	143	0	0	143
2028	9	135	0	143	0	0	143
2029	9	135	0	144	0	0	144
2030	10	135	0	145	0	0	145
2031	10	135	0	144	0	0	144
2032	10	135	0	145	0	0	145
2033	11	135	0	145	0	0	145
2034	10	135	0	145	0	0	145
2035	11	135	0	145	0	0	145
2036	11	135	0	146	0	0	146
2037	11	135	0	146	0	0	146
2038	11	135	0	146	0	0	146
NOMINAL	209	3,304	0	3,513	0	0	3,513
NPV	61	1,066	0	1,127	0	0	1,127

Utility Discount Rate = 8.48

PROGRAM: Interruptible Service - TRC

YEAR	BENEFITS					COSTS				NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	OTHER PARTICIPANT BENEFITS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	UTILITY PROGRAM COSTS \$(000)	PARTICIPANT'S COST \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0
2010	1	0	0	0	1	0	16	0	16	-15
2011	3	0	0	0	3	0	17	0	17	-14
2012	3	0	0	0	3	0	17	0	17	-14
2013	76	0	147	0	223	0	18	0	18	205
2014	0	0	290	0	290	4	18	0	22	267
2015	0	0	353	0	353	51	19	0	70	284
2016	12	0	412	0	424	0	19	0	19	405
2017	119	0	493	0	612	0	20	0	20	592
2018	155	0	623	0	779	0	20	0	20	759
2019	130	0	707	0	837	0	21	0	21	816
2020	120	0	722	0	841	0	5	0	5	836
2021	50	0	737	0	787	0	5	0	5	782
2022	274	0	403	0	677	0	5	0	5	672
2023	301	0	672	0	974	0	5	0	5	969
2024	88	0	702	0	790	0	5	0	5	785
2025	45	0	714	0	759	0	5	0	5	754
2026	273	0	470	0	743	0	5	0	5	738
2027	103	0	850	0	953	0	5	0	5	948
2028	91	0	871	0	962	0	5	0	5	957
2029	247	0	479	0	726	0	5	0	5	721
2030	270	0	802	0	1,071	0	5	0	5	1,066
2031	277	0	834	0	1,110	0	5	0	5	1,105
2032	280	0	867	0	1,147	0	5	0	5	1,142
2033	272	0	902	0	1,174	0	5	0	5	1,169
2034	286	0	938	0	1,224	0	5	0	5	1,219
2035	277	0	976	0	1,253	0	5	0	5	1,248
2036	273	0	1,015	0	1,287	0	5	0	5	1,282
2037	280	0	1,055	0	1,335	0	5	0	5	1,330
2038	289	0	1,098	0	1,386	0	5	0	5	1,381
NOMINAL	4,590	0	18,133	0	22,724	56	278	0	333	22,391
NPV	1,141	0	5,046	0	6,187	37	150	0	187	6,000

Utility Discount Rate = 8.48

Benefit Cost Ratio = 33.061

J. CURTAILABLE SERVICE PROGRAM

Program Start Date: 1996 for the CS-2 and CST-2 rate schedules
2004 for the CS-3 and CST-3 rate schedules.
Modifications proposed in 2010

Program Description

The Curtailable Service program is an indirect load control program that will reduce Progress Energy's demand at times of capacity shortage during peak or emergency conditions.

Policies and Procedures

The program is available throughout the entire territory served by Progress Energy to any non-residential customer who agrees to curtail 25% of their average monthly billing demand for CS-2 and CST-2 and a minimum of 2000 KW for CS-3 and CST-3. The program is currently offered through the Curtailable General Service (CS-2) and Curtailable General Service Time of Use (CST-2) rate schedules. The CS-1 and CST-1 rate schedules were closed to new customers in 1996, but remain active for those customers that were grand-fathered onto the rate.

Progress Energy will notify customers when off-system power purchases may begin in support of their service. If purchased power is available at the time of notification, customers who choose not to reduce their load will be assessed charges as set forth in the applicable tariff. Additionally, Progress Energy will provide notification of curtailment request. Upon curtailment request, customers choosing not to comply with their curtailment responsibility will be assessed penalties as described in the applicable tariff. Customers participating in the Curtailable Service

program receive a monthly curtailable demand credit based on their curtailable demand and billing load factor. The general program eligibility requirements to qualify for participation are as follows:

- Customer must be eligible for service under the CS-2 or CST-2 Rate Schedules.
- Minimum billing demand must be 500 KW or more for CS-2 and CST-2.
- Available at primary, transmission and secondary service voltages.

Program Participation

Annual participation estimates for the Curtailable Service program are shown in the following table.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	886	1	0%
2011	170,886	906	1	0%
2012	175,147	928	1	0%
2013	178,542	946	1	0%
2014	182,030	965	1	1%
2015	185,461	983	1	1%
2016	188,717	1,000	1	1%
2017	191,817	1,017	1	1%
2018	194,809	1,032	1	1%
2019	197,848	1,049	1	1%

1. Total Number of Customers is the forecast of commercial/industrial customers in the Progress Energy 2009 Ten Year Site Plan.
2. Eligible Customers is based upon tariff CS-2 and CS-3 Rate Schedule.
3. Annual number of program participants represents the projected number of customers expected to join this program in each year. New annual participation is projected to be small relative to other programs due to the unique characteristics and requirements of the programs.
4. Cumulative penetration level equals the sum of annual number of program participants in the current year and all prior years divided by the number of eligible customers in the current year.

Savings Estimates

Savings estimate for the Curtailable Service program are shown in the following tables.

At the Meter

Year	Per Customer 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
2010		282.00	189.00	-	282	189
2011		282.00	189.00	-	282	189
2012		282.00	189.00	-	282	189
2013		282.00	189.00	-	282	189
2014		282.00	189.00	-	282	189
2015		282.00	189.00	-	282	189
2016		282.00	189.00	-	282	189
2017		282.00	189.00	-	282	189
2018		282.00	189.00	-	282	189
2019		282.00	189.00	-	282	189

At the Generator

Year	Per Customer 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
2010		299.68	200.85	-	300	201
2011		299.68	200.85	-	300	201
2012		299.68	200.85	-	300	201
2013		299.68	200.85	-	300	201
2014		299.68	200.85	-	300	201
2015		299.68	200.85	-	300	201
2016		299.68	200.85	-	300	201
2017		299.68	200.85	-	300	201
2018		299.68	200.85	-	300	201
2019		299.68	200.85	-	300	201

Impact Evaluation Plan

Program impacts are evaluated through on-site interval metering data of all Curtailable Service customers.

Cost-Effectiveness

Progress Energy is projecting slow growth for the Curtailable Service program. In order to evaluate the program for cost-effectiveness a minimal level of participation was assumed. The cost-effectiveness results of the Curtailable Service program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$4,508	\$720	\$3,787	6.26
Participant	\$663		\$663	N/A
Total Resource Cost	\$4,508	\$57	\$4,450	78.8

PROGRAM: Curtailable Service - RIM

YEAR	BENEFITS					COSTS					NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED O&M COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0
2010	1	0	0	0	1	0	0	8	1	8	-8
2011	3	0	0	0	3	0	1	15	1	17	-15
2012	3	0	0	0	3	0	1	23	2	26	-23
2013	48	0	92	0	140	0	2	31	2	35	106
2014	0	0	182	0	182	2	2	39	3	45	137
2015	0	0	222	0	222	30	3	46	4	83	139
2016	10	0	367	0	377	0	3	54	5	62	315
2017	106	0	440	0	546	0	4	62	5	70	476
2018	99	0	391	0	491	0	4	70	5	78	412
2019	83	0	444	0	527	0	5	77	6	87	439
2020	77	0	453	0	530	0	5	77	6	88	441
2021	35	0	463	0	497	0	5	77	6	89	409
2022	174	0	253	0	427	0	5	77	6	89	338
2023	192	0	422	0	614	0	5	77	7	89	525
2024	58	0	441	0	499	0	5	77	7	89	410
2025	31	0	448	0	479	0	5	77	7	89	390
2026	174	0	295	0	469	0	5	77	7	89	380
2027	66	0	534	0	600	0	5	77	7	89	510
2028	59	0	547	0	606	0	5	77	7	90	516
2029	220	0	428	0	647	0	5	77	8	90	557
2030	242	0	715	0	956	0	5	77	8	90	866
2031	247	0	744	0	990	0	5	77	8	90	900
2032	249	0	773	0	1,022	0	5	77	8	90	931
2033	243	0	804	0	1,047	0	5	77	8	91	957
2034	255	0	836	0	1,091	0	5	77	8	91	1,001
2035	247	0	870	0	1,117	0	5	77	9	91	1,026
2036	242	0	905	0	1,147	0	5	77	9	91	1,055
2037	250	0	941	0	1,191	0	5	77	9	91	1,099
2038	258	0	978	0	1,236	0	5	77	9	91	1,145
NOMINAL	3,668	0	13,987	0	17,654	32	118	1,892	177	2,218	15,436
NPV	855	0	3,652	0	4,508	21	36	611	52	720	3,787

Utility Discount Rate = 8.48

Benefit Cost Ratio = 6.259

PROGRAM: Curtailable Service - Participant

YEAR	BENEFITS				COSTS		NET BENEFITS \$(000)
	(1) SAVINGS IN PARTICIPANT'S BILL \$(000)	(2) INCENTIVE PAYMENTS \$(000)	(3) OTHER PARTICIPANT'S BENEFITS \$(000)	(4) TOTAL BENEFITS \$(000)	(5) PARTICIPANT'S COST \$(000)	(6) TOTAL COSTS \$(000)	
2008	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0
2010	1	8	0	8	0	0	8
2011	1	15	0	17	0	0	17
2012	2	23	0	25	0	0	25
2013	2	31	0	33	0	0	33
2014	3	39	0	41	0	0	41
2015	4	46	0	50	0	0	50
2016	5	54	0	59	0	0	59
2017	5	62	0	66	0	0	66
2018	5	70	0	74	0	0	74
2019	6	77	0	83	0	0	83
2020	6	77	0	83	0	0	83
2021	6	77	0	84	0	0	84
2022	6	77	0	84	0	0	84
2023	7	77	0	84	0	0	84
2024	7	77	0	84	0	0	84
2025	7	77	0	84	0	0	84
2026	7	77	0	84	0	0	84
2027	7	77	0	84	0	0	84
2028	7	77	0	85	0	0	85
2029	8	77	0	85	0	0	85
2030	8	77	0	85	0	0	85
2031	8	77	0	85	0	0	85
2032	8	77	0	85	0	0	85
2033	8	77	0	86	0	0	86
2034	8	77	0	86	0	0	86
2035	9	77	0	86	0	0	86
2036	9	77	0	86	0	0	86
2037	9	77	0	86	0	0	86
2038	9	77	0	86	0	0	86
NOMINAL	177	1,892	0	2,069	0	0	2,069
NPV	52	611	0	663	0	0	663

Utility Discount Rate = 8.48

PROGRAM: Curtailable Service - TRC

YEAR	BENEFITS					COSTS				NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
	TOTAL FUEL & O&M SAVINGS	AVOIDED T&D COSTS	AVOIDED GEN. CAP. COSTS	OTHER PARTICIPANT BENEFITS	TOTAL BENEFITS	TOTAL FUEL & O&M INCREASE	UTILITY PROGRAM COSTS	PARTICIPANT'S COST	TOTAL COSTS	
	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2008	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0
2010	1	0	0	0	1	0	0	0	0	1
2011	3	0	0	0	3	0	1	0	1	2
2012	3	0	0	0	3	0	1	0	1	2
2013	48	0	92	0	140	0	2	0	2	139
2014	0	0	182	0	182	2	2	0	4	178
2015	0	0	222	0	222	30	3	0	33	189
2016	10	0	367	0	377	0	3	0	3	374
2017	106	0	440	0	546	0	4	0	4	542
2018	99	0	391	0	491	0	4	0	4	487
2019	83	0	444	0	527	0	5	0	5	522
2020	77	0	453	0	530	0	5	0	5	525
2021	35	0	463	0	497	0	5	0	5	492
2022	174	0	253	0	427	0	5	0	5	422
2023	192	0	422	0	614	0	5	0	5	609
2024	58	0	441	0	499	0	5	0	5	494
2025	31	0	448	0	479	0	5	0	5	474
2026	174	0	295	0	469	0	5	0	5	464
2027	66	0	534	0	600	0	5	0	5	595
2028	59	0	547	0	606	0	5	0	5	601
2029	220	0	428	0	647	0	5	0	5	642
2030	242	0	715	0	956	0	5	0	5	951
2031	247	0	744	0	990	0	5	0	5	985
2032	249	0	773	0	1,022	0	5	0	5	1,017
2033	243	0	804	0	1,047	0	5	0	5	1,042
2034	255	0	836	0	1,091	0	5	0	5	1,086
2035	247	0	870	0	1,117	0	5	0	5	1,112
2036	242	0	905	0	1,147	0	5	0	5	1,142
2037	250	0	941	0	1,191	0	5	0	5	1,186
2038	258	0	978	0	1,236	0	5	0	5	1,231
NOMINAL	3,668	0	13,987	0	17,654	32	118	0	149	17,505
NPV	855	0	3,652	0	4,508	21	36	0	57	4,450

Utility Discount Rate = 8.48

Benefit Cost Ratio = 78.800

K. BUSINESS ENERGY RESPONSE PROGRAM

Program Start Date: Proposed in 2010

Program Description

This program will provide participating non-residential customers with prompt time-of-use energy information, enabling the customer to utilize current energy usage data to identify opportunities to reduce electric consumption during high peak/rate periods. Additionally, these customers will have the opportunity to take advantage of the critical peak rebate incentive that will be offered upon approval of this demand response program and associated tariff sheet (GSDR). This critical peak rebate will be provided to the qualifying non-residential customers during critical peak times to encourage the customer to reduce load during these peak events by allowing direct load control of their air-conditioning systems and/or interfacing with their energy management systems.

There will be a phased infrastructure enhancement plan and implementation that will enable advanced remote metering, direct load control & energy management system demand response interfaces, provide customers with more frequent interval meter data including the addition of a two-way communications network, and a Meter Data Management System with a customer-accessible energy usage and reporting web portal.

Goals of the program are:

- Provide non-residential customers alternative methods/technologies to reduce their electricity cost and contribute to Progress Energy's overall energy and demand reduction goals
- Reduce on-peak demand and energy usage
- Provide low-cost added-value data services (i.e. detailed energy usage reports) in lieu of monthly incentives to lower overall program cost
- Incent participants for only energy/demand benefits actually provided and measured
- Implement the necessary metering & communications technology to support this program and create the opportunity for other energy efficiency programs to be added in the future. This infrastructure will allow Progress Energy to match the American Recovery and Reinvestment Act stimulus grant funds awarded by the Department of Energy.
- Total participation goal is approximately 85,000 AMI web portal (access) non-residential customers by 2014 with many participants upgrading to other energy efficiency programs by the end of 2019 resulting in additional demand and energy reductions

Policies and Procedures

Incentives will be based on measured demand reduction compared to a benchmark average demand established over a period just prior to the critical peak event day.

The program eligibility requirements to qualify for participation are as follows:

General Requirements:

- Meet program specific requirements to ensure needed technology is compatible and expected load reduction is feasible as will be indicated in the GSDR tariff sheet
- The building/facility must be a Progress Energy non-residential tariff type with a time of use or demand rate or have an existing time of use or demand meter
- The building/facility must have an approved Progress Energy “smart meter” that is connected to the Progress Energy Advanced Metering Infrastructure/Demand Response network with two-way communications active (provided by Progress Energy)
- The metering and DR equipment/installation must be considered cost effective by Progress Energy
- The non-residential participant must agree to participate for a minimum number of control events if demand response equipment is installed
- Exceptions to the non-residential tariff type requirement may be made in the event the commercial customer is out of our AMI range, resulting in the need to install meters/gateways to complete the two-way communications network to the customer or if interval data is needed on that residential customer for research purposes.
- Participant must allow Progress Energy and/or its contractor access to all equipment on this program when required by Progress Energy

- Incentive Levels and specific eligibility requirements for each feature promoted in this program will be presented in the Program Participation Standards.

Program Participation

Annual participation estimates for the Business Energy Response program are shown in the following table.

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	167,233	24	0%
2011	170,886	170,886	7	0%
2012	175,147	175,147	5,904	3%
2013	178,542	178,542	5,904	7%
2014	182,030	182,030	10,904	12%
2015	185,461	185,461	15,904	21%
2016	188,717	188,717	18,404	30%
2017	191,817	191,817	18,404	39%
2018	194,809	194,809	16,904	47%
2019	197,848	197,848	814	47%

1. Total Number of Customers is the forecast of commercial/industrial customers in the Progress Energy 2009 Ten Year Site Plan.
2. Because there are three participant levels and customers may participate in more than one, the number of measure eligible customers is equal to the number of customers.
3. Annual Number of Measure Participants is the number of individual measure participants projected in a given year.
4. Cumulative penetration is the ratio of projected participating customers to the eligible customer pool.

Savings Estimates

Total program savings were developed by first estimating the total savings for each individual measure based on each measure's per customer savings and, annual projected participation. The total program savings were then computed as the sum of the individual measure savings, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	0	0.00	28.58	-	-	686
2011	0	0.00	28.57	-	-	200
2012	1774	0.36	1.46	8,870,523	2,120	8,648
2013	1774	0.63	1.73	8,870,523	3,710	10,243
2014	1774	0.61	1.21	17,741,045	6,625	13,153
2015	1774	0.50	0.91	26,611,568	7,950	14,478
2016	1774	0.46	0.82	31,046,829	8,480	15,013
2017	1774	0.46	0.82	31,046,829	8,480	15,008
2018	1774	0.39	0.78	28,385,673	6,625	13,153
2019	0	0.00	7.52	-	-	6,123

At the Generator

Year	Per Customer 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
2010	0	0.00	30.15	-	-	724
2011	0	0.00	30.13	-	-	211
2012	1871	0.38	1.54	9,355,740	2,236	9,121
2013	1871	0.66	1.83	9,355,740	3,913	10,803
2014	1871	0.64	1.27	18,711,481	6,987	13,872
2015	1871	0.53	0.96	28,067,221	8,385	15,270
2016	1871	0.49	0.86	32,745,091	8,944	15,834
2017	1871	0.49	0.86	32,745,091	8,944	15,829
2018	1871	0.41	0.82	29,938,369	6,987	13,872
2019	0	0.00	7.93	-	-	6,458

1. 2010, 2011, 2019 contain demand values for summer participants only.
2. The measure that affects energy is available between 2012 to 2018.

Impact Evaluation Plan

Baseline energy and demand usage will be collected from participants to create a statistically valid baseline for winter and summer peak impact evaluation. This baseline will be compared to participants' energy and demand actual data to determine program impacts. In addition, the program requires actual demand comparison before incentives are paid out.

Cost-Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$337,889	\$316,024	\$21,865	1.07
Participant	\$6,804	\$0	\$6,804	N/A
Total Resource Cost	\$337,889	\$130,891	\$206,998	2.58

PROGRAM: Business Energy Response - RIM

YEAR	BENEFITS					COSTS								NET BENEFITS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	REVENUE GAINS \$(000)	TOTAL BENEFITS \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	INCREASED T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	INCENTIVE PAYMENTS \$(000)	REVENUE LOSSES \$(000)	TOTAL COSTS \$(000)		
2008	0	0	0	0	0	0	0	0	0	0	0	0	0	
2009	0	0	0	0	0	0	0	0	0	0	0	0	0	
2010	5	0	0	0	5	0	0	0	10,940	36	3	10,979	-10,975	
2011	7	0	0	0	7	0	0	0	13,780	61	5	13,845	-13,838	
2012	9,439	585	0	0	10,024	0	0	0	20,734	181	10,460	31,375	-21,351	
2013	20,588	995	6,833	0	28,416	0	0	0	24,301	301	18,778	43,380	-14,964	
2014	14,629	995	14,287	0	29,911	0	0	0	21,551	421	19,597	41,570	-11,659	
2015	15,044	995	17,343	0	33,382	0	0	0	21,108	541	21,487	43,136	-9,754	
2016	21,330	995	5,590	0	27,916	0	0	0	19,847	661	21,152	41,660	-13,745	
2017	18,064	995	11,468	0	30,527	0	0	0	16,634	781	18,331	35,746	-5,219	
2018	21,707	995	24,557	0	47,259	0	0	0	12,966	901	17,549	31,416	15,843	
2019	21,301	995	26,546	0	48,843	0	0	0	10,218	1,016	18,374	29,608	19,235	
2020	21,328	995	26,239	0	48,562	0	0	0	8,343	1,016	18,911	28,270	20,292	
2021	20,062	995	27,736	0	48,793	0	0	0	7,446	1,016	20,469	28,931	19,862	
2022	26,688	995	12,328	0	40,011	0	0	0	6,934	1,016	20,644	28,594	11,417	
2023	28,736	995	20,599	0	50,330	0	0	0	5,241	1,016	21,157	27,414	22,916	
2024	22,729	995	28,753	0	52,477	0	0	0	3,294	1,016	21,586	25,895	26,582	
2025	22,101	995	29,640	0	52,736	0	0	0	2,709	1,016	22,156	25,881	26,854	
2026	29,665	995	14,489	0	45,149	0	0	0	2,574	1,016	22,667	26,256	18,893	
2027	24,986	995	35,271	0	61,252	0	0	0	2,371	1,016	23,169	26,555	34,696	
2028	24,502	995	28,191	0	53,688	0	0	0	2,092	1,016	23,697	26,805	26,883	
2029	26,767	995	7,254	0	35,016	0	0	0	1,687	1,016	24,373	27,076	7,940	
2030	28,311	995	12,393	0	41,699	0	0	0	1,930	1,016	24,930	27,876	13,823	
2031	29,254	995	12,787	0	43,036	0	0	0	2,175	1,016	25,502	28,693	14,343	
2032	30,279	995	13,227	0	44,501	0	0	0	2,686	1,016	26,017	29,719	14,782	
2033	31,193	995	13,940	0	46,128	0	0	0	2,643	1,016	26,676	30,335	15,793	
2034	31,757	995	14,097	0	46,849	0	0	0	2,770	1,016	27,160	30,947	15,902	
2035	33,317	995	14,967	0	49,279	0	0	0	2,912	1,016	27,867	31,795	17,484	
2036	34,539	995	15,674	0	51,207	0	0	0	2,818	1,016	28,513	32,348	18,859	
2037	35,549	995	16,113	0	52,657	0	0	0	8,298	1,016	29,203	38,518	14,139	
NOMINAL	643,871	25,464	450,324	0	1,119,659	0	0	0	241,001	23,192	580,431	844,624	275,035	
NPV	188,439	8,450	141,000	0	337,889	0	0	0	130,891	6,804	178,329	316,024	21,865	

Utility Discount Rate = 8.48

Benefit Cost Ratio = 1.069

PROGRAM: Business Energy Response - Participant

YEAR	BENEFITS				COSTS			NET BENEFITS TO PARTICIPANTS \$(000)
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	
	SAVINGS IN PARTICIPANT BILL	INCENTIVE PAYMENTS	OTHER PARTICIPANT BENEFITS	TOTAL BENEFITS	PARTICIPANT COST	PARTICIPANT'S BILL INCREASE	TOTAL COSTS	
	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	\$(000)	
2008	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0
2010	0	36	0	36	0	0	0	36
2011	0	61	0	61	0	0	0	61
2012	0	181	0	181	0	0	0	181
2013	0	301	0	301	0	0	0	301
2014	0	421	0	421	0	0	0	421
2015	0	541	0	541	0	0	0	541
2016	0	661	0	661	0	0	0	661
2017	0	781	0	781	0	0	0	781
2018	0	901	0	901	0	0	0	901
2019	0	1,016	0	1,016	0	0	0	1,016
2020	0	1,016	0	1,016	0	0	0	1,016
2021	0	1,016	0	1,016	0	0	0	1,016
2022	0	1,016	0	1,016	0	0	0	1,016
2023	0	1,016	0	1,016	0	0	0	1,016
2024	0	1,016	0	1,016	0	0	0	1,016
2025	0	1,016	0	1,016	0	0	0	1,016
2026	0	1,016	0	1,016	0	0	0	1,016
2027	0	1,016	0	1,016	0	0	0	1,016
2028	0	1,016	0	1,016	0	0	0	1,016
2029	0	1,016	0	1,016	0	0	0	1,016
2030	0	1,016	0	1,016	0	0	0	1,016
2031	0	1,016	0	1,016	0	0	0	1,016
2032	0	1,016	0	1,016	0	0	0	1,016
2033	0	1,016	0	1,016	0	0	0	1,016
2034	0	1,016	0	1,016	0	0	0	1,016
2035	0	1,016	0	1,016	0	0	0	1,016
2036	0	1,016	0	1,016	0	0	0	1,016
2037	0	1,016	0	1,016	0	0	0	1,016
NOMINAL	0	23,192	0	23,192	0	0	0	23,192
NPV	0	6,804	0	6,804	0	0	0	6,804

Utility Discount Rate = 6804.18

PROGRAM: Business Energy Response - TRC

YEAR	BENEFITS					COSTS						
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
	TOTAL FUEL & O&M SAVINGS \$(000)	AVOIDED T&D CAP. COSTS \$(000)	AVOIDED GEN. CAP. COSTS \$(000)	OTHER PARTICIPANT BENEFITS \$(000)	TOTAL BENEFITS \$(000)	PARTICIPANT'S COST \$(000)	TOTAL FUEL & O&M INCREASE \$(000)	INCREASED T&D CAP. COSTS \$(000)	INCREASED GEN. CAP. COSTS \$(000)	UTILITY PROGRAM COSTS \$(000)	TOTAL COSTS \$(000)	NET BENEFITS \$(000)
2008	0	0	0	0	0	0	0	0	0	0	0	0
2009	0	0	0	0	0	0	0	0	0	0	0	0
2010	5	0	0	0	5	0	0	0	0	10,940	10,940	-10,936
2011	7	0	0	0	7	0	0	0	0	13,780	13,780	-13,772
2012	9,439	585	0	0	10,024	0	0	0	0	20,734	20,734	-10,709
2013	20,588	995	6,833	0	28,416	0	0	0	0	24,301	24,301	4,115
2014	14,629	995	14,287	0	29,911	0	0	0	0	21,551	21,551	8,360
2015	15,044	995	17,343	0	33,382	0	0	0	0	21,108	21,108	12,275
2016	21,330	995	5,590	0	27,916	0	0	0	0	19,847	19,847	8,068
2017	18,064	995	11,468	0	30,527	0	0	0	0	16,634	16,634	13,893
2018	21,707	995	24,557	0	47,259	0	0	0	0	12,966	12,966	34,293
2019	21,301	995	26,546	0	48,843	0	0	0	0	10,218	10,218	38,625
2020	21,328	995	26,239	0	48,562	0	0	0	0	8,343	8,343	40,219
2021	20,062	995	27,736	0	48,793	0	0	0	0	7,446	7,446	41,348
2022	26,688	995	12,328	0	40,011	0	0	0	0	6,934	6,934	33,077
2023	28,736	995	20,599	0	50,330	0	0	0	0	5,241	5,241	45,089
2024	22,729	995	28,753	0	52,477	0	0	0	0	3,294	3,294	49,184
2025	22,101	995	29,640	0	52,736	0	0	0	0	2,709	2,709	50,027
2026	29,665	995	14,489	0	45,149	0	0	0	0	2,574	2,574	42,576
2027	24,986	995	35,271	0	61,252	0	0	0	0	2,371	2,371	58,881
2028	24,502	995	28,191	0	53,688	0	0	0	0	2,092	2,092	51,596
2029	26,767	995	7,254	0	35,016	0	0	0	0	1,687	1,687	33,329
2030	28,311	995	12,393	0	41,699	0	0	0	0	1,930	1,930	39,769
2031	29,254	995	12,787	0	43,036	0	0	0	0	2,175	2,175	40,861
2032	30,279	995	13,227	0	44,501	0	0	0	0	2,686	2,686	41,815
2033	31,193	995	13,940	0	46,128	0	0	0	0	2,643	2,643	43,485
2034	31,757	995	14,097	0	46,849	0	0	0	0	2,770	2,770	44,078
2035	33,317	995	14,967	0	49,279	0	0	0	0	2,912	2,912	46,367
2036	34,539	995	15,674	0	51,207	0	0	0	0	2,818	2,818	48,389
2037	35,549	995	16,113	0	52,657	0	0	0	0	8,298	8,298	44,358
NOMINAL	643,871	25,464	450,324	0	1,119,659	0	0	0	0	241,001	241,001	878,658
NPV	188,439	8,450	141,000	0	337,889	0	0	0	0	130,891	130,891	206,998

Utility Discount Rate = 8.48

Benefit Cost Ratio = 2.581

VI. DEMAND-SIDE RENEWABLE PORTFOLIO

The Demand Side Renewable Portfolio was designed to emphasize the benefits of solar photovoltaic technology and encourage the development of renewable programs, with an added focus placed on low income and education pilots. Additionally, Progress Energy endeavored to collaborate with state initiatives and provide interested customers with the option to voluntarily support renewable efforts. This portfolio encourages education of energy efficiency by recommending an energy audit be performed on the home or business prior to participation.

The Demand-Side Renewable Energy Portfolio is comprised of the following pilot programs:

- Solar Water Heating for Low-income Residential
- Solar Water Heating with Energy Management
- Residential Solar Photovoltaic
- Commercial Solar Photovoltaic
- Photovoltaic for Schools
- Research & Demonstration

Incentive levels and specific eligibility requirements for the initial measures promoted in these pilot programs will be presented in the Program Participation Standards. Customer participation

will be evaluated on an on-going basis; funds may be moved from one pilot program to another based upon actual participation. Progress Energy will implement these pilot programs over a five-year period to evaluate the system impacts.

A. SOLAR WATER HEATING FOR LOW INCOME RESIDENTIAL CUSTOMERS PILOT

Program Start Date: Proposed in 2010

Program Description

The Solar Water Heating for the Low-income Residential Customers Pilot is a custom renewable energy measure designed to assist low-income families with energy costs by incorporating a solar thermal water heating system in their residence while it is under construction. Progress Energy will collaborate with non-profit builders to provide low-income families with a residential solar thermal water heater. The solar thermal system will be provided at no cost to the non-profit builders or the residential participants.

Policies and Procedures

The incentive for this program is the total cost of the solar thermal system plus the associated installation cost. The program will be limited to a targeted annual incentive cap of \$90,000.

Program Participation

Annual participation estimates for the Solar Water Heating for Low Income Residential Customers Pilot program are shown in the table below:

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	1,457,415	0	0	0.0%
2011	1,473,688	896	30	3.3%
2012	1,495,098	864	30	6.9%
2013	1,521,451	817	30	11.0%
2014	1,548,531	753	30	15.9%

All numbers annual except cumulative penetration level

1. Total Number of Customers is the forecast of all residential customers from the Progress Energy 2009 Ten Year Site Plan.
2. Eligible customers based on U.S. Census block data for income qualifications.
3. Annual number of program participants represents the projected number of low income homes to participate in this pilot annually. There are no new participants beyond the 5-year time frame of this Pilot.
4. Cumulative penetration level equals the sum of annual number of program participants in the current year and all prior years divided by the number of eligible customers in the current year.

Savings Estimates

Total pilot savings were developed by first estimating per customer savings and, annual projected participation. The total pilot savings were then computed as the product of those two variables for each year, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	-	-	-	-	-	-
2011	2314	0.40	0.37	69,420	12	11
2012	2314	0.40	0.37	69,420	12	11
2013	2314	0.40	0.37	69,420	12	11
2014	2314	0.40	0.37	69,420	12	11

At the Generator

Year	Per Customer 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
2010	-	-	-	-	-	-
2011	2466	0.43	0.39	74,295	13	12
2012	2466	0.43	0.39	74,295	13	12
2013	2466	0.43	0.39	74,295	13	12
2014	2466	0.43	0.39	74,295	13	12

The tables above show annual incremental savings for new participants in this 5-year Pilot program. There are no new participants and no new annual savings additions beyond the 5-year time frame of this Pilot.

Impact Evaluation Plan

Maintain record of capacity of systems installed.

Cost-Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$359	\$906	-\$547	0.4
Participant	\$745	\$392	\$353	1.9
Total Resource Cost	\$359	\$553	-\$194	0.65

B. SOLAR WATER HEATING WITH ENERGY MANAGEMENT PROGRAM

Program Start Date: 2007

Proposed modification in 2010

Program Description

The Solar Water Heating with Energy Management Program encourages residential customers to install new solar thermal water heating systems on their residence. This program incorporates a long standing cost effective Demand Side Management program with the requirement for customers to participate in our residential demand response program.

Policies and Procedures

There are two incentives associated with this program. First, participants will receive a one-time \$550 rebate designed to reduce the upfront cost of the renewable energy system. Second, participants will receive a monthly bill credit associated with their participation in the residential demand response program.

This program was designed with the support and input of the solar industry. The program will record participant occupancy levels to capture the most accurate energy savings. The program will be limited to a targeted annual incentive cap of \$1,237,500.

Program Participation

Annual participation estimates for the Solar Water Heating with Energy Management program are shown in the table below:

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	1,457,415	1,209,654	1,125	0.1%
2011	1,473,688	1,223,161	2,250	0.3%
2012	1,495,098	1,240,931	2,250	0.5%
2013	1,521,451	1,262,804	2,250	0.6%
2014	1,548,531	1,285,281	2,250	0.8%

1. Total Number of Customers is the forecast of all residential customers from the Progress Energy 2009 Ten Year Site Plan.
2. Eligible customers is the total number of customers less existing participation
3. Annual number of program participants represents the projected number of homes to be involved in this pilot by year. There are no new participants beyond the 5-year time frame of this Pilot.
4. Cumulative penetration level equals the sum of annual number of program participants in the current year and all prior years divided by the number of eligible customers in the current year.

Savings Estimates

Total program savings were developed by first estimating per customer savings and, annual projected participation, multiplied by measure. The total program savings were then computed as the sum of the individual customer savings, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	1718	2.14	1.11	1,932,863	2,408	1,245
2011	1718	2.14	1.11	3,865,725	4,815	2,491
2012	1718	2.14	1.11	3,865,725	4,815	2,491
2013	1718	2.14	1.11	3,865,725	4,815	2,491
2014	1718	2.14	1.11	3,865,725	4,815	2,491

At the Generator

Year	Per Customer 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
2010	1831	2.28	1.18	2,068,605	2,577	1,332
2011	1831	2.28	1.18	4,137,209	5,153	2,666
2012	1831	2.28	1.18	4,137,209	5,153	2,666
2013	1831	2.28	1.18	4,137,209	5,153	2,666
2014	1831	2.28	1.18	4,137,209	5,153	2,666

The tables above show annual incremental savings for new participants in this 5-year Pilot program. There are no new participants and no new annual savings additions beyond the 5-year time frame of this Pilot.

Impact Evaluation Plan

Maintain record of capacity of systems installed.

Cost-Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$34,097	\$28,707	\$5,390	1.19
Participant	\$33,388	\$28,811	\$4,577	1.16
Total Resource Cost	\$41,138	\$31,171	\$9,967	1.32

C. RESIDENTIAL SOLAR PHOTOVOLTAIC PILOT

Program Start Date: Proposed in 2010

Program Description

The Solar PV pilot encourages residential customers to install new solar photovoltaic (PV) systems on their home. This pilot promotes the installation of renewable energy on energy efficient homes by requiring customers to participate in at least one residential energy efficiency measure. The program design includes an annual reservation process for pre-approval to ensure the incentive expenditure cap is available for participation.

Goals of the program are:

- Provide residential customers with a higher return on investment in PV systems
- Increase renewable energy generation on Progress Energy's system
- Increase participation in existing residential Demand Side Management measures

Policies and Procedures

This program will provide participating residential customers a rebate of up to \$2.00 per Watt of the PV dc power rating up to a \$20,000 maximum for installing a new photovoltaic system. This rebate is designed to reduce the initial investment required to install a qualified renewable solar energy system. The program will be limited to a targeted annual incentive cap of \$1,000,000 per year.

Participation with this program is intended to support and collaborate with state initiatives. As such, Progress Energy anticipates these rebates would be used with state funds to limit Florida residents to a maximum incentive of \$4.00 per Watt total when all state, local, and utility incentives are combined. Progress Energy will work with our customers to endeavor to not to exceed this incentive cap.

Program Participation

Annual participation estimates for the Residential Solar Photovoltaic Pilot program are shown in the table below:

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	1,457,415	1,457,415	25	0.00%
2011	1,473,688	1,473,688	100	0.01%
2012	1,495,098	1,495,098	100	0.02%
2013	1,521,451	1,521,451	100	0.02%
2014	1,548,531	1,548,531	100	0.03%

All numbers annual except cumulative penetration level

1. Total Number of Customers is the forecast of all residential customers from the Progress Energy 2009 Ten Year Site Plan.
2. Eligible customers represent all residential customers.
3. Annual number of program participants represents the projected number of homes to be involved in this pilot by year. There are no new participants beyond the 5-year time frame of this Pilot.
4. Cumulative penetration level equals the sum of annual number of program participants in the current year and all prior years divided by the number of eligible customers in the current year.

Savings Estimates

Total pilot savings were developed by first estimating per customer savings and, annual projected participation, multiplied by measure. The total pilot savings were then computed as the sum of the individual customer savings, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	8340	0.00	1.56	208,490	-	39
2011	8340	0.00	1.58	833,960	-	158
2012	8340	0.00	1.58	833,960	-	158
2013	8340	0.00	1.58	833,960	-	158
2014	8340	0.00	1.58	833,960	-	158

At the Generator

Year	Per Customer 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
2010	8887	0.00	1.66	223,132	-	42
2011	8887	0.00	1.68	892,528	-	169
2012	8887	0.00	1.68	892,528	-	169
2013	8887	0.00	1.68	892,528	-	169
2014	8887	0.00	1.68	892,528	-	169

1. The tables above show annual incremental savings for new participants in this 5-year Pilot program. There are no new participants and no new annual savings additions beyond the 5-year time frame of this Pilot.
2. Annual incremental coincident winter KW reductions for this Pilot program are de minimis and round to zero.

Impact Evaluation Plan

Maintain record of capacity of systems installed.

Cost-Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$4,469	\$8,761	-\$4,292	0.51
Participant	\$11,361	\$13,958	-\$2,597	0.81
Total Resource Cost	\$7,511	\$14,400	-\$6,889	0.52

D. COMMERCIAL SOLAR PHOTOVOLTAIC PILOT

Program Start Date: Proposed in 2010

Program Description

Solar PV pilot encourages Commercial customers to install new solar photovoltaic (PV) systems on their facilities. This pilot promotes the installation of renewable on energy efficient businesses by requiring customers to participate in at least one commercial energy efficiency measure. The program design includes an annual reservation process for pre-approval to ensure the incentive expenditure cap is available for participation. The program design also provides commercial customers with a higher return on investment in PV systems designed to:

- Increase renewable energy generation on Progress Energy's system
- Increase participation in existing commercial Demand Side Management measures

Policies and Procedures

This program will provide participating commercial customers who install a new photovoltaic system with a tiered rebate up to the following incentive levels, based on the PV dc power rating:

- \$2.00 per Watt for the first 10 KW
- \$1.50 per Watt for 11KW to 50 KW
- \$1.00 per Watt for 51KW to 100 KW

The rebate is designed to reduce the initial investment required to install a qualified renewable solar energy system. Total incentives per participant will be limited to \$130,000, based on a maximum installation of 100KW. Program design includes an annual reservation process for pre-approval to ensure the incentive expenditure cap is available for participation. The program will be limited to a targeted annual incentive cap of \$1,000,000 per year.

Participation with this program is intended to support and collaborate with state initiatives. As such, Progress Energy anticipates these rebates would be used with state funds to limit Florida business owners to a maximum incentive of \$4.00 per Watt total when all state, local, and utility incentives are combined. Progress Energy will work with our customers to endeavor to not to exceed this incentive cap.

Program Participation

Participation estimates for the Commercial Solar Photovoltaic Pilot program are shown in the following table:

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	7,487	6	0.1%
2011	170,886	7,524	23	0.4%
2012	175,147	7,562	23	0.7%
2013	178,542	7,600	23	1.0%
2014	182,030	7,638	23	1.3%

All numbers annual except cumulative penetration level

1. Total Number of Customers is the forecast of all commercial/industrial customers from the Progress Energy 2009 Ten Year Site Plan.
2. Eligible customers is the estimated number of customers with electric water heater that qualifies for the load management program.
3. Annual number of program participants represents the projected number of commercial participants in this pilot annually. There are no new participants beyond the 5-year time frame of this Pilot.
4. Cumulative penetration level equals the sum of annual number of program participants in the current year and all prior years divided by the number of eligible customers in the current year.

Savings Estimates

Total pilot savings were developed by first estimating per customer savings and annual projected participation, multiplied by measure. The total pilot savings were then computed as the sum of the individual customer savings, and are shown in the following tables.

At the Meter

Year	Per Customer 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
2010	41698		7.83	250,187	-	47
2011	41698		7.87	959,052	-	181
2012	41698		7.87	959,052	-	181
2013	41698		7.87	959,052	-	181
2014	41698		7.87	959,052	-	181

At the Generator

Year	Per Customer 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
2010	44158		8.30	265,874	-	50
2011	44158		8.33	1,019,184	-	192
2012	44158		8.33	1,019,184	-	192
2013	44158		8.33	1,019,184	-	192
2014	44158		8.33	1,019,184	-	192

1. The tables above show annual incremental savings for new participants in this 5-year Pilot program. There are no new participants and no new annual savings additions beyond the 5-year time frame of this Pilot.
2. Annual incremental coincident winter kW reductions for this Pilot program are de minimis and round to zero.

Impact Evaluation Plan

Maintain record of capacity of systems installed.

Cost-Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$5,119	\$8,809	-\$3,690	0.58
Participant	\$10,904	\$12,714	-\$1,810	0.86
Total Resource Cost	\$7,713	\$13,213	-\$5,500	0.58

E. PHOTOVOLTAIC FOR SCHOOLS PILOT

Program Start Date: Proposed in 2010

Program Description

The Schools Pilot is designed to assist schools with energy costs while promoting energy education. This program will provide participating public schools with new photovoltaic systems at no cost to the school. These systems will be installed, owned, operated and maintained by Progress Energy for a period of 5 years, after which the school assumes ownership and system benefits.

Goals of the program are:

- Eliminate the initial investment required to install a renewable solar PV system
- Increase renewable energy generation on Progress Energy's system
- Increase participation in existing residential Demand Side Management measures through energy education
- Increase solar education and awareness in Progress Energy communities and schools

Policies and Procedures

This program will fully fund the PV systems that are installed on the participating public schools. These schools will enter an agreement allowing Progress Energy to own and operate the system

for an initial 5 year period. Progress Energy will record the total PV system and installation cost as a regulatory asset to be amortized over five years. After the 5-year contract period, the school will assume ownership of the PV system. Customers will apply for participation in this program. The program will be limited to an annual target of one system with a rating up to 100 KW installed on a post secondary public school and (10) 10 KW systems with battery backup option installed on public schools, preferably serving as emergency shelters.

Post secondary school participation will be prioritized based on attendance and consumption associated with their main campus. Public schools will be selected using a competitive process that aligns with Florida's SunSmart E-Shelters Program Application with an emphasis placed on the schools commitment to energy efficiency and renewable energy education.

The incentive for this program is the total equipment cost of the solar PV system plus the associated installation, operation and maintenance cost for the first five years. The solar PV system and installation will be considered a rebate that will eliminate the cost to the customer for providing new renewable energy system on their facilities.

This program places an emphasis on energy education and promotes environmental stewardship. As such, customers participating in the Winter-Only Energy Management or Year Round Energy Management residential demand response programs can elect to contribute their monthly credit toward a fund design to support and promote energy education. The fund will accumulate associated participant credits for a period of two years, at which time the customer may elect to renew for an additional two years. All proceeds collected from participating customers and their associated monthly credits will be used to promote energy efficiency and renewable energy educational opportunities.

Program Participation

Projected participation projections for K-12:

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	99	1	1.0%
2011	170,886	100	10	11.0%
2012	175,147	101	10	20.8%
2013	178,542	102	10	30.4%
2014	182,030	103	10	39.8%

All numbers annual except cumulative penetration level

1. Total Number of Customers is the forecast of all commercial customers from the Progress Energy 2009 Ten Year Site Plan.
2. Eligible customer projections represent the projected number of K-12 schools in the Progress Energy service area that also serve as an emergency shelter.
3. Annual number of program participants represents the projected number of K-12 schools participants in this pilot by year. There are no new participants beyond the 5-year time frame of this Pilot.
4. Cumulative penetration level equals the sum of annual number of program participants in the current year and all prior years divided by the number of eligible customers in the current year.

Projected participation projections for post secondary:

Year	Total Number of Customers ⁽¹⁾	Total Number of Measure Eligible Customers ⁽²⁾	Annual Number of Program Measure Participants ⁽³⁾	Cumulative Penetration Level (%) ⁽⁴⁾
2010	167,233	11		
2011	170,886	11	1	9.0%
2012	175,147	11	1	17.8%
2013	178,542	11	1	26.5%
2014	182,030	11	1	34.9%

All numbers annual except cumulative penetration level

1. Total Number of Customers is the forecast of all commercial customers from the Progress Energy 2009 Ten Year Site Plan.
2. Eligible customer projections represent the projected number of post secondary schools in the Progress Energy service area that also serve as an emergency shelter.
3. Annual number of program participants represents the projected number of post secondary schools participants in this pilot by year. There are no new participants beyond the 5-year time frame of this Pilot.
4. Cumulative penetration level equals the sum of annual number of program participants in the current year and all prior years divided by the number of eligible customers in the current year.

Savings Estimates

Total pilot savings were developed by first estimating per customer savings and, annual projected participation, multiplied by measure. The total pilot savings were then computed as the sum of the individual customer savings, and are shown in the following tables.

Projected savings estimates for K-12:

At the Meter

Year	Per Customer 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
2010	16679		3.20	16,679	-	3
2011	16679		3.20	166,792	-	32
2012	16679		3.20	166,792	-	32
2013	16679		3.20	166,792	-	32
2014	16679		3.20	166,792	-	32

At the Generator

Year	Per Customer 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
2010	17663		3.39	17,725	-	3
2011	17663		3.39	177,250	-	34
2012	17663		3.39	177,250	-	34
2013	17663		3.39	177,250	-	34
2014	17663		3.39	177,250	-	34

Projected savings estimates for post secondary:

At the Meter

Year	Per Customer 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
2010	-	-	-	-	-	-
2011	166792		31.00	166,792	-	31
2012	166792		31.00	166,792	-	31
2013	166792		31.00	166,792	-	31
2014	166792		31.00	166,792	-	31

At the Generator

Year	Per Customer 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
2010	-	-	-	-	-	-
2011	176633		33	177,250	-	33
2012	176633		33	177,250	-	33
2013	176633		33	177,250	-	33
2014	176633		33	177,250	-	33

1. The tables above show annual incremental savings for new participants in this 5-year Pilot program. There are no new participants and no new annual savings additions beyond the 5-year time frame of this Pilot.
2. Annual incremental coincident winter kW reductions for this Pilot program are de minimis and round to zero.

Impact Evaluation Plan

Maintain record of capacity of systems installed.

Cost-Effectiveness

The economic results of the program are as follows:

Cost-Effectiveness Test	NPV Benefits \$(000)	NPV Costs \$ (000)	NPV Net Benefits \$(000)	B/C Ratio
Rate Impact Measure	\$1,681	\$7,913	-\$6,232	0.21
Participant	\$4,550	\$1,042	\$3,508	4.37
Total Resource Cost	\$5,100	\$7,824	-\$2,724	0.65

F. RESEARCH AND DEMONSTRATION PILOT

Program Start Date: Proposed in 2010

Program Description

The purpose of this program component is to research technology and establish R&D initiatives to support the development of renewable energy pilot programs. Demonstration projects will provide real-world field testing to assist in the development of these initiatives. The program will be limited to a targeted annual expenditure cap of 5% of the total Demand-Side Renewable Portfolio annual expenditures.

Policies and Procedures

In general, each R&D project that is proposed and investigated will proceed as follows:

- Project concept or idea development
- Project research and design, including estimated costs and benefits
- Conduct field test, modeling, general research, and theoretical testing
- Each project will be designed to support the development of future solar and renewable energy pilot programs.

VII. TECHNOLOGY DEVELOPMENT PROGRAM

Program Start Date: 1995

Modifications proposed in 2010

Program Description

The purpose of this program is to establish a system for meeting the goals in Section 366.82(2), Florida Statutes, and Rule 25-17, Florida Administrative Code. Progress Energy will undertake certain research and demonstration projects which provide support for the development of cost-effective demand reduction, energy efficiency, and alternative energy programs. Technical and operational knowledge for the advances in the energy field may come from field demonstration projects, research partnerships, webinars, general education, etc. The Technology Development program is designed to allow Progress Energy to investigate technologies and support the development of new programs from initial concept through submittal to the Commission for consideration and approval. In general, each research and demonstration project that is proposed and investigated will proceed as follows:

- Project concept or idea development
- Project research and design, including estimated costs and benefits
- Conduct field testing, pilot program, modeling, general research, and theoretical testing
- Evaluation of collected data, including cost-effectiveness
- Acceptance or rejection of project for continuation as a program

- If accepted for continuation, application will be made to the Commission for approval to implement the program

Policies and Procedures

Eligible customers will be dependent on the type of project proposed and investigated as determined during the project research and design phase. Each project that is proposed and investigated will have to meet one or more of the goals identified in Section 366.82(2), Florida Statutes, and Rule 25-17, Florida Administrative Code. If not, the project will not proceed beyond the project concept or idea phase.

Program Participation

In many cases the demand reduction, energy efficiency, and alternative energy projects that are proposed and investigated under this program will require field testing with actual customers. After being defined in the project research and design phase, these projects will offer services or products to eligible customers on a voluntary basis.

Examples of potential projects that may be funded under this program include:

- Demand reduction, energy efficiency technologies, such as energy awareness devices
- Market transformation initiatives, such as smart charging for electric vehicles
- And other alternative energy and innovative technologies

All costs will be included as part of the pre-approved project expenditures under this program.

Technology focused on energy efficiency, demand response, alternative energy, as well as innovations within the energy field in general have undergone significant development since 1995. With the current international focus in this arena, advances are even more rapid today. In addition, the way in which customers accept these products and the studies associated with how to offer products and services, further complicates the efficient and effective development of programs. In order to keep pace an enhanced focus on research, demonstration, and development is needed.

At the discretion of Progress Energy, annual basis expenditures up to 1% of the previous year's Energy Conservation Cost Recovery budget, not to exceed \$2,000,000 annually, may be made and recovered through the Energy Conservation Cost Recovery clause for all research projects that are proposed and investigated. If any single project's expenditures exceed 25% of the pre-approved annual program budget, a status report will be filed as a component of the Energy Conservation Cost Recovery Clause Projection and True-Up filings.

The status report will identify each project under investigation with disbursements exceeding 25% of the pre-approved annual program budget, the scope and purpose of the project, its development schedule identifying accomplishments and projections, and the project's actual and proposed expenditures for Commission review. If total program expenditures are projected to exceed 1% of the previous year's total Energy Conservation Cost Recovery expenditure, Progress Energy will apply to the Commission staff for approval to proceed with the particular project which would cause Progress Energy to exceed the limit.

Finally, Progress Energy will account for and maintain records of all expenses for each project in accordance with Rule 25-17.015, Florida Administrative Code.

Savings Estimates

The Technology Development program makes it possible to obtain and use actual data from field tests, as well as customer and market research studies instead of relying heavily on engineering assumptions, model results, and estimates. Benefit and cost figures derived from these projects will be more accurate and provide enhanced reliability to forecasts, allowing better assessment of potential future demand reduction, energy efficiency, alternative, and innovative programs submitted to the Commission for approval.

A second benefit resulting from this research program is that the field tests, customer research and market evaluations uncover benefits, costs, and disadvantages that may be overlooked by an engineering estimate or evaluation. Real world testing provides actual experience on a small scale to be obtained. This should facilitate the decision-making process and improve the success rate of approved programs.

Consequently, program savings were not estimated during the planning stage and are not included in the Demand Side Management Plan totals. Any impacts obtained by this program will be calculated for each individual project and will be reported to the Commission to be counted toward achieving Progress Energy's conservation goals.

Impact Evaluation Plan

The methodology for monitoring and evaluating a project that is submitted to the Commission for approval as a program shall be determined during the project research and design phase and shall be refined during the field test or pilot program phase. Since projects will normally include a field test or pilot program, the data will be actual rather than estimated. In the event a project does not involve a field test or pilot program, the estimated or modeled savings will be documented with the methodology used.

Cost-Effectiveness

The cost-effectiveness of each project submitted to the Commission for approval to be implemented as a program shall be analyzed and reported using the Commission-approved cost-effectiveness tests.

VIII. QUALIFYING FACILITIES PROGRAM

Program Description

The purpose of this program is to meet the objectives and obligations established by Section 366.051, Florida Statutes, and the Commission's rules contained within Part III of Chapter 25-17, Florida Administrative Code, regarding the purchase of as-available energy and firm energy and capacity from qualifying facilities pursuant to standard offer and negotiated contracts.

Under the Qualifying Facilities program, Progress Energy develops standard offer contracts, negotiates, enters into, amends and restructures firm energy and capacity contracts entered into with qualifying cogeneration and small power production facilities, and administers all such contracts.

IX. TARIFF REVISIONS

Legislative Copy Format Tariffs

Eighth Revised Tariff Sheet No. 2.0
Fourth Revised Tariff Sheet No. 2.6
Twenty-First Revised Tariff Sheet No. 6.100
Second Revised Tariff Sheet No. 6.226
Original Tariff Sheet No. 6.228
Original Tariff Sheet No. 6.229



SECTION NO. II
EIGHTH SEVENTH REVISED SHEET NO. 2.0
CANCELS SEVENTH SIXTH REVISED SHEET NO. 2.0

MISCELLANEOUS
INDEX

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Home Energy Check-up	2.3
Non-Residential Energy Audit	2.4
Florida Energy Gauge Ratings	2.6
Load Energy Profiler Online	2.7
Remote Access	2.8

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning-Florida Mark A. Myers, Vice President, Finance
EFFECTIVE: April 12, 2004



Florida Energy Gauge Ratings
Energy Gauge

Availability:

Available throughout the entire territory served by the Company.

Applicable:

To residential customers with single family homes (mobile, manufactured homes excluded). Upon request a state certified Home Energy Rating System (HERS) rater will perform an on-site energy inspection on an existing home and provide a rating certificate. New homes with completed Florida Energy Code Whole Building Performance Method A will require a review of code calculations to be eligible for a rating certificate.

Schedule of Fees:

The following fees are based on a home equal to or less than 1,850 air conditioned square feet and one (1) air handler.

Class	Fee	Notes	Fee
Class I On-Site ¹	\$550496	N/A	\$550496
Class II On-Site ²	\$315146	N/A	\$315146
Class III From Plans ²	\$1240	\$36	N/A

* Includes electronic registration fees charged by the State of Florida.

¹ A \$35 fee will be added for each additional air handler.

² For homes with greater than 1,850 square feet of air conditioned space, an additional \$0.09 per square foot will be added.

Definitions:

Existing home: is a completed residential occupancy building for which a certificate of occupancy or equivalent approval for occupancy, has been issued.

Florida Energy Code Whole Building Performance Method A: Required by the State listing building components, dimensions and system efficiencies.

Energy Gauge Ratings are Categorized In Three Classes:

Class I: Energy rating requiring an on-site energy audit with specialized performance testing for air infiltration and duct leakage. Class I ratings have the highest level of confidence.

Class II: Energy rating requiring an on-site energy audit. Class II ratings have a good level of confidence.

Class III: Energy rating reserved for new buildings only and uses construction plans to generate data for ratings. Class III ratings have a fair level of confidence.

Terms of Payment:

The fee shall be payable at the time the rating is completed and delivered. The Company reserves the right to withhold the rating certificate until the fee is paid.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning- Florida Mark A. Myers, Vice President, Finance

EFFECTIVE: December 23, 2003



SECTION NO. VI
TWENTY-FIRSTIETH REVISED SHEET NO. 6.100
CANCELS TWENTIETHNINETEENTH REVISED SHEET

NO. 6.100

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PPS-1	General Service - Premier Power Service Rider	6.370

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida

EFFECTIVE: February 10, 2010



6.226

Page 2 of 2

RATE SCHEDULE GSLM-2
GENERAL SERVICE LOAD MANAGEMENT – STANDBY GENERATION
(Continued from Page No. 1)

Schedules:

Requests by the Company for the customer to reduce facility demand by operation of the standby generation can occur at any time during the day. The GSLM-2 will not be operated more than twice each day with the total operation not exceeding twelve (12) hours. Under extreme emergency conditions, the Company may request the Customer to voluntarily operate their standby generation for longer than twelve (12) hours a day.

Term of Service:

Service under this rate schedule shall be for a minimum initial term of twelve (12) months from completion of Company acceptance testing of customer's equipment and shall continue thereafter until terminated by either party by written notice sixty (60) days prior to termination.

Special Provisions:

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove the equipment associated with this rate.
2. Prior to the installation of the equipment, the Company may inspect the customer's electrical equipment (including standby generator) to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment (including standby generator). The Company may, at its option, require a commercial energy audit as a prerequisite to receiving service under this rate. The audit may be used to establish or confirm equipment capacity, operating hours, or to determine the ability of the Company to control electric demand.
3. If the Company determines that the equipment installed as part of this rate by the Company has been tampered with, the Company may discontinue service under this rate and bill the customer for prior credits received under this rate for that fiscal year.
4. Customers taking service under this Standby Generation rate schedule who desire to transfer to a firm rate schedule after the initial term of service will be required to provide the Company with written notice at least 12 months prior to such transfer. Such notice shall be irrevocable unless the Company and the customer agree to void the notice.
5. The Company reserves the right, at its option, to remove Customers from this rate who, during any consecutive 12 month period, do not participate in at least 75% of Company requests to reduce their demand by operation of their standby generation equipment.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida Mark A. Myers, Vice President, Finance

EFFECTIVE: October 1, 2003

**RATE SCHEDULE GSDR-1
GENERAL SERVICE DEMAND RESPONSE**

Availability:

Available only within the range of the Company's two-way communications capability to the "smart" billing meter.

Applicable:

To customers who are eligible for service under Rate Schedules GST-1, GSD-1, or GSDT-1 who have qualified equipment that will allow for a demand reduction during a Company Control Event. The customer must have a Business Energy Check that pre-qualifies and identifies the tons of air-conditioning (A/C) eligible for Direct Load Control (DLC) or the subscribed demand reduction kW by customer's Energy Management System (EMS) under this rate schedule. Customers cannot be on this rate schedule and also the General Service Load Management (GSLM-1) or General Service Load Management - Standby Generation (GSLM-2) rate schedule.

Limitation of Service:

Load control of the customer's equipment will occur at the Company's request or by the Company if the equipment is directly connected to the Company's two-way demand response system.

Standby or resale service not permitted hereunder. Service under this rate is subject to the Company's currently effective and filed "General Rules and Regulations for Electric Service."

Rate Per Company Control Event:

The rates and all other terms and conditions of Company rate schedules GST-1, GSD-1 or GSDT-1 (whichever shall otherwise be applicable) shall be applicable to service under this rate schedule, subject to the following:

GSDR-1 CRITICAL PEAK REBATE AMOUNT

Rebate (Credit)	Time Period Rate Effective
\$1.20 per Ton of air conditioning load reduced per Control Event	April through October
OR	
\$2.86 per kW reduced per Control Event (EMS customers only)	April through October

The customer's Critical Peak Rebate (CPR) per Company Control Event will be a calculated value based upon the following formulas depending on the type of participation and will only be credited for actual participation in a Company Control Event:

Direct Load Control Switch:

$$CPR = (\text{Tons of A/C load confirmed during Business Energy Check}) \times \$1.20$$

Interconnection to Existing Energy Management System:

$$CPR = \text{Average demand reduction kW} \times \$2.86, \text{ where}$$

- Average demand reduction kW = control baseline kW - actual average kW demand during the Company Control Event period, where
Control baseline kW = the average kW demand from the most recent prior three non-control days during hours corresponding to the Company Control Event period.
- Customer must submit a subscribed demand reduction kW. The subscribed demand reduction kW = the kW reduction that will be achieved by customer's EMS control during a Company Control Event period.
- The subscribed demand reduction kW must be at least 20 kW and at least 10% of the customer's average monthly peak demand.
- Actual average kW demand during Company Control Event period = average kW measured during the Company Control Event period. (minimum of 50% and maximum of 150% of the subscribed demand reduction kW).
- Upon Company notification, the customer will be given 15 minutes to initiate demand reduction of 50% to 150% of subscribed demand reduction kW to qualify for CPR.

*Non-Control days exclude weekend days and observed holidays as defined in the otherwise applicable rate.

Definitions:

CPR = Critical Peak Rebate (credit) amount provided to the customer each time they participate in a Company Control Event.

Tons of

A/C Load = Actual connected tons of air conditioning controlled by the DLC switch.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida

EFFECTIVE:



**RATE SCHEDULE GSDR-1
GENERAL SERVICE DEMAND RESPONSE**
(Continued from Page No. 1)

DLC = Direct Load Control of the customer's air conditioning system using 50% duty cycle for a minimum of 2 consecutive hours during a load control event using a Company supplied control switch. Total operation not to exceed 12 hours per day.

EMS = Energy Management System owned by the customer that reduces a subscribed demand reduction kW during a 2-hour Company Control Event time frame. EMS notification of a Company Control Event can be manual or automatic.

Company Control Event= Any request by the Company to reduce customer's kW usage as defined by this tariff whether notified electronically, manually, or otherwise.

Schedules:

Requests by the Company for the customer to reduce facility demand by operation of the DLC or EMS equipment can occur at any time during the day. The GSDR will not be operated more than twice each day. Under extreme emergency conditions, the Company may request DLC Customers to voluntarily participate for longer than twelve (12) hours a day.

Special Provisions:

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove the equipment associated with this rate.
2. Prior to the installation of the equipment, the Company may inspect the customer's electrical equipment to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment (including Air Conditioning System). The Company may, at its option, require a commercial energy audit as a prerequisite to receiving service under this rate. The audit may be used to establish or confirm equipment capacity, operating hours, or to determine the ability of the Company to control electric demand.
3. If the Company determines that the equipment installed as part of this rate by the Company has been tampered with, the Company may discontinue service under this rate and bill the customer for prior credits received under this rate for the previous twelve (12) months.
4. If the customer does not participate in three or more Company Control Event periods during the months of April through October during any year, the Company shall be allowed to remove the equipment and/or terminate service under this rate schedule.
5. The Company will initiate a minimum of three Company Control Event periods during the months of April through October of each year.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida
EFFECTIVE:

Clean Copy Format Tariffs

Eighth Revised Tariff Sheet No. 2.0
Fourth Revised Tariff Sheet No. 2.6
Twenty-First Revised Tariff Sheet No. 6.100
Second Revised Tariff Sheet No. 6.226
Original Tariff Sheet No. 6.228
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SECTION NO. II
EIGHTH REVISED SHEET NO. 2.0
CANCELS SEVENTH REVISED SHEET NO. 2.0

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Remote Access	2.8

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida
EFFECTIVE:

**Florida Energy Gauge Ratings
Energy Gauge****Availability:**

Available throughout the entire territory served by the Company.

Applicable:

To residential customers with single family homes (mobile, manufactured homes excluded). Upon request a state certified Home Energy Rating System (HERS) rater will perform an on-site energy inspection on an existing home and provide a rating certificate. New homes with completed Florida Energy Code Whole Building Performance Method A will require a review of code calculations to be eligible for a rating certificate.

Schedule of Fees:

The following fees are based on a home equal to or less than 1,850 air conditioned square feet and one (1) air handler.

Class	Fee	Fee
Class I On-Site ¹	\$550	\$550
Class II On-Site ²	\$315	\$315
Class III From Plans ²	\$120	N/A

^{*} Includes electronic registration fees charged by the State of Florida.

¹ A \$35 fee will be added for each additional air handler.

² For homes with greater than 1,850 square feet of air conditioned space, an additional \$0.09 per square foot will be added.

Definitions:

Existing home: Is a completed residential occupancy building for which a certificate of occupancy or equivalent approval for occupancy, has been issued.

Florida Energy Code Whole Building Performance Method A: Required by the State listing building components, dimensions and system efficiencies.

Energy Gauge Ratings are Categorized In Three Classes:

Class I: Energy rating requiring an on-site energy audit with specialized performance testing for air infiltration and duct leakage. Class I ratings have the highest level of confidence.

Class II: Energy rating requiring an on-site energy audit. Class II ratings have a good level of confidence.

Class III: Energy rating reserved for new buildings only and uses construction plans to generate data for ratings. Class III ratings have a fair level of confidence.

Terms of Payment:

The fee shall be payable at the time the rating is completed. The Company reserves the right to withhold the rating certificate until the fee is paid.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida

EFFECTIVE:



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CST-3	Curtailable General Service (Optional Time of Use) Fixed Curtailable Demand	6.2490
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IS-2	Interruptible General Service	6.255
IST-1	Interruptible General Service (Optional Time of Use) (Closed to New Customers as of 04/16/96)	6.260
IST-2	Interruptible General Service (Optional Time of Use)	6.265
LS-1	Lighting Service	6.280
SS-1	Firm Standby Service	6.310
SS-2	Interruptible Standby Service	6.315
SS-3	Curtailable Standby Service	6.320
TS-1	Temporary Service	6.330
RSS-1	Residential Seasonal Service Rider	6.350
CJSR-1	Commercial/Industrial Service Rider	6.360
PPS-1	General Service - Premier Power Service Rider	6.370

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida

EFFECTIVE:

**RATE SCHEDULE GSLM-2
GENERAL SERVICE LOAD MANAGEMENT – STANDBY GENERATION
(Continued from Page No. 1)**

Schedules:

Requests by the Company for the customer to reduce facility demand by operation of the standby generation can occur at any time during the day. The GSLM-2 will not be operated more than twice each day with the total operation not exceeding twelve (12) hours. Under extreme emergency conditions, the Company may request the Customer to voluntarily operate their standby generation for longer than twelve (12) hours a day.

Term of Service:

Service under this rate schedule shall be for a minimum initial term of twelve (12) months from completion of Company acceptance testing of customer's equipment and shall continue thereafter until terminated by either party by written notice sixty (60) days prior to termination.

Special Provisions:

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove the equipment associated with this rate.
2. Prior to the installation of the equipment, the Company may inspect the customer's electrical equipment (including standby generator) to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment (including standby generator). The Company may, at its option, require a commercial energy audit as a prerequisite to receiving service under this rate. The audit may be used to establish or confirm equipment capacity, operating hours, or to determine the ability of the Company to control electric demand.
3. If the Company determines that the equipment installed as part of this rate by the Company has been tampered with, the Company may discontinue service under this rate and bill the customer for prior credits received under this rate for that fiscal year.
4. Customers taking service under this Standby Generation rate schedule who desire to transfer to a firm rate schedule after the initial term of service will be required to provide the Company with written notice at least 12 months prior to such transfer. Such notice shall be irrevocable unless the Company and the customer agree to void the notice.
5. The Company reserves the right, at its option, to remove Customers from this rate who, during any consecutive 12 month period, do not participate in at least 75% of Company requests to reduce their demand by operation of their standby generation equipment.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida**EFFECTIVE:**

**RATE SCHEDULE GSDR-1
GENERAL SERVICE DEMAND RESPONSE**

Availability:

Available only within the range of the Company's two-way communications capability to the "smart" billing meter.

Applicable:

To customers who are eligible for service under Rate Schedules GST-1, GSD-1, or GSDT-1 who have qualified equipment that will allow for a demand reduction during a Company Control Event. The customer must have a Business Energy Check that pre-qualifies and identifies the tons of air-conditioning (A/C) eligible for Direct Load Control (DLC) or the subscribed demand reduction kW by customer's Energy Management System (EMS) under this rate schedule. Customers cannot be on this rate schedule and also the General Service Load Management (GSLM-1) or General Service Load Management - Standby Generation (GSLM-2) rate schedule.

Limitation of Service:

Load control of the customer's equipment will occur at the Company's request or by the Company if the equipment is directly connected to the Company's two-way demand response system.

Standby or resale service not permitted hereunder. Service under this rate is subject to the Company's currently effective and filed "General Rules and Regulations for Electric Service."

Rate Per Company Control Event:

The rates and all other terms and conditions of Company rate schedules GST-1, GSD-1 or GSDT-1 (whichever shall otherwise be applicable) shall be applicable to service under this rate schedule, subject to the following:

GSDR-1 CRITICAL PEAK REBATE AMOUNT

<u>Rebate (Credit)</u>	<u>Time Period Rate Effective</u>
\$1.20 per Ton of air conditioning load reduced per Control Event	April through October
OR	
\$2.86 per kW reduced per Control Event (EMS customers only)	April through October

The customer's Critical Peak Rebate (CPR) per Company Control Event will be a calculated value based upon the following formulas depending on the type of participation and will only be credited for actual participation in a Company Control Event:

Direct Load Control Switch:

$$\text{CPR} = (\text{Tons of A/C load confirmed during Business Energy Check}) \times \$1.20$$

Interconnection to Existing Energy Management System:

$$\text{CPR} = \text{Average demand reduction kW} \times \$2.86, \text{ where}$$

- Average demand reduction kW = control baseline kW - actual average kW demand during the Company Control Event period, where
Control baseline kW = the average kW demand from the most recent prior three non-control days during hours corresponding to the Company Control Event period.
- Customer must submit a subscribed demand reduction kW. The subscribed demand reduction kW = the kW reduction that will be achieved by customer's EMS control during a Company Control Event period.
- The subscribed demand reduction kW must be at least 20 kW and at least 10% of the customer's average monthly peak demand.
- Actual average kW demand during Company Control Event period = average kW measured during the Company Control Event period. (minimum of 50% and maximum of 150% of the subscribed demand reduction kW).
- Upon Company notification, the customer will be given 15 minutes to initiate demand reduction of 50% to 150% of subscribed demand reduction kW to qualify for CPR.

*Non-Control days exclude weekend days and observed holidays as defined in the otherwise applicable rate.

Definitions:

CPR = Critical Peak Rebate (credit) amount provided to the customer each time they participate in a Company Control Event.

Tons of A/C Load = Actual connected tons of air conditioning controlled by the DLC switch.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida

EFFECTIVE:

**RATE SCHEDULE GSDR-1
GENERAL SERVICE DEMAND RESPONSE**
(Continued from Page No. 1)

DLC = Direct Load Control of the customer's air conditioning system using 50% duty cycle for a minimum of 2 consecutive hours during a load control event using a Company supplied control switch. Total operation not to exceed 12 hours per day.

EMS = Energy Management System owned by the customer that reduces a subscribed demand reduction kW during a 2-hour Company Control Event time frame. EMS notification of a Company Control Event can be manual or automatic.

Company Control Event= Any request by the Company to reduce customer's kW usage as defined by this tariff whether notified electronically, manually, or otherwise.

Schedules:

Requests by the Company for the customer to reduce facility demand by operation of the DLC or EMS equipment can occur at any time during the day. The GSDR will not be operated more than twice each day. Under extreme emergency conditions, the Company may request DLC Customers to voluntarily participate for longer than twelve (12) hours a day.

Special Provisions:

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove the equipment associated with this rate.
2. Prior to the installation of the equipment, the Company may inspect the customer's electrical equipment to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment (including Air Conditioning System). The Company may, at its option, require a commercial energy audit as a prerequisite to receiving service under this rate. The audit may be used to establish or confirm equipment capacity, operating hours, or to determine the ability of the Company to control electric demand.
3. If the Company determines that the equipment installed as part of this rate by the Company has been tampered with, the Company may discontinue service under this rate and bill the customer for prior credits received under this rate for the previous twelve (12) months.
4. If the customer does not participate in three or more Company Control Event periods during the months of April through October during any year, the Company shall be allowed to remove the equipment and/or terminate service under this rate schedule.
5. The Company will initiate a minimum of three Company Control Event periods during the months of April through October of each year.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida
EFFECTIVE:



Florida Energy Gauge Ratings
Energy Gauge

Availability:

Available throughout the entire territory served by the Company.

Applicable:

To residential customers with single family homes (mobile, manufactured homes excluded). Upon request a state certified Home Energy Rating System (HERS) rater will perform an on-site energy inspection on an existing home and provide a rating certificate. New homes with completed Florida Energy Code Whole Building Performance Method A will requires a review of code calculations to be eligible for a rating certificate.

Schedule of Fees:

The following fees are based on a home equal to or less than 1,850 air conditioned square feet and one (1) air handler.

Class I On-Site ¹	\$550495	N/A	\$550495
Class II On-Site ²	\$315445	N/A	\$315445
Class III From Plans ²	\$1240	\$35	N/A

* Includes electronic registration fees charged by the State of Florida.

¹ A \$35 fee will be added for each additional air handler.

² For homes with greater than 1,850 square feet of air conditioned space, an additional \$0.09 per square foot will be added.

Definitions:

Existing home: is a completed residential occupancy building for which a certificate of occupancy or equivalent approval for occupancy, has been issued.

Florida Energy Code Whole Building Performance Method A: Required by the State listing building components, dimensions and system efficiencies.

Energy Gauge Ratings are Categorized In Three Classes:

Class I: Energy rating requiring an on-site energy audit with specialized performance testing for air infiltration and duct leakage. Class I ratings have the highest level of confidence.

Class II: Energy rating requiring an on-site energy audit. Class II ratings have a good level of confidence.

Class III: Energy rating reserved for new buildings only and uses construction plans to generate data for ratings. Class III ratings have a fair level of confidence.

Terms of Payment:

The fee shall be payable at the time the rating is completed ~~and delivered.~~ The Company reserves the right to withhold the rating certificate until the fee is paid.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning- Florida Mark A. Myers, Vice President, Finance

EFFECTIVE: December 23, 2003



**RATE SCHEDULE GSDR-1
General Service Demand Response**

Availability:

Available only within the range of the Company's two-way communications capability to the "smart" billing meter.

Applicable:

To customers who are eligible for service under Rate Schedules GST-1, GSD-1, or GSDT-1 who have qualified equipment that will allow for a demand reduction during a Company Control Event. The customer must have a Business Energy Check that pre-qualifies and identifies the tons of air-conditioning (A/C) eligible for Direct Load Control (DLC) or the subscribed demand reduction kW by customer's Energy Management System (EMS) under this rate schedule. Customers cannot be on this rate schedule and also the General Service Load Management (GSLM-1) or General Service Load Management - Standby Generation (GSLM-2) rate schedule.

Limitation of Service:

Load control of the customer's equipment will occur at the Company's request or by the Company if the equipment is directly connected to the Company's two-way demand response system.

Standby or resale service not permitted hereunder. Service under this rate is subject to the Company's currently effective and filed "General Rules and Regulations for Electric Service."

Rate Per Company Control Event:

The rates and all other terms and conditions of Company rate schedules GST-1, GSD-1 or GSDT-1 (whichever shall otherwise be applicable) shall be applicable to service under this rate schedule, subject to the following:

GSDR-1 CRITICAL PEAK REBATE AMOUNT

<u>Rebate (Credit)</u>	<u>Time Period Rate Effective</u>
\$1.20 per Ton of air conditioning load reduced per Control Event	April through October
OR	
\$2.86 per kW reduced per Control Event (EMS customers only)	April through October

The customer's Critical Peak Rebate (CPR) per Company Control Event will be a calculated value based upon the following formulas depending on the type of participation and will only be credited for actual participation in a Company Control Event:

Direct Load Control Switch:

$CPR = (\text{Tons of A/C load confirmed during Business Energy Check}) \times \1.20

Interconnection to Existing Energy Management System:

$CPR = \text{Average demand reduction kW} \times \2.86 , where

- Average demand reduction kW = control baseline kW - actual average kW demand during the Company Control Event period, where
Control baseline kW = the average kW demand from the most recent prior three non-control days during hours corresponding to the Company Control Event period.
- Customer must submit a subscribed demand reduction kW. The subscribed demand reduction kW = the kW reduction that will be achieved by customer's EMS control during a Company Control Event period.
- The subscribed demand reduction kW must be at least 20 kW and at least 10% of the customer's average monthly peak demand.
- Actual average kW demand during Company Control Event period = average kW measured during the Company Control Event period, (minimum of 50% and maximum of 150% of the subscribed demand reduction kW).
- Upon Company notification, the customer will be given 15 minutes to initiate demand reduction of 50% to 150% of subscribed demand reduction kW to qualify for CPR.

*Non-Control days exclude weekend days and observed holidays as defined in the otherwise applicable rate.

Definitions:

CPR = Critical Peak Rebate (credit) amount provided to the customer each time they participate in a Company Control Event.

Tons of A/C Load =

Actual connected tons of air conditioning controlled by the DLC switch.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida

EFFECTIVE:



NO. 6.006

**RATE SCHEDULE GSLM-2
GENERAL SERVICE LOAD MANAGEMENT - STANDBY GENERATION**
(Continued from Page No. 1)

Schedule:

Requests by the Company for the customer to reduce facility demand by operation of the standby generation can occur at any time during the day. The GSLM-2 will not be operated more than twice each day with the total operation not exceeding twelve (12) hours. Under extreme emergency conditions, the Company may request the Customer to voluntarily operate their standby generation for longer than twelve (12) hours a day.

Term of Service:

~~Service under this rate schedule shall be for a minimum initial term of 12 months from completion of Company acceptance testing after installation of customer's equipment and shall continue thereafter until terminated by either party by written notice sixty (60) days prior to termination.~~

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Special Provisions:

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove the equipment associated with this rate.
2. Prior to the installation of the equipment, the Company may inspect the customer's electrical equipment (including standby generator) to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment (including standby generator). The Company may, at its option, require a commercial energy audit as a prerequisite to resuming service under this rate. The audit may be used to establish or confirm equipment capacity, operating hours, or to determine the ability of the Company to control electric demand.
3. If the Company determines that the equipment installed as part of this rate by the Company has been tampered with, the Company may discontinue service under this rate and bill the customer for prior credits received under this rate for that fiscal year.
4. ~~Customers taking service under this Standby Generation rate schedule who desire to transfer to a firm rate schedule after the initial term of service will be required to provide the Company with written notice at least 12 months prior to such transfer. Such notice shall be irrevocable unless the Company and the customer agree to void the notice.~~
5. ~~The Company reserves the right, at its option, to remove Customers from this rate who, during any consecutive 12 month period, do not participate in at least 75% of Company requests to reduce their demand by operation of their standby generation equipment.~~

ISSUED BY: ~~Led J. Cross, Manager, Utility Regulatory Planning - Florida~~ Mark A. Myers, Vice President, Finance
EFFECTIVE: October 4, 2003

TARIFF REVISIONS

(Clean Copy)



Florida Energy Gauge Ratings
Energy Gauge

Availability:

Available throughout the entire territory served by the Company.

Applicable:

To residential customers with single family homes (mobile, manufactured homes excluded). Upon request a state certified Home Energy Rating System (HERS) rater will perform an on-site energy inspection on an existing home and provide a rating certificate. New homes with completed Florida Energy Code Whole Building Performance Method A will require a review of code calculations to be eligible for a rating certificate.

Schedule of Fees:

The following fees are based on a home equal to or less than 1,850 air conditioned square feet and one (1) air handler.

Class	Fee	Fee
Class I On-Site ¹	\$550	\$550
Class II On-Site ²	\$315	\$315
Class III From Plans ²	\$120	N/A

* Includes electronic registration fees charged by the State of Florida.

¹ A \$35 fee will be added for each additional air handler.

² For homes with greater than 1,850 square feet of air conditioned space, an additional \$0.09 per square foot will be added.

Definitions:

Existing home: is a completed residential occupancy building for which a certificate of occupancy or equivalent approval for occupancy, has been issued.

Florida Energy Code Whole Building Performance Method A: Required by the State listing building components, dimensions and system efficiencies.

Energy Gauge Ratings are Categorized in Three Classes:

Class I: Energy rating requiring an on-site energy audit with specialized performance testing for air infiltration and duct leakage. Class I ratings have the highest level of confidence.

Class II: Energy rating requiring an on-site energy audit. Class II ratings have a good level of confidence.

Class III: Energy rating reserved for new buildings only and uses construction plans to generate data for ratings. Class III ratings have a fair level of confidence.

Terms of Payment:

The fee shall be payable at the time the rating is completed. The Company reserves the right to withhold the rating certificate until the fee is paid.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning- Florida

EFFECTIVE:

**RATE SCHEDULE GSDR-1
General Service Demand Response**
(Continued from Page No. 1)

DLC = Direct Load Control of the customer's air conditioning system using 50% duty cycle for a minimum of 2 consecutive hours during a load control event using a Company supplied control switch. Total operation not to exceed 12 hours per day.

EMS = Energy Management System owned by the customer that reduces a subscribed demand reduction kW during a 2-hour Company Control Event time frame. EMS notification of a Company Control Event can be manual or automatic.

Company Control Event= Any request by the Company to reduce customer's kW usage as defined by this tariff whether notified electronically, manually, or otherwise.

Schedules:

Requests by the Company for the customer to reduce facility demand by operation of the DLC or EMS equipment can occur at any time during the day. The GSDR will not be operated more than twice each day. Under extreme emergency conditions, the Company may request DLC Customers to voluntarily participate for longer than twelve (12) hours a day.

Special Provisions:

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove the equipment associated with this rate.
2. Prior to the installation of the equipment, the Company may inspect the customer's electrical equipment to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment (including Air Conditioning System). The Company may, at its option, require a commercial energy audit as a prerequisite to receiving service under this rate. The audit may be used to establish or confirm equipment capacity, operating hours, or to determine the ability of the Company to control electric demand.
3. If the Company determines that the equipment installed as part of this rate by the Company has been tampered with, the Company may discontinue service under this rate and bill the customer for prior credits received under this rate for the previous twelve (12) months.
4. If the customer does not participate in three or more Company Control Event periods during the months of April through October during any year, the Company shall be allowed to remove the equipment and/or terminate service under this rate schedule.
5. The Company will initiate a minimum of three Company Control Event periods during the months of April through October of each year.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida
EFFECTIVE:

**RATE SCHEDULE GSLM-2
GENERAL SERVICE LOAD MANAGEMENT - STANDBY GENERATION**
(Continued from Page No. 1)**Schedules:**

Requests by the Company for the customer to reduce facility demand by operation of the standby generation can occur at any time during the day. The GSLM-2 will not be operated more than twice each day with the total operation not exceeding twelve (12) hours. Under extreme emergency conditions, the Company may request the Customer to voluntarily operate their standby generation for longer than twelve (12) hours a day.

Term of Service:

Service under this rate schedule shall be for a minimum initial term of 12 months from completion of Company acceptance testing after inspection of customer's equipment and shall continue thereafter until terminated by either party by written notice sixty (60) days prior to termination.

Special Provisions:

1. The Company shall be allowed reasonable access to the customer's premises to install, maintain, inspect, test and remove the equipment associated with this rate.
2. Prior to the installation of the equipment, the Company may inspect the customer's electrical equipment (including standby generator) to ensure good repair and working condition, but the Company shall not be responsible for the repair or maintenance of the electrical equipment (including standby generator). The Company may, at its option, require a commercial energy audit as a prerequisite to receiving service under this rate. The audit may be used to establish or confirm equipment capacity, operating hours, or to determine the ability of the Company to control electric demand.
3. If the Company determines that the equipment installed as part of this rate by the Company has been tampered with, the Company may discontinue service under this rate and bill the customer for prior credits received under this rate for that fiscal year.
4. Customers taking service under this Standby Generation rate schedule who desire to transfer to a firm rate schedule after the initial term of service will be required to provide the Company with written notice at least 12 months prior to such transfer. Such notice shall be irrevocable unless the Company and the customer agree to void the notice.
5. The Company reserves the right, at its option, to remove Customers from this rate who, during any consecutive 12 month period, do not participate in at least 75% of Company requests to reduce their demand by operation of their standby generation equipment.

ISSUED BY: Lori J. Cross, Manager, Utility Regulatory Planning - Florida**EFFECTIVE:**